



# **California High-Speed Rail: Operations Report**

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

September 2016

# Agenda

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## ▶ Operations Report Metrics

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

# Executive Summary

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## ROW Acquisition

- ▶ The current report presents ROW acquisition progress relative to CPI thru CP4 through July 31, 2016. As of that date, the Authority has secured legal possession of 834 parcels, with 777 delivered to the design-builder (DB). There were 21 parcels delivered in CPIABC, 7 parcels delivered in CP2-3, 11 parcels delivered in CP4, and 1 parcel delivered in CP1D for a total delivery of 40 parcels during the month of July. This is the highest monthly delivery rate in the recent 6 months. The Authority continues to focus on the acquisition of critical parcels for construction.
- ▶ 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 those 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 baselining effort per the requirements of the contract is being initiated and is anticipated to be completed in the next 90 days.
- ▶ The probabilistic analysis update for CPI and CP2-3 will be completed by November-2016. A supplemental risk informed ROW analysis specifically focusing on “construction critical” parcel delivery has been completed and was presented as part of the August-2016 Finance and Audit Committee presentation.

# Executive Summary

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## Environmental

- ▶ Finalizing a standard set of Impact Avoidance and Minimization Features and mitigation measures for program-wide use that builds on the lessons learned from our experiences with the DB contractors in implementing these in the field.
- ▶ Published first set of quality check tools by resource for use in the quality reviews.
- ▶ Published new method on evaluating ground-disturbing geotechnical activities.
- ▶ Completed contract to retain a wildlife corridor expert to support program-wide wildlife movement approaches across the state.
- ▶ Following the successful meeting on October 1, 2015, an additional planning meeting between the state/federal agencies is proposed for September 27, 2016.
- ▶ Updating the V.5 methods for agricultural lands, ground subsidence, induced growth, and cultural resources.
- ▶ Hosting monthly meetings with regional regulatory agencies to address schedules, project-related issues, and environmental 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.
- ▶ Preparing administrative draft EIR/EIS documents for the Central Valley Wye and for the Fresno to Bakersfield Locally Generated Alternative Alignment.
- ▶ Continuing work on helping prepare the Checkpoint B document for Palmdale to Burbank project section as part of the NEPA/Clean Water Act Section 404/408 Integration process.
- ▶ Continuing work among the Authority, FRA, USFWS, CDFW, and resource agencies on a statewide regional conservation approach.
- ▶ Confirming the project footprints and preparing technical reports needed for the EIR/EIS documents for the four Southern California project sections.
- ▶ Finalizing programmatic guidance on outreach for circulating the draft EIR/EIS documents.

# Executive Summary

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## **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 July 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 contractors schedule. In some instances a Third Party Agreement is not clearly defined in the schedule; therefore, other schedule information is used to determine agreement need by dates. The forecast for agreement execution is based on short-term historical trends for agreement process durations.
- ▶ All but four Master/Cooperative Agreements for CP2-3 and CP4 had been executed by July 31, 2016. The remaining four agreements were executed in August.
- ▶ 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

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## 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, removing temporary formwork where structural concrete work has been completed; Cottonwood Creek – started the construction of the bridge abutments and piers; Fresno Trench (between Belmont & SR-180) - continued foundation work; Tuolumne Street Overcrossing – completed placing girders, starting to place structural concrete for the bridge superstructure; Downtown Fresno Viaduct (North Avenue & SR-99) – constructing columns, mobilizing materials for formwork for the bridge superstructure; and San Joaquin River Viaduct (SR-99 On-Ramp) – preparing the location to allow for installation of foundation piles, continued fabrication of foundation reinforcement. 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 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 is anticipated by 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 McKinley Avenue on-ramp, Clinton Avenue on-ramp and State Route 99 (SR-99) mainline.

# Executive Summary

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## **Finance/Budget**

- ▶ Capital outlay expenditures were \$78.5M as reported in the Capital Outlay report for September-2016, compared to \$51.4 for September-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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- ▶ Operations Report Metrics
  - Executive Summary
  - Right-of-Way (ROW)
  - Environmental
  - Third Party Agreements
  - Contract Management
  - Finance/Budget
  - ARRA Schedule
  - Risk

## ROW Metrics - Context

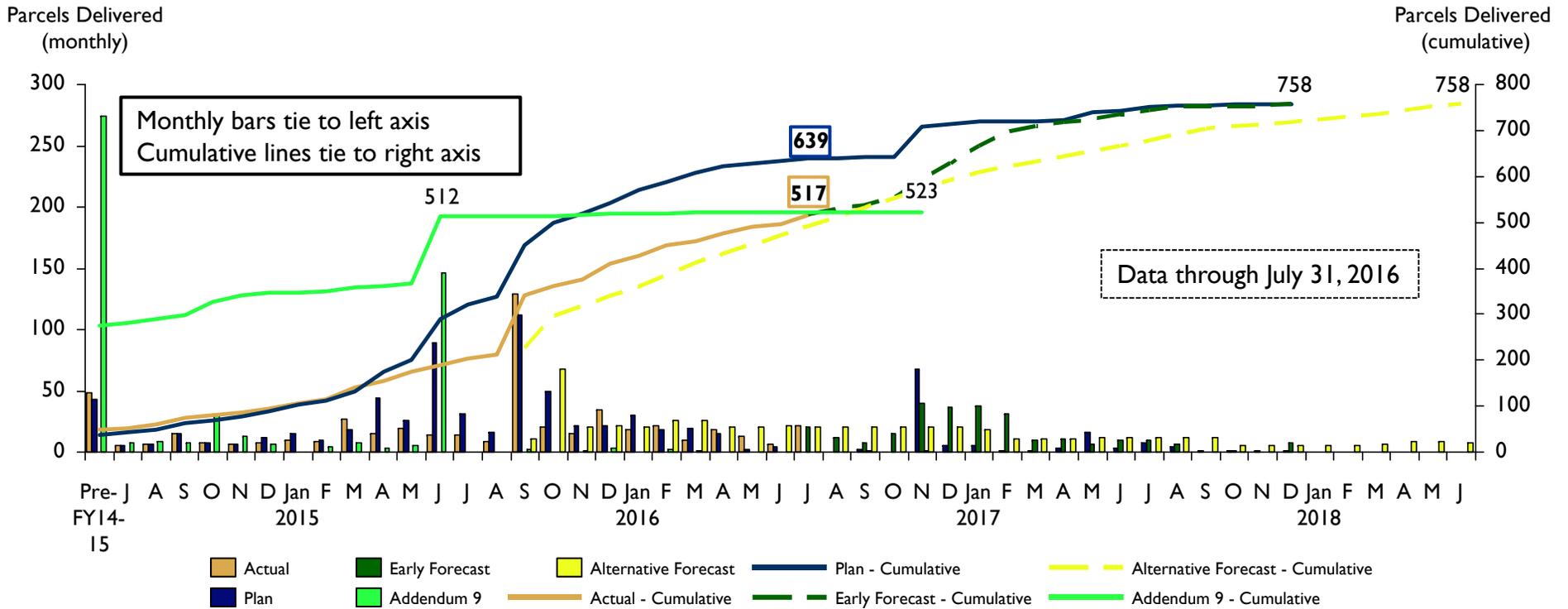
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- ▶ The following slides track parcels delivered to **design-builder (DB)**, which is the last step of the ROW process
  - Four metrics related to “delivered to DB” are tracked:
    - Plan: For CPI, the negotiated schedule of parcel delivery as of 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 CPI and CP2-3 parcels needed for delivery has changed (CPI: 542 to 757 and CP2-3: 543 to 562) 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.

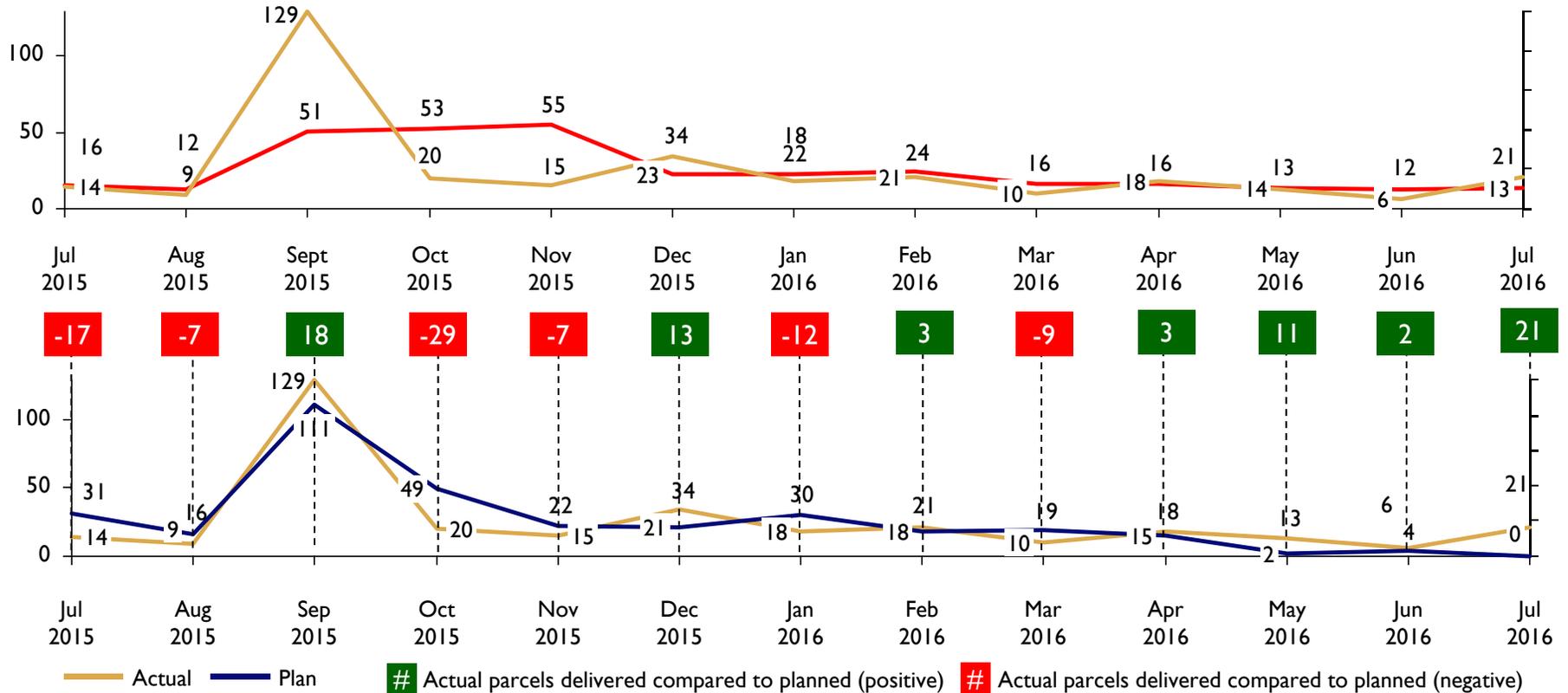
Source: August 12, 2016 ROW Weekly Report

# ROW – CP1ABC Historic Performance

## CPIABC Performance (in number of parcels)

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

Data through July 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

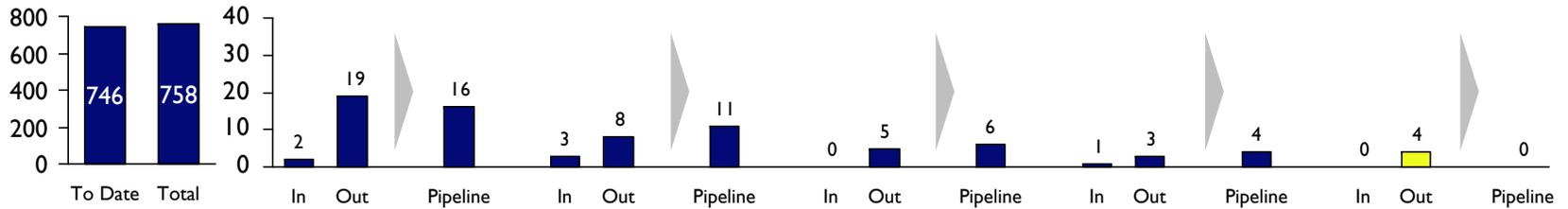
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

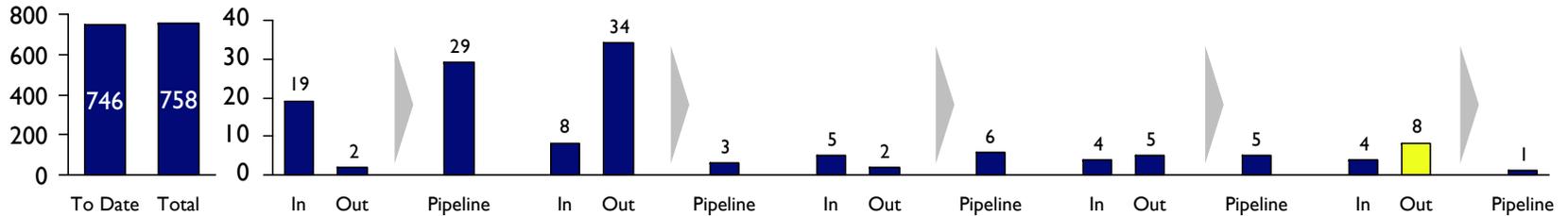
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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

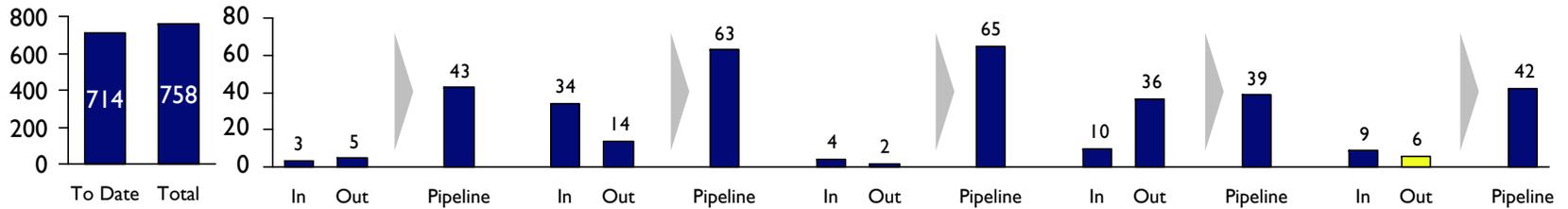
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

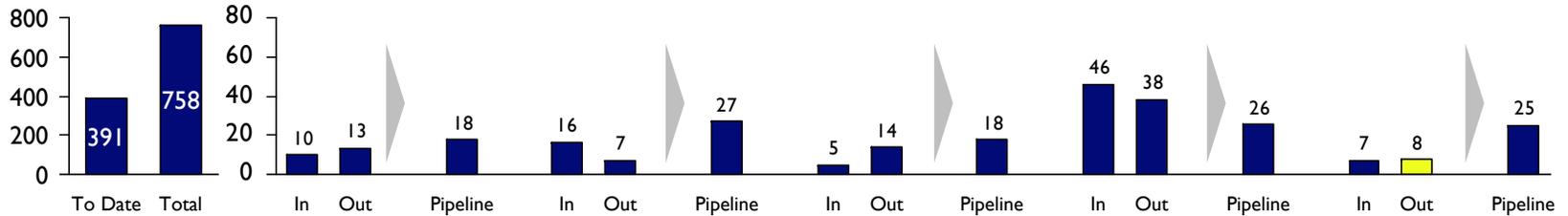
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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).

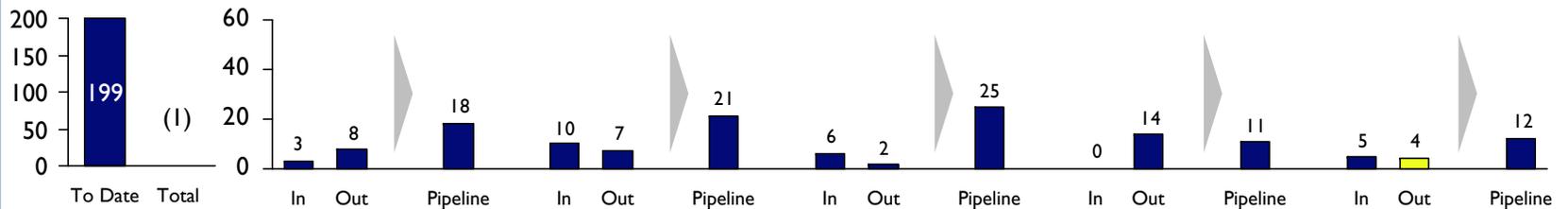
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

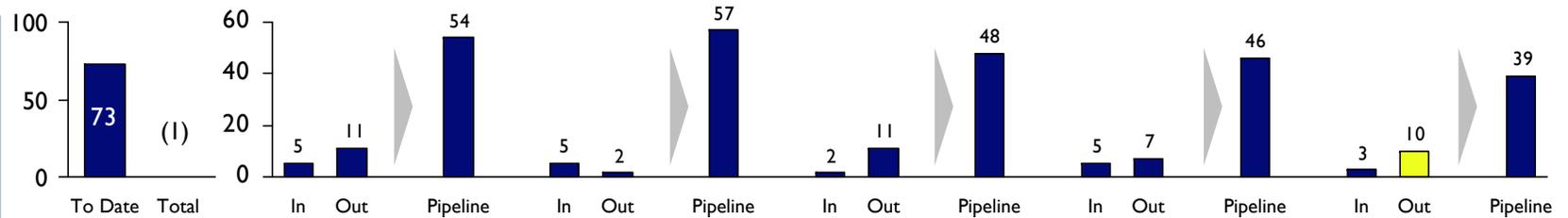


Condemnation



- 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.

Eminent Domain



- 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

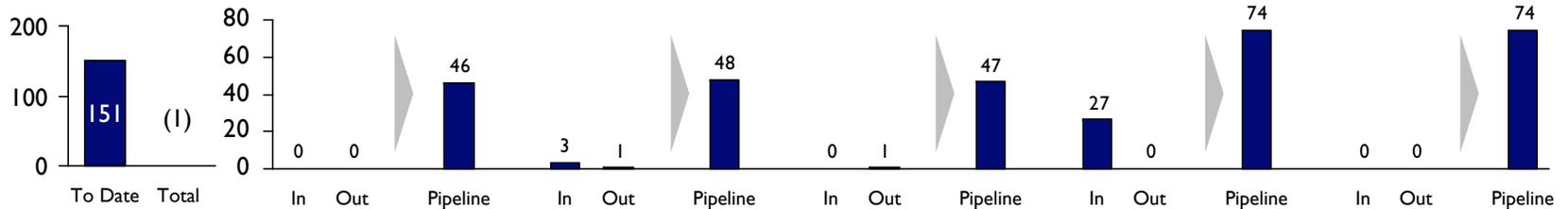
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

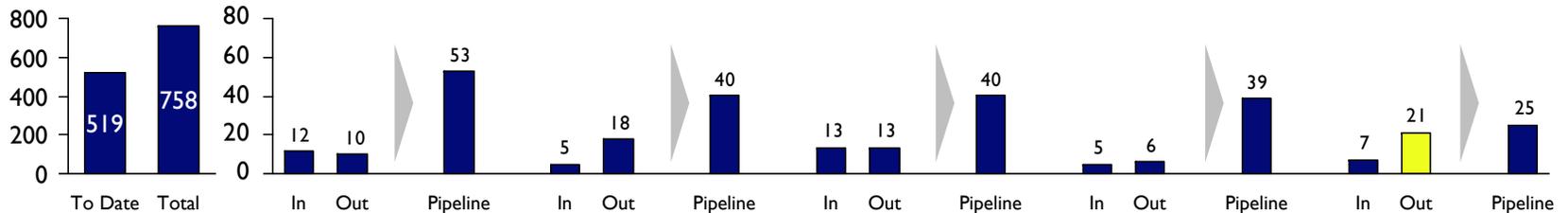


Public Agency / Railroad



- Comprised of railroad parcels and public parcels. Public parcels are being processed with Master Agreements before proceeding to individual utility relocations and acquisitions.

Delivery



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

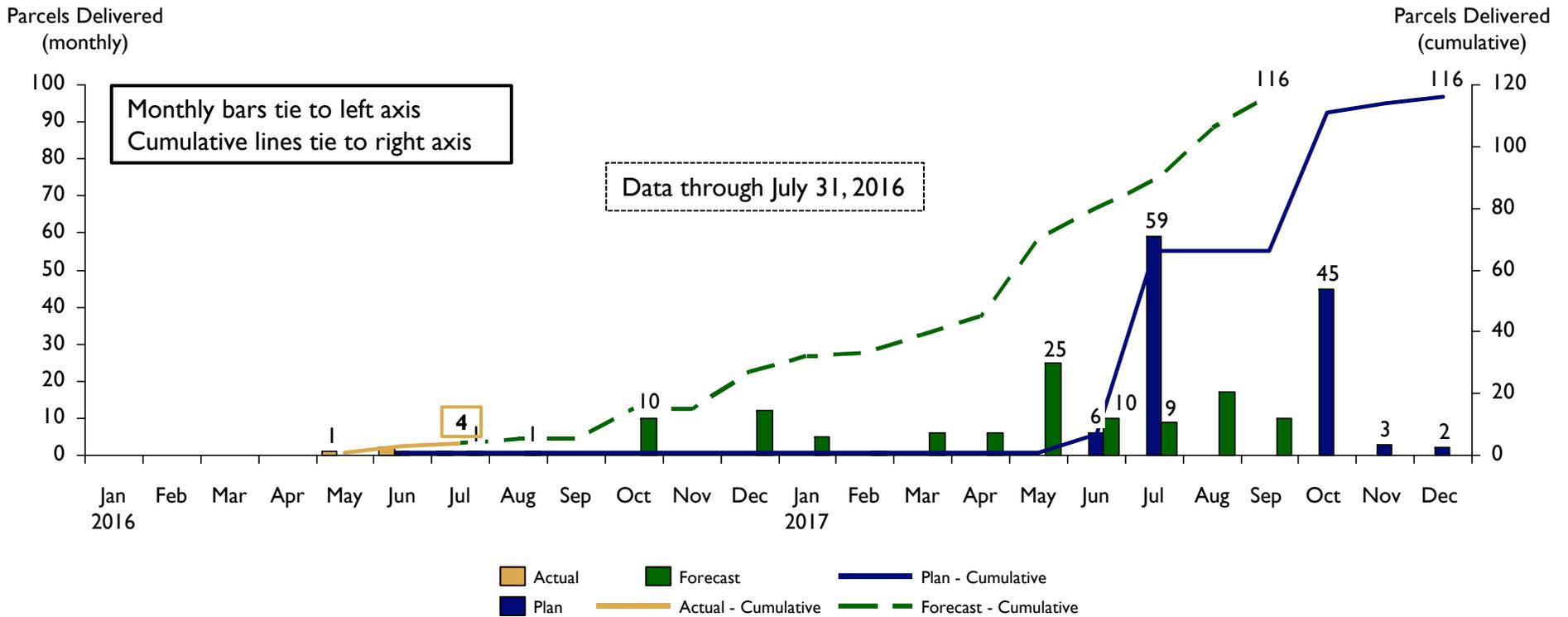
(1) Total number of public parcels to be identified

Source: August 12, 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:

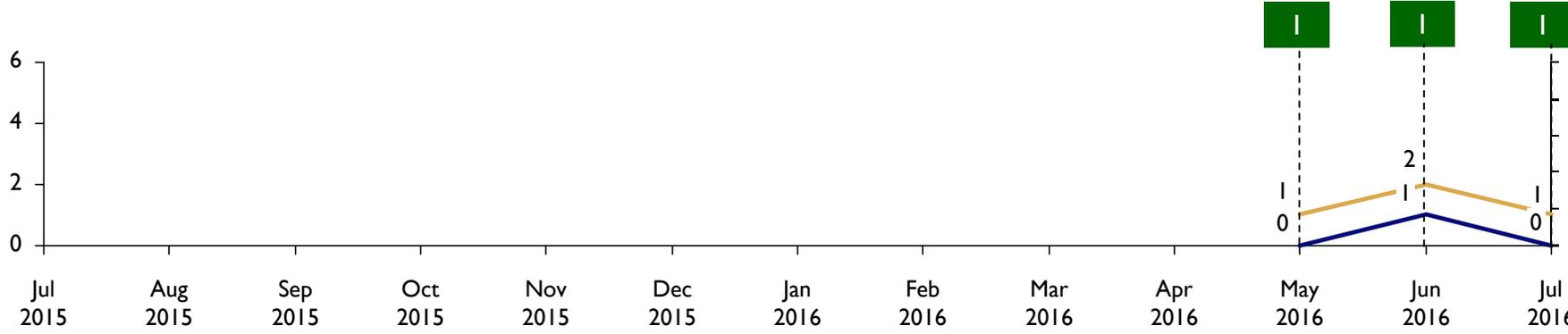
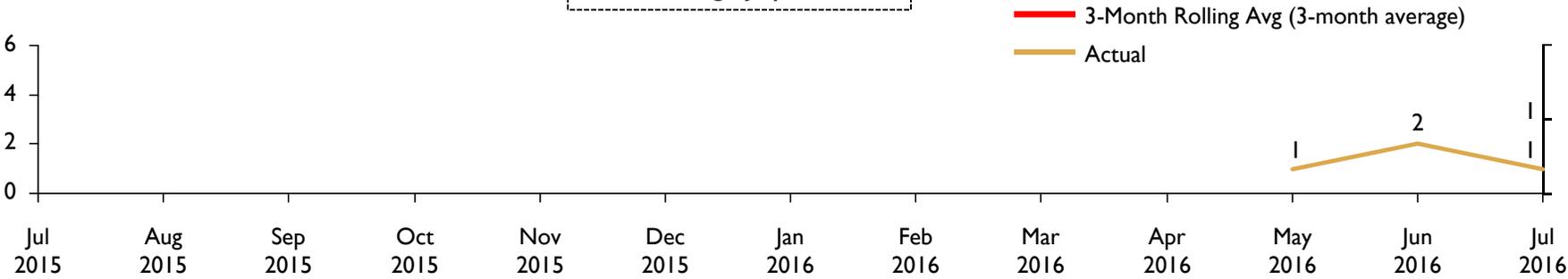
1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved.

