



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

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

October 2015

# Agenda

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## ▶ Operations Report Metrics

- Executive Summary
- ROW
- Contract Management
- Finance/Budget
- Environmental
- Third-Party Agreements
- Risk
- Back-Up ROW Information

# Executive Summary

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## ROW Acquisition

- ▶ The current report presents ROW acquisition progress relative to CPI and CP2-3 through September 18th. As of that date, the Authority has secured legal possession of 474 parcels, with 383 delivered to the design-builder.
- ▶ The increase of 92 parcels delivered in CPI since the last Ops Report is mostly attributed to the delivery of the City of Fresno parcels through the ROW Transfer Agreement execution. We anticipate delivery of another 40 public parcels in the coming weeks resulting from the execution of the County of Madera and County of Fresno ROW Transfer Agreements.
- ▶ Both CPI and CP2-3 delivery plans will be re-baselined in September. The Authority and CPI DB have “partnered” to identify 7 early construction locations with the goal of starting construction before the end of the calendar year. The team is focused on the priority parcels to be delivered in these sections so that construction delays are minimized.
- ▶ The ROW dataset has been updated to incorporate 5 additional parcels in CPI as a result of design refinements. The forecast has been updated to reflect the current scheduled delivery for each parcel. An “Alternative” forecast has been developed to reflect potential delays that are outside the control of the Authority and are more in line with recent trends. The most likely delivery schedule will be between these forecasts curves.
- ▶ Future positive changes in delivery have the potential to significantly alter the outcome of the probabilistic analysis as it is based upon short term historical trends. As the dataset grows to include the benefits of these changes, improvements will be reflected in the results and reliability of the forecasts. Updating of the probabilistic analysis is planned for October after the rebaselining occurs in CPI and CP2-3.

# Executive Summary

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## **Finance/Budget**

- ▶ In FY 2014/15, the focus was on fully utilizing cap and trade funding of \$250M for planning and construction which was achieved. The current balance is subject to change due to pending approval of tapered match and federal reimbursements
- ▶ The program will rebaseline the budget and forecast in the coming months. In FY 2014/15, expenditure graphs tracked actuals and forecast. Going forward in FY 2015/16, the expenditure graphs will track budget along with actuals and forecast. Forecast will be published after the budget is rebaselined.
- ▶ July-2015 actual expenditures were not received as of the publication of the September-2015 Operations Report. Actuals were zero as a result. August-2015 expenditures were \$74.1M, as reported for the October-2015 Operations Report, a 229% increase over the expenditures of \$22.5M for August-2014 the previous year.
- ▶ Delays in ROW are impacting construction schedules. Mitigation measures are in place to prioritize critical parcels required for major construction work. An analysis is currently being 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.

## **Contract Management**

- ▶ CP 1 - Despite initial delays to construction activities, TPZP is progressing with construction at the Fresno River Bridge. Key critical and near critical path structure locations have been jointly identified and actions are being taken to start construction in the coming months. Progress is being made in right-of-way acquisition to support starting construction at these additional locations.
- ▶ CP 2-3 - The Joint Venture of Dragados/Flatiron has been issued a full Notice to Proceed. The Joint Venture continues to mobilize and plan the work, including developing baseline right-of-way, design and construction plans. The initial right-of-way plan has been submitted and is being reviewed.

# Executive Summary

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## Environmental

Where are we today?

- ▶ With the Authority's decision to deliver the high speed rail program benefits to the citizens of California and the traveling public sooner, the Authority committed to clear environmentally the program segments and projects in record time – clearance by December 2017. Prior to this approach, the Authority was clearing program sections in a more sequential order following the project phasing identified in the 2012 and 2014 Business Plans.
- ▶ This aggressive schedule requires that the program team changes its organizational structure, its processes and its tools. Together with this re-tooling comes the decision to approach environmental clearance more holistically to cover not only environmental process clearances- environmental impact reports/environmental impact statements (EIRs/EISs), initial studies/environmental assessments (ISs/EAs) and categorical exemptions/categorical exclusions(CEs/CEs) – but also the mitigation programs and permits, in near synchronicity, to allow the program to enter construction more quickly.
- ▶ The hard-hitting schedule requires a closer coordination among team members including clear lines of communications, decision-making, prioritization and control. It also demands additional resources for staffing and funds to advance mitigation and permitting. The aggressive schedule allows the deployment of additional management and budgeting regimes, many of which are well underway. These include the environmental program integrated schedules. The team is tracking progress by environmental milestone and these are being wrapped into five key ones being reported to the Authority Board.
- ▶ Some tools are in progress. One is the cost-loaded scheduling by project and segment which takes into account all costs: Authority, RDP, consultants, legal, support to other federal and staff agencies for resources, and permitting and mitigation costs. Another is the specific reporting requirements to allow the ability to monitor progress and take swift management actions to achieve milestones.
- ▶ Other tools are not as advanced. The need exists, for example, to integrate the milestones tracking and reporting into the new overall Project Management Information System (PMIS) which is currently in review.

# Executive Summary

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## Are we on target?

- ▶ We have successfully delivered a number of plans this year. Among them are the Palmdale to Burbank supplemental alternatives analysis (SAA), to be closely followed by the Bakersfield to Palmdale SAA and terminal storage maintenance facility study this fall.
- ▶ In the Central Valley the Bakersfield F Street Station Area supplemental EIR/EIS is on target to meet a December 2016 ROD. Public meetings on the project are underway.
- ▶ The Central Valley Wye administrative draft EIR/EIS is being written. Before the ROD can be issued the least environmentally damaging practicable alternative (LEDPA) must be agreed upon by the US Army Corps of Engineers and the US Environmental Protection Agency.
- ▶ Extensive community and elected officials engagement activities have been kicked off in Northern California leading into the environmental process for the San Francisco to San Jose and San Jose to Carlucci Road later this fall.
- ▶ To continue delivering progress we need additional resources. We are adding some additional staff in the regions and headquarters.
- ▶ To advance permitting and mitigation with the environmental clearances requires additional program funding, planning and scheduling. Daylighting these costs now is important as the costs may be significant.

# Executive Summary

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What is our short term action plan?

- ▶ Addressing the completely changed environmental clearance process, we have actions underway to deliver the program to meet uncompromising deadlines. Much remains to be done.
- ▶ Approaches to align federal agencies' priorities have been developed and are happening. Similar tactics at the state level are being deployed. Tailored approaches to both NEPA and CEQA are being implemented to offer greater flexibility to advance environmental clearances.
- ▶ Going hand-in-hand are higher levels of stakeholder engagement to identify issues sooner and reach agreement on decisions that will “stick”.
- ▶ We are leveraging opportunities to make program-wide efficiencies with regional mitigation, updated interagency agreements and customized environmental analyses methods.
- ▶ Internally we are kicking off an Authority Coordination Team to support achieving the aggressive environmental program schedule.

# Executive Summary

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## Third-Party Agreement Execution

- ▶ Third Party Agreements are agreements that enable the design and construction of the High-Speed Rail System. These agreements are for the relocation, modification, reconstruction, and/or protection of utilities, irrigations facilities, roadways, and railways that are in physical conflict with the proposed High-Speed Rail System alignment.
- ▶ The current report presents Third Party Agreement execution progress relative to CPI and CP2-3 through September 17th. To date, the Authority has secured 47 third party agreements to support the design and construction of CPI and CP2-3. The plan for agreement execution is based on the respective design-build contractor schedules and is updated monthly to reflect changes in the respective contractors schedule. The forecast for agreement execution is based on short term historical trends for agreement process durations.
- ▶ A Third Party Agreement executed after the planned date does not represent an overall schedule delay or impact. The planned dates reflect the earliest date an agreement is required at any work section as per the respective design build contractors' schedules. The planned dates may change month to month.
- ▶ The agreements are broken into three separate groupings to account for differences among the Authority's obligations and risks. The Agreements are identified as: Master/Cooperative Agreements, AT&T and PG&E Utility Relocation Agreements, and Railroad Agreements.
- ▶ The reports show that for the Master/Cooperative Agreements for CPI all of the agreements are executed. For CP2-3 most of the agreements have been executed and the Authority is forecasting execution of all agreements, except the County of Kings and Kings County Water District, within the next three months.

# Executive Summary

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## Lessons Learned From CPI

- ▶ Senate Bill 85 added Section 185500 et. seq to the Public Utilities Code gave the Authority similar authority to Caltrans to enter into agreements for the relocation of third-party facilities.
- ▶ Through negotiations, standard provisions and policy direction is continuing to be developed and incorporated into templates.
- ▶ The third-party agreement preparation, negotiation, processing, and approval processes are being redefined and streamlined.
- ▶ Agreement tracking, including database management, is in the process of being integrated and increasingly automated (e.g. automated workflow notifications).
- ▶ Critical issues are being identified and tracked through a results focused action based weekly meeting. If the issue cannot be resolved at this level, they are immediately elevated to Executive Management for final resolution.

# Agenda

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- ▶ Operations Report Metrics
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  - Finance/Budget
  - Environmental
  - Third-Party Agreements
  - Risk
  - Back-Up ROW Information

## ROW Metrics - Context

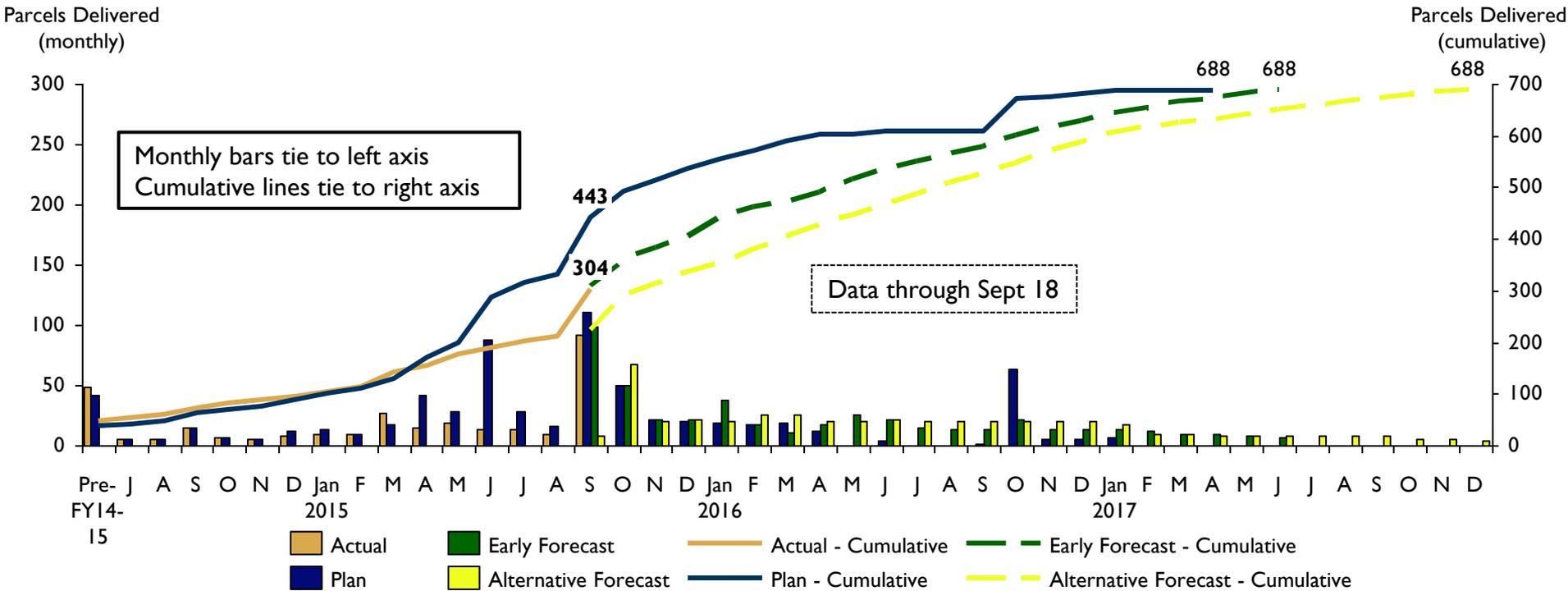
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- ▶ The following slides track parcels **delivered to design-builder (DB)**, which is the last step of the ROW process as well as several other key process steps.
  - Four metrics related to “delivered to DB” are tracked:
    - Plan: For CPI, the negotiated 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 re-baselined in September/October per the new contract
    - 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
- ▶ Forecasts are based on inputs from the ROW Consultants and the Authority
- ▶ The total number of CPI parcels needed for delivery has changed (542 to 688) over time for two main reasons:
  - Any design refinement can impact alignment or width of needed ROW and as a result the counts of impacted parcels/parcels needed to be acquired can fluctuate up or down
  - The number of public property parcels were based upon 15% designs; as the ROW Transfer Agreements are being completed with the local agencies, the number of parcels is being refined

# ROW – CP1 Parcels Delivered to Design-Build by Month

Plan vs. Actual vs. Forecast

## CPI - Delivered to DB (number of parcels)



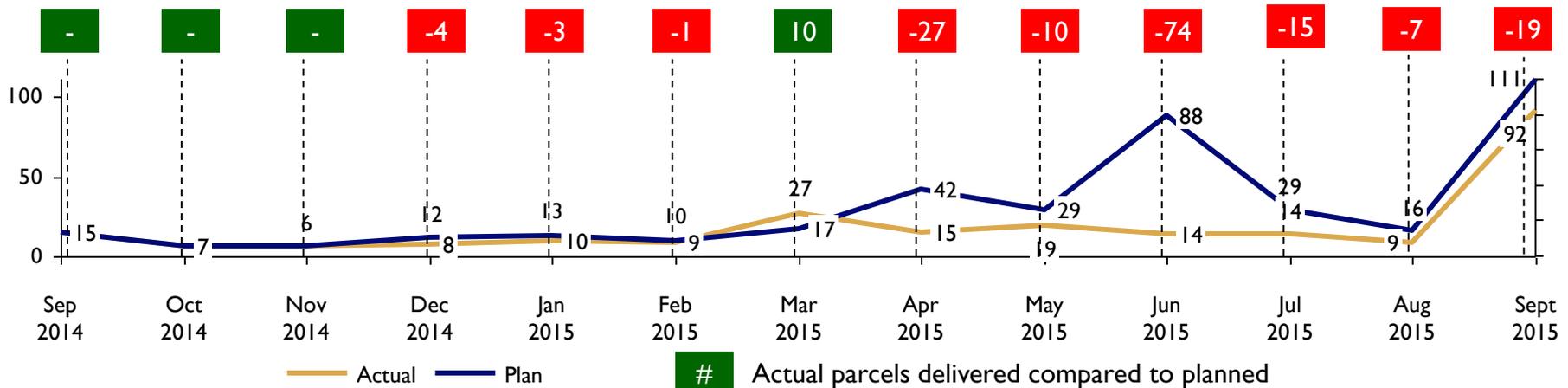
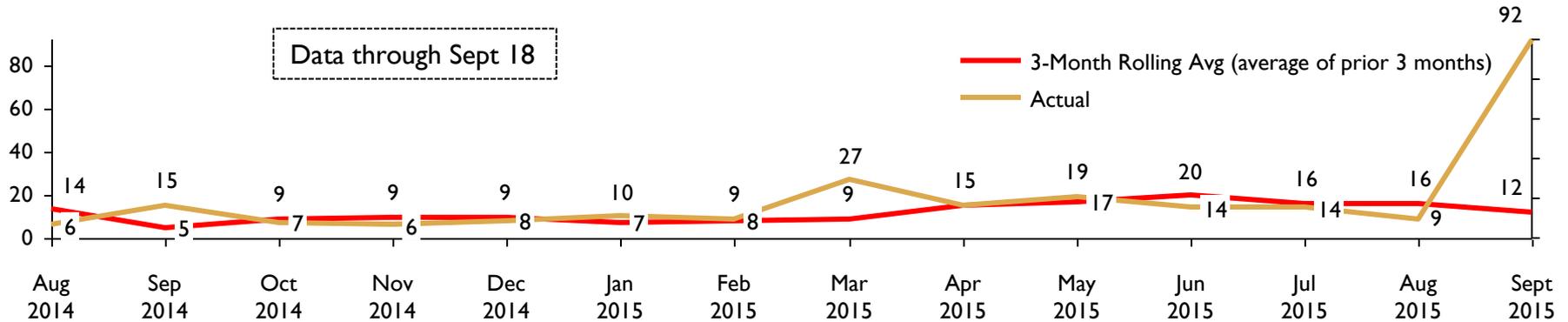
Notes:

1. "Plan": Negotiated schedule as of December 2014 plus public parcels (128), design changes (16) and 2 new parcels
2. "Early Forecast" and "Alternative Forecast": Early forecast will be continually refined based on expected delivery schedule. The Alternative Forecast is meant to reflect potential delays outside control of CHSRA and are more in line with historical delivery rates. Forecasts may exceed the plan in certain months as a result of the anticipated or actual delays from plan parcels scheduled earlier
4. 32 public parcels being delivered from County of Madera in October

Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP1 Historic Performance

## CPI Performance (in number of parcels)



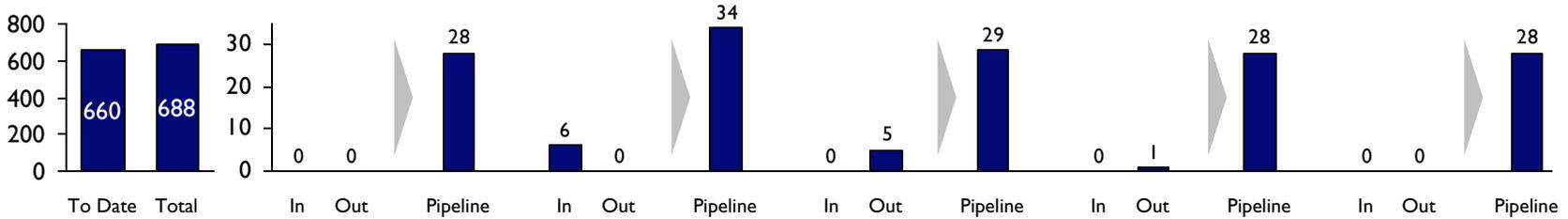
Notes:  
 1. "Plan": Negotiated schedule as of December 2014  
 Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP1 Pipeline by Process (1 out of 4 pages)

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

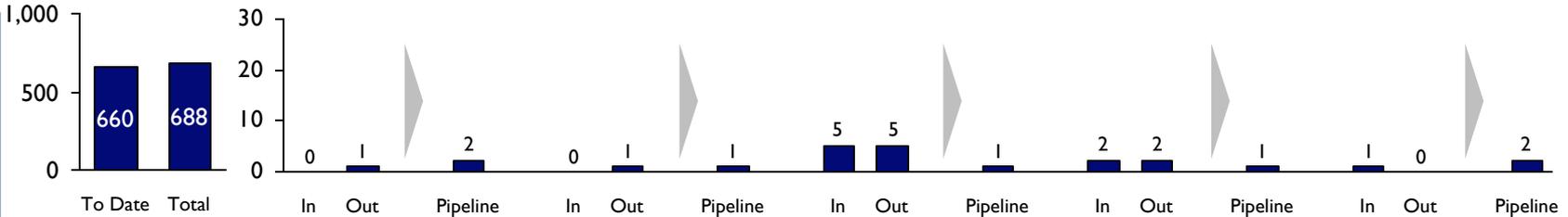
Completion    May 2015    June 2015    July 2015    August 2015    **Sept 2015**

