

California High-Speed Rail Operations Report

FY2014-15, FY2015-16, FY2016-17, FY2017-18, FY2018-19, FY2019-20 and Program Metrics

September 2019 (data through July 2019)

Agenda

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



Executive Summary - ROW Acquisition

- Remaining Parcels by Construction Package: CP 1, CP 2-3, and CP 4 acquisition forecasts and delivery are challenged by railroad parcel approvals, condemnation process and timing and complexity of relocations, phase in the acquisition process (OP hearing/settlement, DGS contract approval, or certification for delivery). In addition to the foregoing, in the case of CP 4, the forecast is also impacted by DB's compliance with environmental permitting.
- The current report presents ROW acquisition progress relative to CP1 thru CP4 through July 31, 2019. As of that date, the Authority has secured legal possession of 1,540 parcels with 1,528 delivered to the Design-Builders (DB). The total number of parcels acquired (legally possessed) by the Authority and pending delivery in July was 24 parcels. Of the total number of parcels legally acquired, 12 parcels were delivered to the DB during the month of July. Four parcels were delivered for CP 1, seven parcels delivered for CP 2-3, and one parcel delivered for CP 4. Twelve parcels have been acquired pending vacancy or certification to the DB. The total percent of cumulative parcels delivered to the DB remained at 82%. From last month, total parcels needed for the project increased by four parcels. From last month's total remaining parcels, the total remaining parcels for July 31, 2019 has decreased by six parcels. The total parcels and percentage delivered to date are as follows:

Section	Number of Parcels	Acquired by HSR Pending Delivery to DB	Delivered to DB	Percent Delivered to DB	Remaining Parcels	Remaining Parcels on DB Hold	Remaining DB Identified Critical Parcels	Remaining Railroad Parcels
CP 1	893	4	823	92%	66	7	5	54
CP 2-3	756	7	540	71%	209	13	7	42
CP 4A	210	1	165	79%	44	2	8	10
Total	1859	12	1528	82%	319	22	20	106



Executive Summary - ROW Acquisition (Cont'd)

- Railroad Parcels: Acquisition of ROW for Railroad parcels is contingent upon the completion of 100% design by the DB and approval by the railroads before the Authority can commence the acquisition process. The total number of remaining railroad parcels is 106 parcels.
- CP 1 Summary: In CP 1, two of the four parcels delivered in July were DB Critical parcels. Of the five remaining DB Critical parcels, four are either public agency parcels or railroad parcels. The other is a private parcel forecast for delivery in early August.
- CP 2-3 Summary: In CP 2-3, seven parcels were delivered in July. The seven DB Critical parcels remaining are proceeding toward condemnation.
- CP 4 Summary: In CP 4, one parcel was delivered in July. Seven of the remaining eight DB Critical parcels are either public agency parcels or railroad parcels, and the other parcel is a private parcel pending an updated appraisal.
- DB Design Hold Parcels: The DB Hold category is representative of parcels for which acquisition activities cannot commence or continue due either to a design refinement or the DB having not submitted a Certificate of Sufficiency (COS) confirming that the mapping produced for the DB by the Authority (contractual requirement) is sufficient for the DB to construct the project. The total number of parcels on DB Design Hold slightly increased from 15 to 16 parcels.
- Legal Possession: In July, the Authority legally acquired (possessed) 12 parcels, pending vacancy, certification to DB and cost to cure obligations. Upon vacancy, Real Property branch will certify the parcels to the Authority's Infrastructure Delivery branch for delivery to the DB team.