Source: August 12, 2016 ROW Weekly Report

# ROW – CP1D Historic Performance

## CPID Performance (in number of parcels)

Data through July 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.

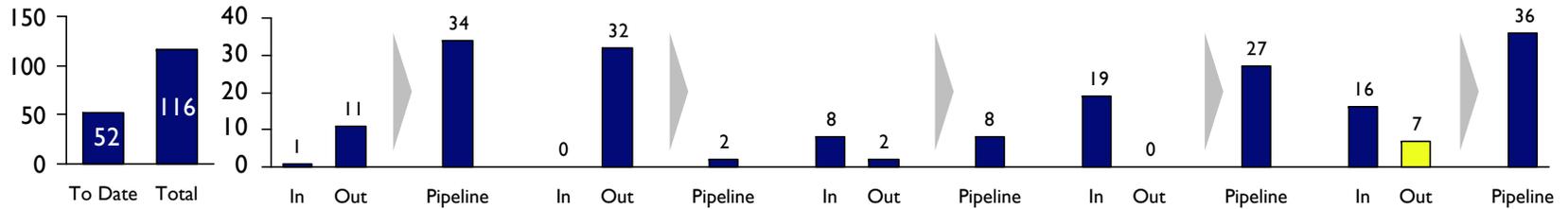
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

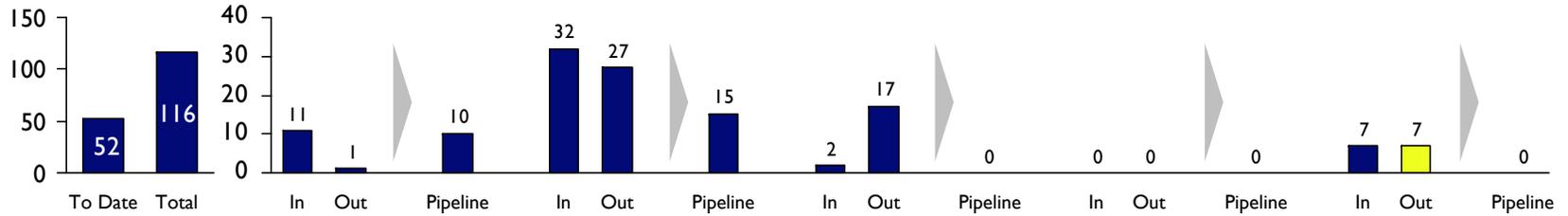
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

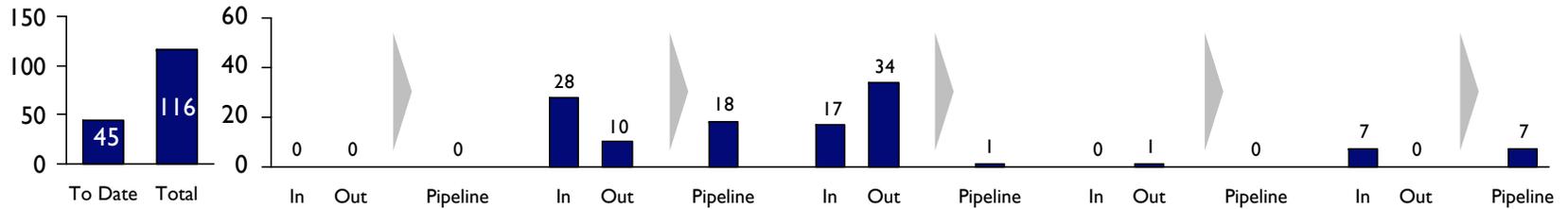
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

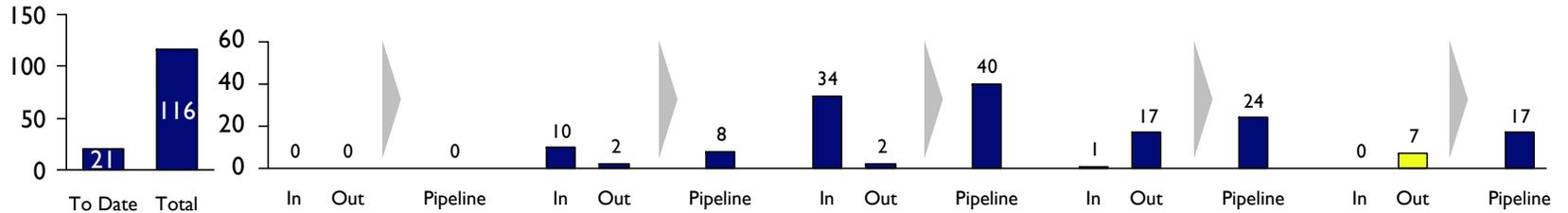
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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)

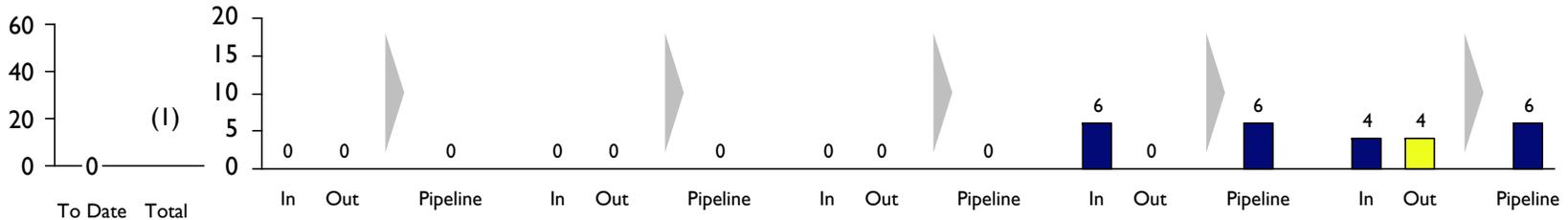
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

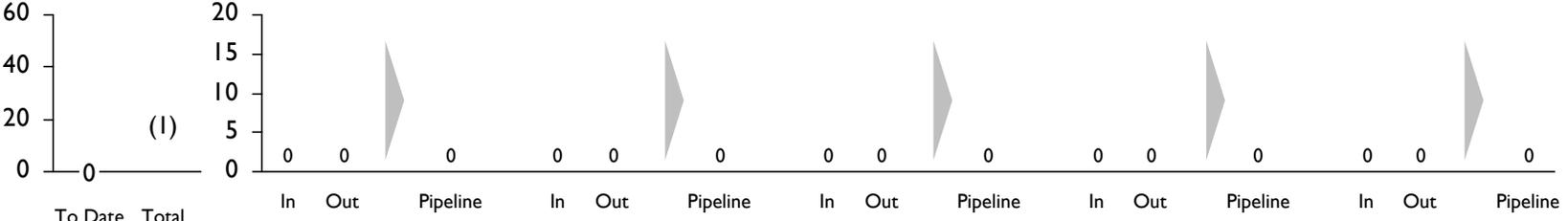
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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

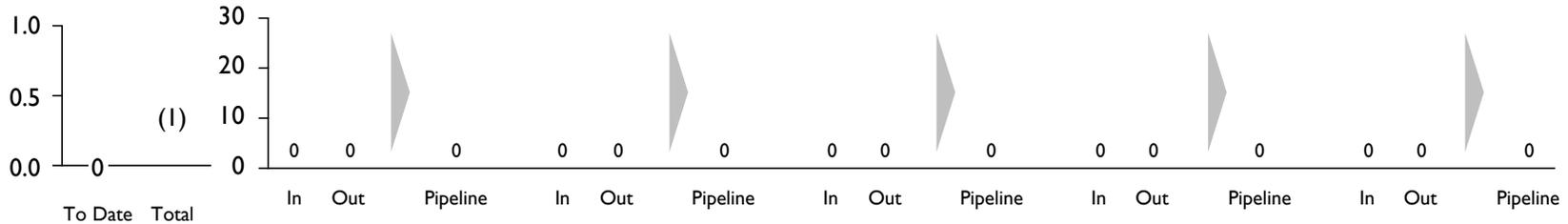
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

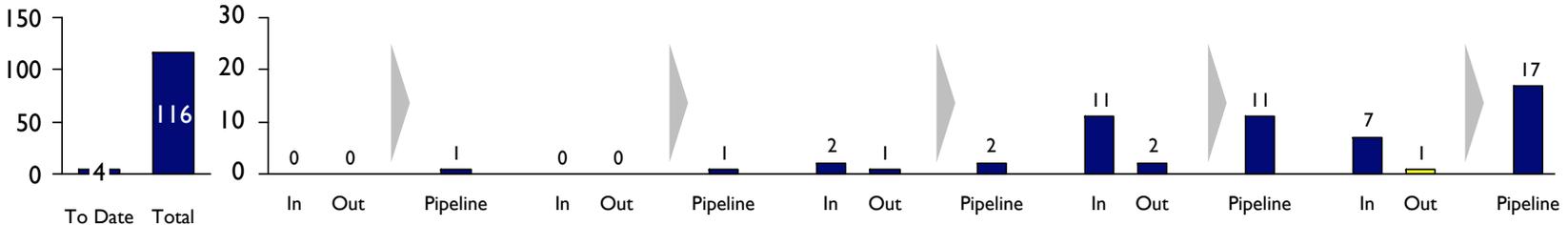
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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.

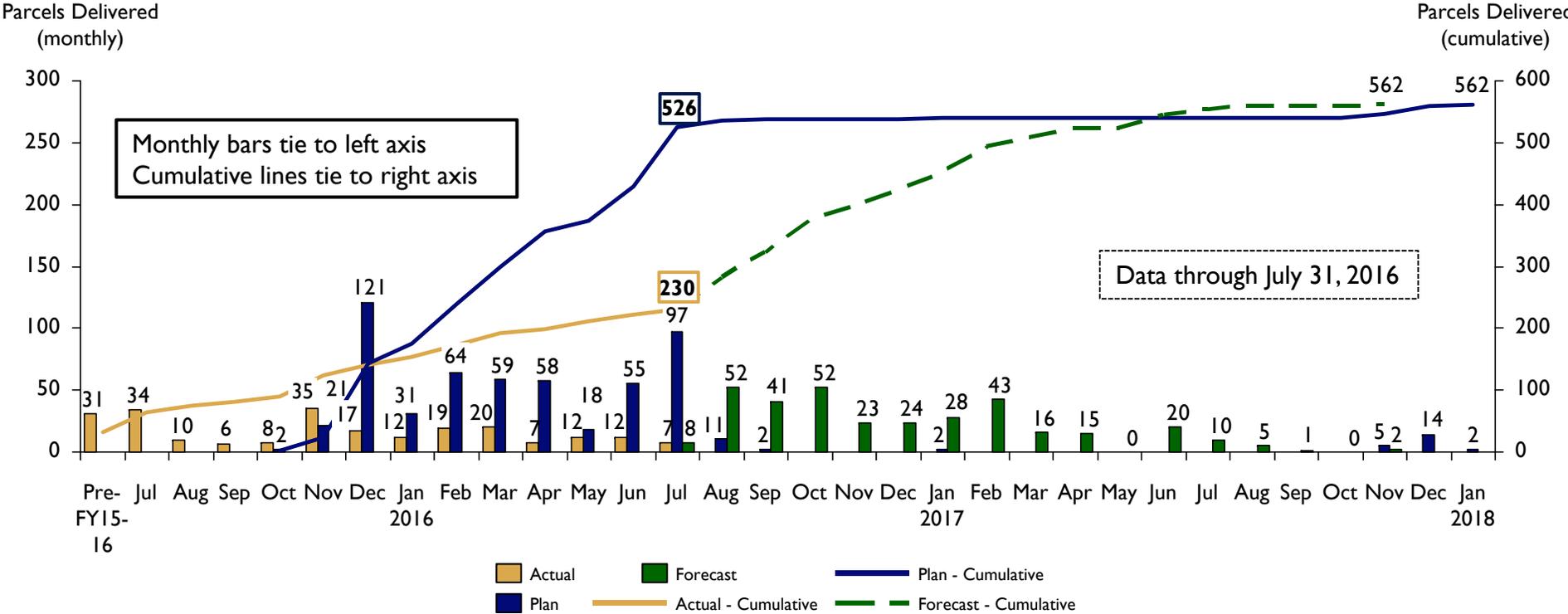
(1) Total number of public parcels to be identified

Source: August 12, 2016 ROW Weekly Report

# ROW – CP2-3 Parcels Delivered to Design-Build by Month

Plan vs. Actual vs. Forecast

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



Notes:

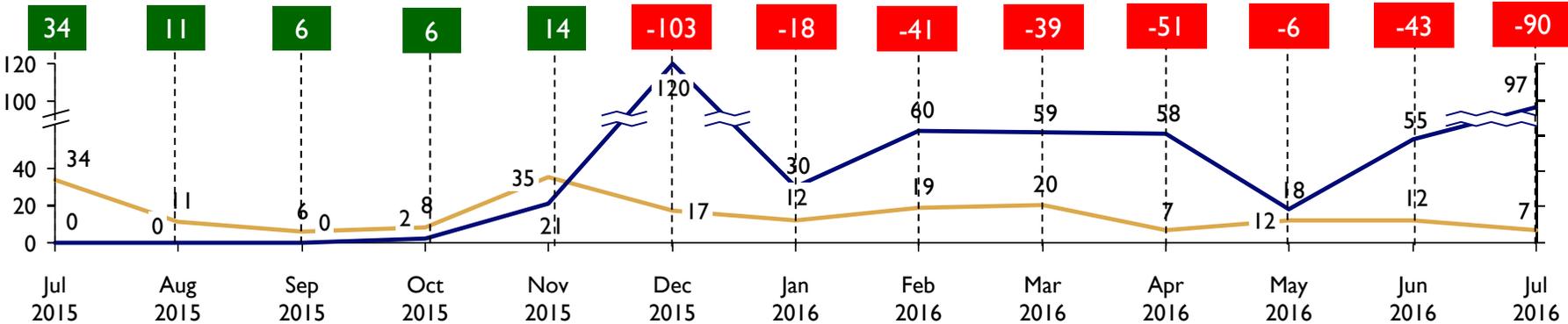
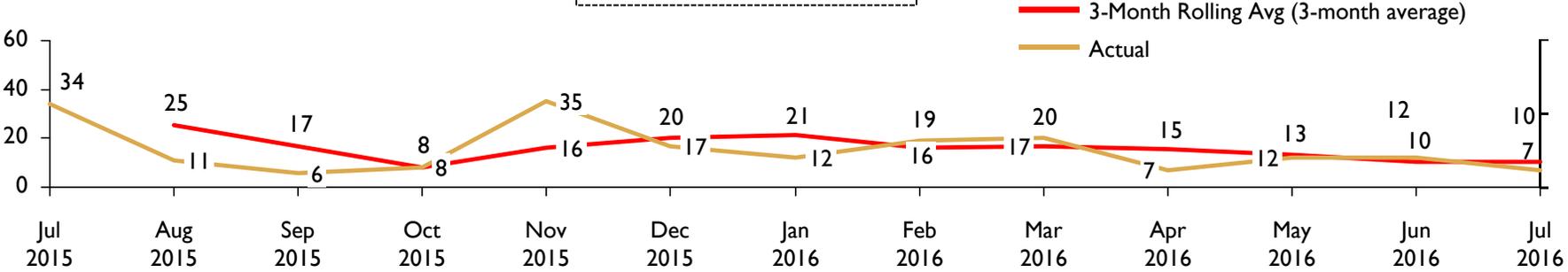
- 1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized. Addition of new parcels extend Plan full delivery to later date.
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are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

Source: August 12, 2016 ROW Weekly Report

# ROW – CP2-3 Historic Performance

## CP2-3 Performance (in number of parcels)

Data through July 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.

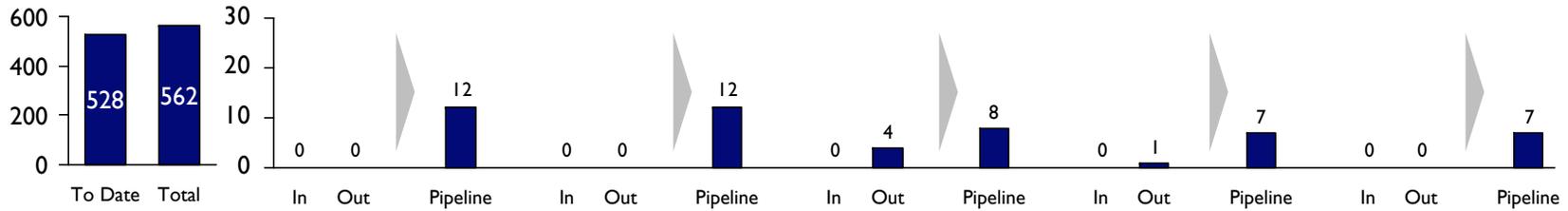
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

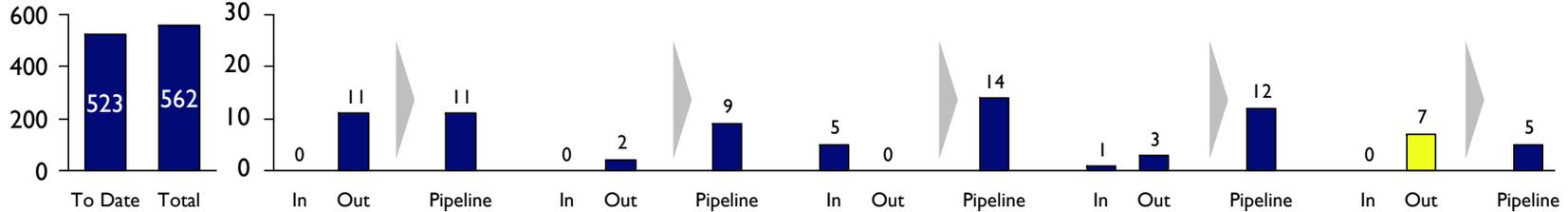
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

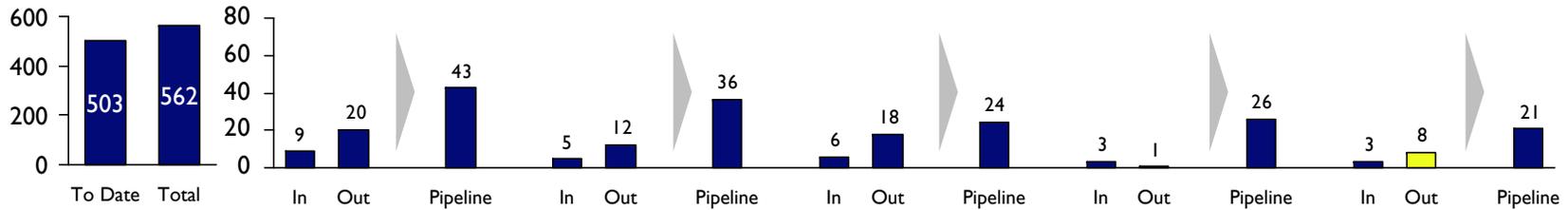
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

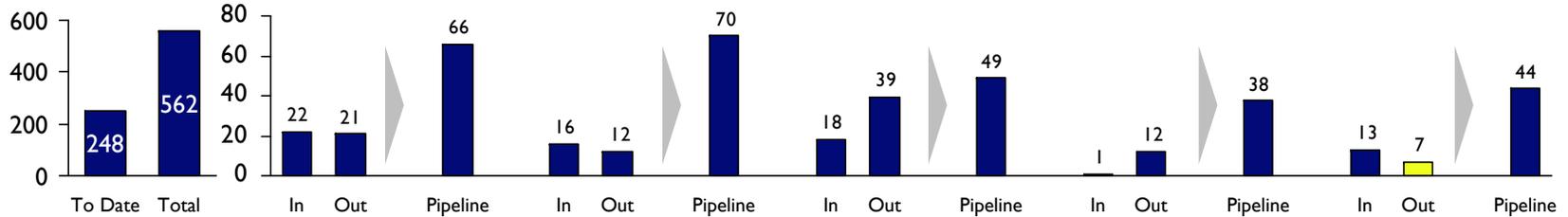
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First Written Offer



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Negotiation Acquisition



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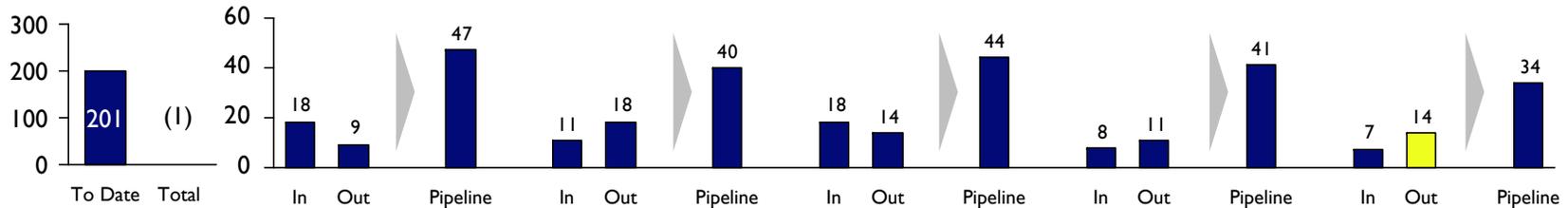
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