Appraisal



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

Just Compensation



- Pipeline nearly clear

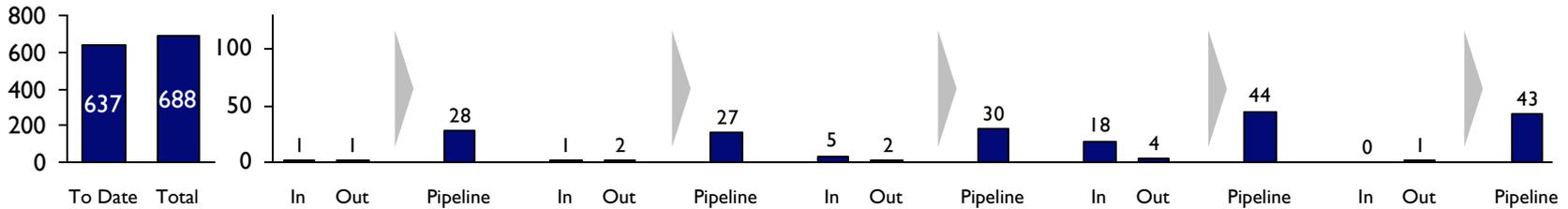
Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP1 Pipeline by Process (2 out of 4 pages)

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

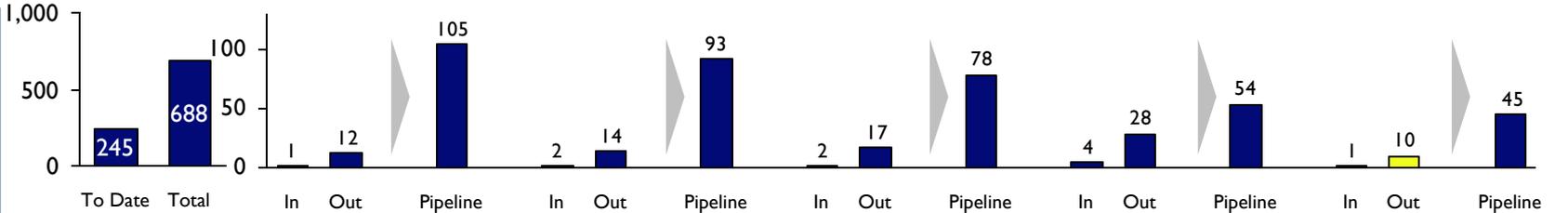


First Written Offer



- Much of the pipeline consists of railroad and State of California parcels that are handled through other means than First Written Offers

Negotiation Acquisition



- 25 signed agreements being processed to and through escrow with the balance of pending offers at property owner decision to sign or enter condemnation

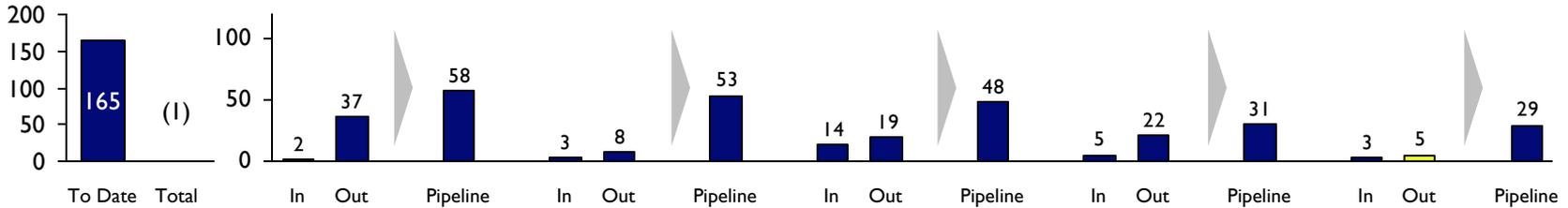
Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP1 Pipeline by Process (3 out of 4 pages)

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

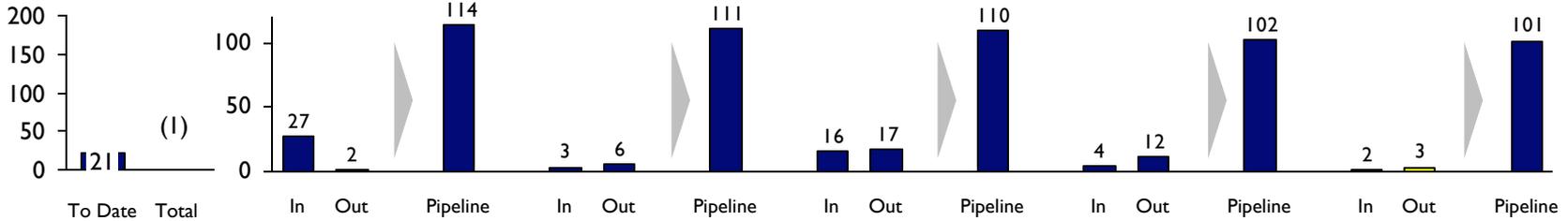


Condemnation



- Pipeline comprised of RONS being processed by CHSRA and ROW consultants

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

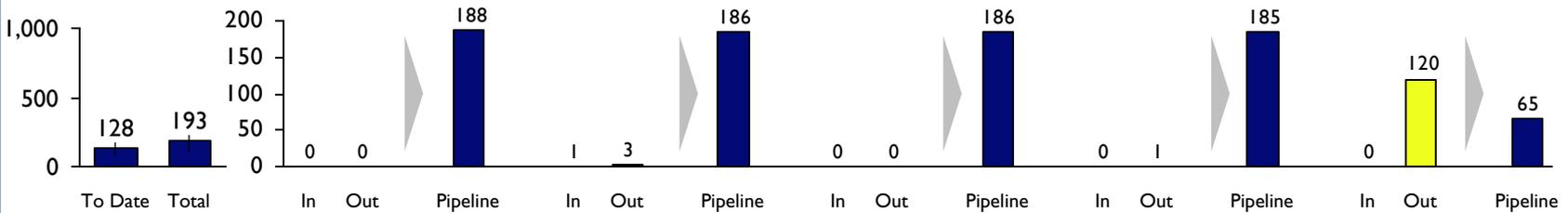
Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP1 Pipeline by Process (4 out of 4 pages)

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

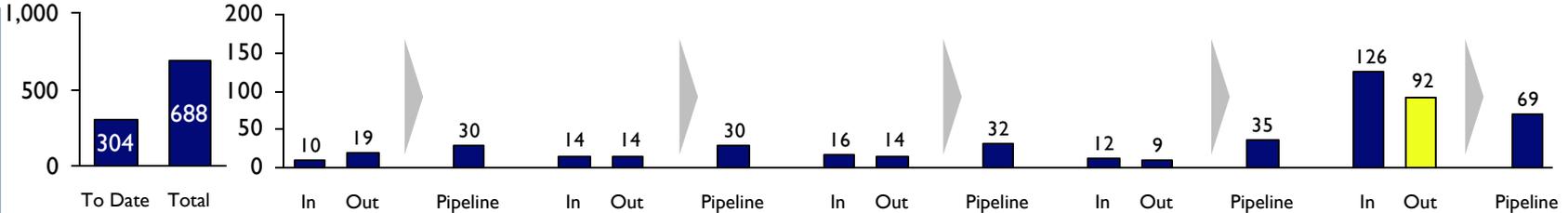


Public Agency



- 88 public roadway parcels included in City of Fresno Transfer Agreements were delivered to DB this week

Delivery



- 27 parcels require relocations, 4 parcels via OP's; balance available to be transferred to DB

Source: Sept 18, 2015 ROW Weekly Report

# CP1 Probabilistic Analysis of Meeting CP1 Forecast

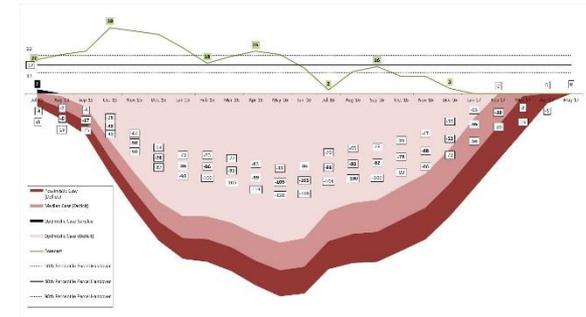
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- ▶ The team has developed a new parcels handover forecast for CPI based on actual and past performance in terms of numbers of parcels delivered per month
- ▶ The forecast is refined monthly as new information is integrated and present a trajectory that the team uses to achieve the plan agreed with the contractor TPZP (negotiated schedule as of December 2014)
- ▶ A probabilistic distribution of monthly handover rates is specified based on monthly handovers during previous delivery periods (3 months and 6 months)
- ▶ The distribution is then compared to the forecast handover rates of each month in a Monte Carlo simulation to determine the probability of meeting monthly (clean slate) and cumulative (rolling over delayed parcels to next month) targets
- ▶ When relevant the analysis determines the likely delay to the forecasted completion date
- ▶ A Pessimistic case and an Optimistic case bracket the Median case; all presented in the detailed results in Appendix
- ▶ An updated probabilistic analysis will be prepared in October 2015

# CP1 Probabilistic Analysis – Summary and Preliminary Results from August 2015 Forecasts

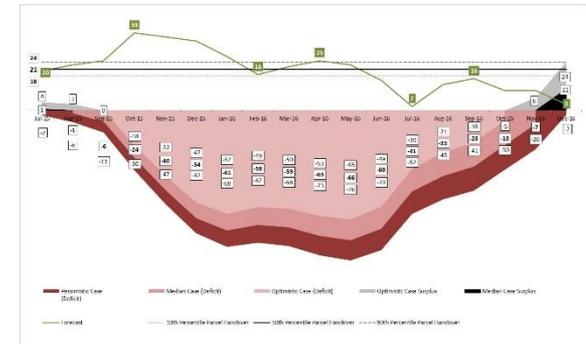
## Past 6-Month Parcel Handover Rate

- Range used for historic period : 9 – 27 parcels per month (Median = 17 parcels per month)
- Meeting monthly targets (clean slate) : 9 / 18 months
- Meeting monthly targets (roll over) : 1 / 18 months
- Accumulated parcel delivery deficit of delivery of parcels (iceberg) reaches 105 parcels in the median case creating cost impacts to the contract if delays are not avoided or mitigated
- Handover of the final parcel anticipated to be delayed 7 months



## Past 3-Month Parcel Handover Rate

- Range used for historic period : 15 – 27 parcels per month (Median = 21 parcels per month)
- Meeting monthly targets (clean slate) : 9 / 18 months
- Meeting monthly targets (roll over) : 4 / 18 months
- While the final parcel is likely (85.6%) to be delivered by Dec 2016, delays (and likely associated claims) will have been accumulated by that date.



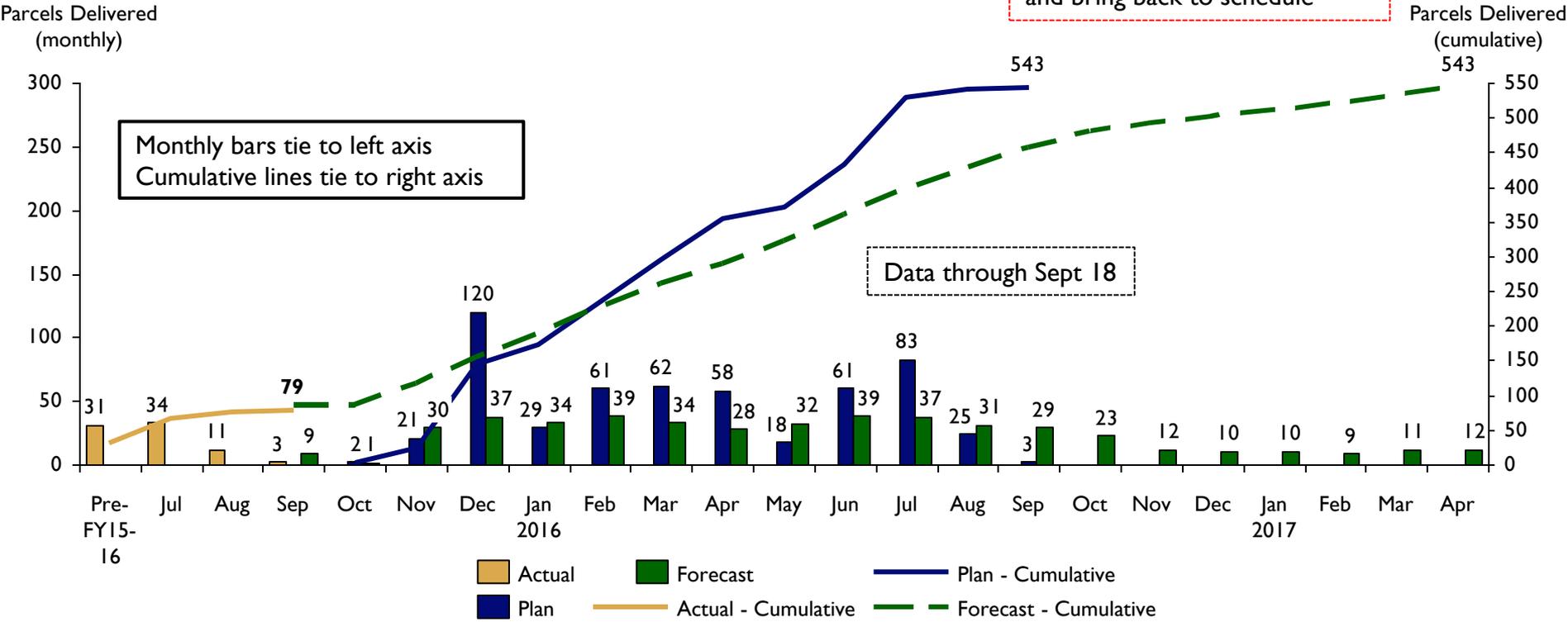
Notes: The deficits presented are in addition to the delays already accrued. Deficits measured against our own internal forecast NOT contractual obligations to the contractor.

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

Planned vs. Actual vs. Forecast

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

8-month delay due to ATCs; contractor required to mitigate and bring back to schedule



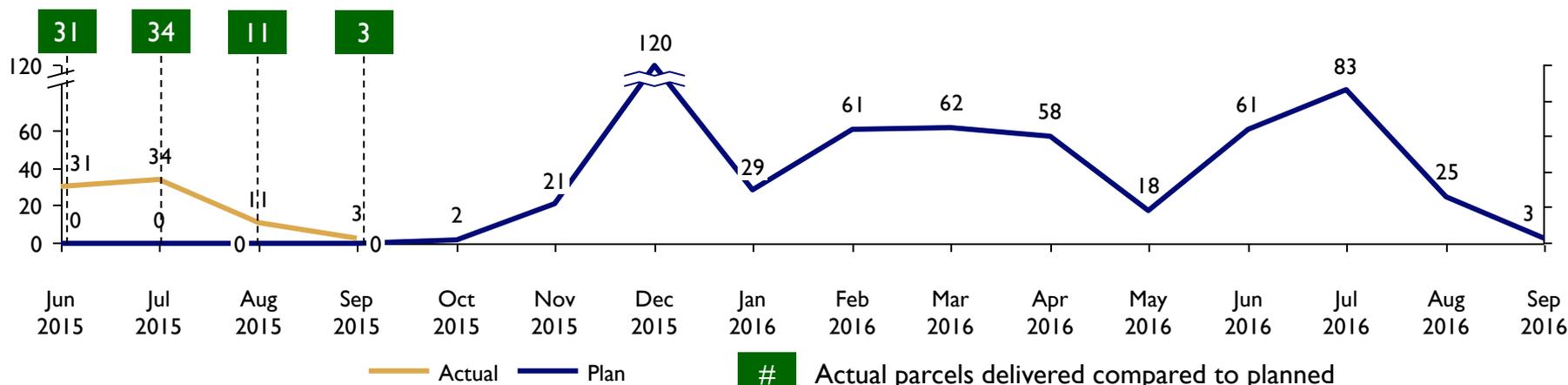
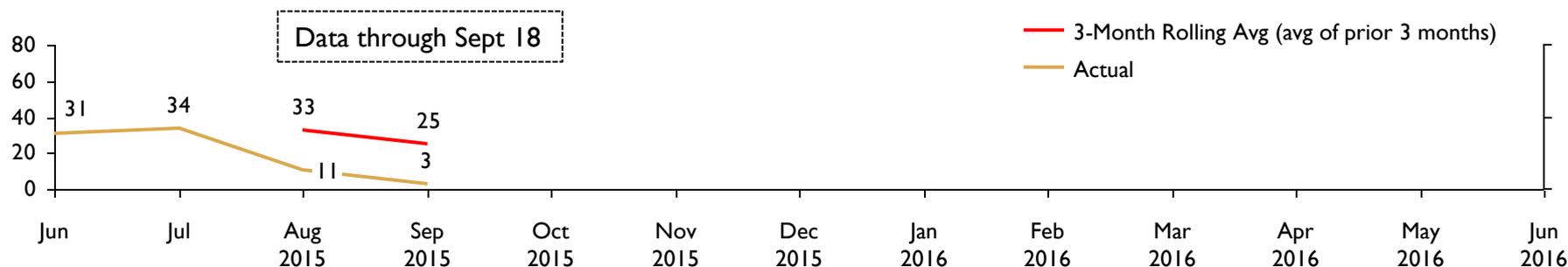
Notes:

1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized. Rebaselining should occur in September.
2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved. Forecast will be revised to reflect current needed parcel count.