Executive Summary - Project Development - Key Issues

- The Authority assumed federal lead agency status with NEPA Assignment. On July 23, the NEPA Assignment Team began working with all project sections, especially the Central Valley project sections, to conduct NEPA environmental clearance actions.
- For the San Francisco to San Jose Project Section, actions included: project schedule revisions to include changes in environmental processes to reflect FRA award of NEPA Assignment; continuation of internal Authority review of the administrative draft EIR/EIS (Environmental Impact Report/Environmental Impact Statement) and submittal of a finalized Checkpoint C Summary Report to the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (USEPA).
- For the San Jose to Merced Project Section, key actions included preparation of the staff-recommended State's Preferred Alternative staff report in response to internal Authority comments to draft products. Other activities included advancing the Geotechnical Investigation Plan for the western and eastern approaches to Pacheco Pass and associated seismic faults.
- For the Merced to Fresno Central Valley Wye, activities include circulation of the draft supplemental EIS on September 13, 2019. Also, continued process of recording comment submissions to the draft supplemental EIR.
- For the Fresno to Bakersfield Locally Generated Alternative, federal cooperating agencies continued to review the draft final supplemental EIS. Following resolution of comments from federal agencies, document will be circulated for public review.
- For Bakersfield to Palmdale Project Section, engineering analysis continues to be conducted to avoid adversely affecting the Cesar Chavez National Monument (CCNM). The project team continues to consult with stakeholders in the development alignment alternatives to minimize or avoid visual and noise impacts.
- For the Palmdale to Burbank project section, coordination continued with USACE and USEPA on Checkpoint B (for approvals and permits) with regard to impacts to Una Lake. Cooperating agency review of the EIR/EIS is planned for October 2019.
- For the Burbank to Los Angeles project section, conducted consultation with municipalities and agencies within the project section by providing preliminary engineering plans for their review. Also continued to revise technical analyses for the administrative draft EIR/EIS.
- For the Los Angeles to Anaheim project section, coordination continued with BNSF on project elements and analysis methods for inclusion in the draft EIR/EIS.



Executive Summary - Third-Party Agreement Execution

- The current report presents agreement execution progress relative to the Central Valley, North, South, and Valley to Valley through July 31, 2019.
- 15 of the 19 AT&T design packages have been approved are in construction in CP 1.
 - Stanislaus and Sprint Diversity packages are at 90%
 - Road 26 and Avenue 17 are still in the conceptual stage (30% design) waiting for PG&E design to complete.
- Provisional Sum work is progressing as planned for CP 2-3 and CP 4.
- The team is continuously assessing lessons learned from all CPs for improvements in current construction, as well as improved management practices for future construction.



Executive Summary - Contract Management

- CP 1 The project consumed approximately 98.6% of the approved contract duration through to the end of July 2019; about 60.3% of the current contract value has been earned during that time. In addition, work performed were as follows; ongoing coordination with the DB Contractor and AT&T to develop work-arounds and mitigate possible delays as AT&T relocation is critical; received Amendment no. 8 on hairy Orcutt grass ITP to continue mitigation without impeding schedule; received Amendment No. 9 (Merced to Fresno ITP) to increase the size of the Project Footprint about 90 acres to accommodate 24 additional design variations, including IPB, gas pipelines, sewer, storm drains, water mains, and irrigation utilities; completed California Department of Fish & Wildlife Herndon Canal Streambed Alteration Subnotification Amendment; and continue to work with Authority ROW to provide remediation of soils beneath the former Lamoure's Cleaners.
- CP 2-3 Based on the revised contract completion date of May 22, 2020, the project consumed approximately 83.2% of the contract time through the end of July 2019; about 45.9% of the current contract amount has been earned during that time; Civil works for PG&E relocations was completed at three structure locations (South, Peach and 9th Ave); Electrical cutover was completed at Peach Ave; and AT&T relocations was completed at Davis, Dover, and Avenue 16. Ongoing CIDH test piles at Conejo Ave; superstructure construction at Kent, Kansas and Excelsior Ave.; and change order cost resolution is ongoing. All remaining ITP amendments have been submitted to CDFW and are in process of being issued. Final ROW assessments with the Authority and DFJV on delivery dates are being incorporated into Revise Baseline Schedule; and ongoing issues with irrigation districts continue with resolution per district on an implementation schedule.
- CP 4 The project consumed approximately 63.2% of the contract time through the end of July 2019; about 39.8% of the current contract amount has been earned during that time; The Contractor prepared and submitted a Revised Baseline Schedule which was reviewed and approved in June 2019. A number of additional identified issues also include significant potential cost impacts, such as the potential additional scope of work at SR-46, and the IPB requirement changes based on Authority directives.
- SR-99 Realignment The project consumed 87.5% of the contract time as of the end of July 2019 and 94.3% of the current contract amount has been spent during that time. The construction work was completed on April 8, 2019 and is open to the public.