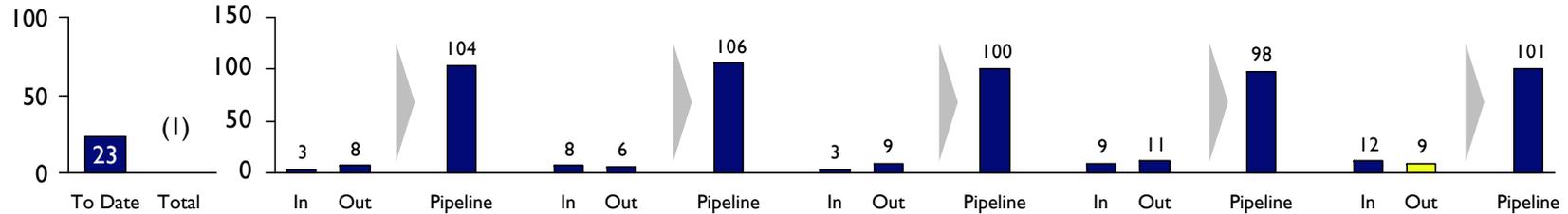
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Condemnation



- 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

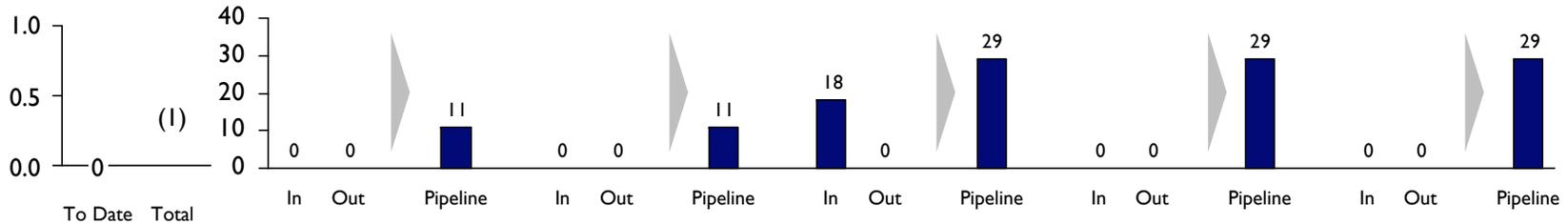
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

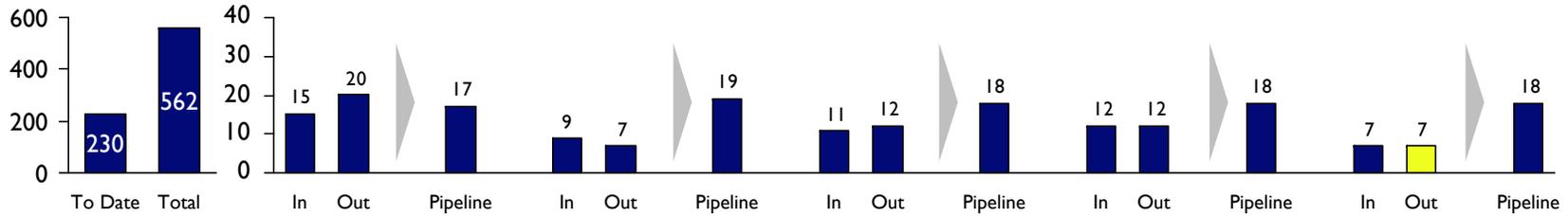
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

Public Agency / Railroad



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Delivery



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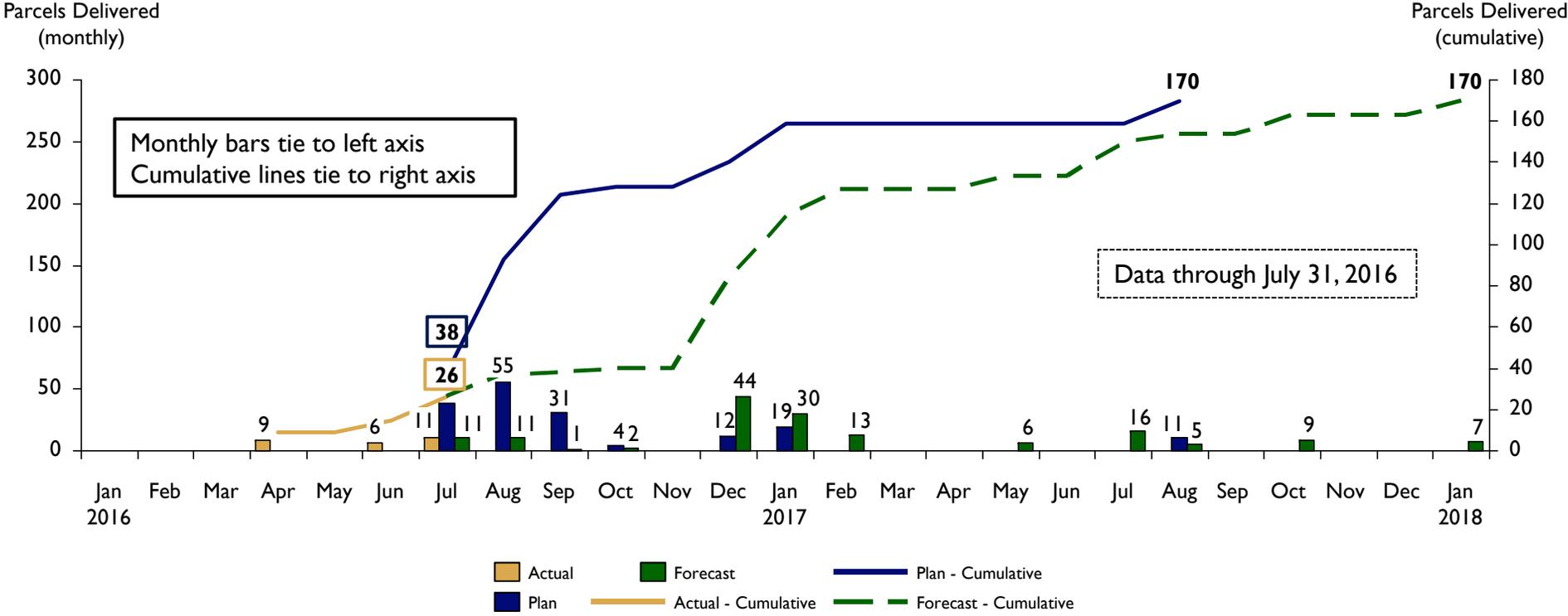
(1) Total number of public parcels to be identified

Source: August 12, 2016 ROW Weekly Report

# ROW – CP4 Parcels Delivered to Design-Build by Month

Plan vs. Actual vs. Forecast

## CP4 - Delivered to DB (in number of parcels)



Notes:

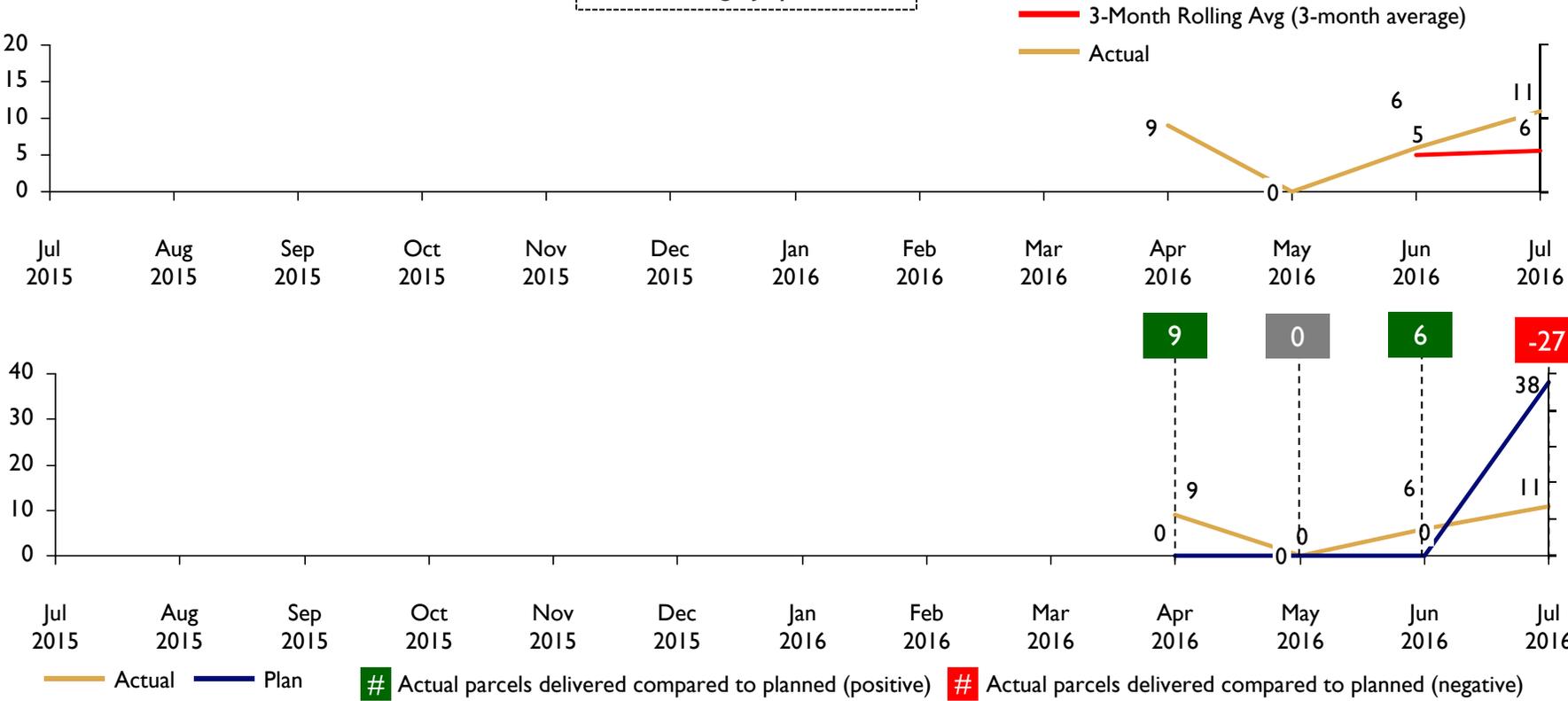
- 1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are approved.

Source: August 12, 2016 ROW Weekly Report

# ROW – CP4 Historic Performance

## CP4 Performance (in number of parcels)

Data through July 31, 2016



Notes:  
 1. Per contract, "planned" to be rebaselined.  
 2. Design changes and lag in data entry can cause slight changes to plan and actual counts.

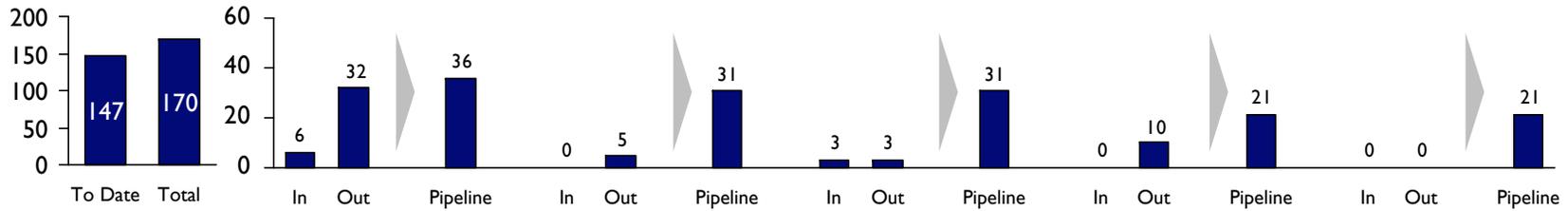
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

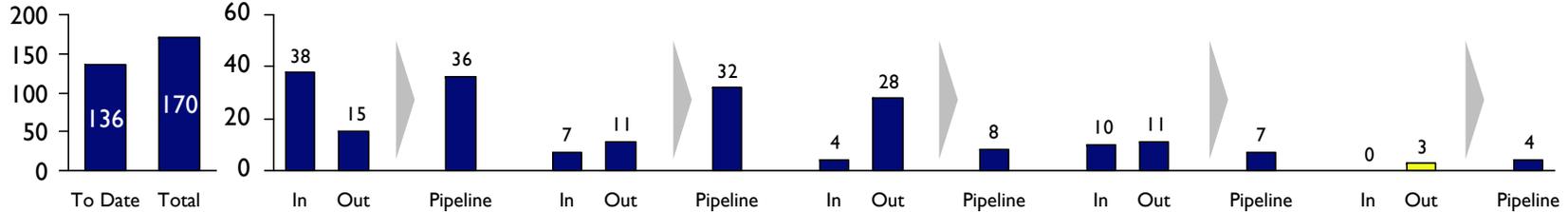
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Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

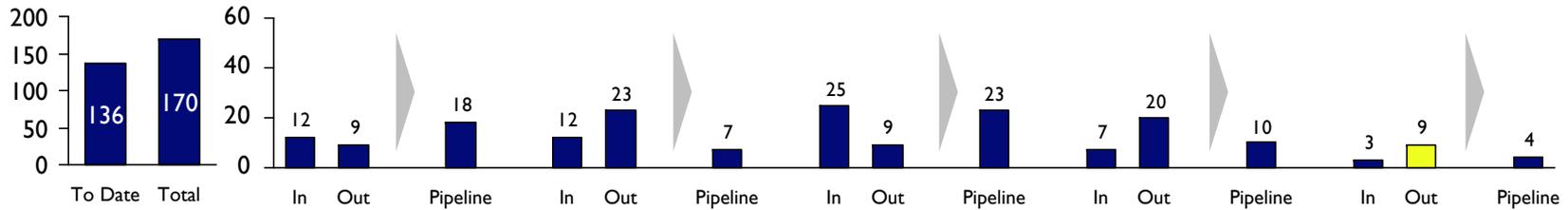
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

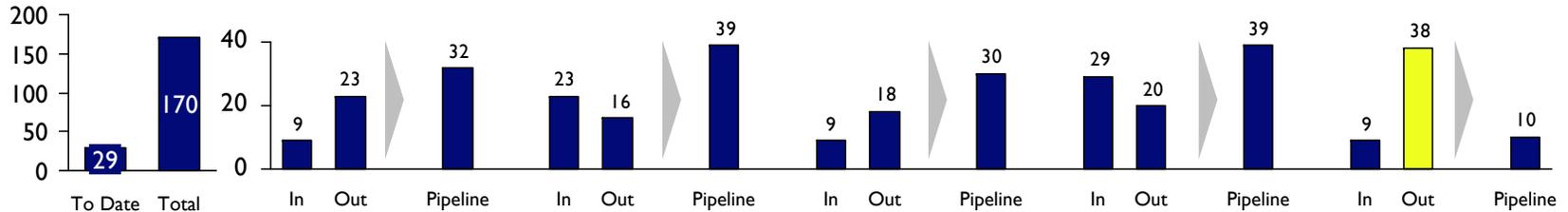


First Written Offer



- 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)

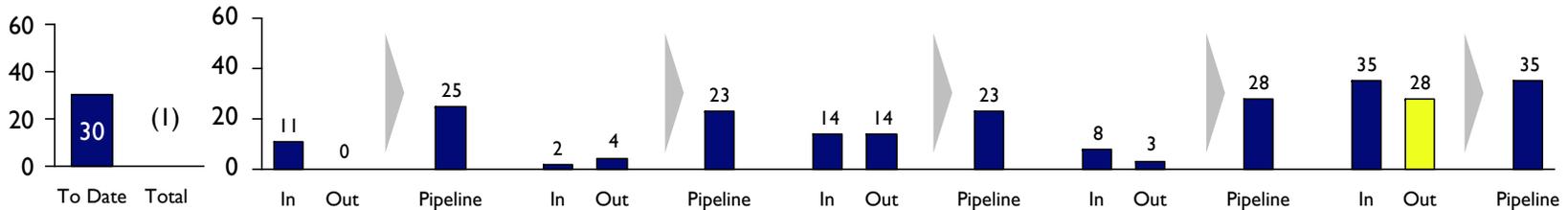
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

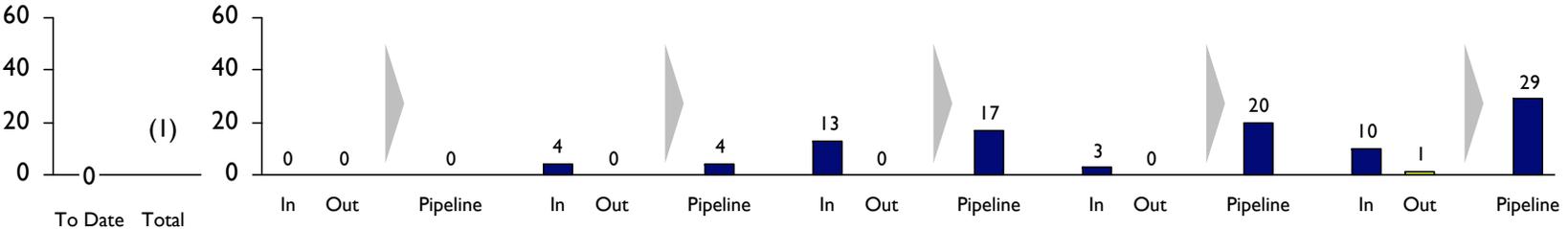
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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

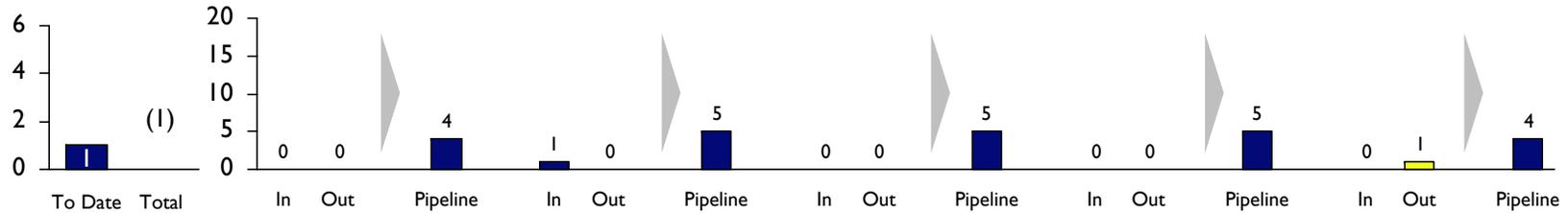
Source: August 12, 2016 ROW Weekly Report

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

## Volume of Activity by Process (Flow) - Pipeline

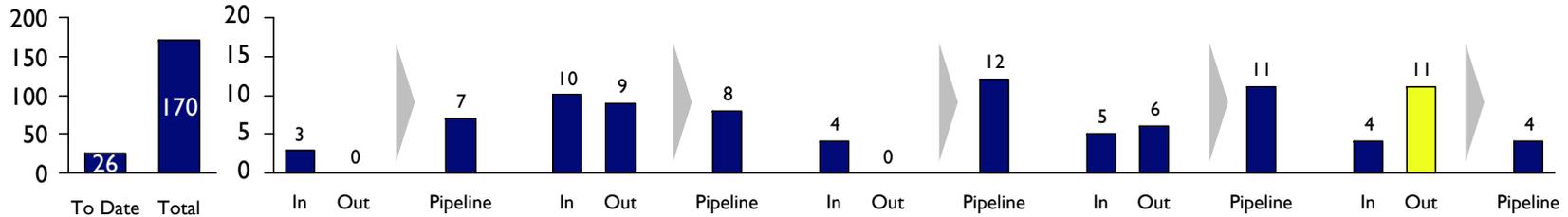
Completion    March 2016    April 2016    May 2016    June 2016    **July 2016**

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.

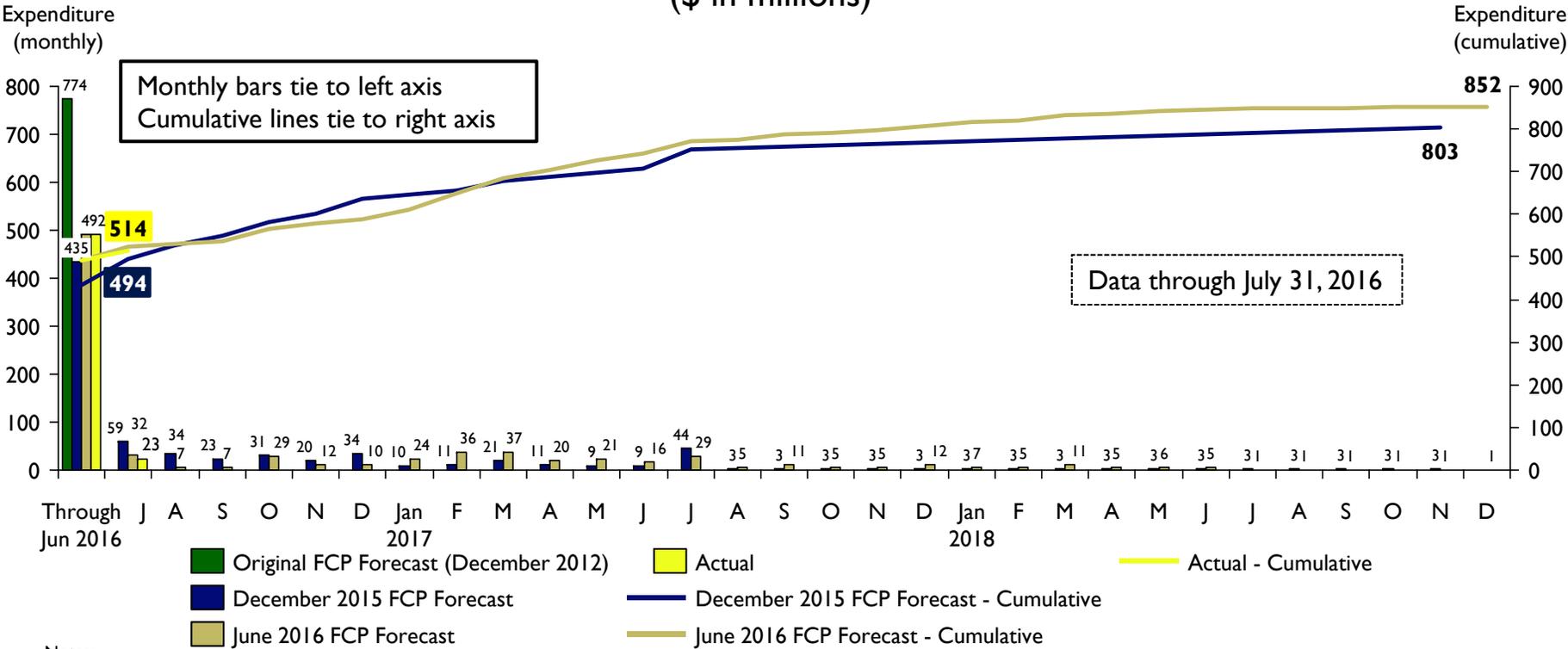
(1) Total number of public parcels to be identified

Source: August 12, 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.