Source: Sept 18, 2015 ROW Weekly Report

# ROW – CP2-3 Historic Performance

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



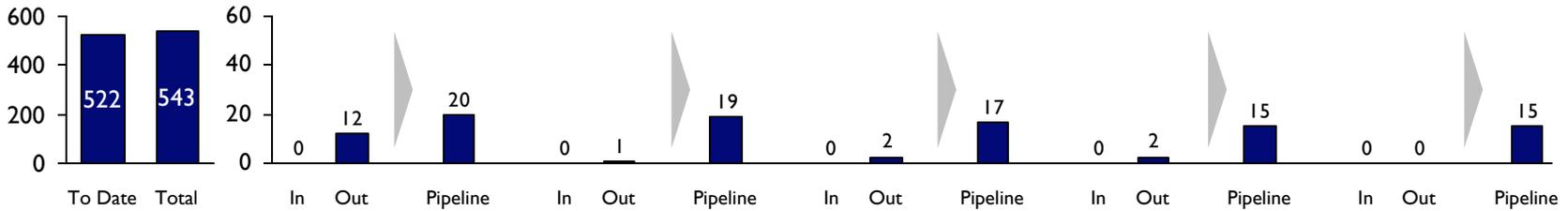
- Notes:
1. Per contract, “planned” to be re-baselined in September/October
  2. Contract executed in June; 31 parcels delivered after contract execution
  3. August rolling average only based on June and July deliveries as CP2-3 deliveries began in June
- Source: Sept 18, 2015 ROW Weekly Report

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

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

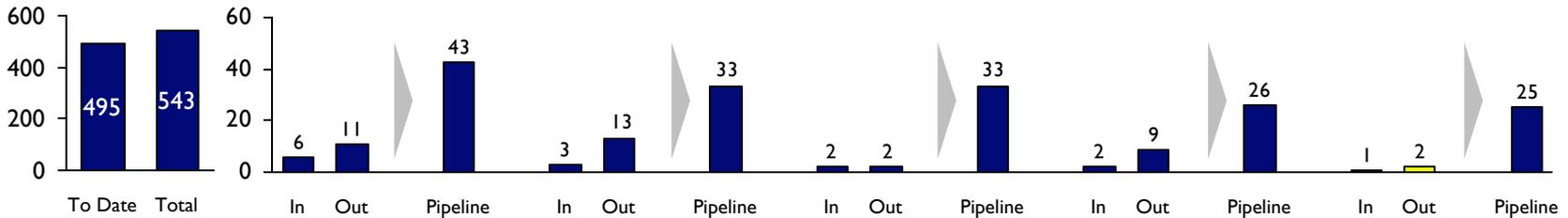


Appraisal



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

Just Compensation



- Pipeline pending DGS setting Just Compensation

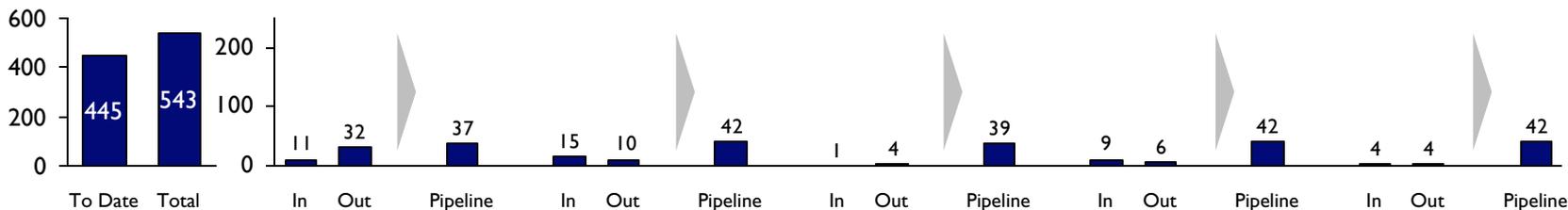
Source: Sept 18, 2015 ROW Weekly Report

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

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

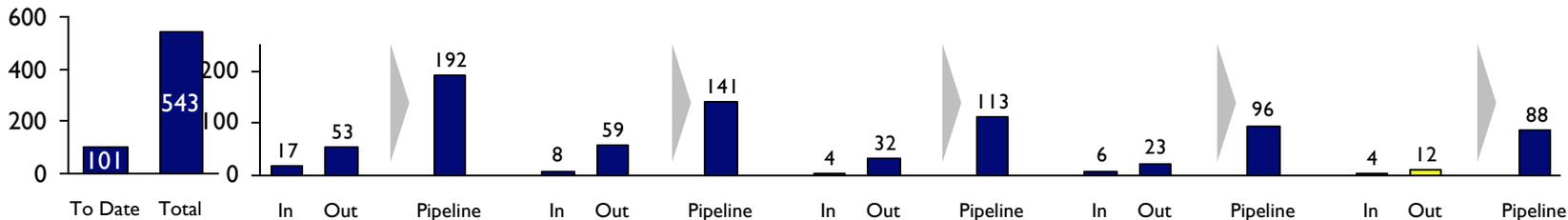


First Written Offer



- Pipeline consists of 24 railroad parcels and 13 that are under appraisal refinement

Negotiation Acquisition



- 57 agreements being processed to and through escrow with the balance of pending offers at property owner decision to sign or enter condemnation

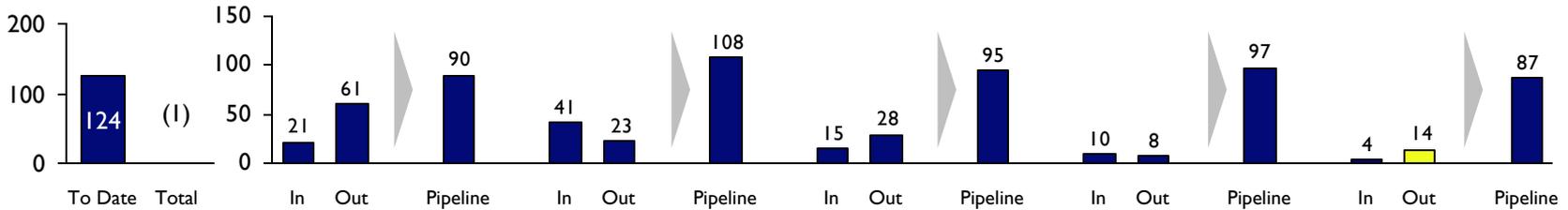
Source: Sept 18, 2015 ROW Weekly Report

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

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

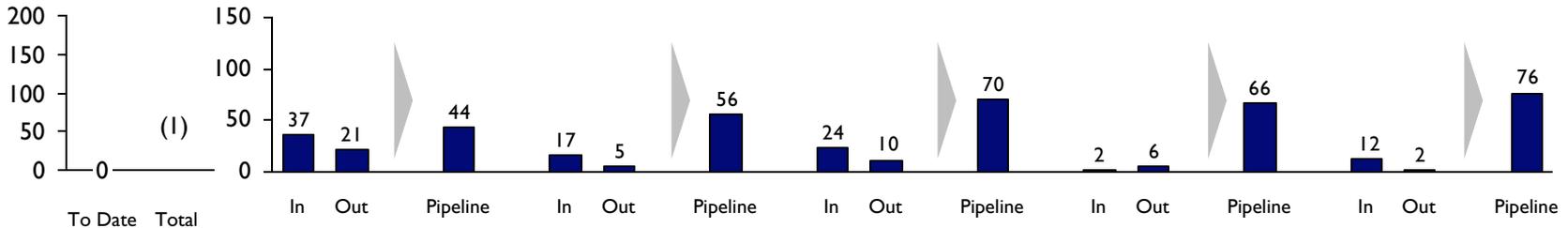
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Condemnation



- Pipeline comprised of RONs being processed by CHSRA and ROW consultants

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

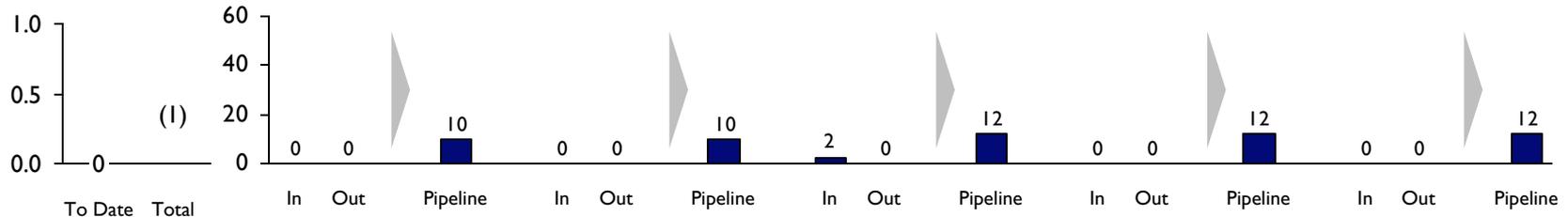
Source: Sept 18, 2015 ROW Weekly Report

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

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

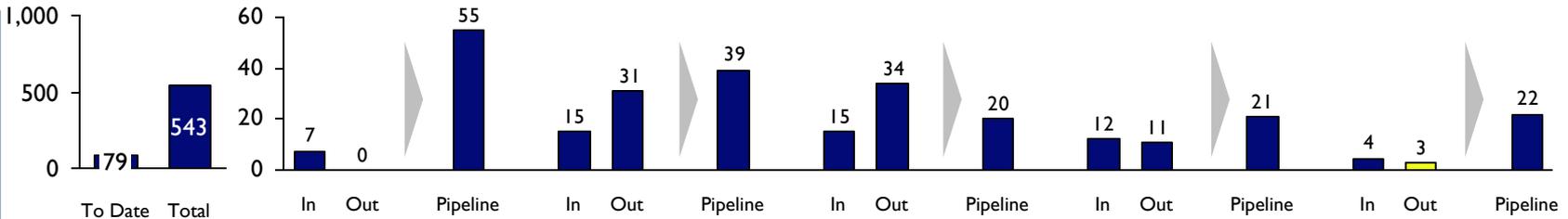


Public Agency



- Current parcels are those public parcels with APN's and value. Public Roadway parcels will be defined to add to the total number of distinct parcels

Delivery



- 15 parcels require relocations, remaining available to be transferred to DB

(1) Total number of public parcels to be identified

Source: Sept 18, 2015 ROW Weekly Report

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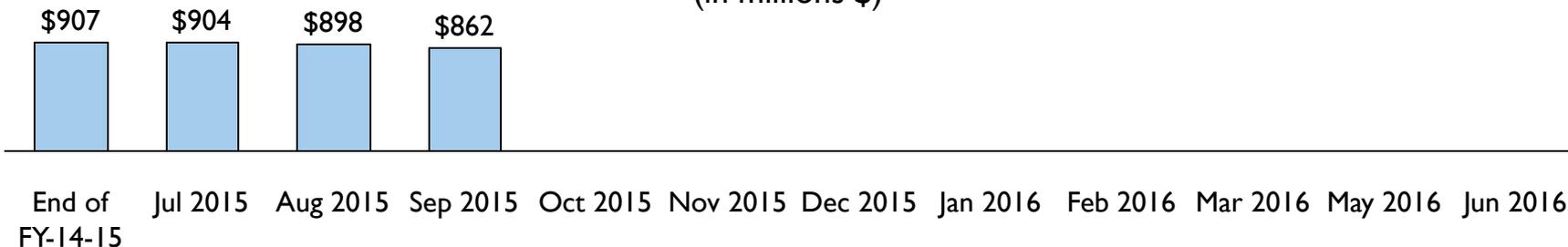
## Contract Management Metrics - Context

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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 refers to total invoices to date
    - Planned value refers to forecasted invoices to date
- ▶ Contract management metrics for CPI and CP2-3 are included
- ▶ Updates to the report will be made monthly

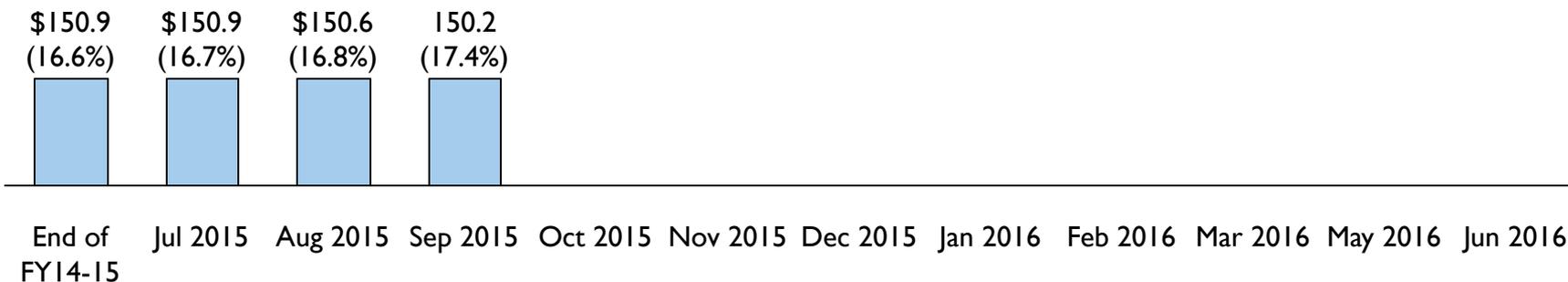
# CP1 Contract Management – Contingency Value

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



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

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



Notes:  
 1. Contract balance only accounts for approved invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric  
 2. Based upon the amount of CP I 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

Data as of: September 20, 2015

# CP1 Contract Management Raw Data: Contingency Value

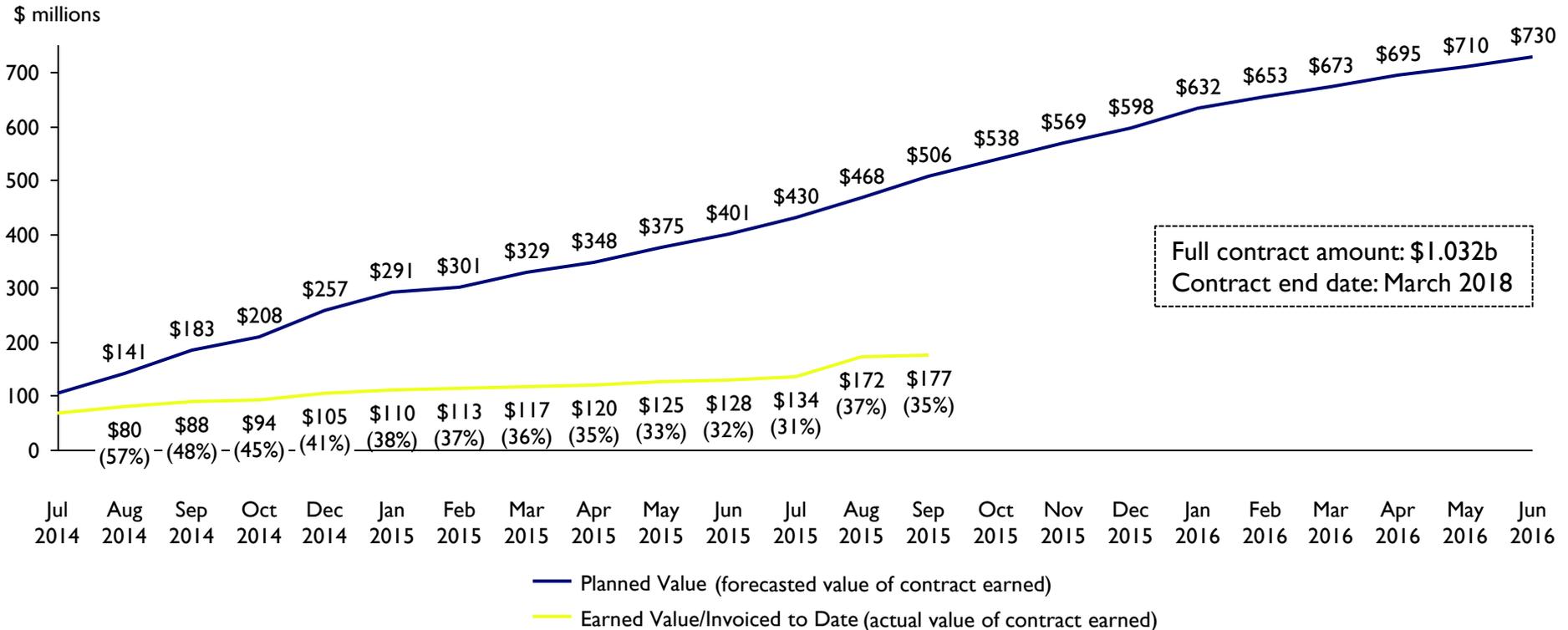
## CPI – Contingency (millions \$)

	End of FY 14-15	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016
Contract Balance Remaining	\$906.8m	\$904.2m	\$898.2m	\$861.7m									
Contingency	\$160m	\$160m	\$160m	\$160m									
Change Orders (from contingency)	\$9.1m	\$0	\$0.3m	\$0.4m									
Contingency Balance Remaining	\$150.9m	\$150.9m	\$150.6m	\$150.2m									
Contingency %	16.6%	16.7%	16.8%	17.4%									

Data as of: September 20, 2015

# CP1 Contract Management – Schedule Performance Index

## CPI Schedule – Total Planned Value of Contract Earned (in millions \$)



Notes:

1. No report produced in November 2014
2. Total amount earned refers to progress on the schedule, not approved contract invoices
3. The increase in the CP I earned value during the August pay period is primarily a result of revising the way the Contractor is compensated for administrative overhead incurred to date

Data as of: September 20, 2015

# CP1 Contract Management Raw Data: Schedule Performance Index

**CPI – Schedule (millions \$)**

	End of FY 14-15	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016
Earned Value/ Invoiced to Date	\$127.9m	\$134.4m	\$171.5m	\$176.5m									
Planned Value	\$400.8m	\$430.3m	\$468.0m	\$505.8m									
Schedule Performance Index	32%	31%	37%	35%									

Data as of: September 20, 2015

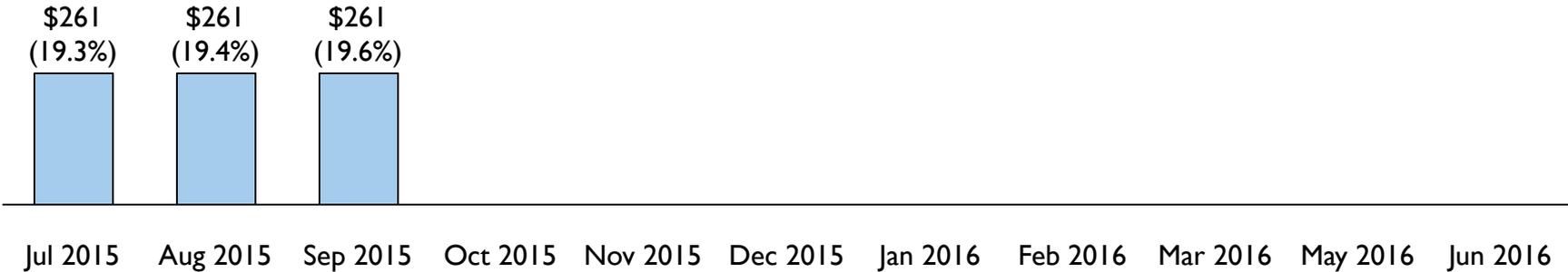
# CP2-3 Contract Management – Contingency Value