Executive Summary - Finance/Budget

- FY2019-20 Capital Outlay expenditures totaled \$48.8M for July 2019, a \$135.8M decrease compared to \$184.6M for June 2019. The decrease is primarily attributed to year-end accruals for the close of FY2018-19.
- Total Program and FY2019-20 budget supports activities reflected within the 2018 Business Plan and is based on a prioritization of executed contracts necessary for Central Valley development and construction, Silicon Valley to Central Valley segment planning, and Bookend Corridor project construction. In addition, the FY2019-20 budget prioritizes work related to completing the scope within the ARRA and FY10 grants.
- The FY2019-20 Capital Outlay budget is \$2.255B, a \$468M increase from FY2018-19.
- The FY2019-20 Forecast increased by \$1.256B (from \$998.8M to \$2.255B).
- The Total Program budget remains \$15.613B.
- As a result of the Authority's focus on State Match to ARRA Grant funds, information on State Match expenditures are now in the ARRA State Match Schedule section.



Operations Report Metrics Right-of-Way (ROW)

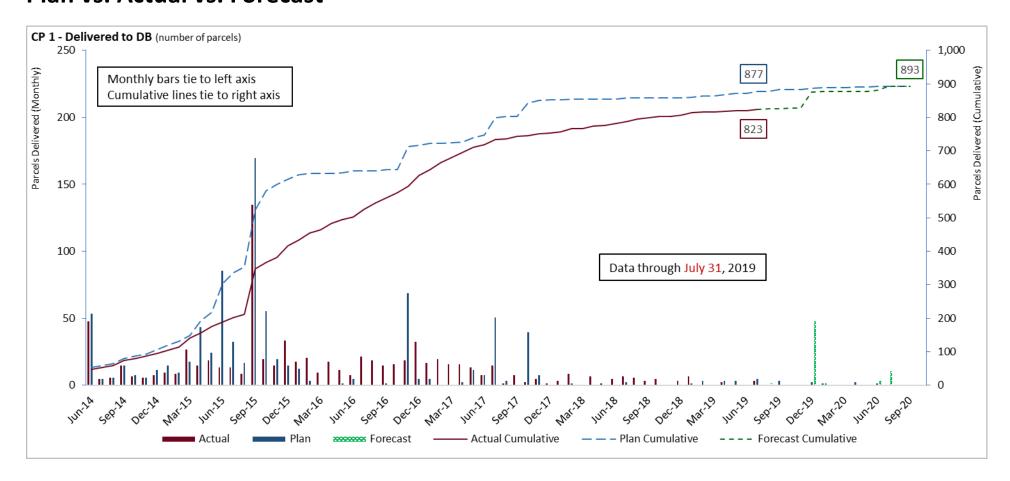


ROW Metrics – Context

- For the purposes of this summary, "DB Critical Parcels" are parcels which have been identified by the DB as having precedence over any other DB acquisition request but have not been verified by the Authority. "DB Design Hold" are parcels which have been placed on a temporary hold by the DB either due to design refinements, environmental reviews, etc. Parcels which have been placed on "hold" by the DB are deemed inactive until the DB releases the hold. In accordance with the DB contract, a "Critical Path" parcel is a parcel identified by the DB and approved by the Authority based on a resource loaded schedule. No parcel has been identified by the DB as "Critical Path".
- 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 CP 1, the negotiated schedule of parcel delivery as of December 2014 plus additional public parcels and design changes; for CP 2-3 and CP 4, a rebaselining has been implemented to reflect "contractual delivery dates" for each parcel resulting from design changes. The 2014 Acquisition Plan has been revised considerably and is no longer a relevant data point to be used to assess the ROW delivery due to the repeated design refinements introduced by the DB which require the ROW acquisition process to be recommenced and unnecessarily prolonged. This "Plan" has been modified by the Authority in consultation with the construction and DB teams, to re-prioritize the acquisition need and align it with the "Get to Construction" plan.
 - Actual: Actual parcels delivered each month.
 - Early Forecast: Refined every month based on future expected delivery.
 - Alternative Forecast (CP 1 only): 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, in consultation with the Infrastructure and DB team, based on agreed task orders. For all three CPs, the multiple impacts to existing parcels after the design is finalized by the DB continues to strain the ROW process and taxes existing resources. To abate this unnecessary delay, the Authority have implemented a process improvement requiring all additional requests for ROW (either increases or decreases) to be presented, reviewed and approved by the Business Oversight Committee prior to implementation.
- For ROW expenditure analysis, this report presents 1) Actual expenditures: reported each month and 2) Forecast: adjusted quarterly based on the Funding Contribution Plan.