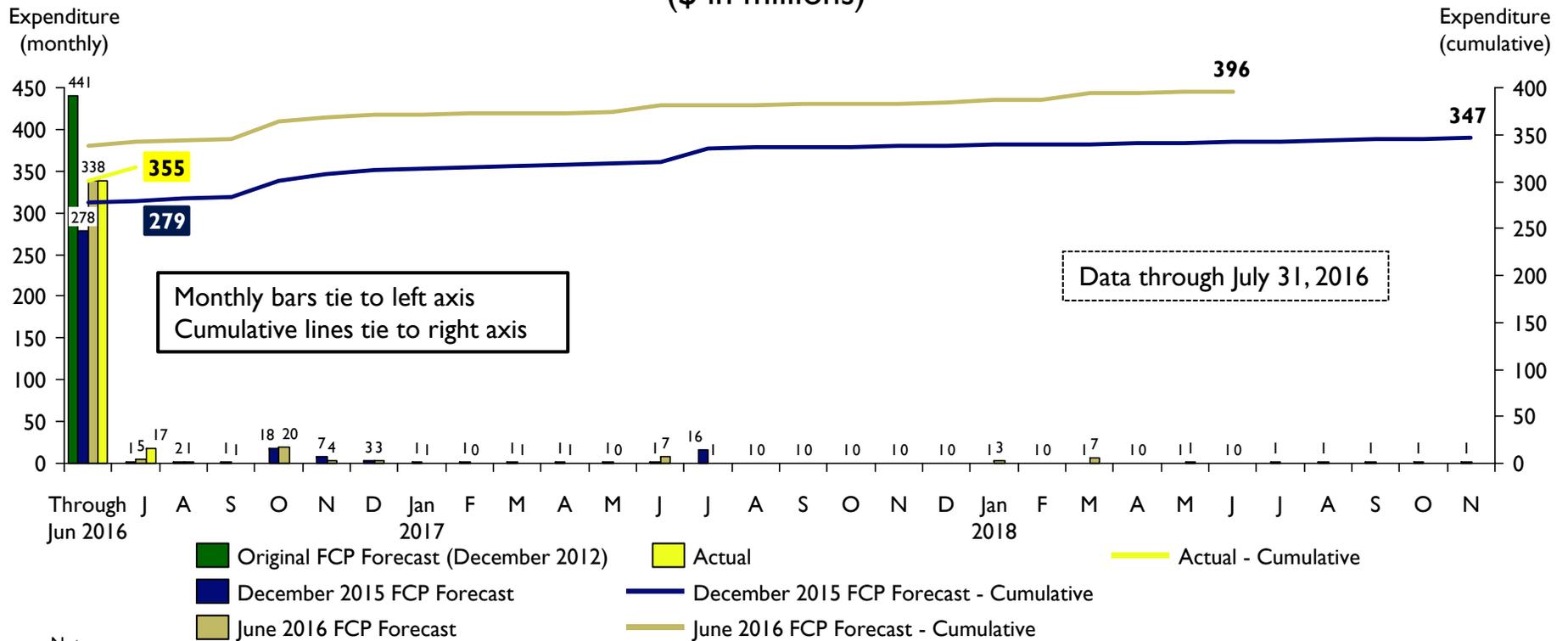
Sources:

1. Interim Funding Contribution Plan Worksheet, Jul-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.

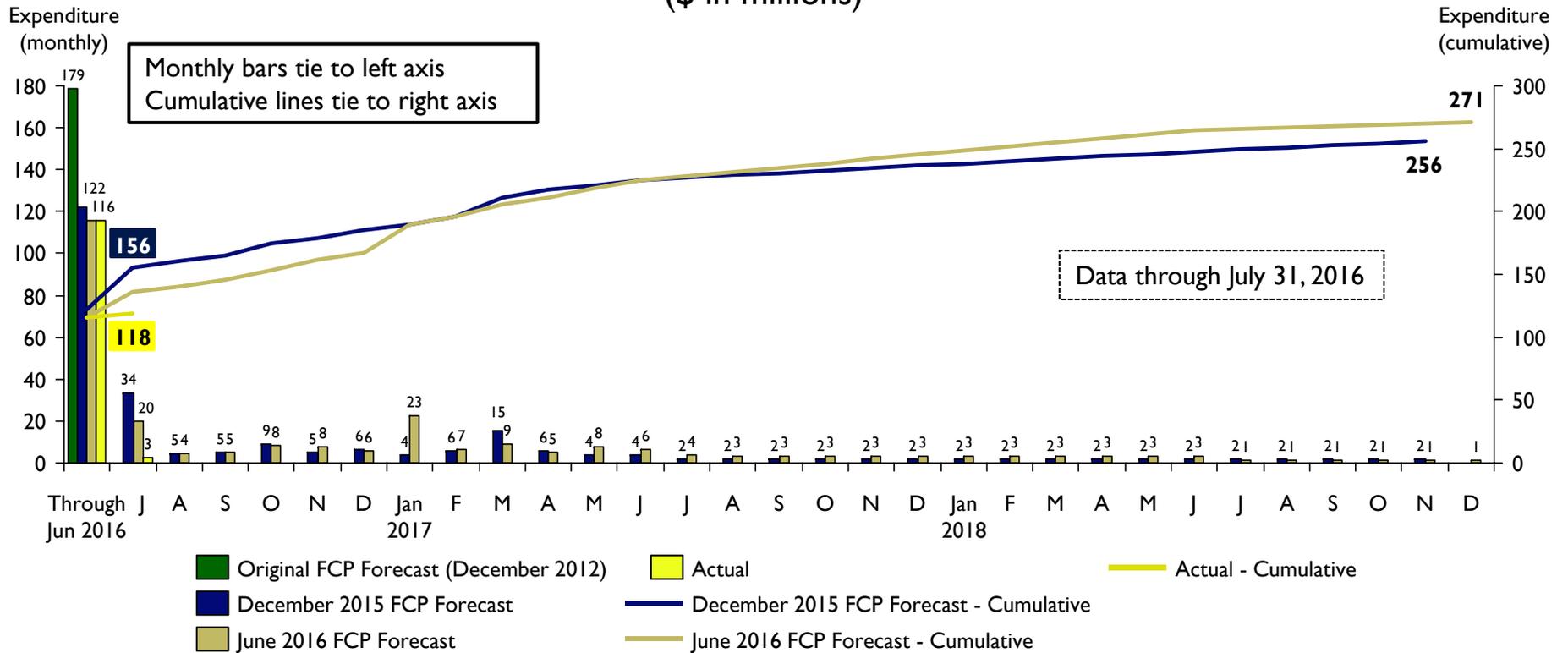
Sources:

1. Interim Funding Contribution Plan Worksheet, Jul-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.

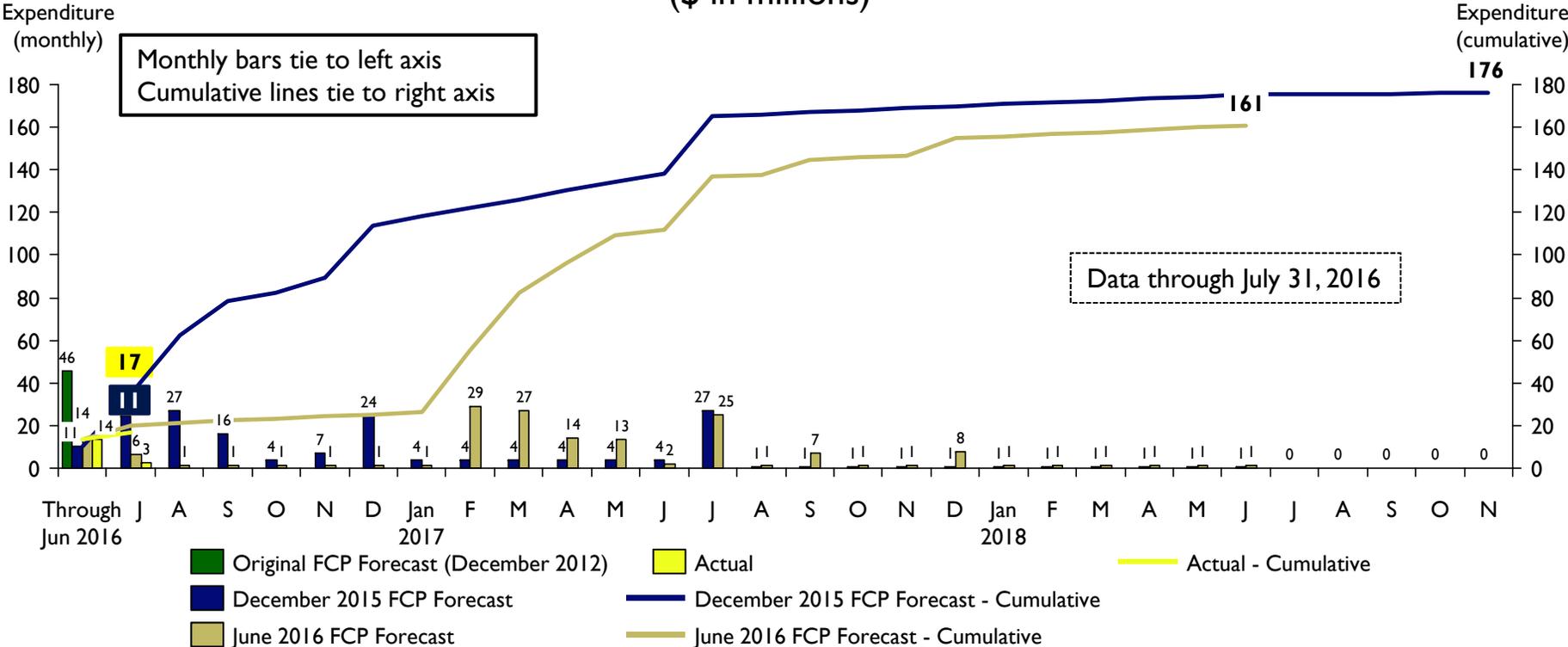
Sources:

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

# Agenda

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

## Environmental Clearance Metrics - Context

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- ▶ 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 July 2016<sup>1</sup>

Segment	Progress to Date	Next Steps
San Francisco to San Jose	<ul style="list-style-type: none"> <li>Concluded scoping comment period on July 20 and began preparing scoping report.</li> <li>Held City-County Coordination Group, Local Policy Makers Group, and community working group meetings.</li> <li>Reviewed project definition documentation.</li> <li>Continued to advance preliminary design.</li> </ul>	<ul style="list-style-type: none"> <li>Work with the EEC on schedule recovery plans to avoid impact on ROD.</li> <li>Submit Clean Water Act Checkpoint B package to EPA and USACE.</li> <li>Maintain stakeholder outreach.</li> <li>Continue coordination meetings with Caltrain to advance blended service and operations in the Caltrain corridor.</li> </ul>
San Jose to CV Wye	<ul style="list-style-type: none"> <li>Continued development of project definition and project footprint.</li> <li>Developed materials for initiating natural and cultural resource field surveys.</li> <li>Completed drilling at four locations for geotechnical investigation in the Pacheco Pass.</li> </ul>	<ul style="list-style-type: none"> <li>Submit project definition to FRA for review.</li> <li>Submit Clean Water Act Checkpoint B addenda to EPA and USACE.</li> <li>Continue to evaluate environmentally sensitive areas along alignment alternatives.</li> <li>Maintain involvement in infrastructure analysis with Caltrain.</li> <li>Continue stakeholder outreach.</li> </ul>
Central Valley Wye (M-F)	<ul style="list-style-type: none"> <li>Initiated development of new alternative approved at the June Board meeting.</li> <li>Began preparing a Checkpoint B addendum for the new alternative.</li> <li>Continued footprint identification and preliminary engineering.</li> </ul>	<ul style="list-style-type: none"> <li>Update technical reports and administrative draft sections to include additional alternative.</li> <li>Continue coordination with stakeholders and resource agencies, including the US Bureau of Reclamation, to identify a preferred alternative.</li> <li>Complete preliminary engineering for project definition for additional alternative.</li> </ul>
Central Valley Interconnections	<ul style="list-style-type: none"> <li>Submitted to FRA for review the draft environmental evaluation for interconnection and upgrade improvements for the test track.</li> <li>Conducted environmental analysis for sites 4 to 7 covering the San Jose to Merced and Wye project sections.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to coordinate with PG&amp;E on electrical interconnections and upgrades.</li> <li>Prepare Biological Resources Memo and cultural survey reports for sites 6 and 7.</li> <li>Complete re-evaluations for sites 8 to 12 by end of summer, 2016.</li> </ul>
HMF	<ul style="list-style-type: none"> <li>Environmental screening criteria and clearance approach still under discussion.</li> </ul>	<ul style="list-style-type: none"> <li>Assess schedule performance once screening criteria and approach are finalized.</li> </ul>
Locally Generated Alternative (F-B) <sup>2</sup>	<ul style="list-style-type: none"> <li>Developing technical reports and administrative draft for F Street evaluation.</li> <li>Continued outreach to City of Shafter and Kern County to discuss locally generated design refinements.</li> </ul>	<ul style="list-style-type: none"> <li>Continue review of Clean Water Act Checkpoint C Summary Report</li> <li>Continue outreach, community and agency meetings.</li> <li>Prepare Section 404 and Section 401 Clean Water Act permit applications for construction year 2016.</li> </ul>

<sup>1</sup> Text identified in red indicate change from previous month.

<sup>2</sup> Previously referred to as the Bakersfield F Street Station Alignment

# Environmental Milestones Schedule (to ROD)

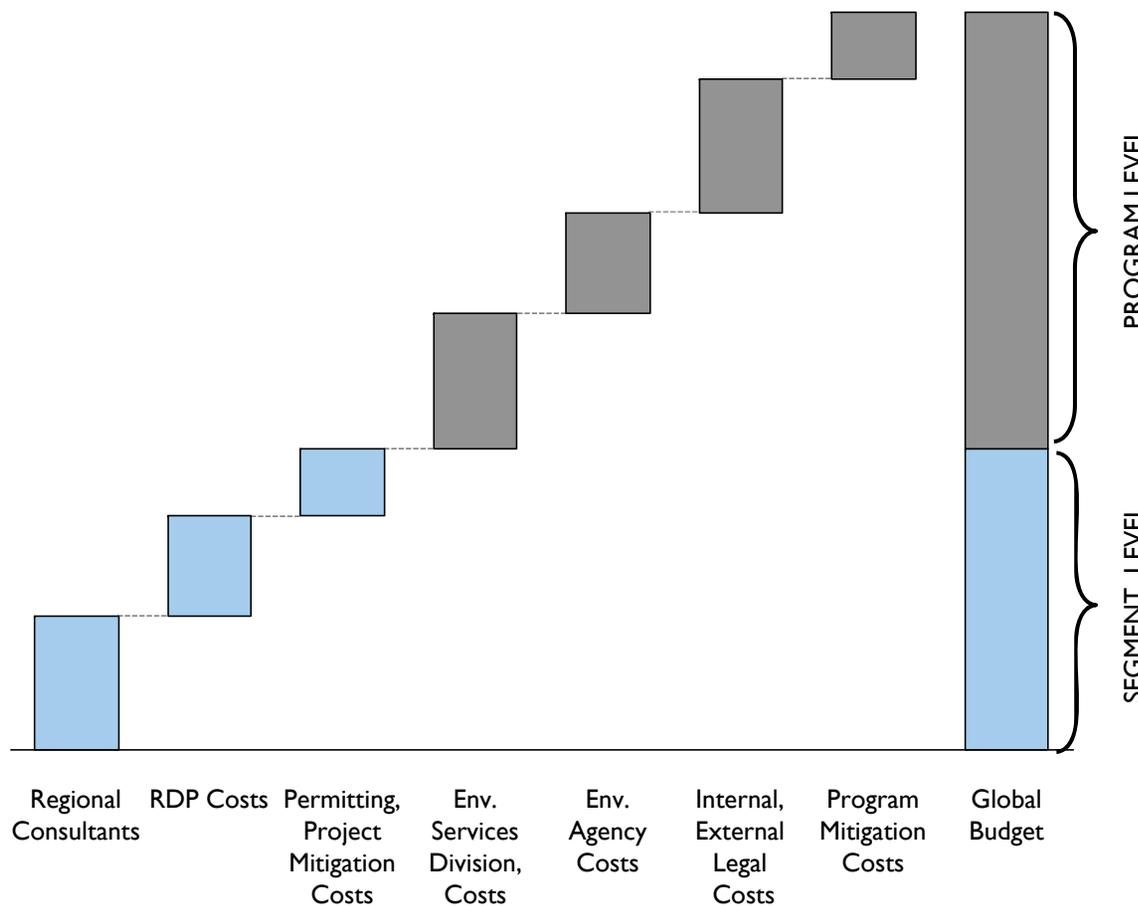
Information through July 2016<sup>1</sup>

Segment	Progress to Date	Next Steps
Bakersfield to Palmdale	<ul style="list-style-type: none"> <li>Conducted community open house meetings in Edison, Tehachapi, Lancaster and Rosamond.</li> <li>Reviewed draft technical reports on noise and vibration, community impacts, and relocation impacts.</li> <li>Continued to review draft technical reports, and administrative draft EIR/EIS chapters and sections.</li> </ul>	<ul style="list-style-type: none"> <li>Continue coordination with the resource agencies, particularly under Section 402 of the Clean Water Act.</li> <li>Complete draft preliminary engineering for project definition.</li> <li>Complete remaining technical reports and EIR/EIS chapters and sections.</li> <li>Develop regional approach for biological mitigation.</li> </ul>
Palmdale to Burbank	<ul style="list-style-type: none"> <li>Continued work on traffic modeling and analysis.</li> <li>Continued geotechnical investigation in Angeles National Forest.</li> <li>Preparing Clean Water Act Checkpoint B submittal.</li> <li>Submitted remaining “in progress” documents for preliminary engineering for project definition.</li> </ul>	<ul style="list-style-type: none"> <li>Continue coordination activities with the USFS and other resource agencies.</li> <li>Complete administrative draft review of Chapter 2 – Alternatives.</li> <li>Distribute additional permission-to-enter letters for field studies.</li> <li>Continue to prepare and review draft technical reports and EIR/EIS chapters and sections.</li> <li>Develop regional approach for biological mitigation.</li> </ul>
Burbank to LA	<ul style="list-style-type: none"> <li>Conducted review of draft Preliminary Engineering for Project Definition.</li> <li>Held basis of design meeting with Metro, Metrolink, Amtrak/LOSSAN.</li> <li>Reviewed draft project description and draft jurisdictional waters/wetlands delineation technical studies.</li> </ul>	<ul style="list-style-type: none"> <li>Complete preparation of final preliminary engineering for project definition.</li> <li>Continue discussions with USEPA and USACE regarding permitting strategy under Clean Water Act.</li> <li>Evaluate parking strategies at LA Union Station.</li> <li>Coordinate with Metro and Metrolink on LA Union Station strategies.</li> </ul>
LA to Anaheim	<ul style="list-style-type: none"> <li>Conducted review of draft preliminary engineering for project definition.</li> <li>Developing environmental justice strategy for outreach.</li> <li>Continued to prepare technical baseline studies and administrative drafts for evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>Complete preparation of final preliminary engineering for project definition.</li> <li>Continue discussions with USEPA and USACE regarding permitting strategy under Clean Water Act.</li> <li>Continue coordination with corridor operators.</li> <li>Complete draft jurisdictional waters/wetlands delineation technical studies.</li> <li>Define project footprint for environmental evaluation.</li> </ul>

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

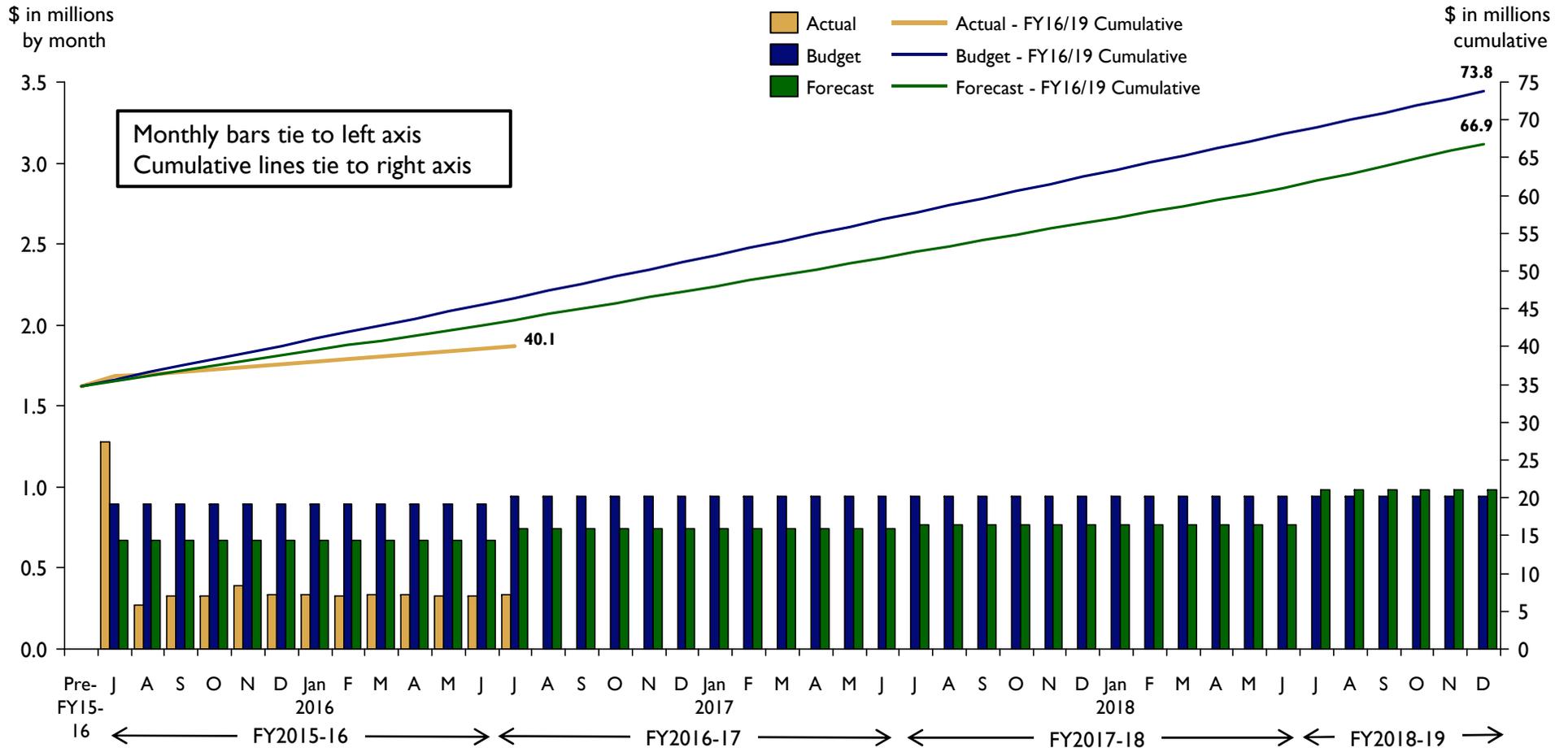
# Global Environmental Budget includes activities involved in the scope at the program and segment levels

## Cost Categories for Scope and Budget Definition



- | Cost Categories   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ <b>Regional consultants'</b> and Engineering and Environmental consultants' costs include project management, outreach, planning, engineering and environmental activities.</li> <li>▪ <b>RDP costs</b> include management, coordination, and technical reviews.</li> <li>▪ <b>Permitting and project mitigation costs</b> include obtaining permits required for construction and implementing project-level mitigation commitments.</li> <li>▪ <b>Authority costs</b> reflect management and staff costs for overseeing environmental program delivery.</li> <li>▪ <b>Environmental agency costs</b> are costs for agency staff to attend meetings, review technical reports, and provide technical guidance.</li> <li>▪ <b>Legal costs</b> are costs associated with in-house and outside legal reviews.</li> <li>▪ <b>Program mitigation costs</b> for costs associated with implementing EIR/EIS program-level mitigation commitments.</li> </ul> |  |