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



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

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



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

Data as of: September 20, 2015

# CP2-3 Contract Management Raw Data: Contingency Value

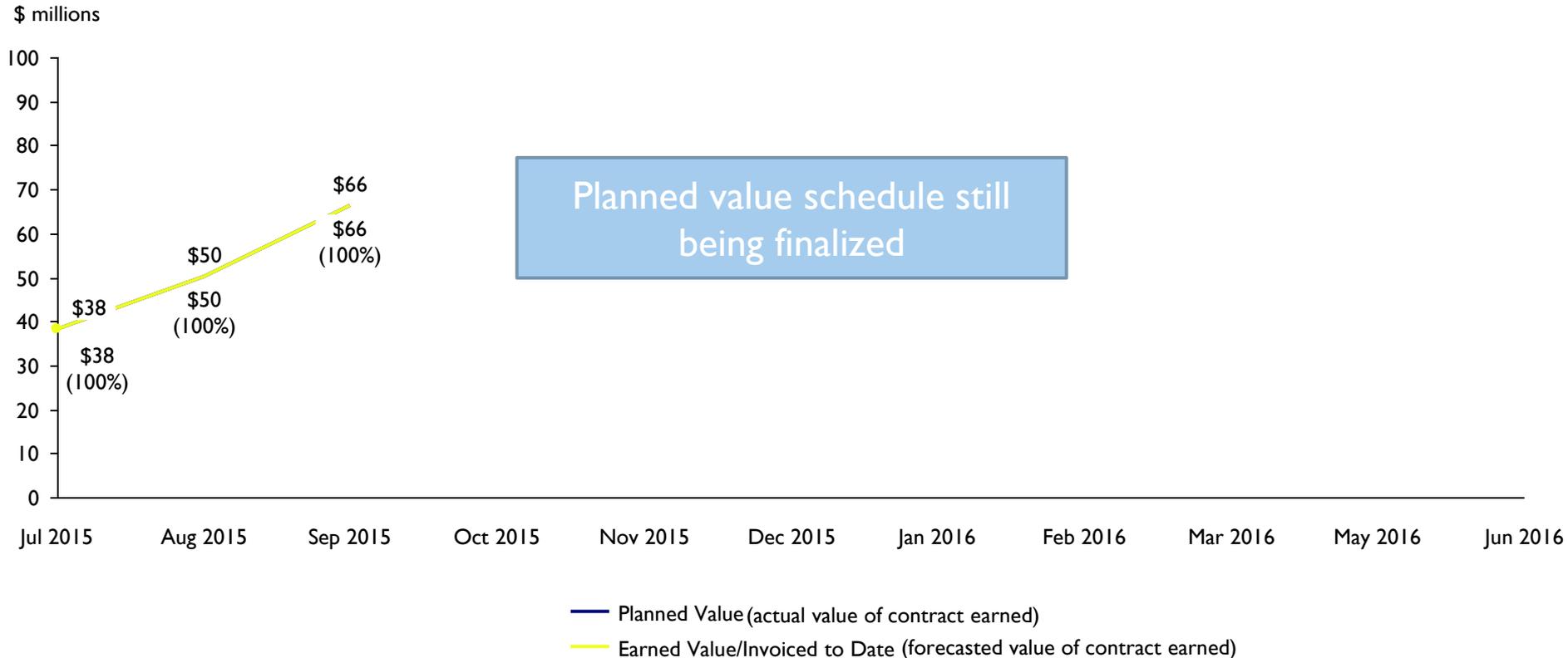
**CP2-3 – Contingency (millions \$)**

	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016
Contract Balance Remaining	\$1,356m	\$1,345m	\$1,328m									
Contingency	\$261.2m	\$261.2m	\$261.2m									
Change Orders (from contingency)	\$0	\$0	\$0.3m									
Contingency Balance Remaining	\$261.2m	\$261.2m	\$260.9m									
Contingency %	19.3%	19.4%	19.6%									

Data as of: September 20, 2015

# CP2-3 Contract Management – Schedule Performance Index

## CP2-3 Schedule – Total Planned Value of Contract Earned (in millions \$)



Notes: Total amount earned refers to progress on the schedule, not approved contract invoices

Data as of: September 20, 2015

# CP2-3 Contract Management Raw Data: Schedule Performance Index

**CP2-3 – Schedule (millions \$)**

	July 2015	Aug 2015	Sept 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016
Earned Value/ Invoiced to Date	\$38.1m	\$50.4m	\$66.5m									
Planned Value	\$38.1m	\$50.4m	\$66.5m									
Schedule Performance Index	100%	100%	100%									

Data as of: September 20, 2015

# Agenda

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- ▶ Operations Report Metrics
  - Executive Summary
  - ROW
  - Contract Management
  - Finance/Budget
  - Environmental
  - Third-Party Agreements
  - Risk
  - Back-Up ROW Information

## Finance/Budget Metrics – Context

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- ▶ Metrics organized by:
  - Summary of current fiscal environment
  - FY 2015-16 finance/budget data, which includes ROW, planning, environmental and construction
  
- ▶ For FY 2015-16, this report presents:
  - Budget expenditures: based on FCP budget
  - Actual expenditures: incorporated each month
  
- ▶ All data shown is at the end of each month
  - Numbers used reflect actual expenditures in the months they occur and include adjustments from published versions of capital outlay reports
  - There is a 1-month lag to produce the F&A Capital Outlay Reports, which is the source of the data
    - For example, a July Capital Outlay Report includes financial data through May

# The Authority has spent 4% of FY15-16 budget, 28.8% of the federal ARRA fund and 100% of C&T fund

## Total Expenditures to Date\* (as of August 2015)

ARRA expenditures are 28.8% of federal ARRA grant funds and 11.6% of \$6.34b total budget

	TOTAL		Planning		Construction	
	Budget	Expended	Budget	Expend to Date	Budget	Expend to Date
<b>ARRA Grant*</b>	\$2.553b	\$0.736b	\$0.322b	\$0.277b	\$2.231b	\$0.459b
<b>FY10 Grant</b>	\$0.928b	\$-	\$-	\$-	\$0.928b	\$-
<b>PROP IA**</b>	\$2.563b	\$0.154b	\$0.192b	\$0.154b	\$2.372b	\$-
<b>LOCAL</b>	\$0.052b	\$-	\$0.052b	\$-	\$-	\$-
<b>C&amp;T (FY14/15 only)*</b>	\$0.250b	\$0.250b	\$0.058b	\$0.059b	\$0.191b	\$0.191b
<b>Total</b>	\$6.347b	\$1.140b	\$0.624b	\$0.490b	\$5.722b	\$0.650b

\*Source: F&A Capital Outlay Report, Oct 2015 – balance subject to change due to pending approval of tapered match and federal reimbursements

\*\*There is a total of \$2.813b in Prop IA appropriations, but the budgeted total excludes \$250m that were supplanted by C&T funds

Note: Numbers may not add due to rounding

Total appropriation includes some funding for Phase II planning and FY15/16 C&T creating a difference with the total budget above.

## FY15-16 Expenditures to Date\* (as of August 2015)

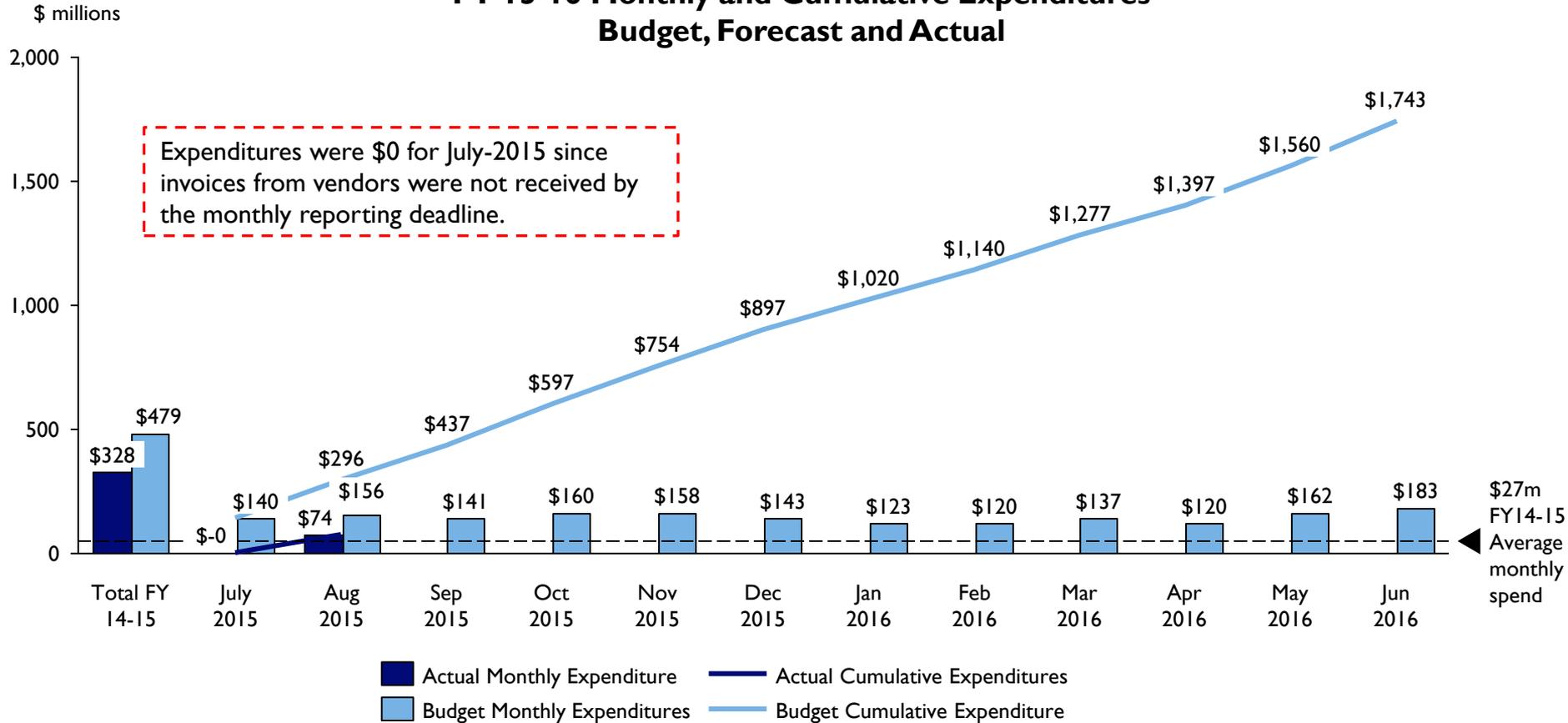
Total Appropriation	FY15-16 Budget		Expenditures to Date		Expenditures - % of Budget	
	July 31	Aug 31	July 31	Aug 31	July 31	Aug 31
\$7.292b	\$1.74b	\$1.74b	\$0.000b	\$0.074b	0%	4%

Expenditures were \$0 for July-2015 since invoices from vendors were not received by the monthly reporting deadline.

\*F&A Capital Outlay Report, Oct 2015

# Finance/Budget – FY15-16 Expenditures

## FY 15-16 Monthly and Cumulative Expenditures Budget, Forecast and Actual



Source: F&A Capital Outlay and Expenditure Reports (Sept 2014 – Oct 2015)

Notes: Forecast data will shift each month (budget and forecasts only equal at outset of FY15-16)

# Finance/Budget Raw Data: FY14-15 Expenditure

## FY14-15 Raw Data

	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	June 2015
Total FY Budget	\$1.6b	\$1.6b	\$1.6b	\$1.6b	\$859m	\$859m	\$859m	\$522m	\$479m	\$479m	\$479m	\$479m
Expense to Date	\$24.7m	\$47.2m	\$66.9m	\$91.6m	\$119.0m	\$139.4 m	\$153.0m	\$174.4m	\$199.7m	\$218.3m	\$273.2m	\$327.6m
Monthly expenditures	\$24.7m	\$22.5m	\$19.7m	\$24.6m	\$27.4m	\$20.5m	\$13.6m	\$21.4m	\$25.3m	\$18.6m	\$54.9m	\$54.4m
Total FY Forecast	\$1.6b	\$1.5b	\$1.6b	\$838m	\$766m	\$728m	\$653m	\$522m	\$479m	\$416m	\$349m	\$336m

## FY15-16 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										
Expense to Date	\$0	\$74.1m										
Monthly expenditures	\$0	\$74.1m										
Total FY Forecast	\$1.7b	\$1.7b										

Source: F&A Capital Outlay and Expenditure Reports (Sept 2014 – Oct 2015)

Notes: Numbers may not add due to rounding; no July 2015 expenditures were received

# Agenda

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## Environmental Clearance Metrics - Context

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- ▶ The following slides track several metrics for each environmental segment/project related to:
  - Schedule and physical percent complete (earned value)
  - Key milestones
  - Actual, planned and forecasted costs-to-completion date
    - As of July 2015, when costs projections were re-baselined, planned and forecast costs are the same; starting in September 2015, forecasted costs will be based on performance and trends, but planned costs will remain locked
    - Actual costs are based on monthly expenditures
  
- ▶ An additional slide in the back of report provides an overview for key, upcoming milestones across all environmental segments and projects

# Progress and Status to Date by Segment

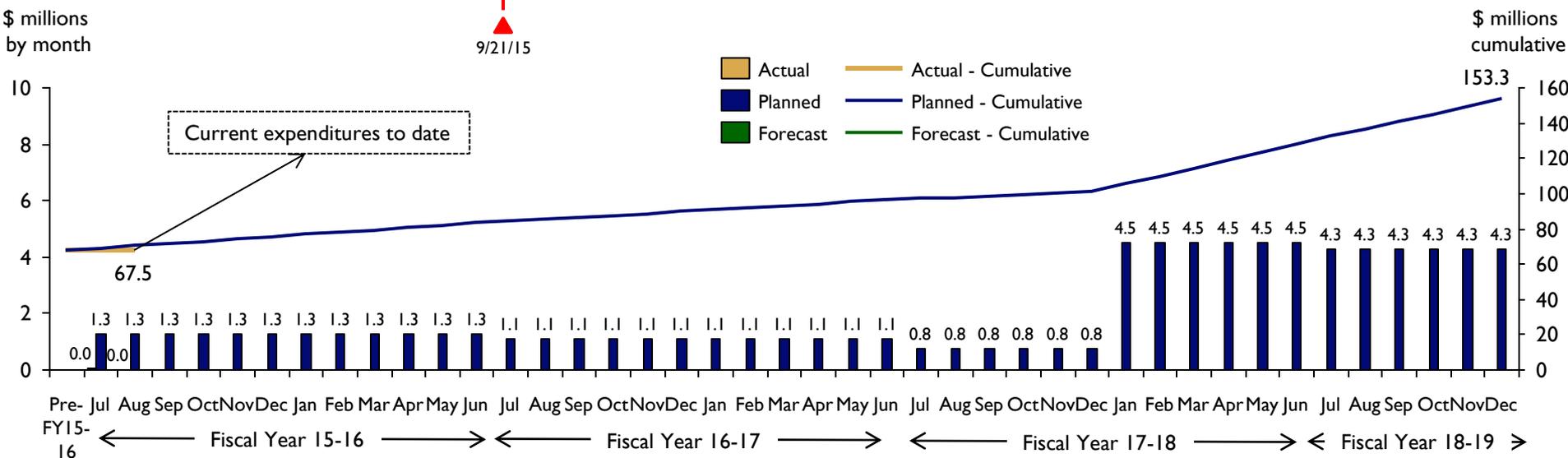
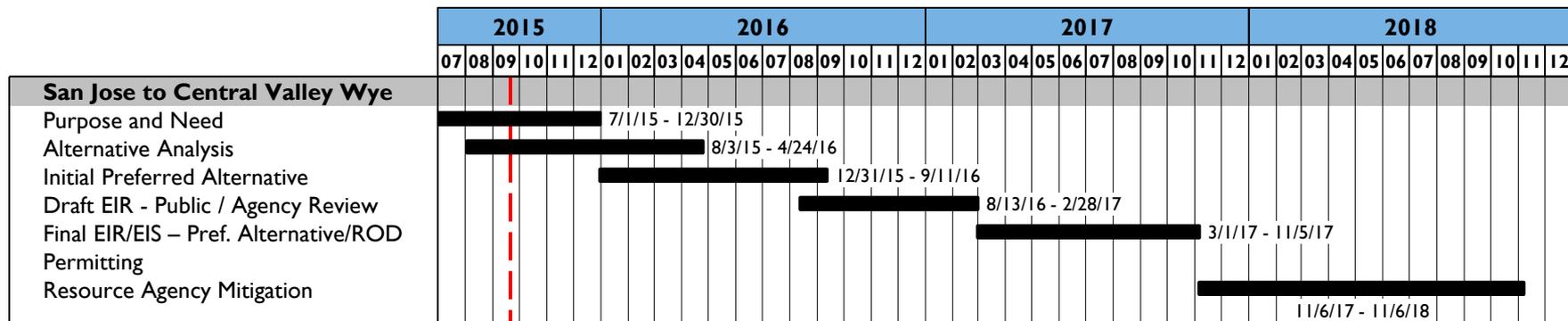
Segment	Progress to Date	Status to Date / Next Steps
Merced to Fresno	<ul style="list-style-type: none"> <li>The EIR/EIS was approved by the Authority Board in May 2012; the FRA ROD was issued in September 2012</li> </ul>	<ul style="list-style-type: none"> <li>Construction is underway for Construction Package 1</li> </ul>
Fresno to Bakersfield	<ul style="list-style-type: none"> <li>The EIR/EIS was approved by the Authority Board in May 2015; the FRA ROD was issued in June 2015</li> </ul>	<ul style="list-style-type: none"> <li>A Notice to Proceed was issued to the Design/Builder for Construction Package 2/3 June 25, 2015.</li> <li>Selection of a Design/Builder Contractor for CP 4 is scheduled for January 2016</li> </ul>
San Francisco to San Jose	<ul style="list-style-type: none"> <li>Caltrain is clearing two electrical interconnections.</li> <li>On Schedule provided Caltrain gets the interconnections done .</li> </ul>	<ul style="list-style-type: none"> <li>We are on target and kicking off stakeholder engagement activities concurrently with the environmental clearance processes.</li> </ul>
San Jose to CV Wye	<ul style="list-style-type: none"> <li>SOQs for environmental and engineering services due 9/14. Award 11/20. All work subject to approved task orders.</li> <li>SAA at initial stage of data gathering, review of earlier work continues.</li> </ul>	
Central Valley Wye	<ul style="list-style-type: none"> <li>Administrative Draft Merced to Fresno Section under development.</li> <li>Checkpoint C: the analyses to support the LEDPA determination must be crafted and concurrence before the ROD.</li> <li>Permitting &amp; Mitigation: A completed draft Compensatory Mitigation Plan required before the ROD can be issued.</li> </ul>	<ul style="list-style-type: none"> <li>We are on target for a December ROD.</li> </ul>
Central Valley Interconnections	<ul style="list-style-type: none"> <li>Initial studies by PG&amp;E completed for critical electrical interconnections for test track. Second phase PG&amp;E study necessary.</li> <li>Environmental clearance approach is under review.</li> </ul>	<ul style="list-style-type: none"> <li>We are continuing to coordinate with PE&amp;E and are currently behind schedule.</li> </ul>
HMF	<ul style="list-style-type: none"> <li>The environmental clearance approach is under review.</li> </ul>	<ul style="list-style-type: none"> <li>We will assess schedule performance once approach is determined.</li> </ul>
Bakersfield F St. Station Alignment	<ul style="list-style-type: none"> <li>Public outreach on the project continues.</li> </ul>	<ul style="list-style-type: none"> <li>We are on target for F Street Station.</li> </ul>
Bakersfield to Palmdale	<ul style="list-style-type: none"> <li>The SAA will be completed this Fall.</li> <li>Administrative draft is due 2016.</li> </ul>	<ul style="list-style-type: none"> <li>Staying on target for the FRA ROD by the end of 2017 requires both immediate process improvements internally and commitments from outside agencies.</li> </ul>
Palmdale to Burbank	<ul style="list-style-type: none"> <li>The SAA is complete.</li> <li>The administrative draft is due 2016.</li> </ul>	<ul style="list-style-type: none"> <li>Staying on target for the FRA ROD by the end of 2017 requires both immediate process improvements internally and commitments from outside agencies.</li> <li>We are coordinating with US Forest Services on environmental clearance and permitting</li> </ul>
Burbank to LA	<ul style="list-style-type: none"> <li>The SAA, will be completed this Fall.</li> <li>The administrative draft is due 2016.</li> </ul>	<ul style="list-style-type: none"> <li>Staying on target for the FRA ROD by the end of 2017 requires both immediate process improvements internally and commitments from outside agencies.</li> </ul>
LA to Anaheim		