# 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 RC and RDP.

# Environmental Milestones Schedule (to ROD) - Information through July 2016<sup>1</sup>

Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Selection of Preliminary Preferred Alternative for Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIR/EIS and Obtain ROD		Date EIR/EIS To Be Completed	
		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 11%	Jul-16 Nov-16 12%	Jan-17 Feb-17 7%	Jan-17 Feb-17 7%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
4 San Jose to Merced	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-16 Dec-16 11%	Sep-16 Dec-16 12%	Feb-17 Mar-17 10%	Feb-17 Mar-17 10%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
5 Central Valley Wye (M-F) <sup>2,3</sup>	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-15 May-17 60%	Sep-15 May-17 60%	Feb-16 Feb-17 0%	Feb-16 Feb-17 0%	Dec-16 Dec-17 0%	Dec-16 Dec-17 0%	Dec-16	Dec-17
6 CV Electrical Interconnections	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-16 Aug-16 90%	Jul-16 Aug-16 90%	Nov-16 Nov-16 0%	Nov-16 Nov-16 0%	Oct-17 Oct-17 0%	Oct-17 Oct-17 0%	Oct-17	No Change
7 HMF	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Apr-16 TBD 0%	Apr-16 TBD 0%	Sep-16 TBD 0%	Sep-16 TBD 0%	May-17 May-17 0%	May-17 May-17 0%	May-17	No Change
8 Locally Generated Alternative (F-B) <sup>4</sup>	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-16 Oct-16 5%	Jul-16 Oct-16 5%	Dec-16 Jan-17 0%	Dec-16 Jan-17 0%	Dec-16	Jan-17
9 Bakersfield to Palmdale	Plan Forecast % Complete	Complete 100%	Complete 100%	Jan-16 Mar-16 85%	Complete 100%	Oct-16 Dec-16 20%	Oct-16 Dec-16 20%	Feb-17 May-17 10%	Feb-17 May-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
10 Palmdale to Burbank	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Aug-16 Jan-17 25%	Aug-16 Jan-17 25%	Mar-17 Apr-17 15%	Mar-17 Apr-17 15%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
11 Burbank to LA	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Mar-17 Feb-17 5%	Mar-17 Feb-17 5%	Jun-17 Jul-17 5%	Jun-17 Jul-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
12 LA to Anaheim	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Mar-17 Feb-17 15%	Mar-17 Feb-17 15%	Jun-17 Jul-17 5%	Jun-17 Jul-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17

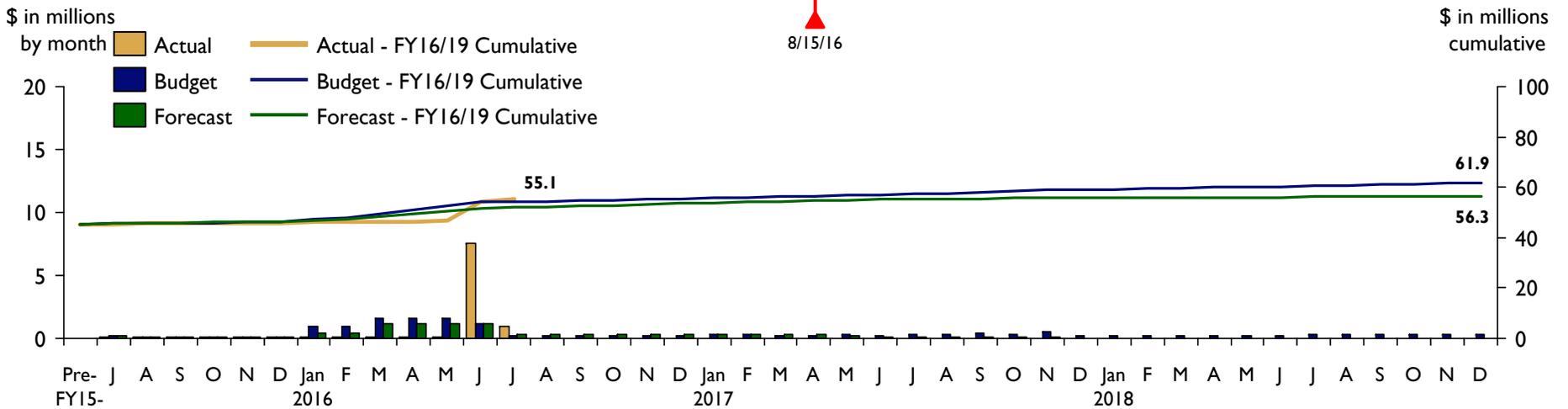
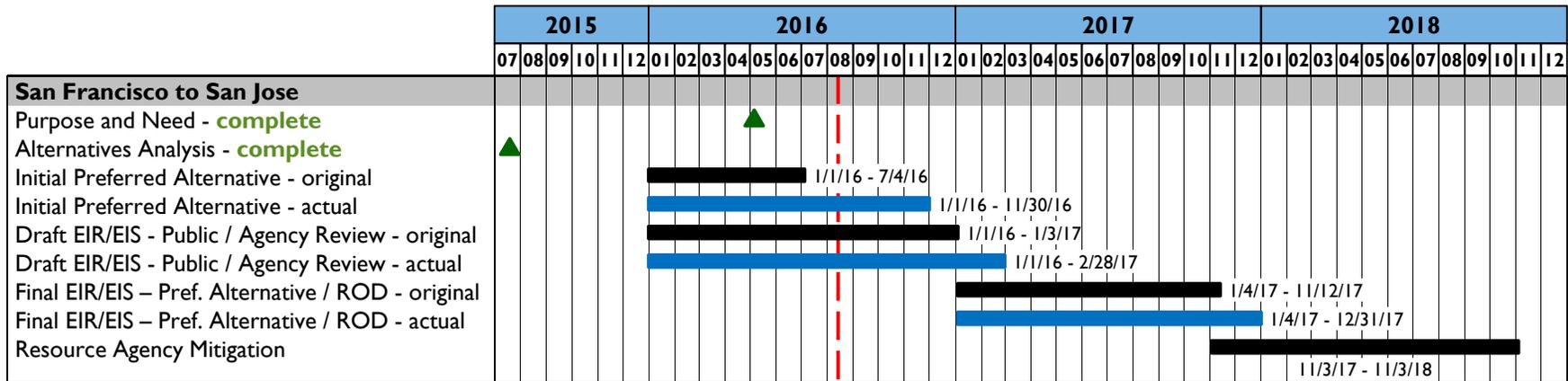
- Dates identified in red indicate change from previous month.
- Purpose and Need and the Alternatives Analysis were achieved as part of the Merced to Fresno EIR/EIS, completed in September 2012.
- Because of ongoing stakeholder/agency coordination issues, selection of a preferred alternative has been postponed to occur after circulation of the Draft EIR/EIS.
- 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 July 2016<sup>1</sup>

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	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
4 San Jose to Merced	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
5 Central Valley Wye (M-F)	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
6 CV Electrical Interconnections	<b>No Delay Forecast at this Time.</b> Dates are subject to change pending Authority decision regarding type of environmental clearance documentation needed. Expect to have sites 8 to 12 cleared by summer 2016 for the test track.
7 HMF	<b>No Delay Forecast at this Time</b> Dates are subject to change pending Authority decision regarding type of environmental clearance documentation needed.
8 Locally Generated Alternative (F-B)	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
9 Bakersfield to Palmdale	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
10 Palmdale to Burbank	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
11 Burbank to LA	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
12 LA to Anaheim	<b>No Delay Forecast at this Time</b> The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.

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

### 3 San Francisco to San Jose

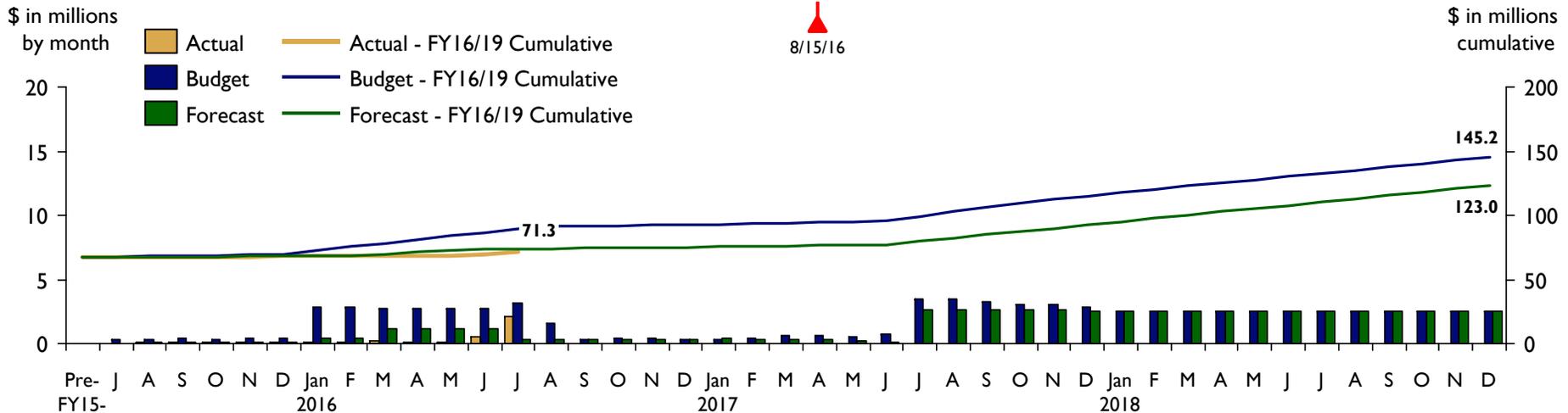
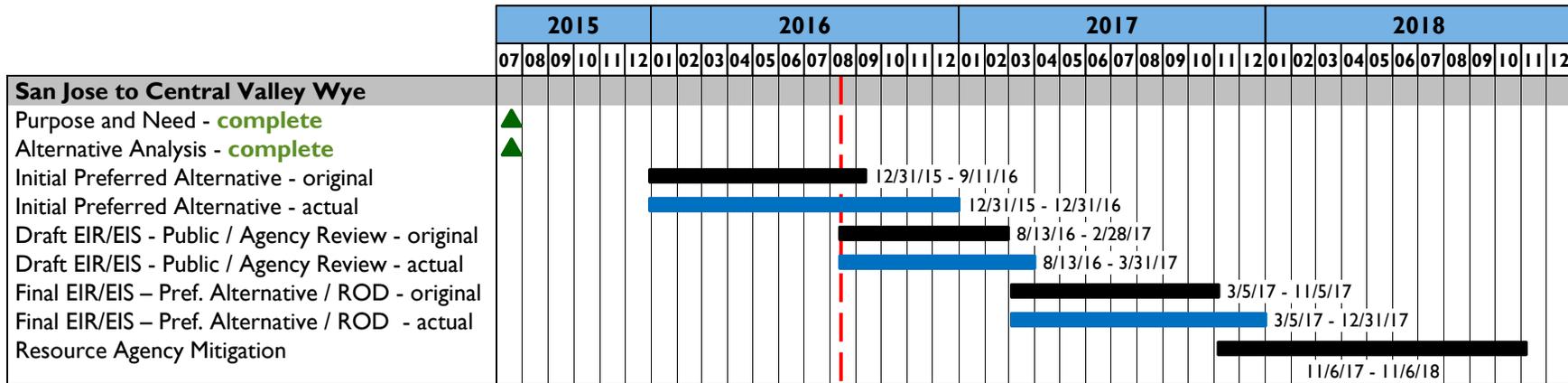


Notes:

- 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) June 2016 actual expenditure include accumulated unbilled expenditures from January 2016 to May 2016.

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

# 4 San Jose to Merced

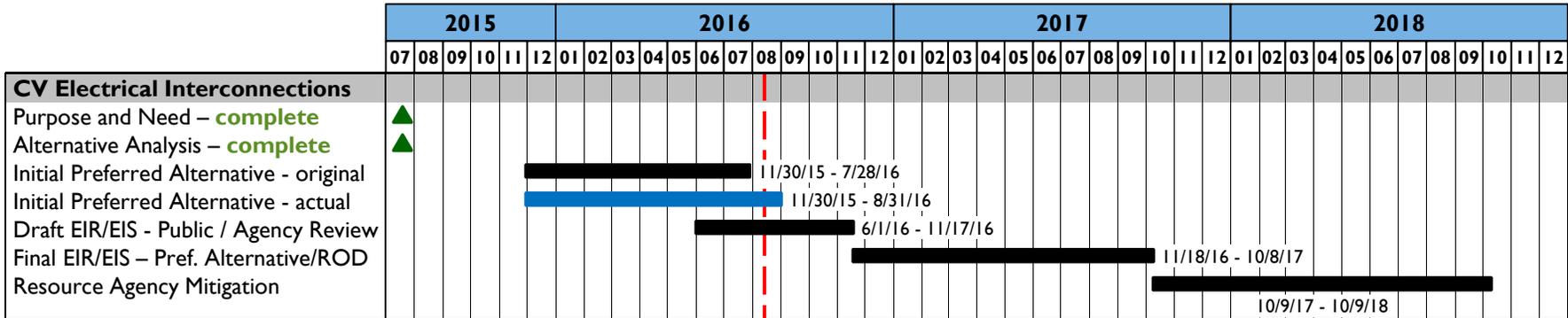


- Notes:
- 1) All estimates are preliminary and subject to change.
  - 2) Forecast based on RDP November 2015 estimate through December 2018.
  - 3) Habitat Mitigation included.
  - 4) June 2016 actual expenditure include accumulated unbilled expenditures from January 2016 to May 2016.

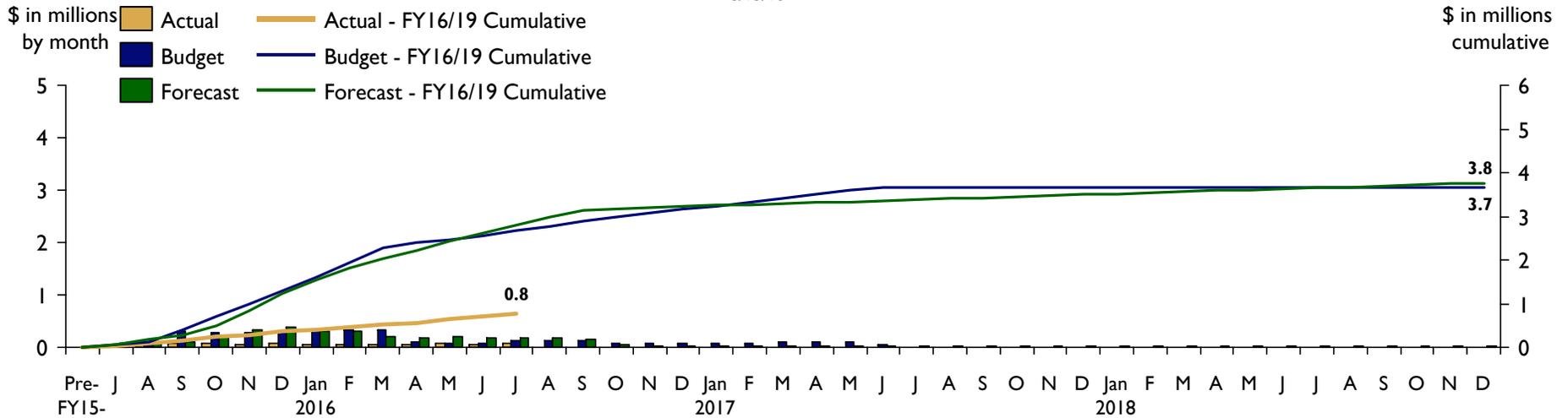
Source: Based on actual costs and future estimates for the EEC and RDP.



# 6 Central Valley Electrical Interconnections



8/15/16

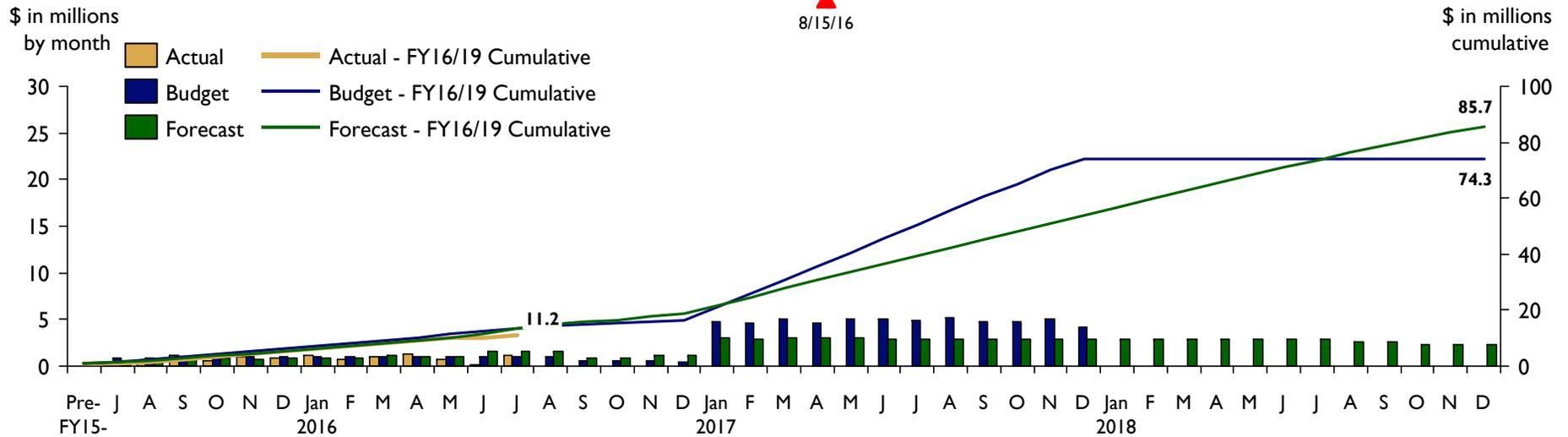
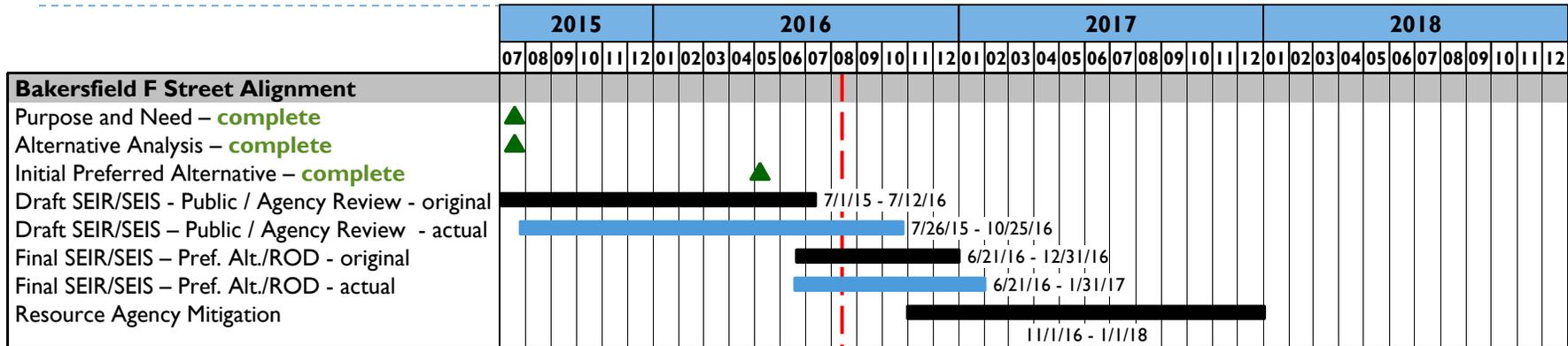


- Notes:
- 1) All estimates are preliminary and subject to change.
  - 2) Environmental clearance approach under review.
  - 3) Forecast includes RDP and RC costs December 2015 through December 2018.
  - 4) At this time, no habitat mitigation assumed in estimate.

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



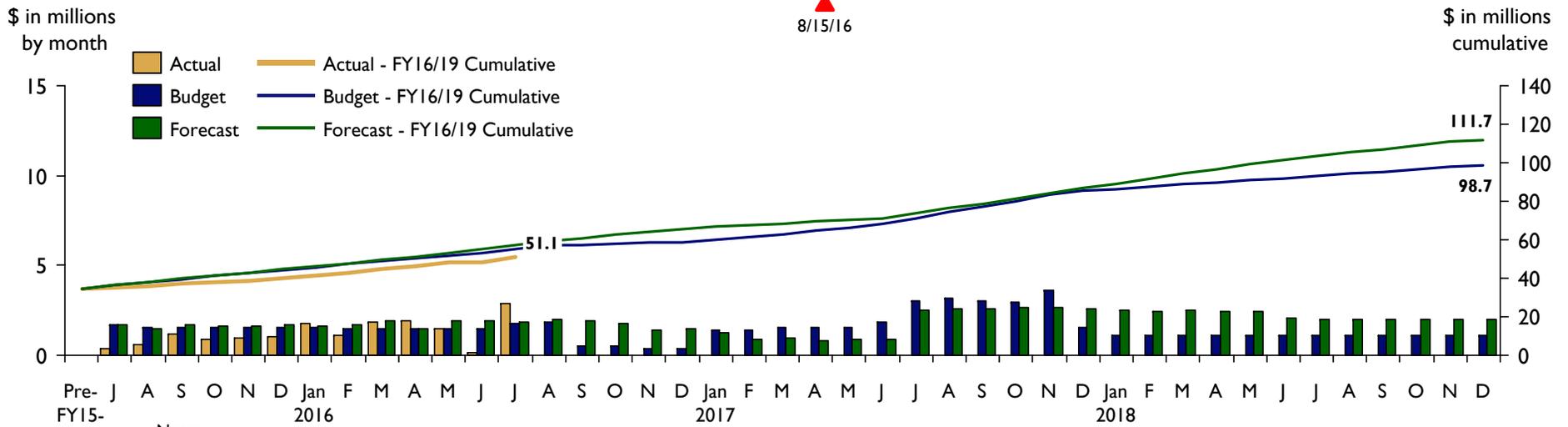
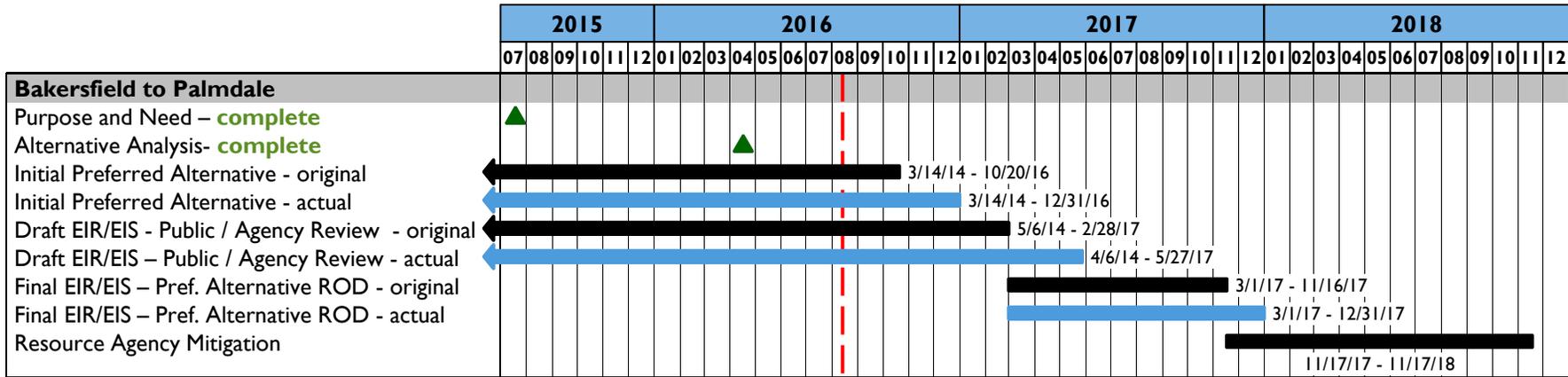
## 8 Locally Generated Alternative (F-B)



- 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.