# Environmental Milestones Schedule (to ROD)

Segment	Progress	Purpose & Need Statement		Alternatives Analysis		Initial Preferred Alternative		Draft EIS		Final EIS / ROD / Permitting		Percent Complete Total	
		Due Dates	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month
Merced to Fresno	Completed		Feb. 2011		Jun. 2011		N/A		Aug. 2011		Apr. 2012	100%	100%
Fresno to Bakersfield	Completed		Feb. 2011		Jun. 2011		NA		Jul. 2012		Apr. 2014	100%	100%
1 San Francisco to San Jose	Plan Actual % Complete	- - -	01-Mar-16 01-Mar-16 100%	- - -	Complete Complete 100%	- - -	04-Jul-16 04-Jul-16 7%	- - -	03-Jan-17 03-Jan-17 7%	- - -	12-Nov-17 12-Nov-17 0%	- - -	Date Date 7%
2 San Jose to CV Wye	Plan Actual % Complete	- - -	30-Dec-15 30-Dec-15 70%	- - -	24-Apr-16 24-Apr-16 50%	- - -	11-Sep-16 11-Sep-16 10%	- - -	28-Feb-17 28-Feb-17 10%	- - -	05-Nov-17 05-Nov-17 0%	- - -	Date Date 10%
3 Central Valley Wye	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	Complete Complete 100%	- - -	21-Sep-15 21-Sep-15 50%	- - -	19-Feb-16 19-Feb-16 30%	- - -	04-Dec-16 04-Dec-16 0%	- - -	Date Date 70%
4 CV Electrical Interconnections	Plan Actual % Complete	- - -	20-Jan-16 20-Jan-16 10%	- - -	20-Mar-16 20-Mar-16 10%	- - -	28-Jul-16 28-Jul-16 0%	- - -	17-Nov-16 17-Nov-16 0%	- - -	08-Oct-17 08-Oct-17 0%	- - -	Date Date 5%
5 HMF	Plan Actual % Complete	- - -	24-Sep-15 24-Sep-15 60%	- - -	01-Aug-15 01-Aug-15 100%	- - -	29-Apr-16 29-Apr-16 0%	- - -	15-Sep-16 15-Sep-16 0%	- - -	09-May-17 09-May-17 0%	- - -	Date Date 11%
6 Bakersfield F Street Alignment	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	Complete Complete 100%	- - -	10-May-16 10-May-16 5%	- - -	12-Jul-16 12-Jul-16 0%	- - -	31-Dec-16 31-Dec-16 0%	- - -	Date Date 5%
7 Bakersfield to Palmdale	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	17-Nov-15 17-Nov-15 70%	- - -	20-Oct-16 20-Oct-16 15%	- - -	24-Apr-17 24-Apr-17 5%	- - -	16-Nov-17 16-Nov-17 0%	- - -	Date Date 10%
8 Palmdale to Burbank	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	01-Oct-15 01-Oct-15 100%	- - -	01-Aug-16 01-Aug-16 25%	- - -	17-Mar-17 17-Mar-17 15%	- - -	19-Nov-17 19-Nov-17 0%	- - -	Date Date 15%
9 Burbank to LA	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	31-Mar-16 31-Mar-16 100%	- - -	24-Jan-17 24-Jan-17 5%	- - -	10-May-17 10-May-17 5%	- - -	20-Nov-17 20-Nov-17 0%	- - -	Date Date 10%
10 LA to Anaheim	Plan Actual % Complete	- - -	Complete Complete 100%	- - -	31-Dec-15 31-Dec-15 75%	- - -	09-Oct-16 09-Oct-16 15%	- - -	21-Feb-17 21-Feb-17 5%	- - -	18-Nov-17 18-Nov-17 0%	- - -	Date Date 12%



# San Jose to Central Valley Wye



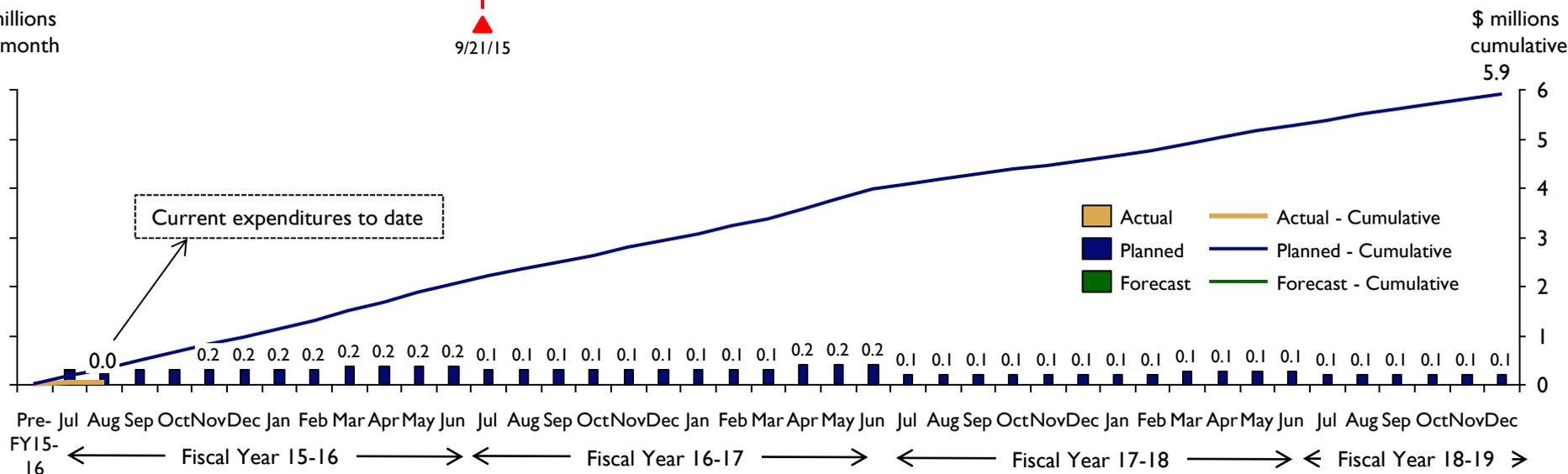
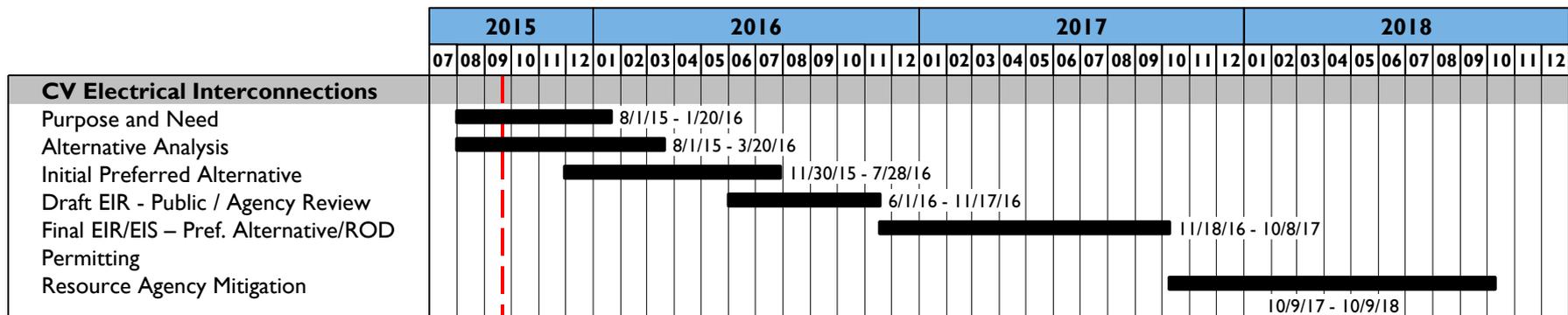
Notes:

- 1) All estimates included are preliminary and subject to change
- 2) Expenditures to date do not include legal or Authority costs
- 3) July and August actuals do not include legal costs

Source: Based on actual expenditures and future estimates for the RCs, RDP and Authority



# Central Valley Electrical Interconnections



Notes:

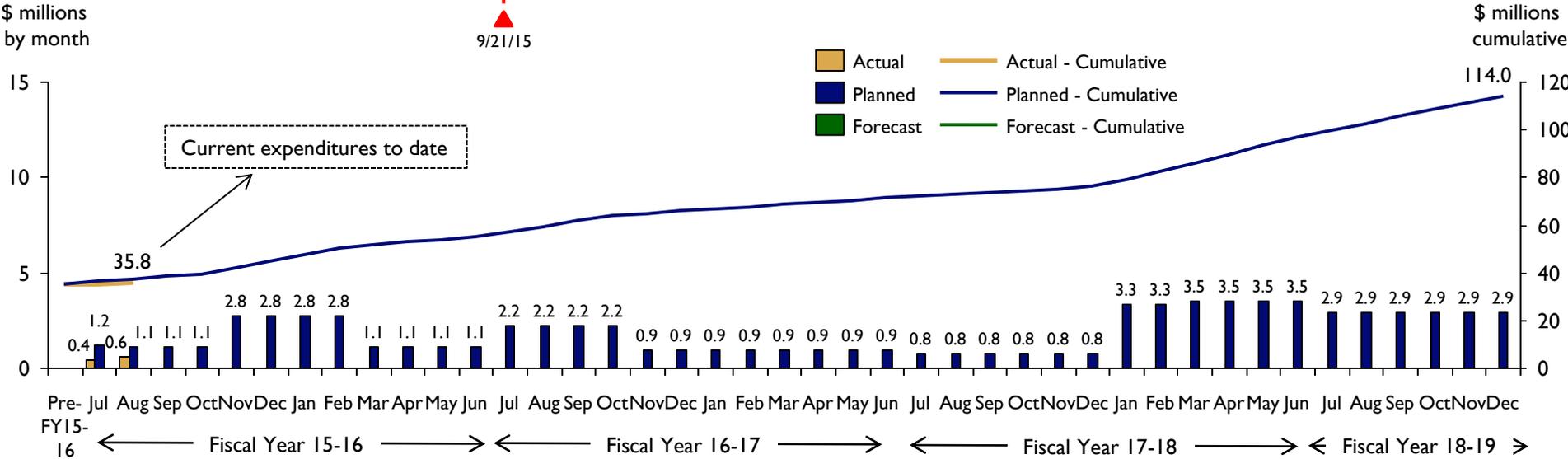
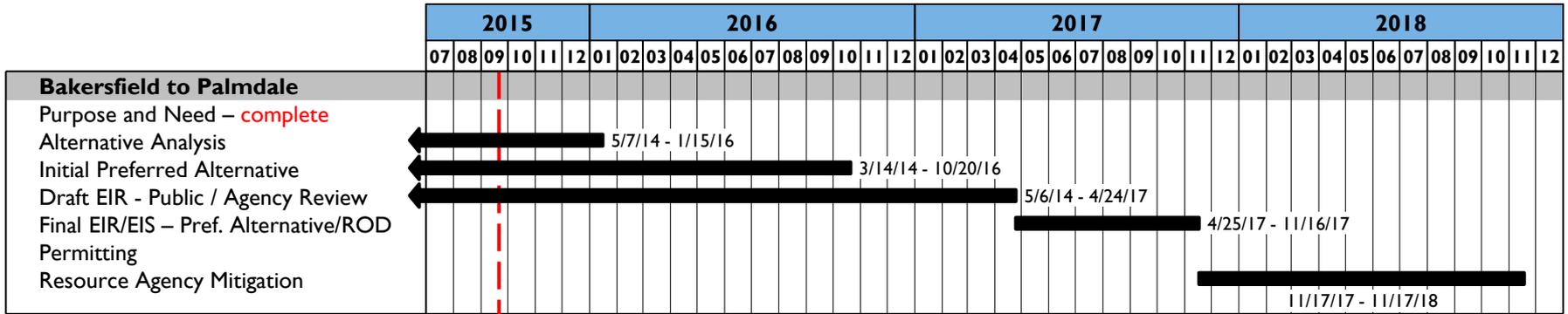
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Source: Based on actual expenditures and future estimates for the RCs, RDP and Authority





# Bakersfield to Palmdale

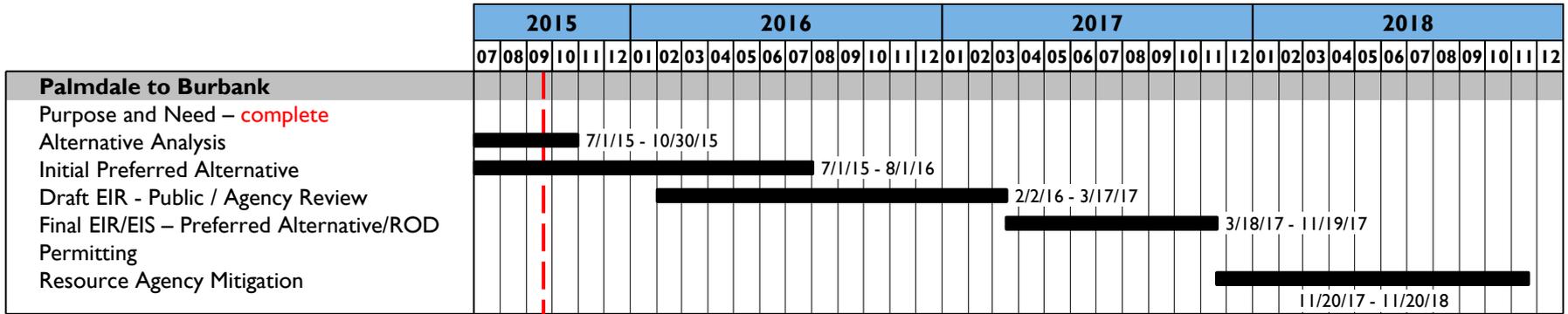


Notes:

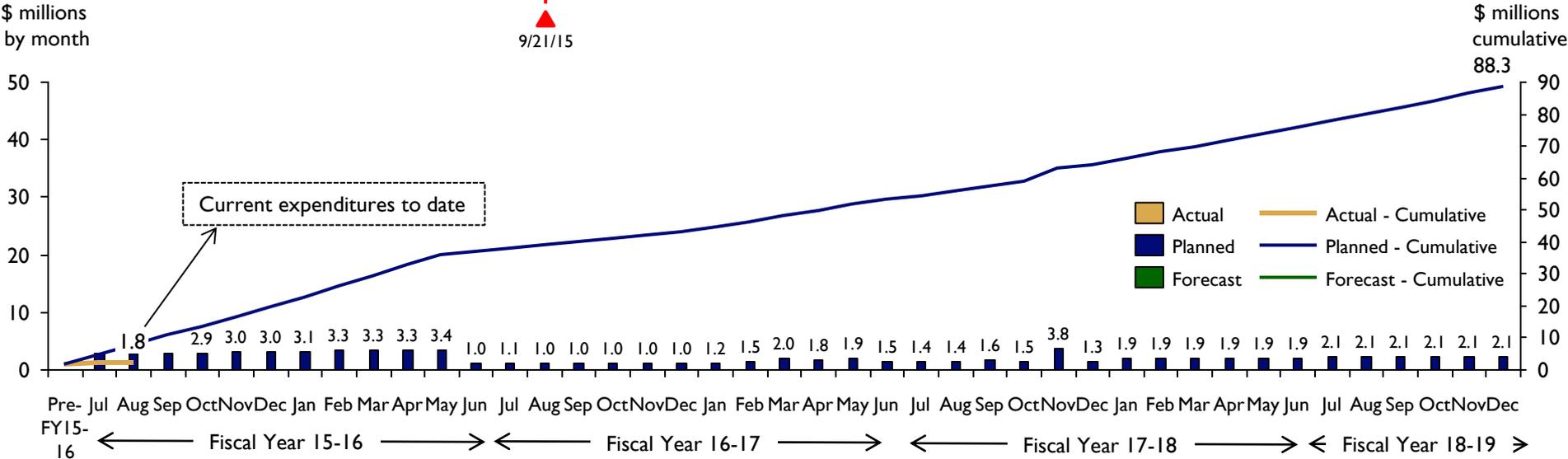
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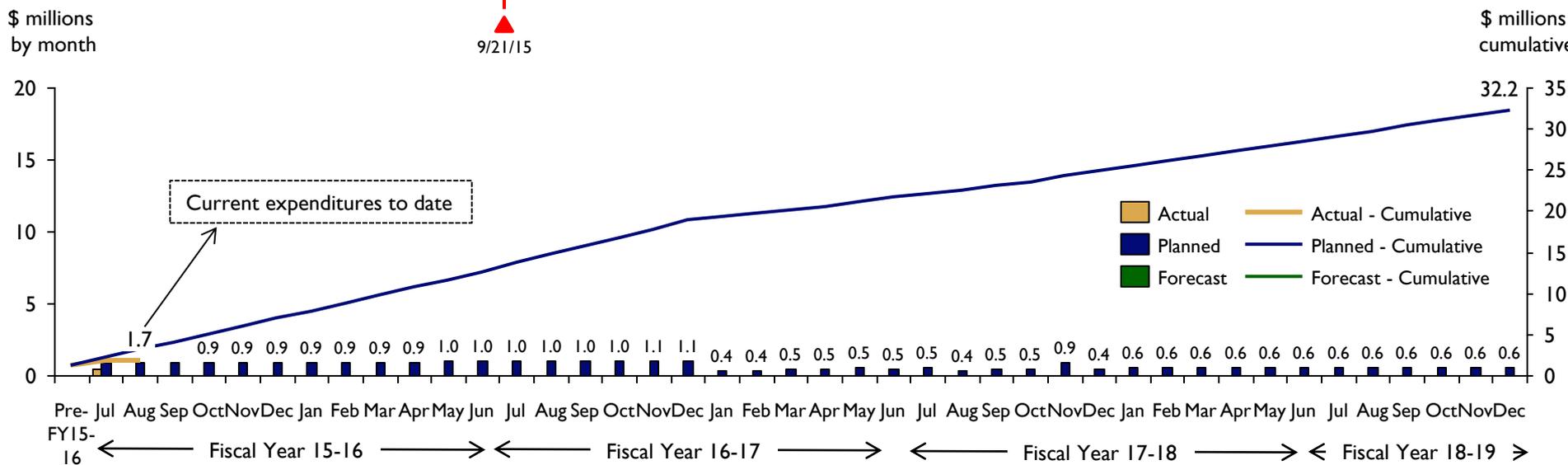
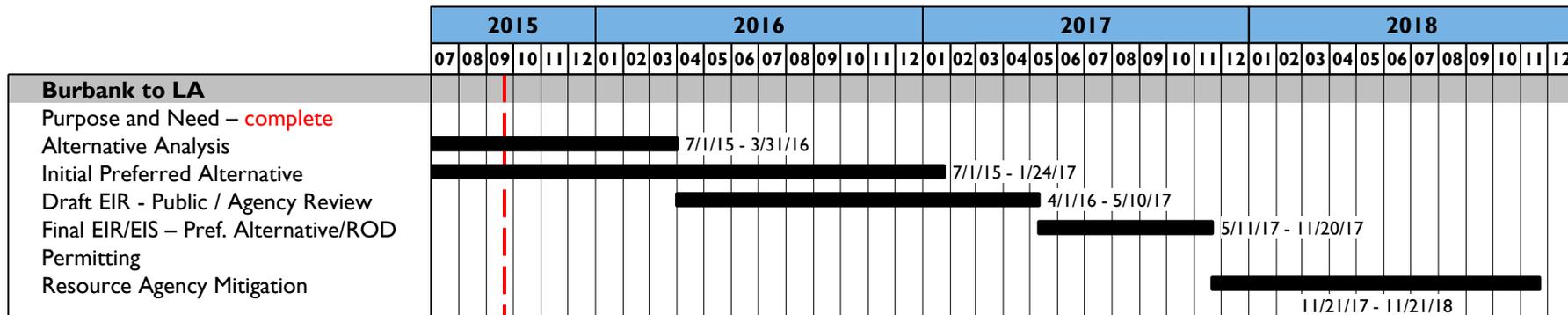
# Palmdale to Burbank