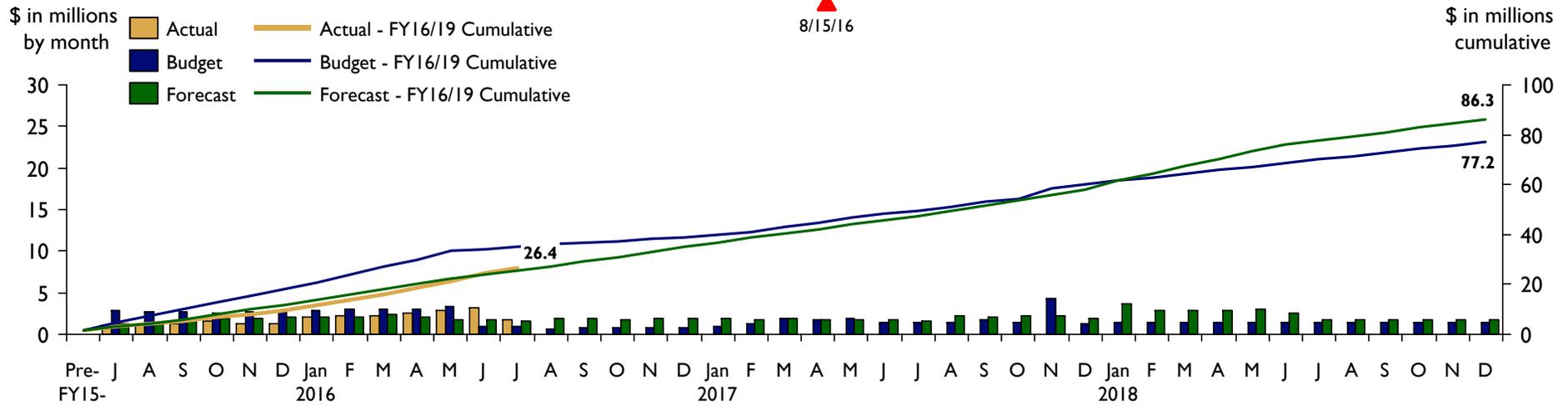
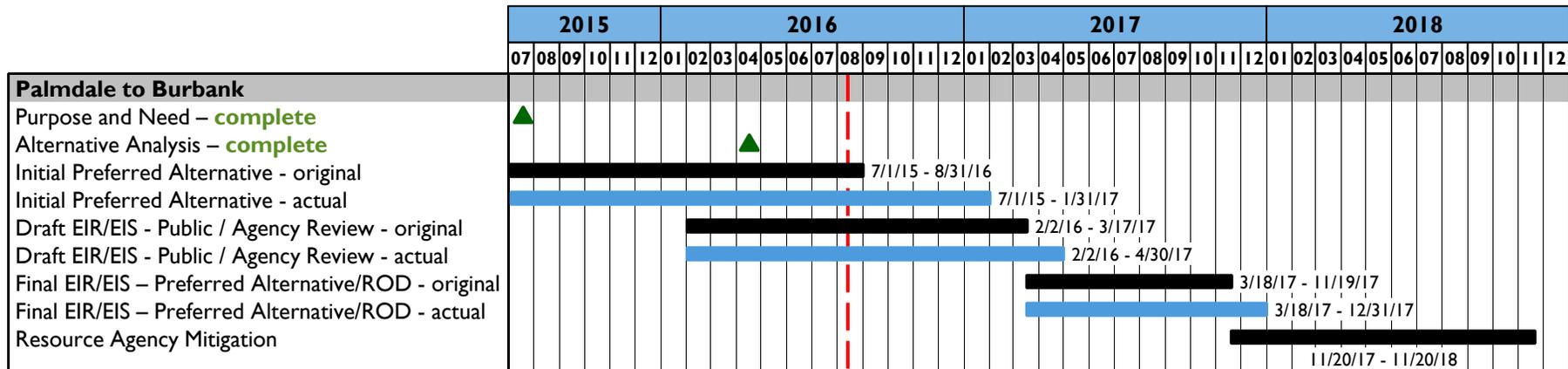
# 9 Bakersfield to Palmdale



- 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.

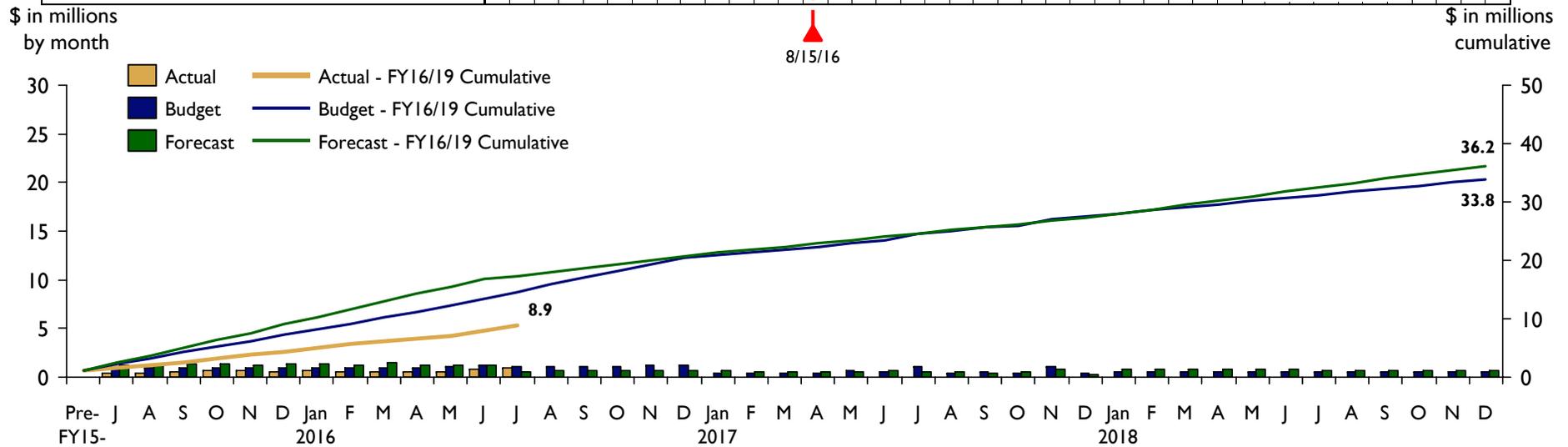
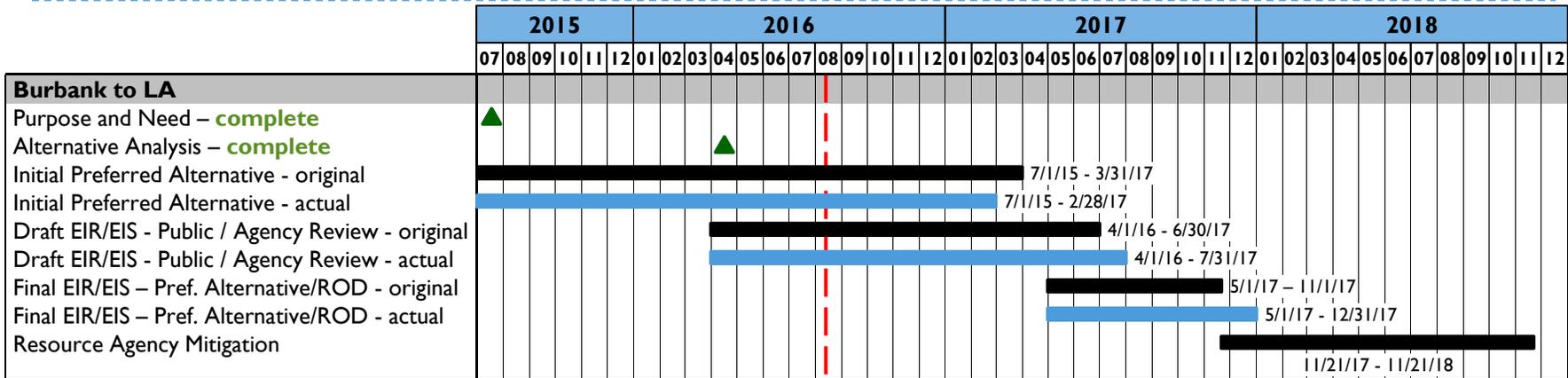
# 10 Palmdale to Burbank



- 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.

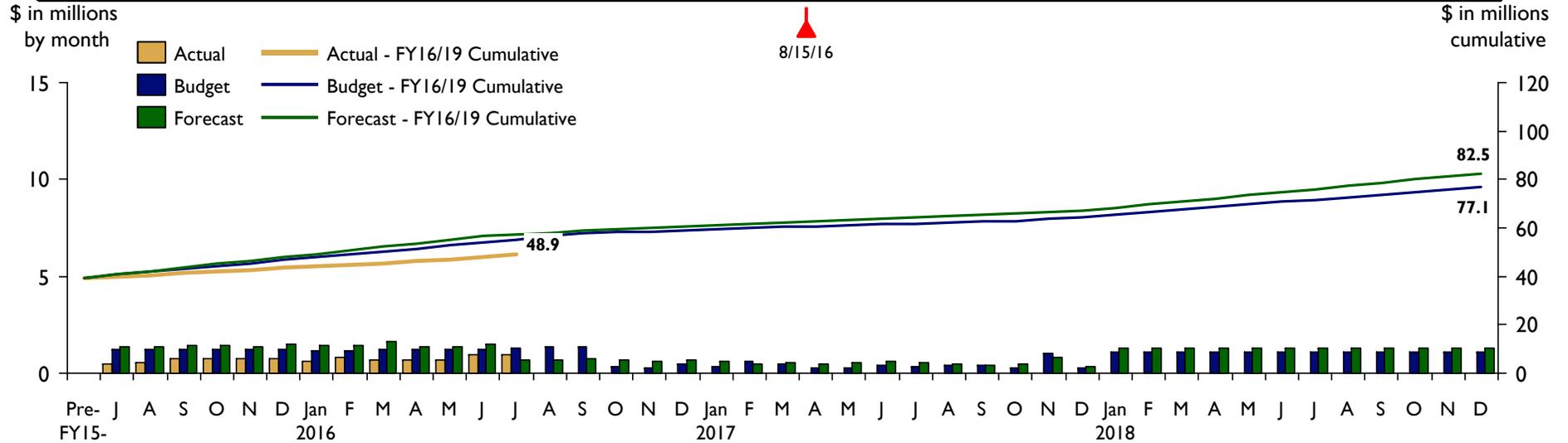
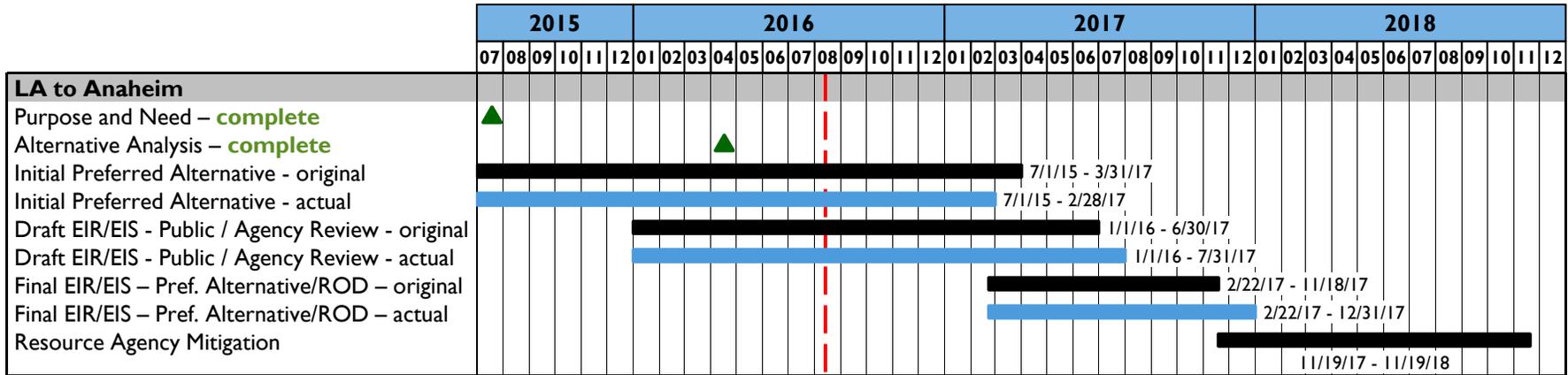
# II Burbank to LA



- 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



- 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 July 2016<sup>1</sup>*

Milestone	Segment	Due Date	% Completion	Status
Complete Record Set Preliminary Engineering for Project Development	Locally Generated Alternative (F-B)	July 2016	90%	On Target
Conclude Record Set Preliminary Engineering for Project Development	Bakersfield to Palmdale	September 2016 (Draft)	70%	On Target
Submit Preliminary Engineering for Project Development for Review	Burbank to Los Angeles and Los Angeles to Anaheim	July 2016 (Draft - <b>submitted</b> )	75%	On Target
Finish Project Definition Report	San Jose to Merced	August 2016	<b>100%</b>	The FRA has agreed to accept the SAA completed in 2011 as the deliverable
Select Preliminary Preferred Alternative for Draft EIR/EIS	Central Valley Interconnections	August 2016	95%	On Target
Submit Jurisdictional Water and Wetlands Delineation Technical Memos	Burbank to Los Angeles and Los Angeles to Anaheim	August 2016	<b>75%</b>	On Target
Complete Environmental Evaluation of PG&E Sites 8 – 12	Central Valley Interconnections	August 2016	<b>90%</b>	On Target
Present Checkpoint B, Range of Alternatives to Agencies	San Francisco to San Jose	September 2016	<b>5%</b>	On Target
<b>Administrative Draft SEIR/SEIS<sup>2</sup></b>	<b>Central Valley Wye</b>	<b>August 2016</b>	<b>80%</b>	<b>Delayed</b>

Notes:

<sup>1</sup> Text and dates identified in red indicate change from previous month.

<sup>2</sup> A delay has occurred because of new alternative approved for study at the June Board meeting.

## 4-month look ahead - milestones and other key deliverables, all sections/projects: *Information through July 2016<sup>1</sup>*

Milestone	Segment	Due Date	% Completion	Status
Finish Scoping Report	San Francisco to San Jose	September 2016	85%	On Target
Present Checkpoint B, Range of Alternatives to Agencies	Palmdale to Burbank	September 2016	60%	On Target
Finish Project Definition Report	Bakersfield to Palmdale	September 2016	75%	On-Target

Notes:

<sup>1</sup> Text and dates identified in red indicate change from previous month.

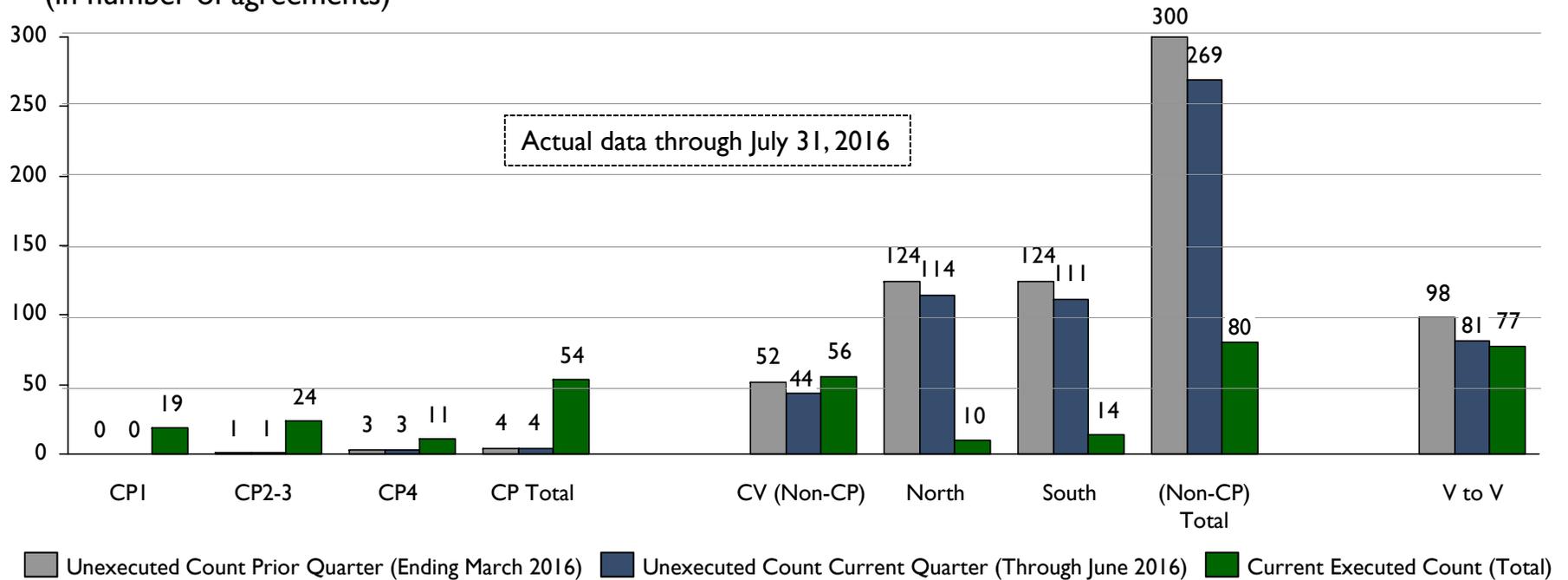
# Agenda

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- ▶ 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)



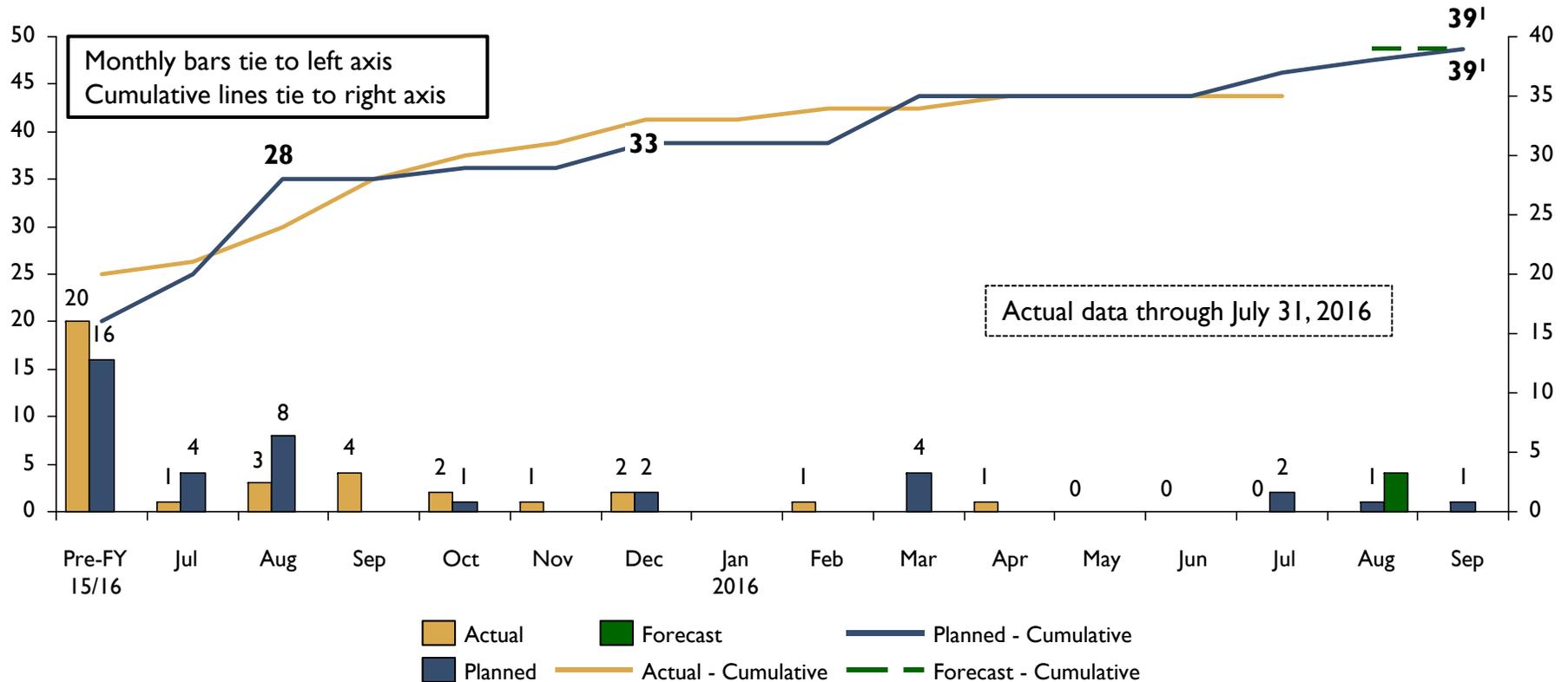
Notes:

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)



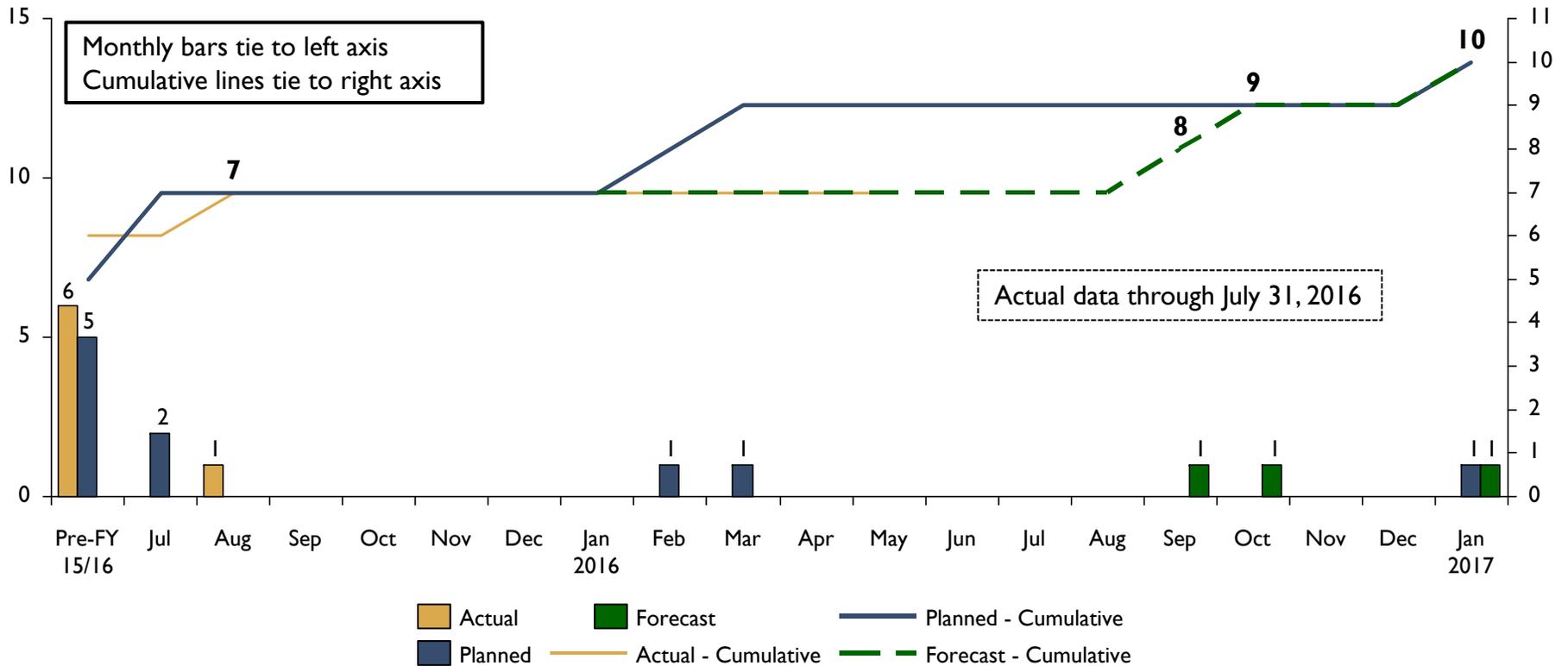
Notes:

1. All agreements are executed as of August 17, 2016. Chart data reflects data only through.
2. 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)



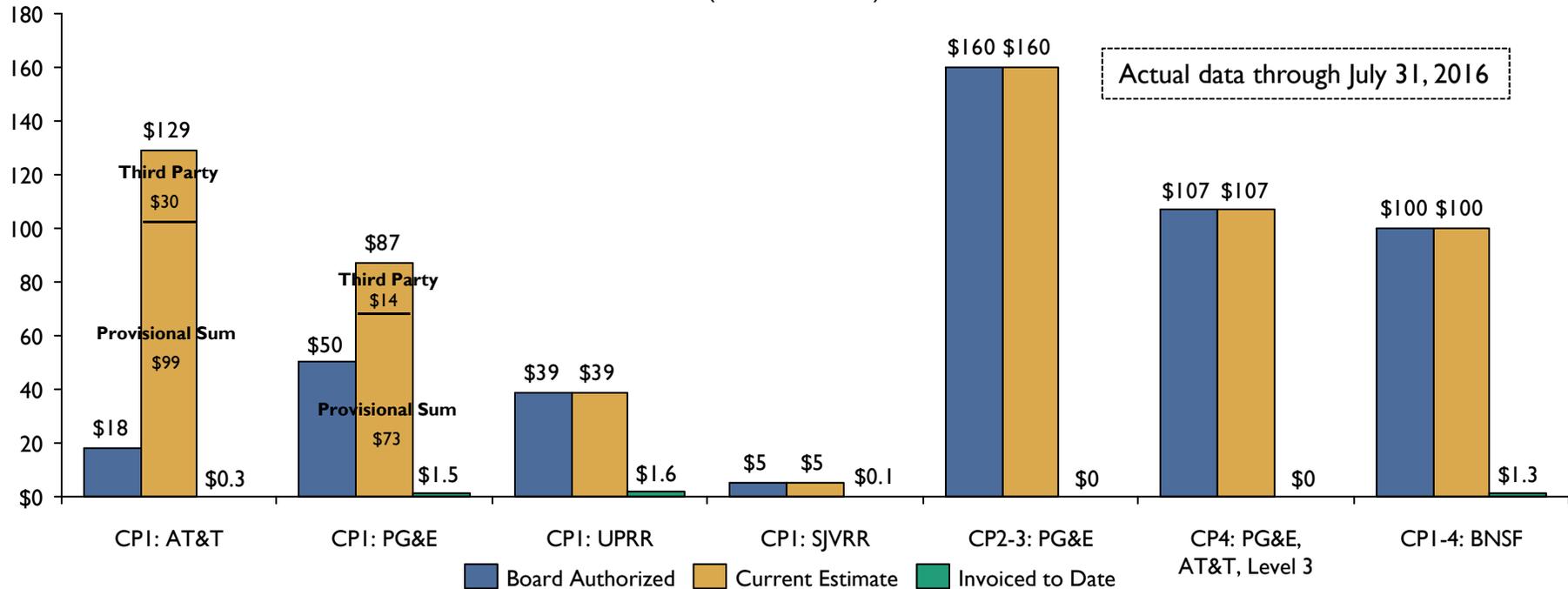
Notes:

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)



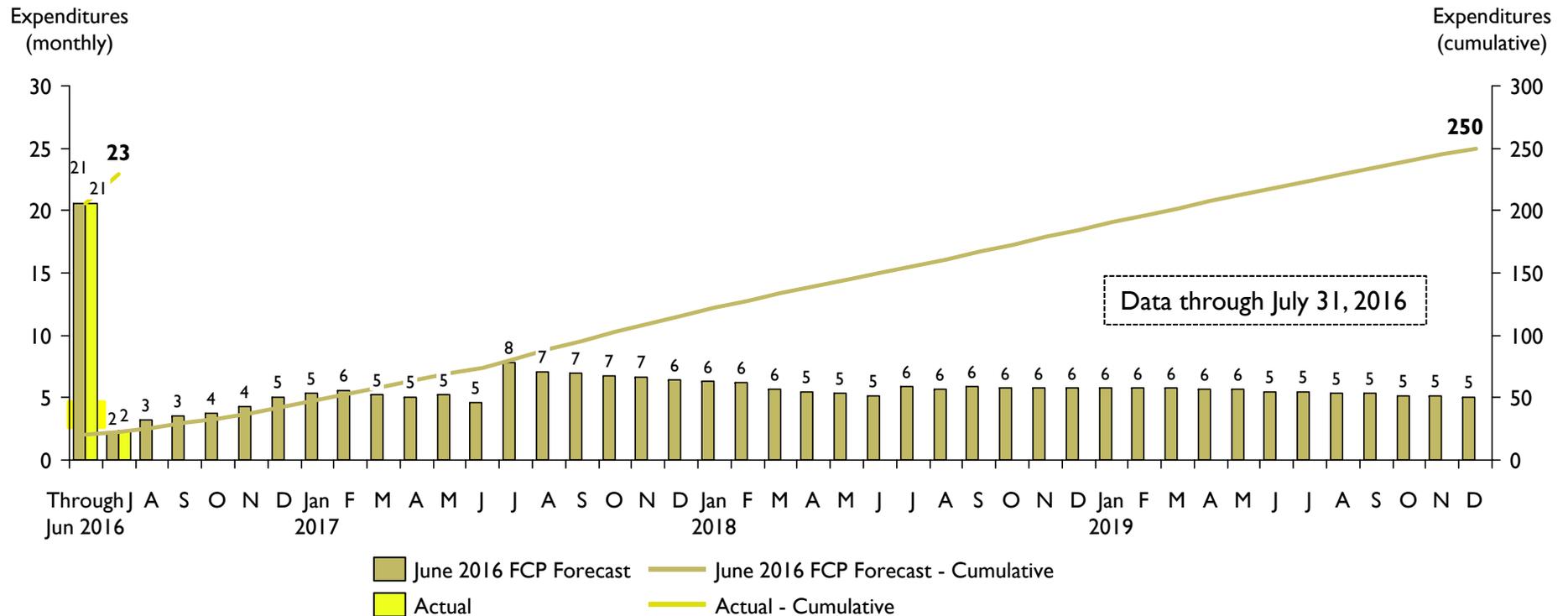
Notes:

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:

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

Sources:

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

# Agenda

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

## Contract Management Metrics - Context

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- ▶ 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

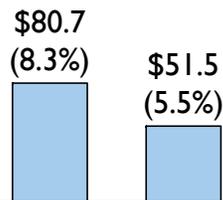
**CPI – Contract Balance Remaining<sup>1</sup>**  
(\$ in millions)



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

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

**CPI – Contingency Balance Remaining**  
(\$ in millions)  
(% of contract balance remaining)



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

Notes:

1. Remaining Contract Value = [Revised DB Contract Amount] – [Authority Approved Invoices to Date]. Revised DB contract amount, increased to \$1,256M from the original contract amount of \$1,023M, due to executed change orders (including North Extension).
2. Contract balance only accounts for 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: July 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											
Contingency	\$160M	\$160M											
Change Orders (from contingency)	\$79.3M	\$29.2M											
Contingency Balance Remaining	\$80.7M	\$51.5M											
Contingency %	8.3%	5.5%											

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).

Source: July 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											
Earned Value/ Invoiced to Date	\$279.8M	\$342.2M											
Planned Value	\$749.8M	\$768.4M											
Schedule Performance Index	37%	45%											

Source: July 31, 2016  
CPI Performance Metric Report

# CP2-3 Contract Management – Contingency Value

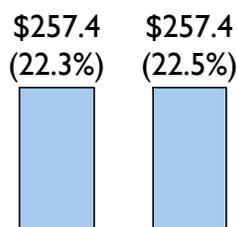
**CP2-3 – Contract Balance Remaining**  
(\$ in millions)



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

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

**CP2-3 – Contingency Balance Remaining**  
(\$ in millions)  
(% of contract balance remaining)



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

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: July 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											
Contingency	\$261.2M	\$261.2M											
Change Orders (from contingency)	\$0.0M	\$0.0M											
Contingency Balance Remaining	\$257.4M	\$257.4M											
Contingency %	22.3%	22.5%											

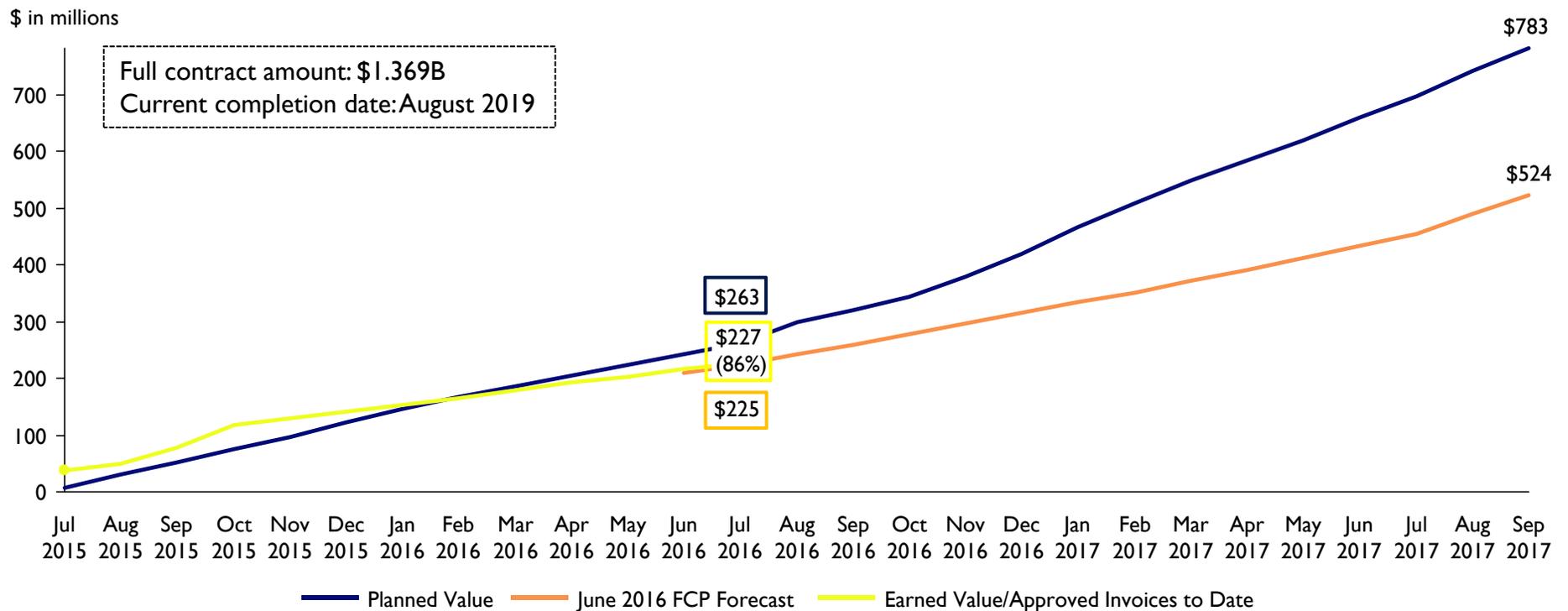
Note:

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: July 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: July 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											
Earned Value/ Invoiced to Date	\$216.3M	\$226.9M											
Planned Value	\$242.2M	\$262.5M											
Schedule Performance Index	89%	86%											

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

# CP4 Contract Management – Contingency Value

**CP4 – Contract Balance Remaining**  
(\$ in millions)



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

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

**CP4 – Contingency Balance Remaining**  
(\$ in millions)  
(% of contract balance remaining)



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

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

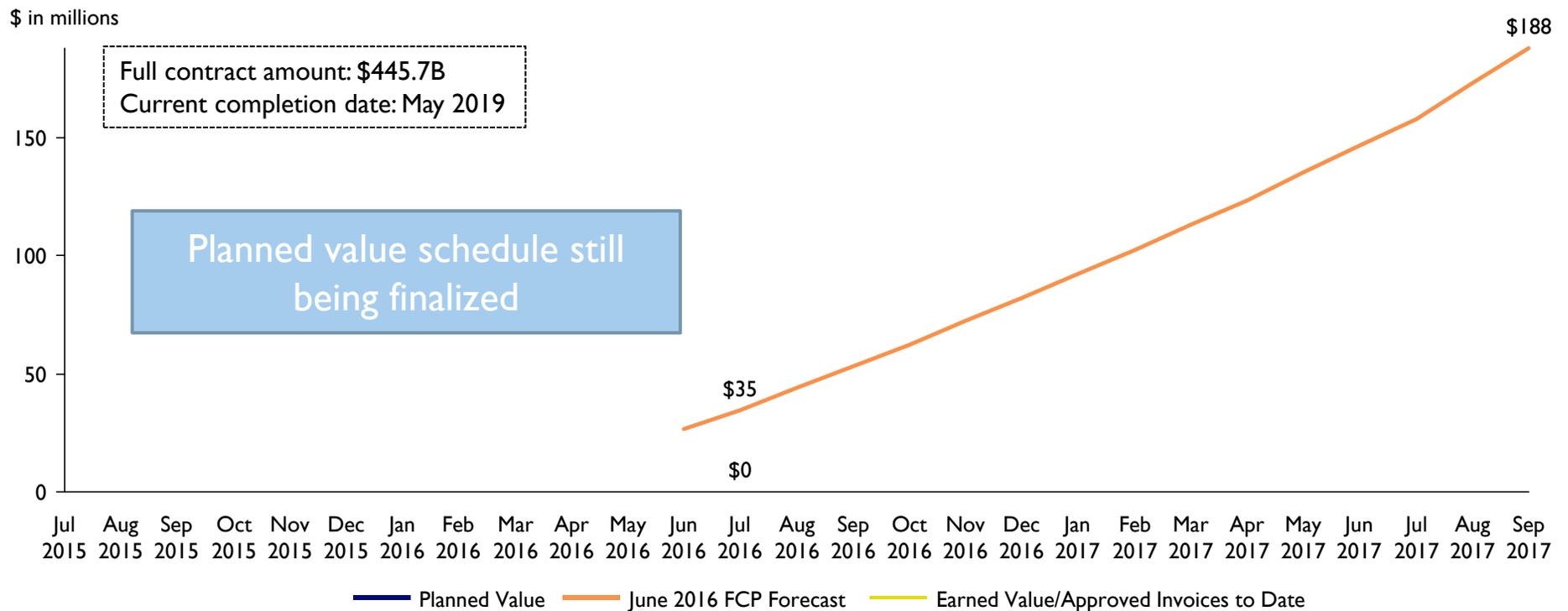
Note:

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: July 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: July 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											
Earned Value/ Invoiced to Date	\$0.0M	\$0.0M											
Planned Value	See Note I	See Note I											
Schedule Performance Index	N/A	N/A											

Notes:  
 I. CP4 Planned Value schedule still being finalized.

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

## SR-99 Contract Management Raw Data: Contingency Value

### SR-99 – Contingency (\$ in millions)

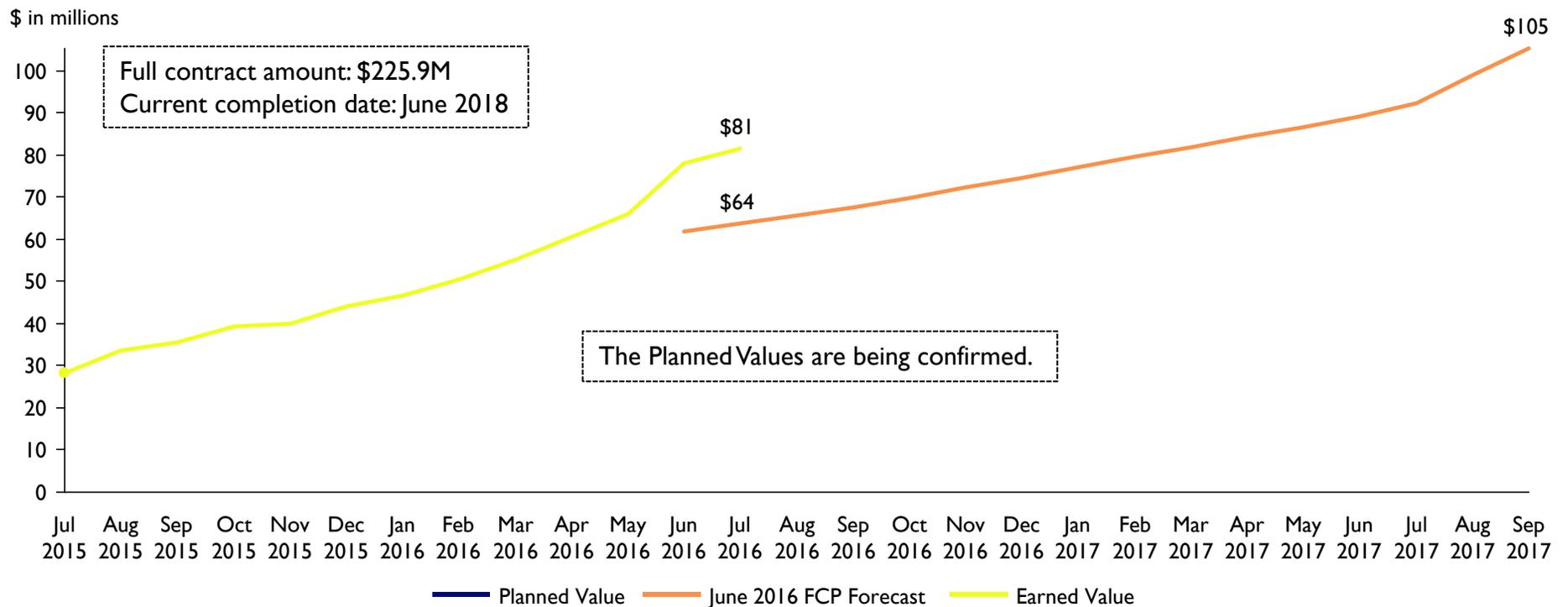
	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Contract Balance Remaining	\$144.7M	\$140.9M											
Contingency	\$9.5M	\$9.5M											
Change Orders (from contingency)	\$1.3M	\$0.0M											
Contingency Balance Remaining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

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: July 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: July 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											
Earned Value <sup>1</sup>	\$78.1M	\$81.3M											
Planned Value	\$84.4M	\$94.5M											
Schedule Performance Index	93%	86%											

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.

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

# Agenda

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

## Finance/Budget Metrics – Context

---

- ▶ Metrics organized by:
  - Summary of current fiscal environment
  - FY2015-16 finance/budget data, which includes ROW, planning, environmental and construction
  
- ▶ For FY2015-16, 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 FY2015-16 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 July F&A Capital Outlay Report includes financial data through May 31, 2016

## As of July 31, 2016, the Authority has spent 4.6% of FY2016-17 budget, 68.9% of the federal ARRA grant, and 73% of the FY2014-15 Cap and Trade appropriation

### FY2016-17 Expenditures to Date (Data as of July 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	FY2015-16 and FY2016-17 Budget		Expenditures to Date		Expenditures - % of Budget	
	Jun-16	Jul-16	Jun-16	Jul-16	Jun-16	Jul-16
\$9.015B	\$1.87B	\$1.71B	\$0.94B	\$0.08B	50.3%	4.6%

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

ARRA expenditures are 68.9% of federal ARRA grant funds and 19.7% of \$8.9B total budget

	TOTAL		Planning		Construction	
	Budget	Expended	Budget	Expend to Date	Budget	Expend to Date
<b>ARRA Grant <sup>1</sup></b>	\$2.55	\$1.76	\$0.44	\$0.40	\$2.11	\$1.36
<b>FY10 Grant</b>	\$0.93	\$-	\$-	\$-	\$0.93	\$-
<b>PROP IA</b>	\$3.18	\$0.29	\$0.58	\$0.29	\$2.6	\$-
<b>Cap and Trade</b>	\$1.18	\$0.20	\$0.29	\$0.06	\$0.89	\$0.14
<b>Local Assistance</b>	\$1.10	\$-	\$-	\$-	\$1.10	\$-
<b>Total</b>	\$8.95	\$2.25	\$1.31	\$0.75	\$7.64	\$1.50

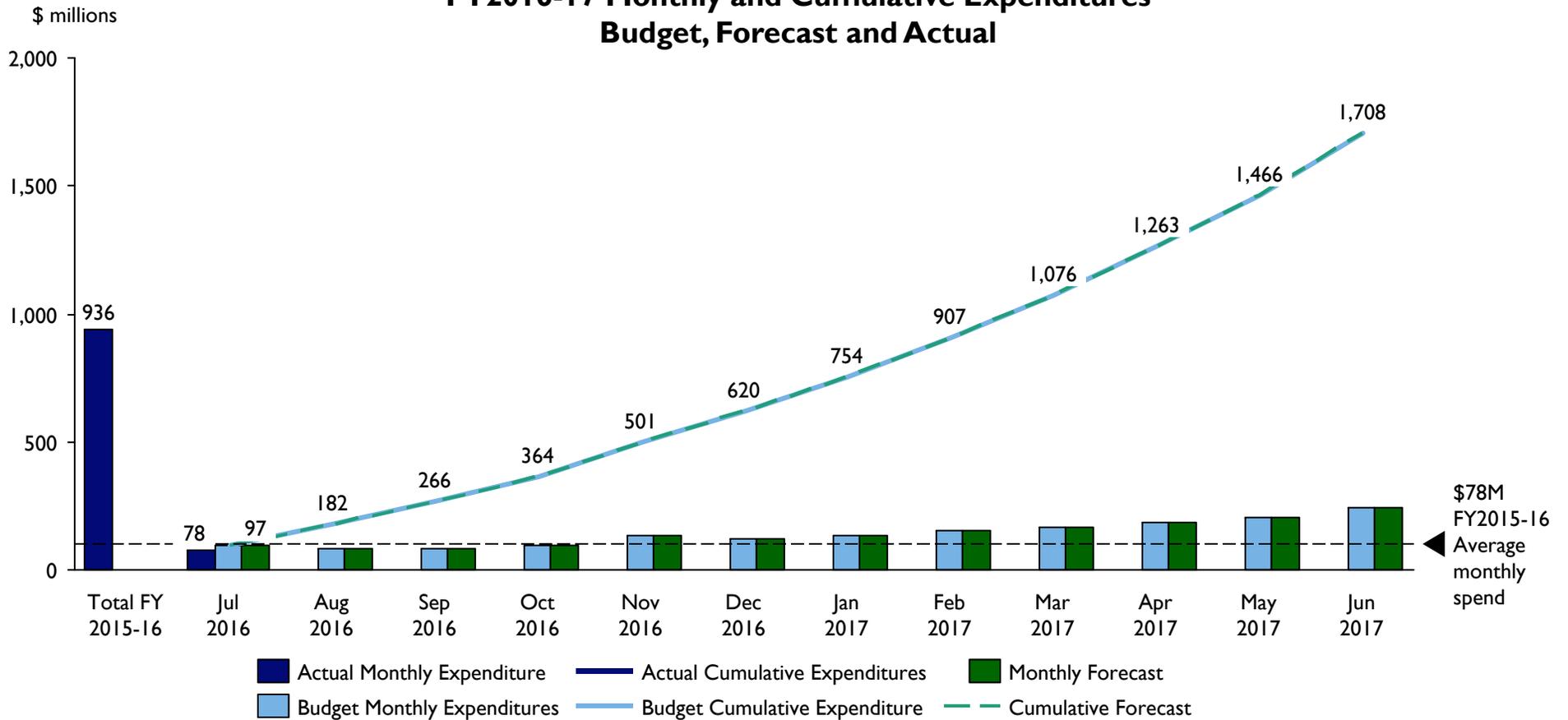
Note: Numbers may not add due to rounding

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

<sup>1</sup> The Project Development FY2016-17 ARRA budget was adjusted \$31.4M, from \$81M to \$49.6M to reflect remaining ARRA funds. The \$31.4M was expended and is included in the total project expenditures and will be reflected in the August FCP following Section 28 approval.