9/21/15



# Burbank to LA

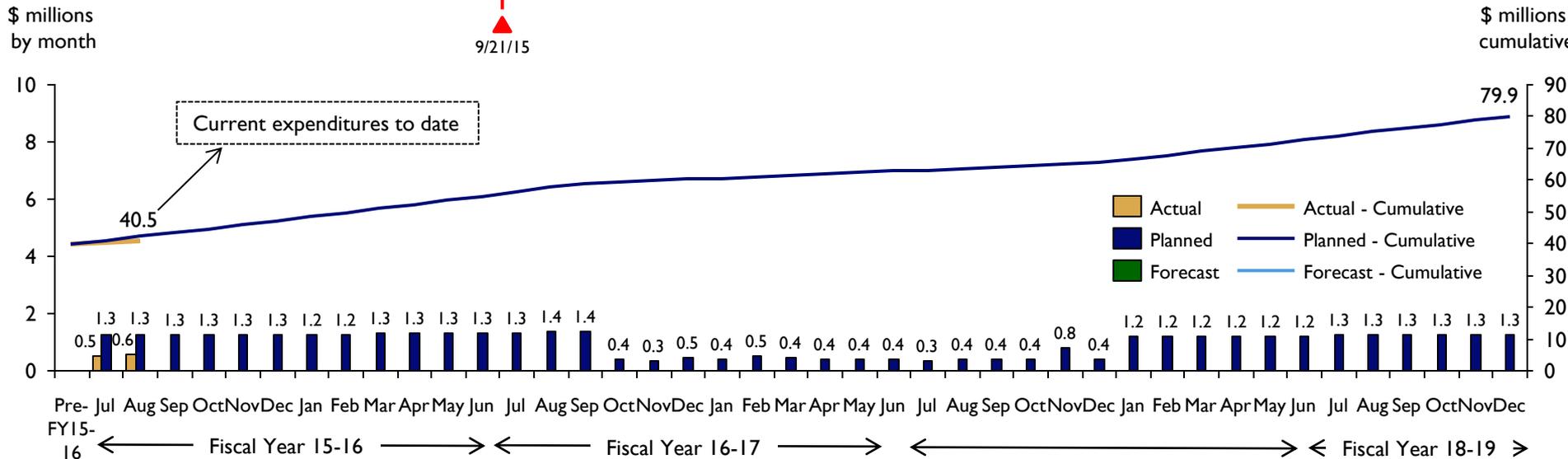
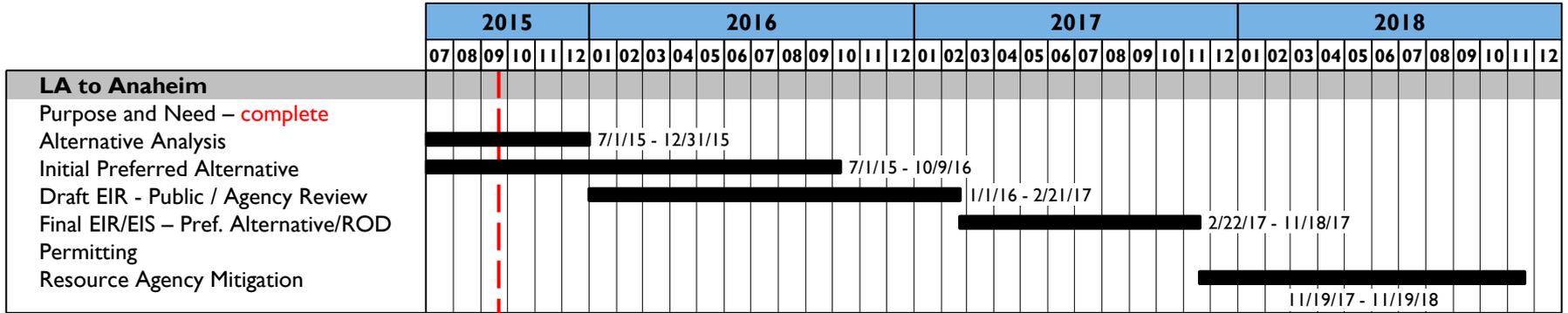


Notes:

- 1) All estimates included are preliminary and subject to change
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- 3) July and August actuals do not include legal costs

Source: Based on actual expenditures and future estimates for the RCs, RDP and Authority

# LA to Anaheim



Notes:

- 1) All estimates included are preliminary and subject to change
- 2) Expenditures to date do not include legal or Authority costs
- 3) July and August actuals do not include legal costs

Source: Based on actual expenditures and future estimates for the RCs, RDP and Authority

## 4-month milestones look-ahead – all segments/projects

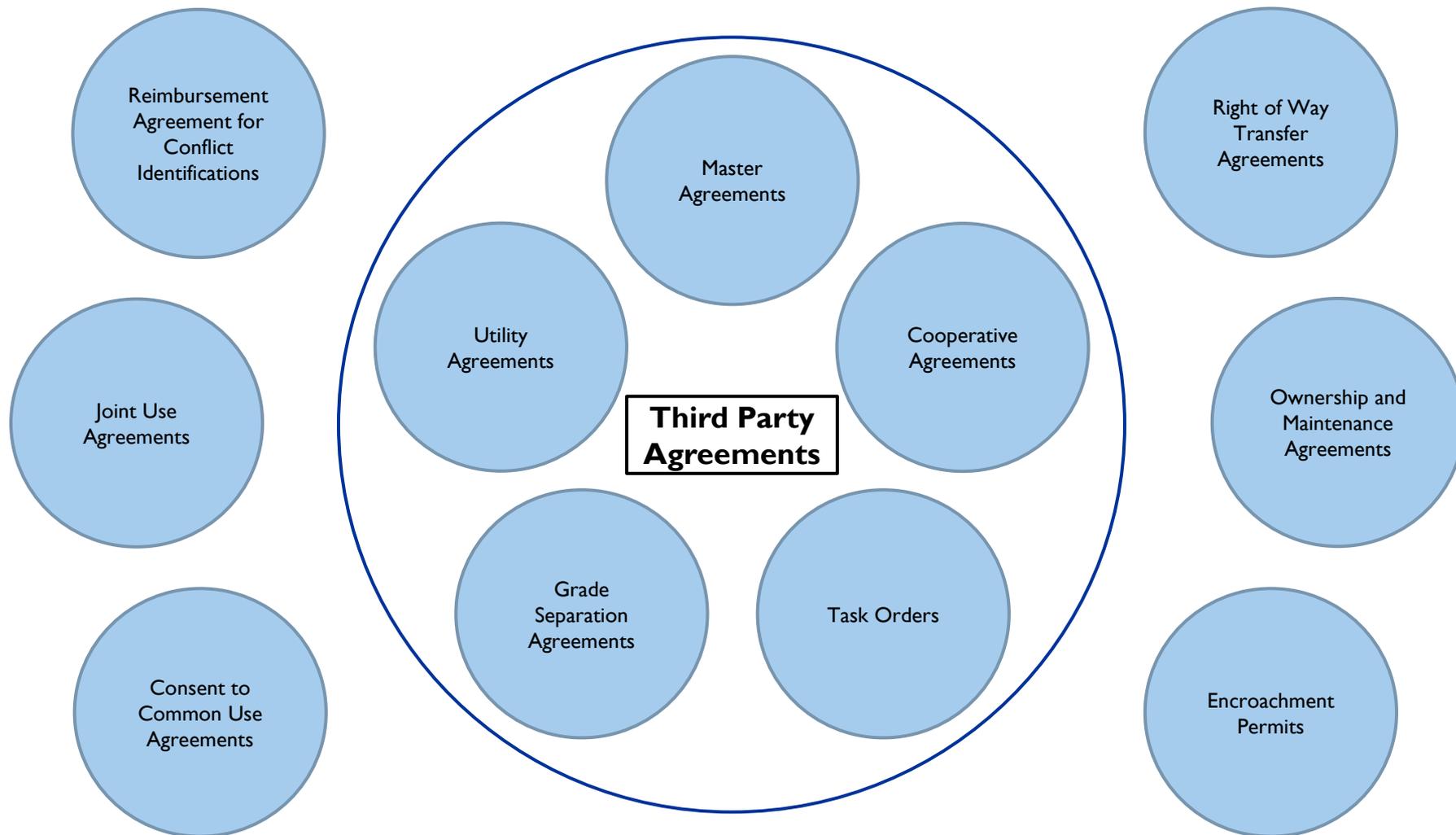
Milestone	Segment	Due Date	% Completion	Status
Initial Preferred Alternative	Central Valley Wye	21 Sept 2015	50%	Need LEDPA determination
Purpose & Need Statement	HMF	24 Sept 2015	60%	Environmental clearance process being determined
Alternatives Analysis	Palmdale to Burbank	1 Oct 2015	100%	Ahead of Target
Alternatives Analysis	Bakersfield to Palmdale	17 Nov 2015	70%	On Target
Alternatives Analysis	LA to Anaheim	31 Dec 2015	75%	On Target

# Agenda

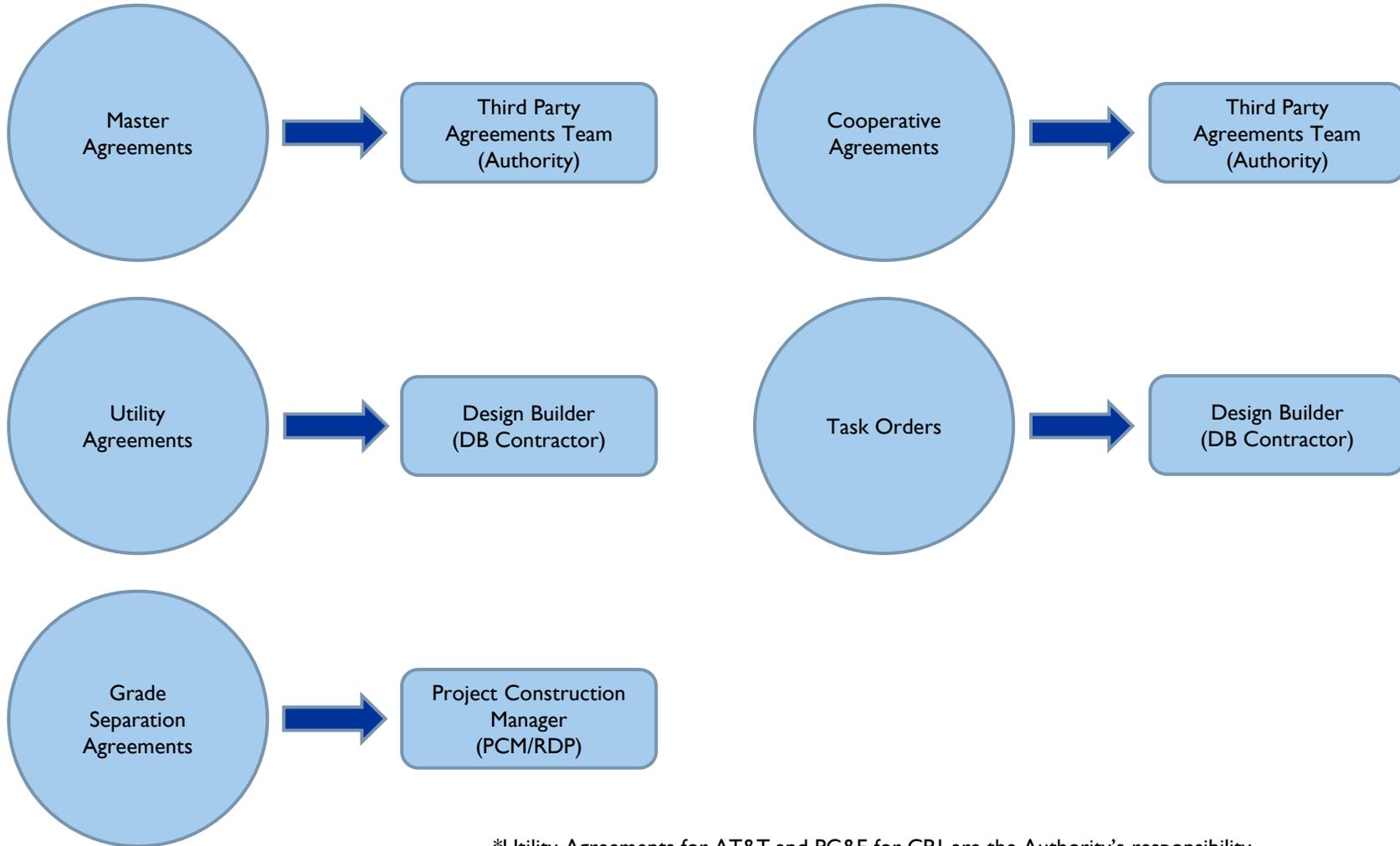
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# Scope for Third Party Agreements



# Categories of Agreements

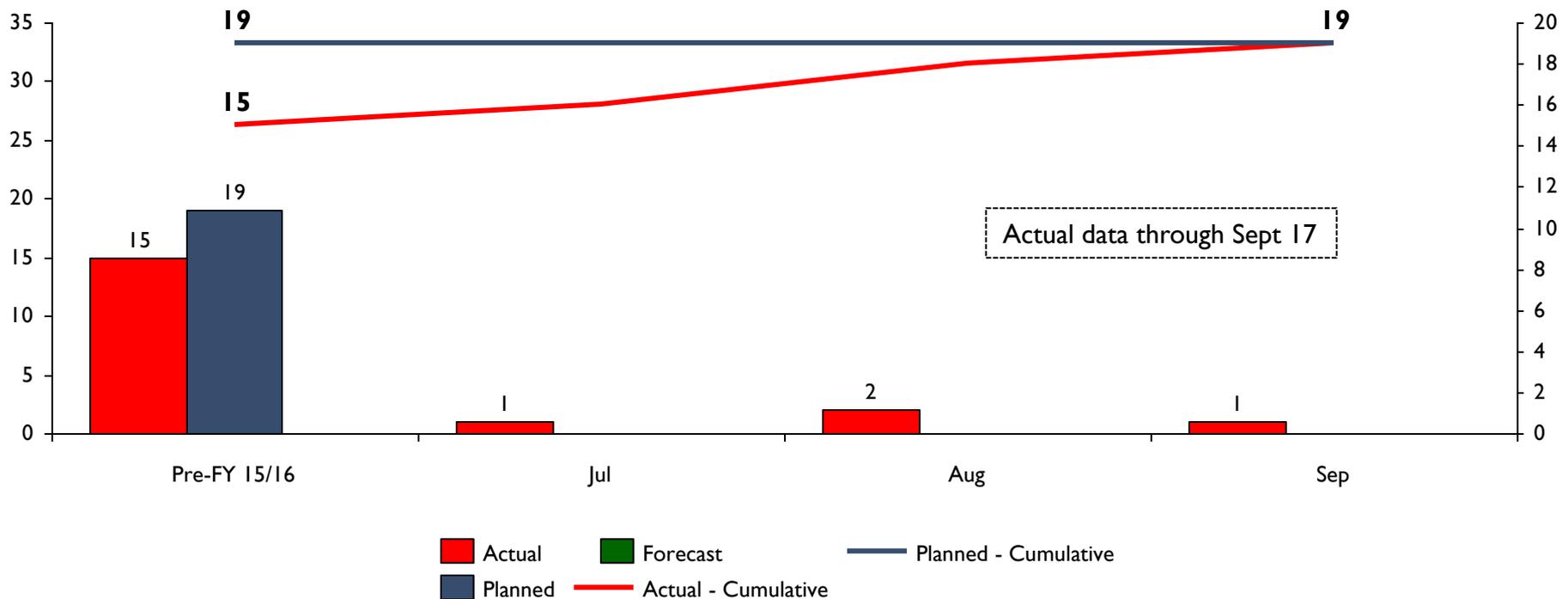


\*Utility Agreements for AT&T and PG&E for CPI are the Authority's responsibility.

# CP1 Third Party Agreements by Month

Plan vs. Actual vs. Forecast

**CPI Third Party Agreements (excluding AT&T, PG&E and Railroad)**  
(number of agreements)

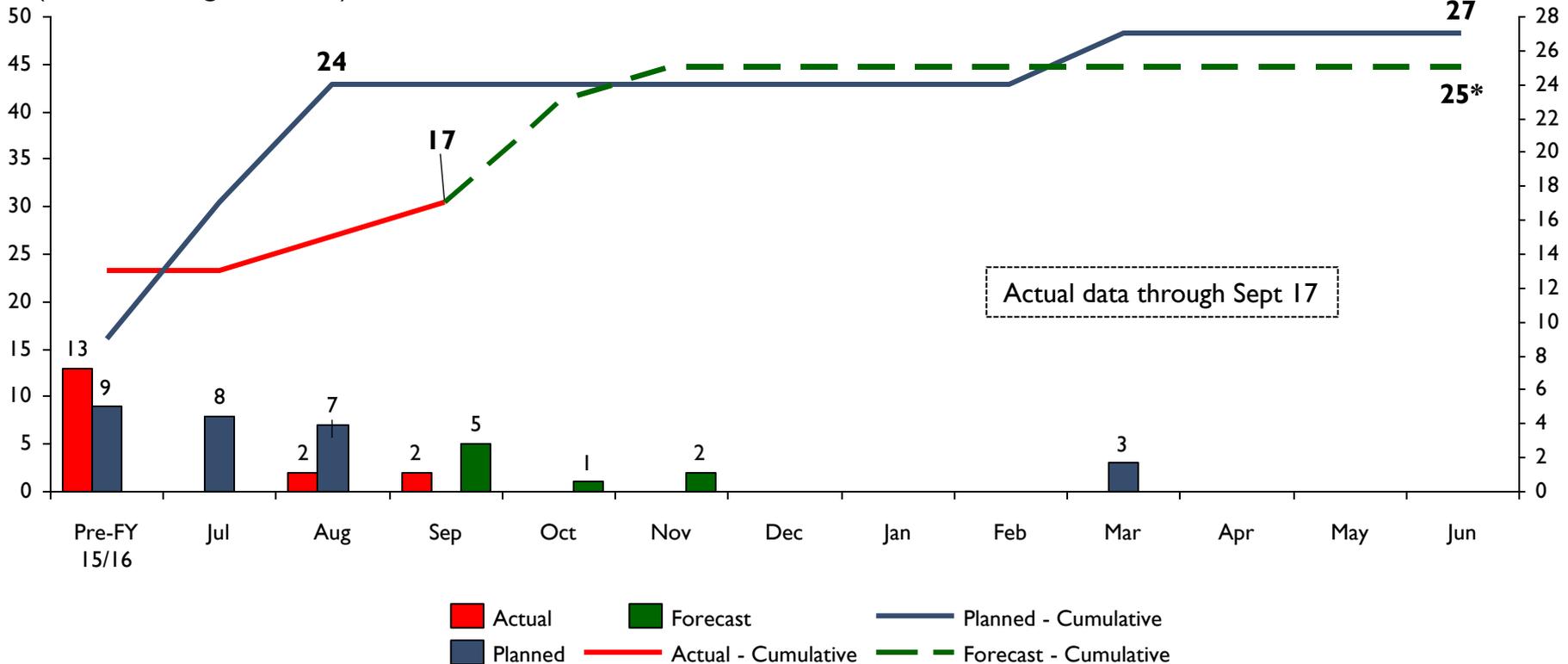


Notes: 19 total CPI agreements to be executed

# CP2-3 Third Party Agreements by Month

Plan vs. Actual vs. Forecast

**CP2-3 Third Party Agreements (excluding AT&T, PG&E and Railroad)**  
(number of agreements)



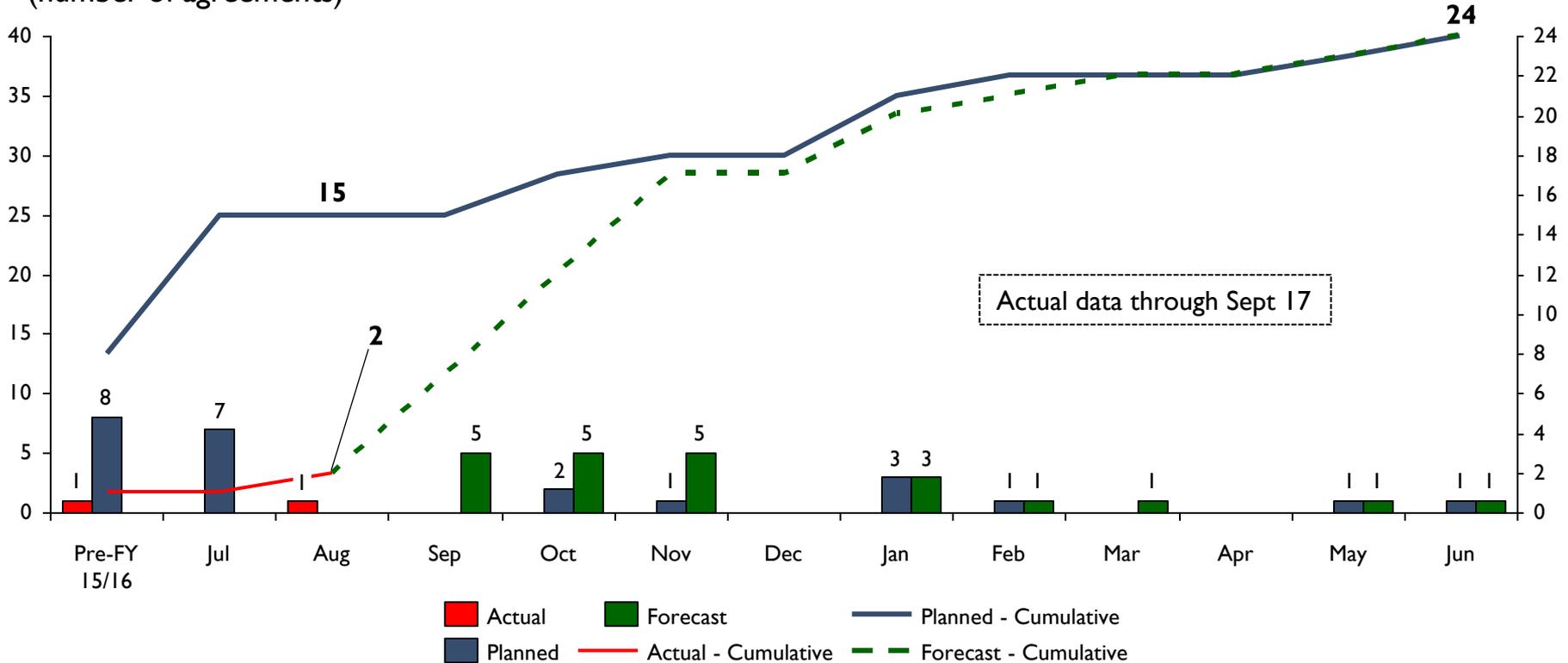
Notes: 27 total CP2-3 agreements to be executed

\* Kings County and Kings County Water District agreements not expected to be executed

# AT&T/PG&E Third Party Agreements Separate from CP1 and CP2-3 by Month

Plan vs. Actual vs. Forecast

**AT&T/PG&E – Third Party Agreements Separate from CPI and CP2-3 DB Contracts**  
(number of agreements)

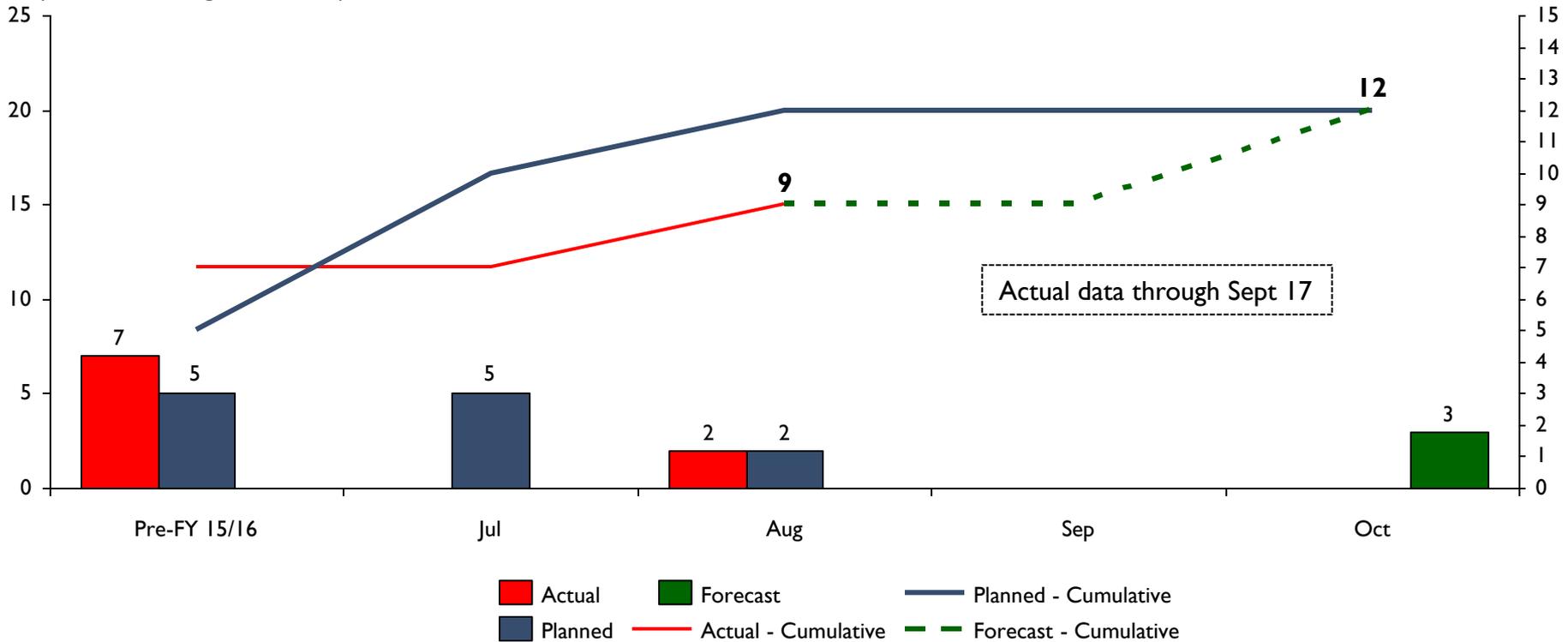


Notes: 24 total AT&T/PG&E agreements to be executed

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

Plan vs. Actual vs. Forecast

**Railroads – Third Party Agreements Separate from CPI and CP2-3 DB Contracts**  
(number of agreements)



Notes: 12 total Railroad agreements to be executed

# Agenda

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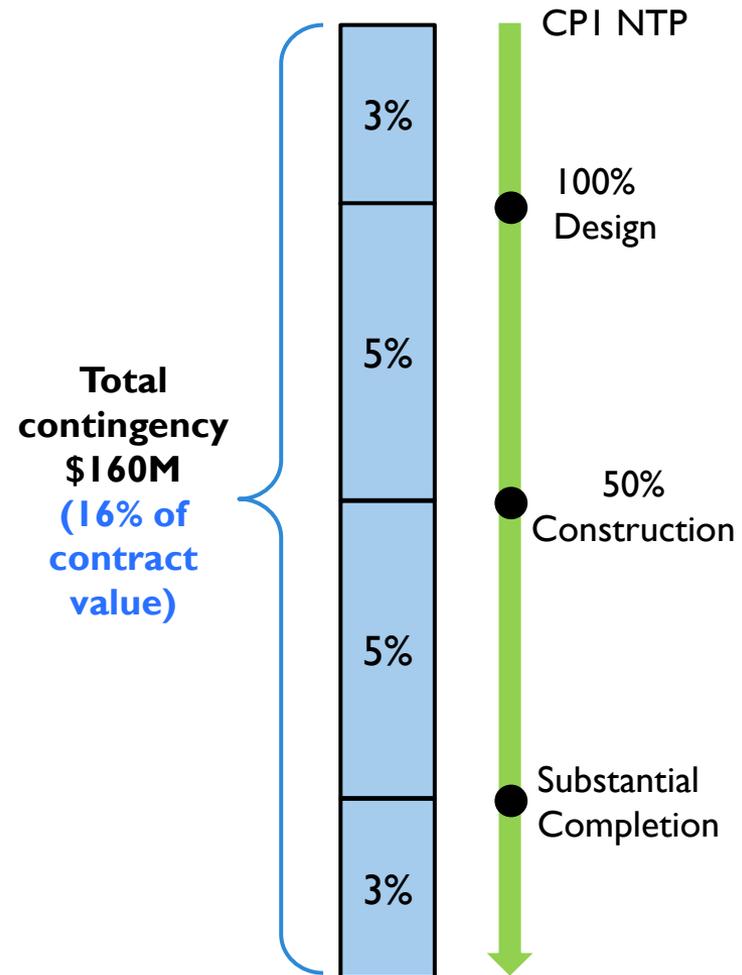
## CP1 Contract – Current Contingency Level

Contract Milestones	CPI Contract Remaining Contingency	Major Change Orders Approved as of August 20, 2015
<b>CPI Contract NTP</b>	\$ 160.0 M	
<b>As of 20-Sep-2015</b>	\$ 150.2 M	<ul style="list-style-type: none"> <li>• Class 1/2 Hazmat (\$5.25M)</li> <li>• Scope Changes - Revised Shear Wave Boring, Weed Abatement, etc.</li> <li>• Env. Permit Changes, etc.</li> <li>• Regulatory Changes - Archaeological, Biological, Native American monitoring (\$1.31M)</li> <li>• Ped. Arch Field Surveys</li> <li>• Other administrative, 3<sup>rd</sup> party, regulatory changes and additional scope items</li> </ul>

Note: The approved change orders for CPI includes both anticipated and unanticipated risks/uncertainty initially considered in the contract contingency analysis (Aug 2013).

## CP1 Contract – Establishing Contingency Floor

- ▶ Based on an analysis of the risks associated with CP I, a contingency of \$160 M or slightly less than 16% of the contract value, was set aside.
- ▶ 3% of the contract value or approximately \$31 M 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.



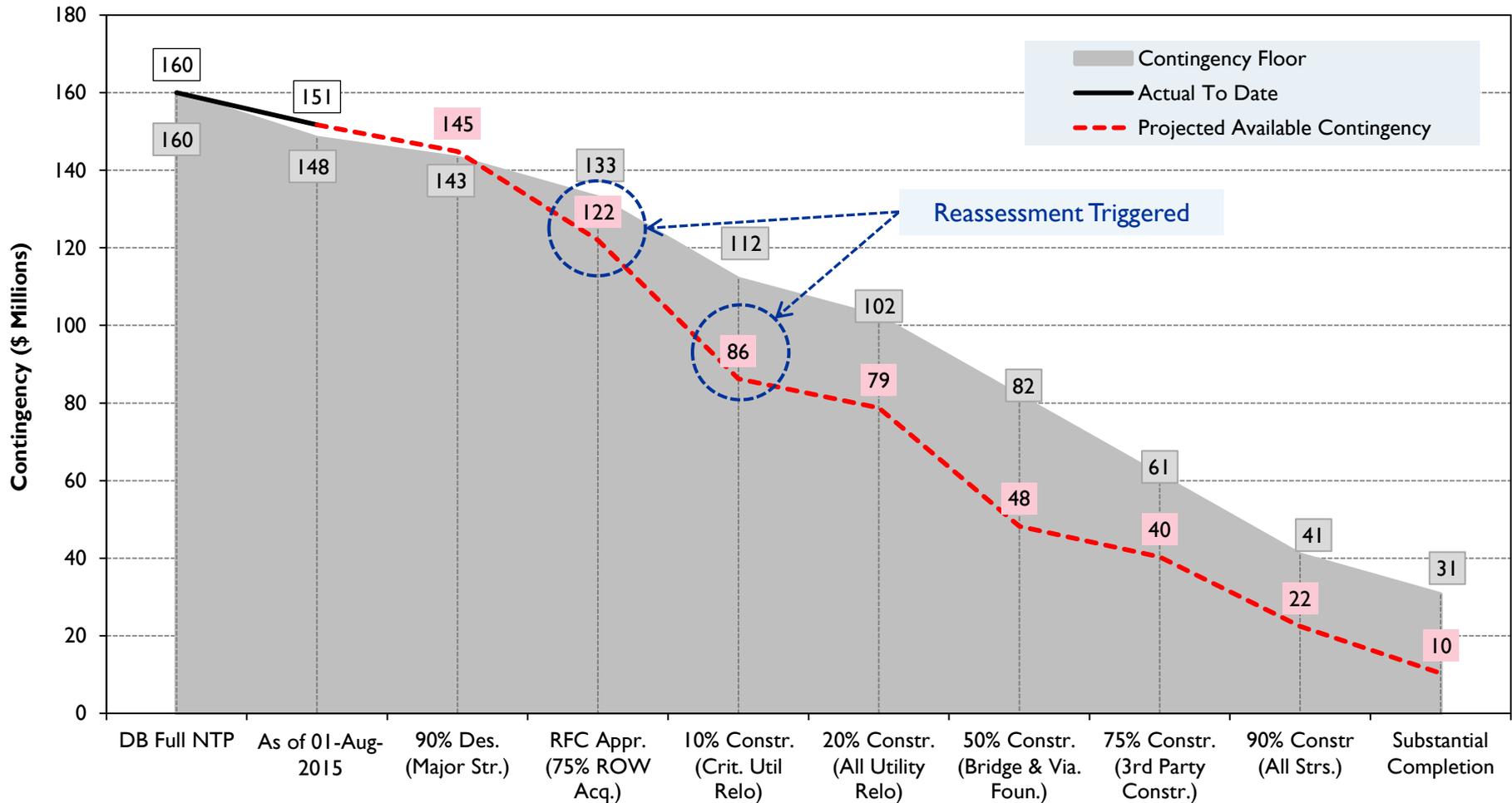
\* Based on FTA Project and Construction Management Guidelines (July 2011)

## Projected Available Contingency Level at Future Milestones

Contract Milestones	Projected Available Contingency (\$M)	Potential Risks Expected to Occur at Contract Milestones	Mean Rem. Risk Exposure (\$M)
<b>As of Apr 01, 2015</b>	151.7		
<b>90% Design</b>	144.8	<ul style="list-style-type: none"> <li>• Scope changes as per environmental requirements modifications</li> </ul>	6.9
<b>100% RFC Design</b>	122.0	<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> </ul>	22.9
<b>10% Construction</b>	86.2	<ul style="list-style-type: none"> <li>• Delays in agreement with RR agencies (50% impact)</li> <li>• ROW acquisition delays (50% impact)</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>	35.8
<b>20% Construction</b>	78.7	<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>	48.2	<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>	40.3	<ul style="list-style-type: none"> <li>• Change or mis-representation of environmental requirements</li> <li>• SR99 &amp; SR180 Interface Coordination</li> </ul>	7.9
<b>90% Construction</b>	22.4	<ul style="list-style-type: none"> <li>• Direct costs associated with intrusion protection</li> </ul>	17.9
<b>Substantial Complete</b>	10.4	<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

Note: Content as of 01-Apr-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 mean impact of the risks that are avoided.

# CP1 Contract - Contingency report



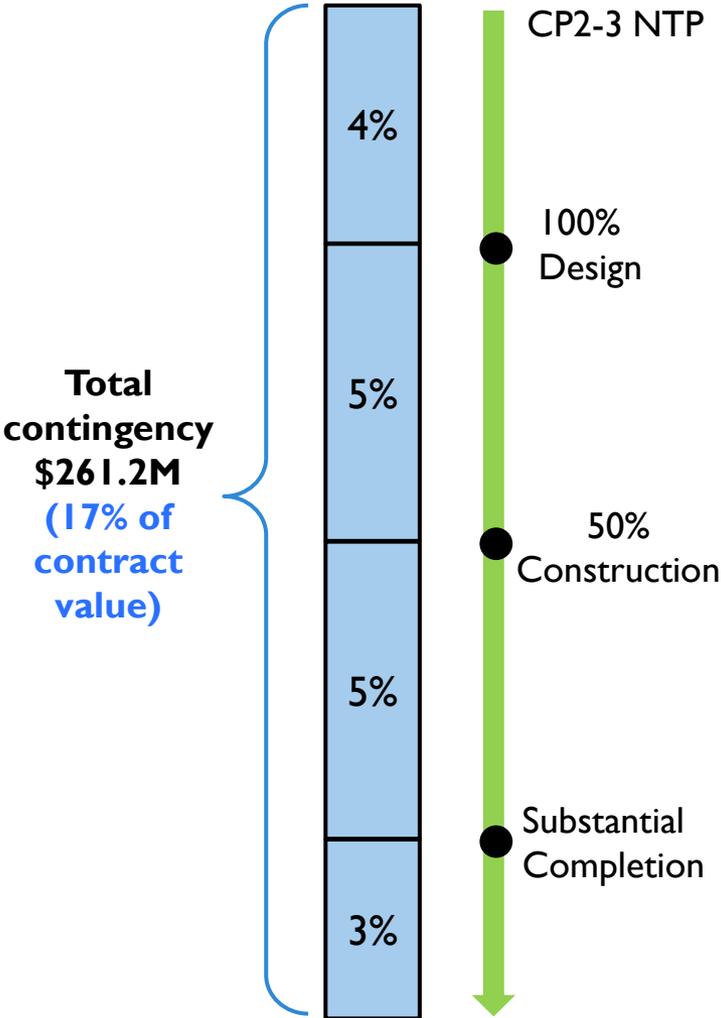
## CP2-3 Contract Cost Summary

Base Cost item	Cost
CP2-3 D-B Base Cost	1,234,567,890
PG&E Allowance	160,000,000
Third Parties / Support Costs	140,000,000
<b>Total CP2-3 Contract D-B Cost</b>	<b>1,534,567,890</b>
Allocated Contingency	261,200,000

Note: Figures from Task 8 – Design-Build Funding Contribution Plan as of May 2015.

# CP2-3 Contract – Establishing Contingency Floor

- ▶ Based on an analysis of the risks associated with CP 2-3, a contingency of \$261.2 M or slightly over 17% of the contract value (base contract plus the PG&E provision sums and third party allowance), was set aside.
- ▶ 3% of the contract value or approximately \$46 M 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.