# Finance/Budget – FY2016-17 Expenditures

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



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

Notes: Forecast data will shift each month (budget and forecasts only equal at outset of FY2015-16)

## Finance/Budget Raw Data: Expenditures

### 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											
Expense to Date	\$78.5M											
Monthly expenditures	\$78.5M											
Total FY Forecast	\$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

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

## ARRA Schedule – Context

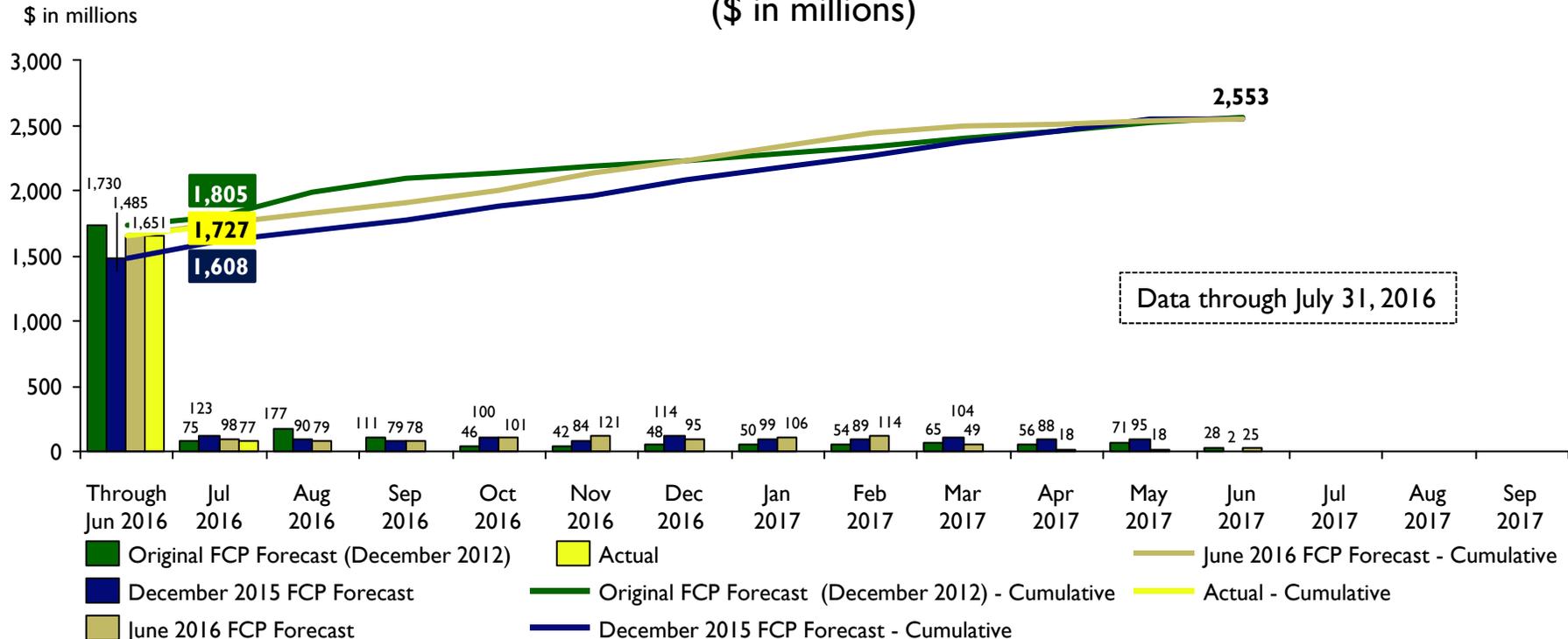
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- ▶ The following slides provide the ARRA grant drawdown schedule, and track ARRA grant monthly expenditures
  
- ▶ The ARRA grant is broken down into two expenditure types:
  - ARRA-Project Development: Environmental Review, Preliminary Engineering 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 July 31, 2016

Notes:

- The program can frontload all of the ARRA funds to help spend those funds as early as possible.
- State funds can be matched against federal funds and matched against ARRA funds already spent.
- “Original FCP Forecast” refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- Dec-15 FCP was not approved, and was only used to initially track performance prior to the approval of the Mar-16 FCP.
- 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.
- An additional \$31.4M was expended in Project Development and will be reflected in the August FCP following Section 28 approval.

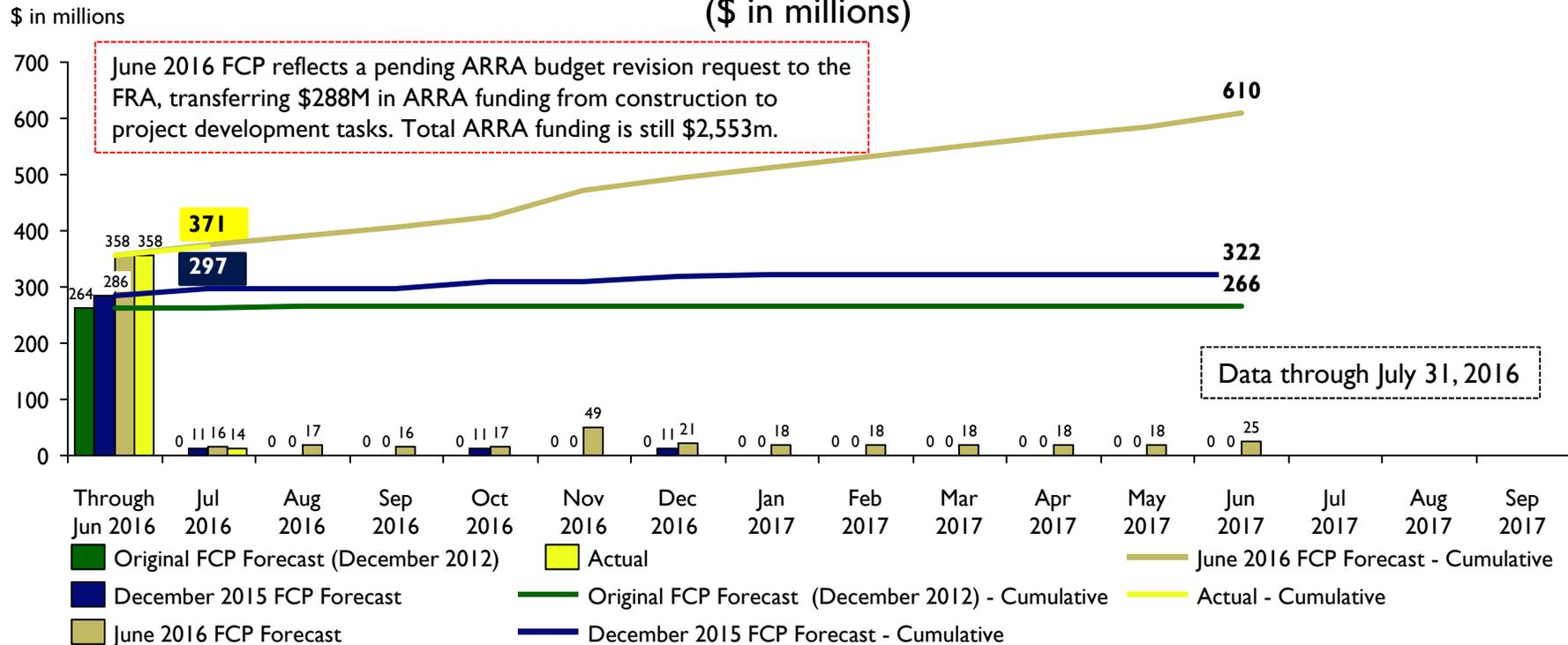
Sources:

- Interim Funding Contribution Plan Worksheet, Jul-2016
- Funding Contribution Plan, Jun-2016
- Funding Contribution Plan, Dec-2015
- Funding Contribution Plan, Dec-2012

# ARRA Expenditure by Month

Forecast vs. Actual

## ARRA-Project Development Drawdown Schedule



Notes:

- The program can frontload all of the ARRA funds to help spend those funds as early as possible.
- State funds can be matched against federal funds and matched against ARRA funds already spent.
- "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
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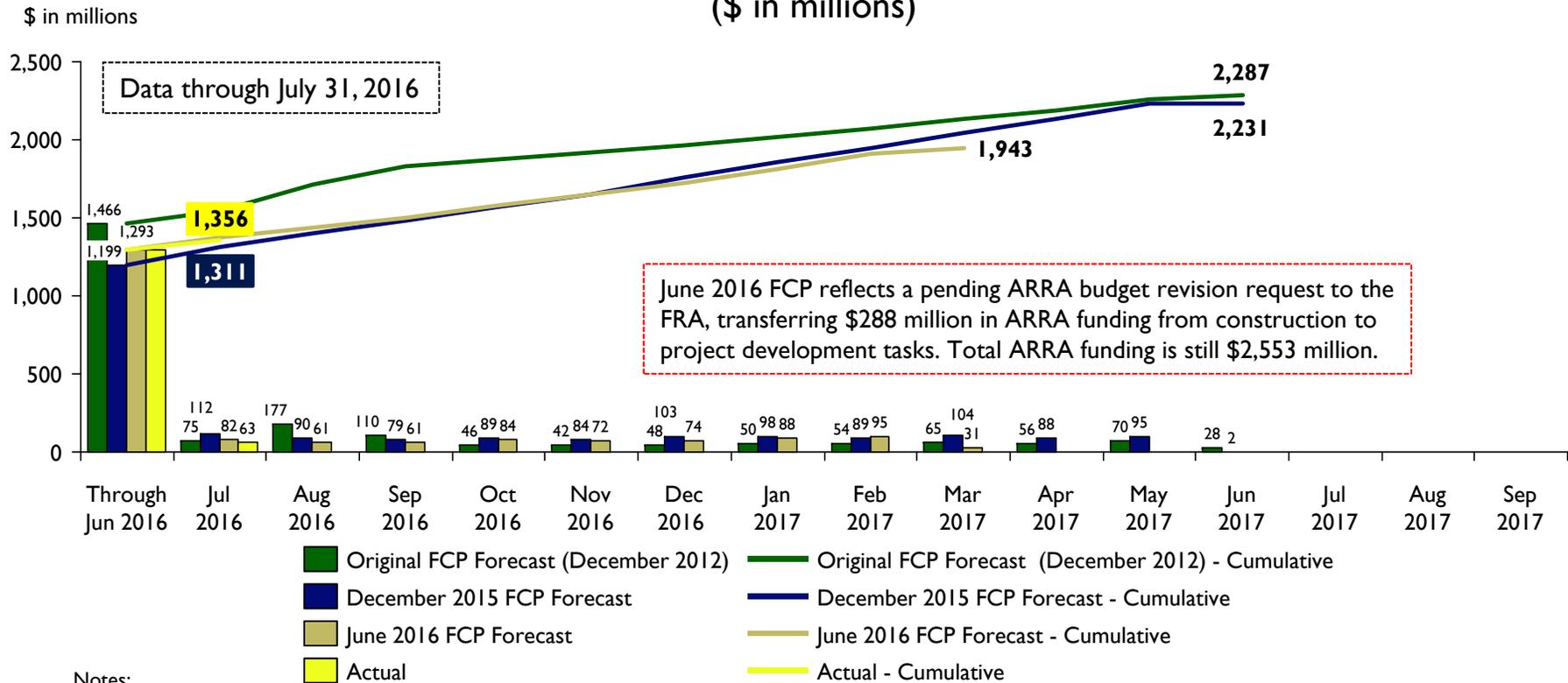
Sources:

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

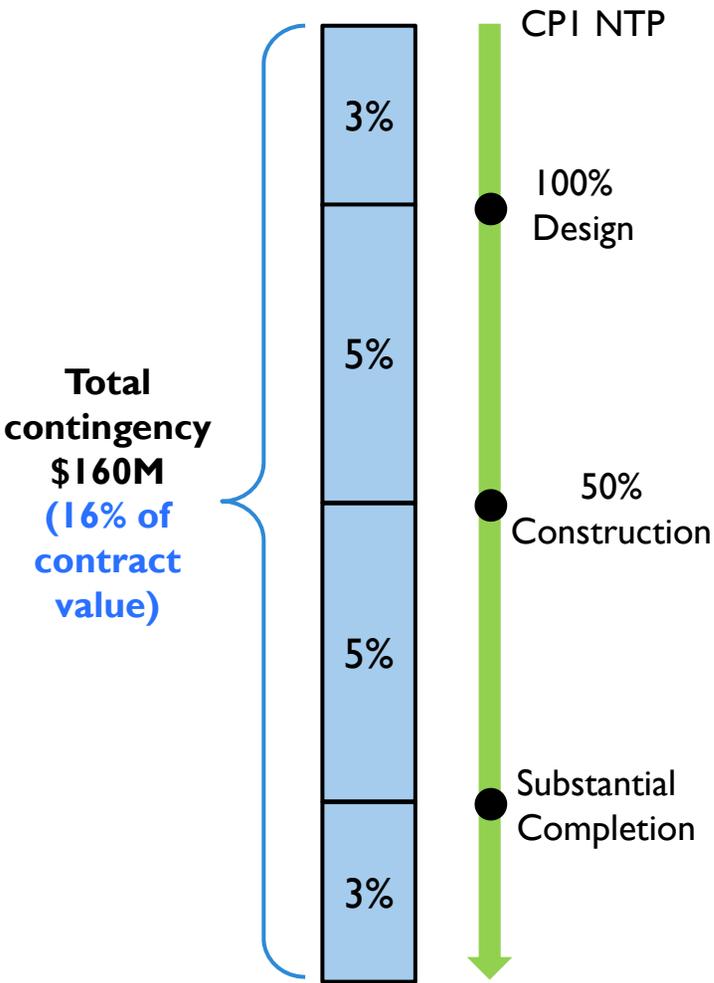
# Agenda

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



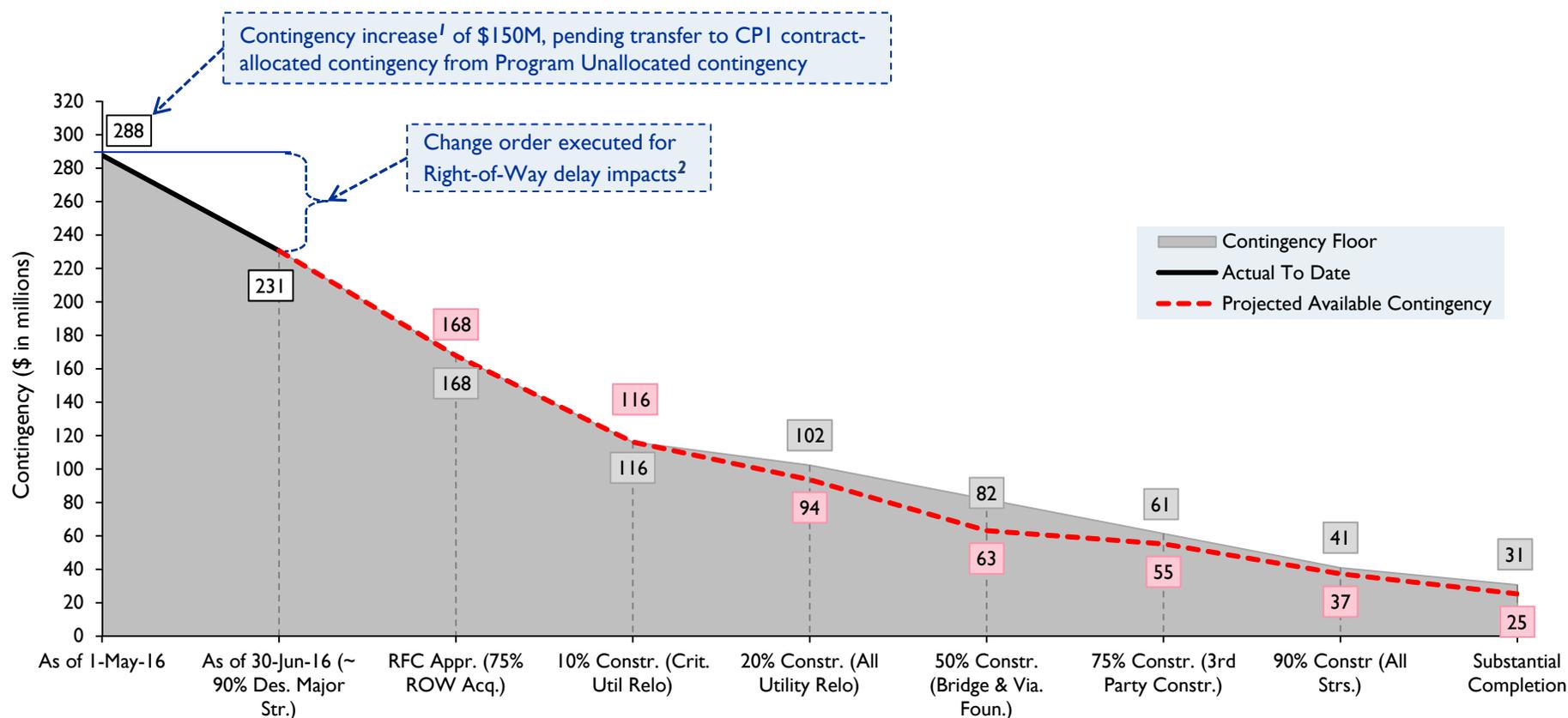
\* Based on FTA Project and Construction Management Guidelines (July 2011)

## Projected Available Contingency Level at Future Milestones

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

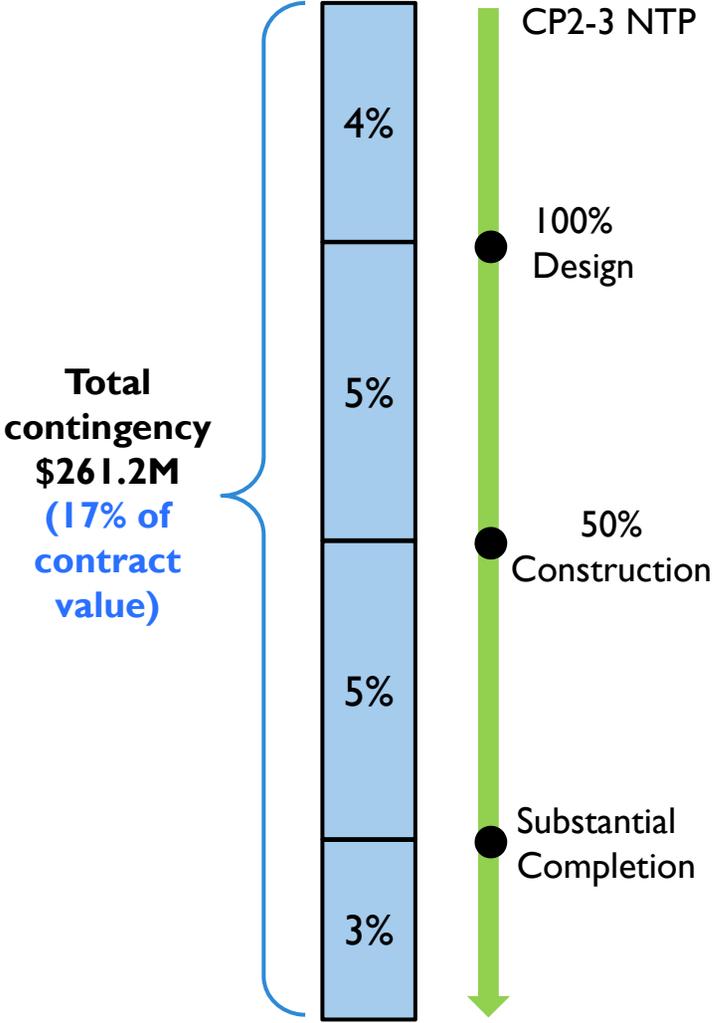
## CP1 Contract - Contingency report



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. \$150 million. 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.



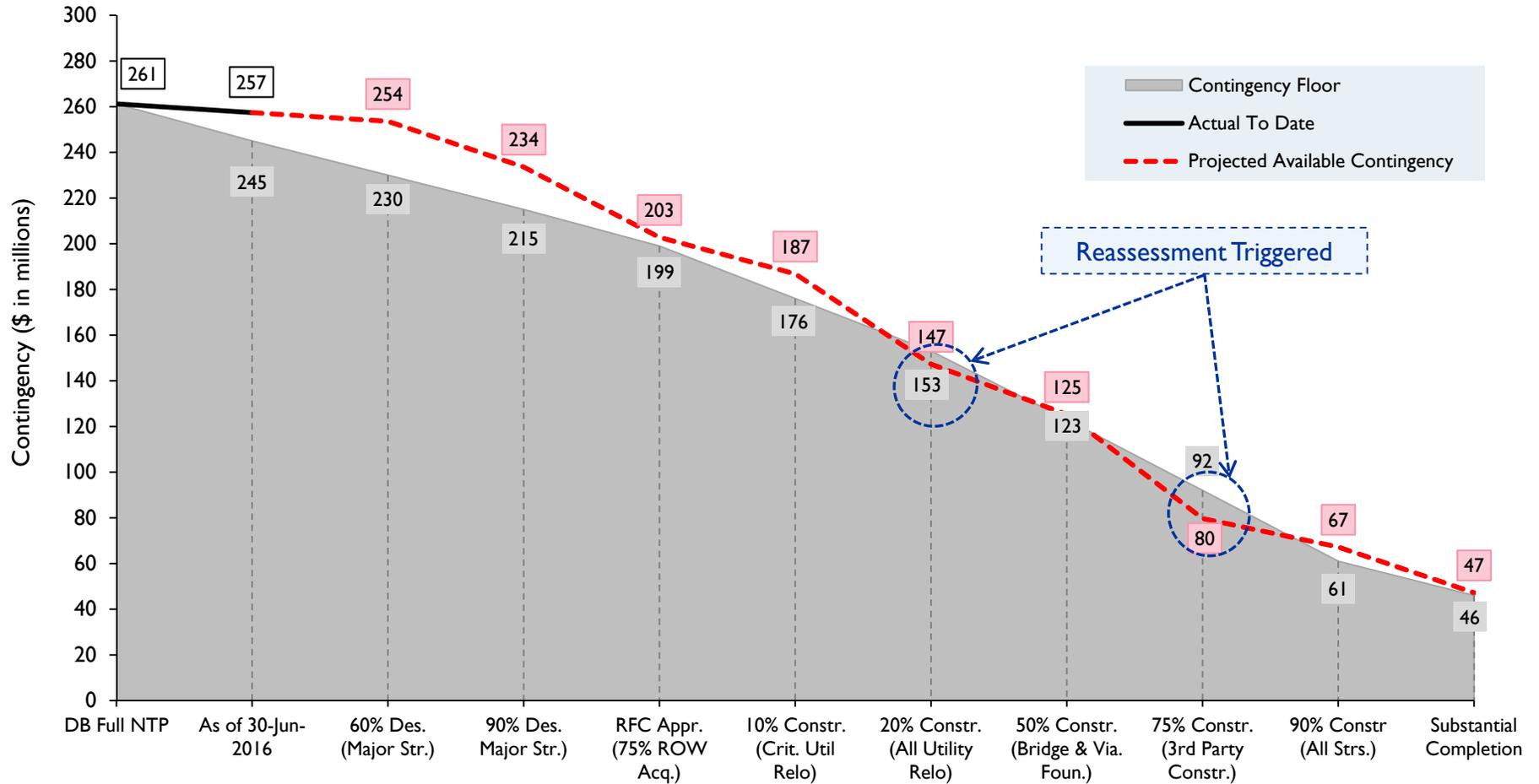
\* Based on FTA Project and Construction Management Guidelines (July 2011)

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