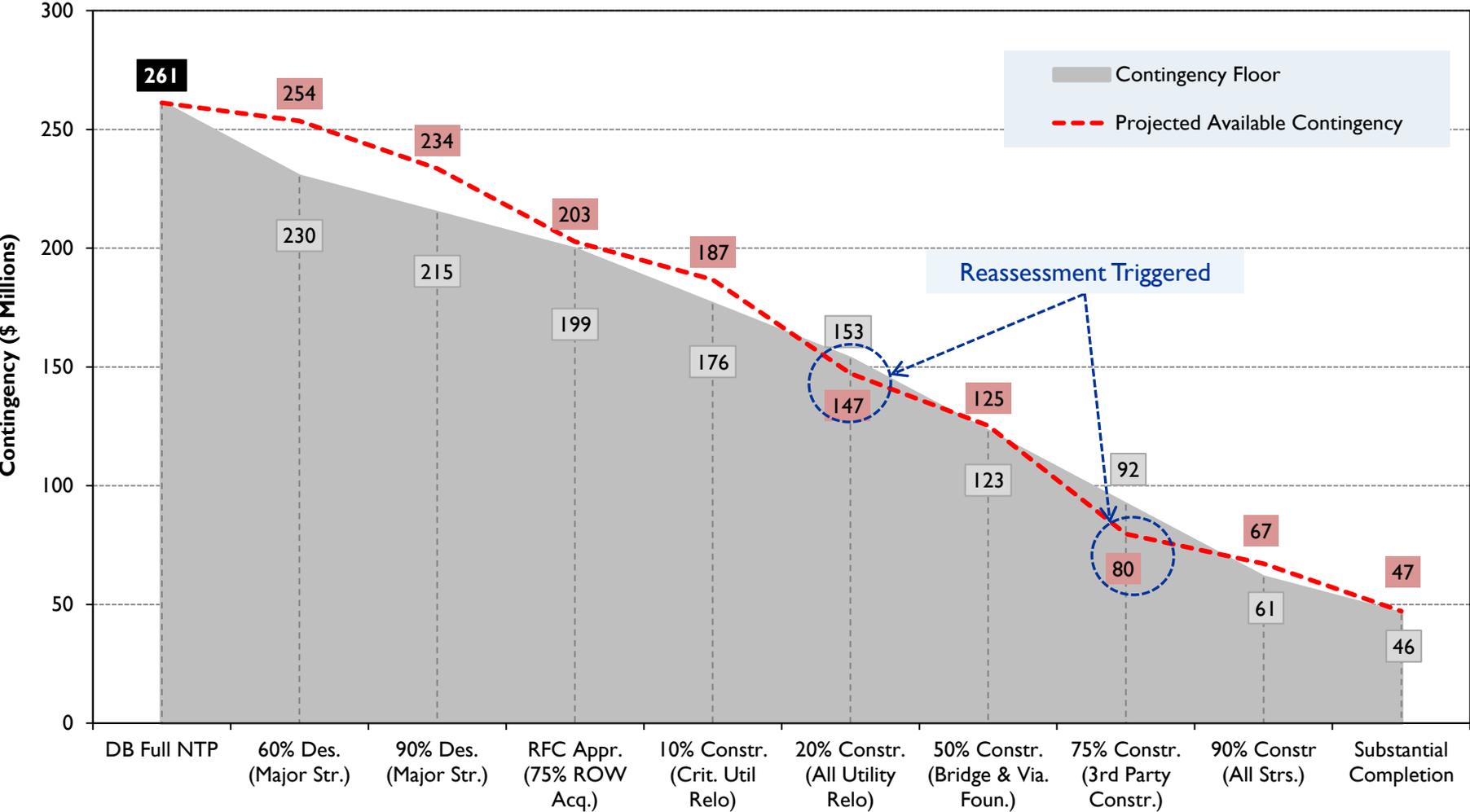
\* Based on FTA Project and Construction Management Guidelines (July 2011)

## Projected Available Contingency Level at Future Milestones

Contract Milestones	Projected Available Contingency (\$M)	Potential Risks Expected to Occur at Contract Milestones	P90 Risk Exposure (\$M)
<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 HSR 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 11-Jun-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



# Agenda

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- ▶ Operations Report Metrics

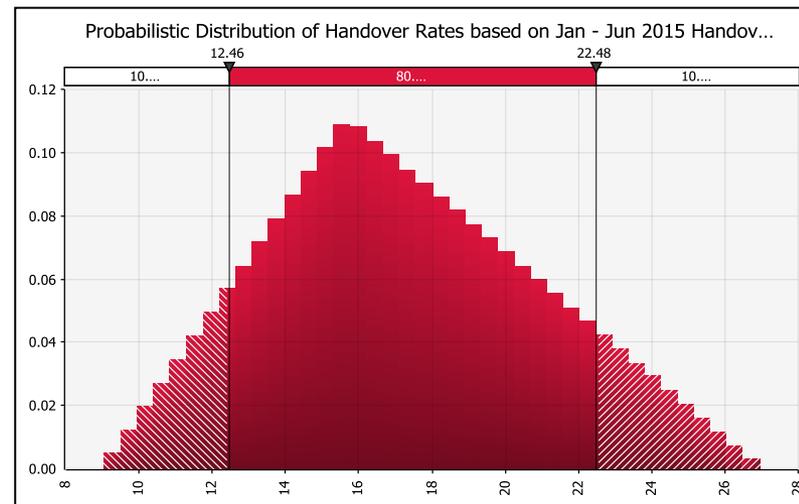
- Executive Summary
- ROW
- Contract Management
- Finance/Budget
- Environmental
- Third-Party Agreements
- Risk
- Back-Up ROW Information

# ROW – CPI: Monthly Forecast Parcel Handover Rate vs Probabilistic Handover Rate based on prior 6 month’s results

	CLEAN SLATE Probability of meeting or bettering forecast	ROLL-OVER Probability of meeting or bettering forecast
Jul-15	24.0%	24.0%
Aug-15	7.8%	5.8%
Sep-15	2.0%	0.6%
Oct-15	0.0%	0.0%
Nov-15	0.0%	0.0%
Dec-15	0.0%	0.0%
Jan-16	0.0%	0.0%
Feb-16	39.7%	0.0%
Mar-16	12.3%	0.0%
Apr-16	2.0%	0.0%
May-16	7.8%	0.0%
Jun-16	70.0%	0.0%
Jul-16	100.0%	0.0%
Aug-16	86.7%	0.0%
Sep-16	59.3%	0.0%
Oct-16	99.2%	0.0%
Nov-16	99.2%	0.0%
Dec-16	100.0%	0.0%
Jan-17	100.0%	1.6%
Feb-17	100.0%	13.2%
Mar-17	100.0%	45.9%
Apr-17	100.0%	82.2%
May-17	100.0%	97.3%
Jun-17	100.0%	99.8%
Jul-17	100.0%	100.0%

A probabilistic distribution of monthly handover rates was specified based on monthly handovers during January – June 2015 period (below). This was then compared to the forecast handover rates of each month in a Monte Carlo simulation to determine the probability of meeting monthly and cumulative (rolling over delayed parcels to next month) targets.

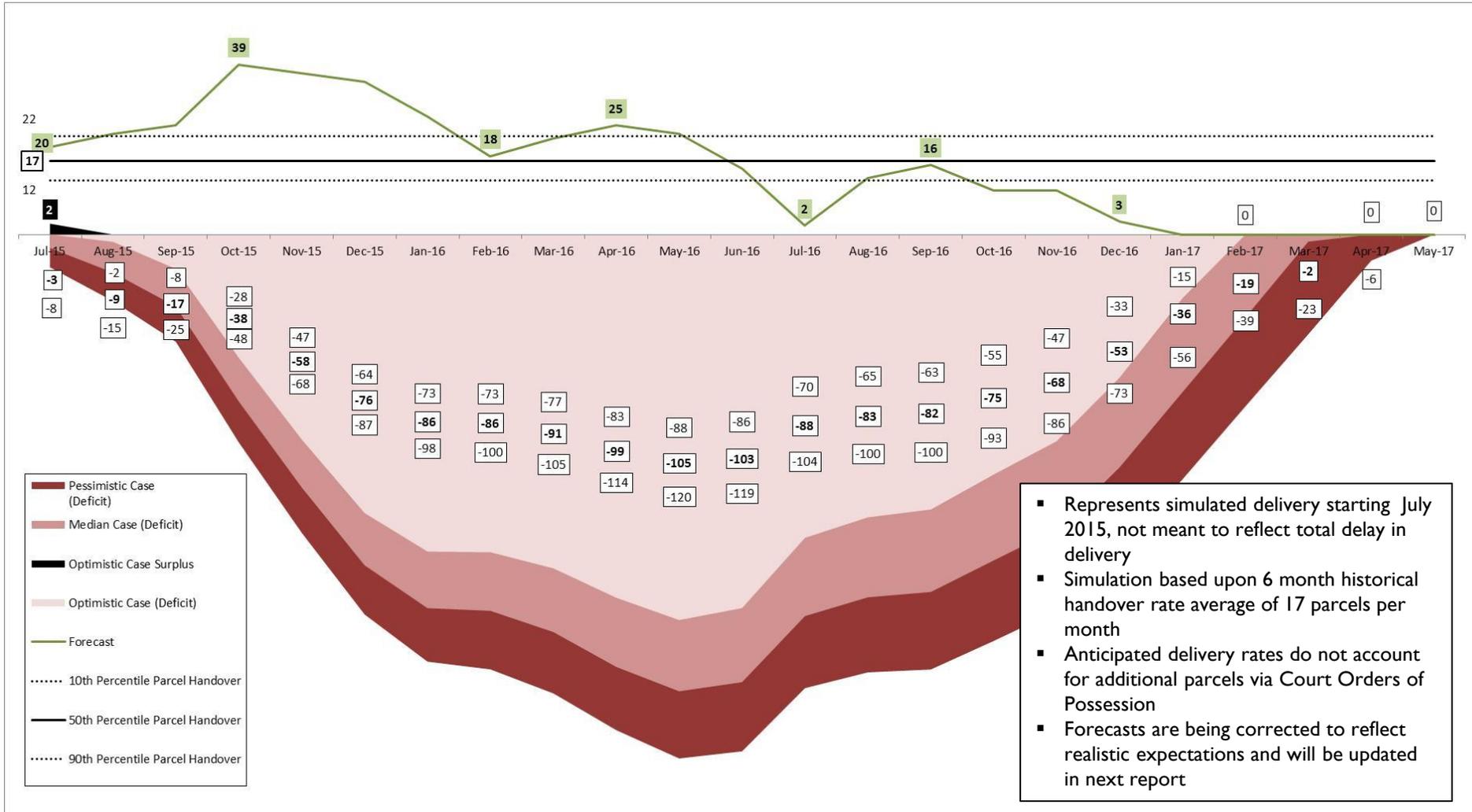
- Based on this analysis, the accumulated deficit of parcel delivery (iceberg) is large and reached 108 parcels in the median case
- The probability of handing over the requisite number of parcels by December 2016 is negligible
- It is projected that handover will not be complete until at least April 2017
- Analysis based purely on historic delivery. As such the additional parcels anticipated to be delivered court Orders of Possession starting in August and ramping up are not captured due to lack of history



# ROW – CPI: Projected surpluses and deficits based on prior 6 month's handover rates (Jan – Jun 2015)

Deficits are projected to be *less than Pessimistic Case 90% of the time*

Deficits are projected to be *greater than Optimistic Case 90% of the time*



- Represents simulated delivery starting July 2015, not meant to reflect total delay in delivery
- Simulation based upon 6 month historical handover rate average of 17 parcels per month
- Anticipated delivery rates do not account for additional parcels via Court Orders of Possession
- Forecasts are being corrected to reflect realistic expectations and will be updated in next report

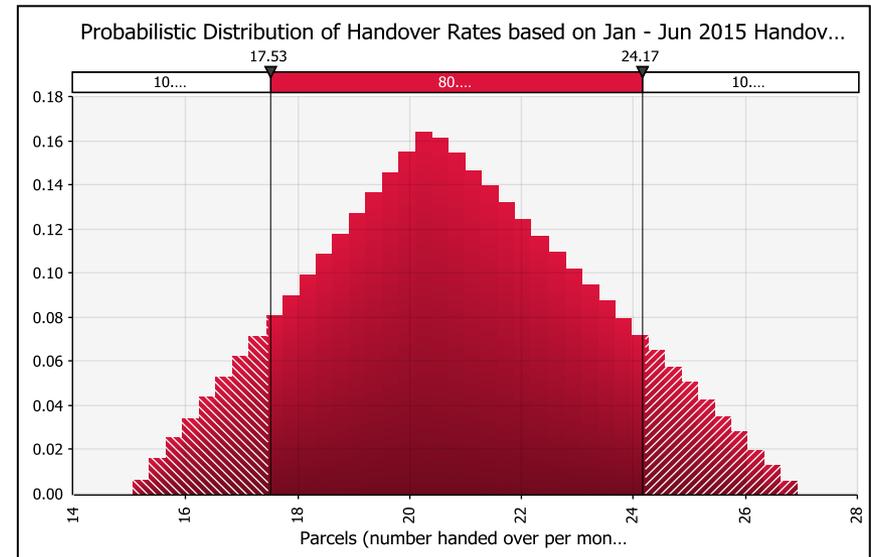
## ROW – CPI: Probability of meeting or bettering forecast based upon 3 month’s results (March to May 2015)

Date	CLEAN SLATE Probability of meeting or bettering forecast	ROLL-OVER Probability of meeting or bettering forecast
Jul-15	60.9%	<b>60.9%</b>
Aug-15	20.0%	<b>33.9%</b>
Sep-15	5.0%	<b>9.4%</b>
Oct-15	0.0%	<b>0.0%</b>
Nov-15	0.0%	<b>0.0%</b>
Dec-15	0.0%	<b>0.0%</b>
Jan-16	0.0%	<b>0.0%</b>
Feb-16	85.9%	<b>0.0%</b>
Mar-16	31.2%	<b>0.0%</b>
Apr-16	5.0%	<b>0.0%</b>
May-16	20.0%	<b>0.0%</b>
Jun-16	100.0%	<b>0.0%</b>
Jul-16	100.0%	<b>0.0%</b>
Aug-16	100.0%	<b>0.0%</b>
Sep-16	98.4%	<b>0.1%</b>
Oct-16	100.0%	<b>3.6%</b>
Nov-16	100.0%	<b>24.4%</b>
Dec-16	100.0%	<b>85.6%</b>

It is projected that CP I will carry a deficit for much of the remaining ROW acquisition period, though the deficit is projected to diminish from Jun 16 forward and clear by the end of the handover period (Dec 2016).

The accumulated deficit of parcels delivery is less significant than the 6 month analysis and reaches 58 parcels in the median case

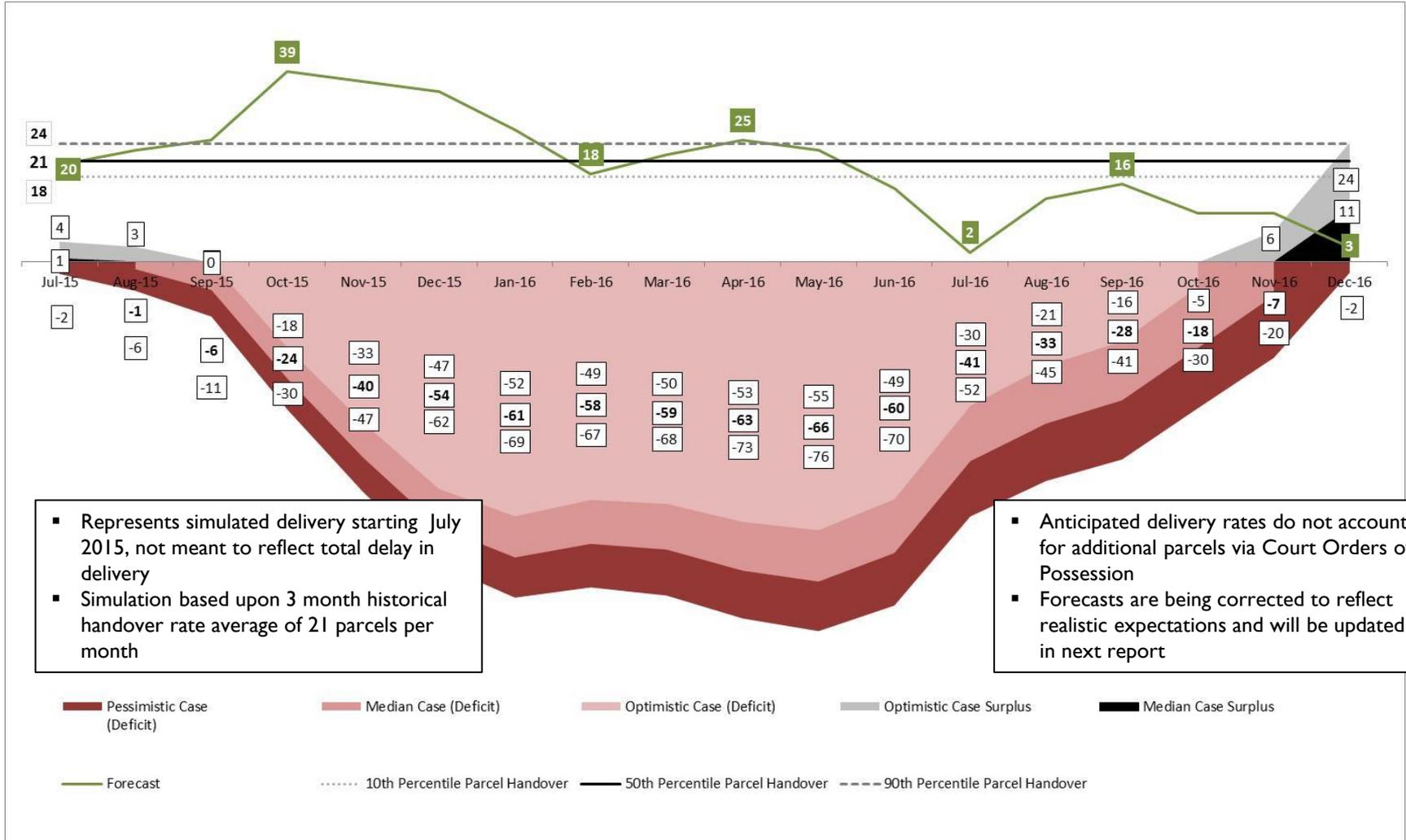
While 9 of 18 remaining months have individual forecasts that could be met by current handover rates, in 7 of these 9 handover rates are insufficient to address both the parcels due in that period and deficits accrued from previous periods



# ROW – CPI: Projected surpluses and deficits end of July 2015 to end of December 2016 based upon 3 month's results (March to May 2015)

Deficits are projected to be *less than Pessimistic Case* 90% of the time

Deficits are projected to be *greater than* and *Surpluses* are projected to be *smaller than Optimistic Case* 90% of the time



- Represents simulated delivery starting July 2015, not meant to reflect total delay in delivery
- Simulation based upon 3 month historical handover rate average of 21 parcels per month

- Anticipated delivery rates do not account for additional parcels via Court Orders of Possession
- Forecasts are being corrected to reflect realistic expectations and will be updated in next report

█ Pessimistic Case (Deficit)    
 █ Median Case (Deficit)    
 █ Optimistic Case (Deficit)    
 █ Optimistic Case Surplus    
 █ Median Case Surplus  
— Forecast    
 - - - 10th Percentile Parcel Handover    
 — 50th Percentile Parcel Handover    
 - - - 90th Percentile Parcel Handover