ROW – CP 1 Parcels Delivered to DB by Month Plan vs. Actual vs. Forecast

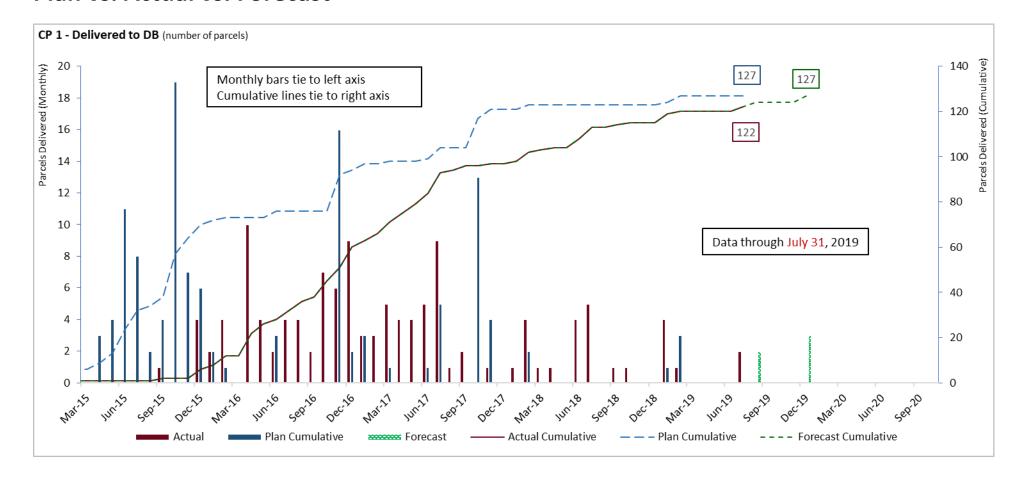


Notes:

- 1. "Plan": Negotiated schedule as of December 2014 plus public parcels, and new parcels added for design developments and utility relocations. Addition of new parcels extends full Plan delivery to later date.
- 2. "Forecast": Forecast is continually refined based on expected delivery schedule.
- 3. CP1 total parcels are continually updated as design changes are approved.



ROW – CP 1 Priority Parcels Delivered to Design-Build by Month Plan vs. Actual vs. Forecast

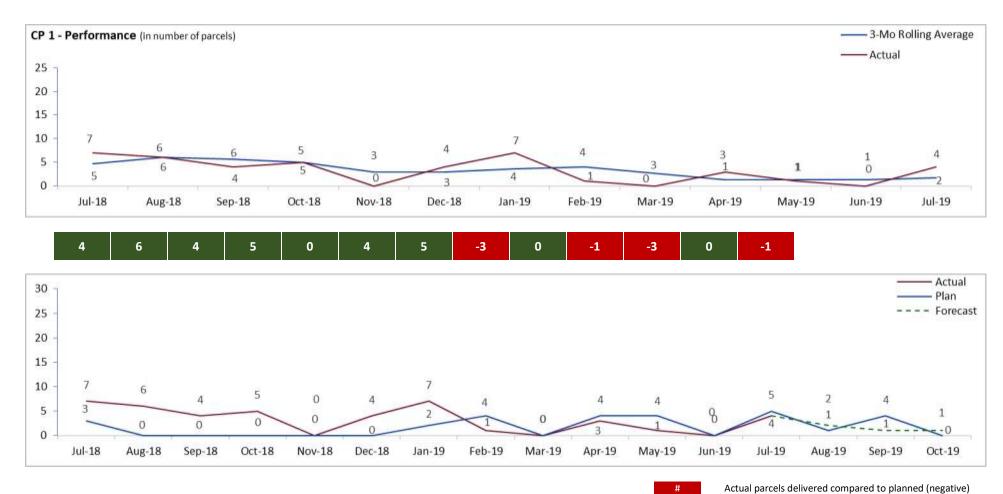


Notes:

- 1. "Plan": Negotiated schedule as of December 2014 plus public parcels, and new parcels added for design developments and utility relocations. Addition of new parcels extend Plan full delivery to later date.
- 2. "Forecast": Continually refined based on expected delivery (driven by pending design changes, legal settlements/agreements, and timing and complexity of relocations).
- 3. Total number of parcels will be updated as priority parcels are approved.



ROW – CP 1 Historic Performance



Notes:

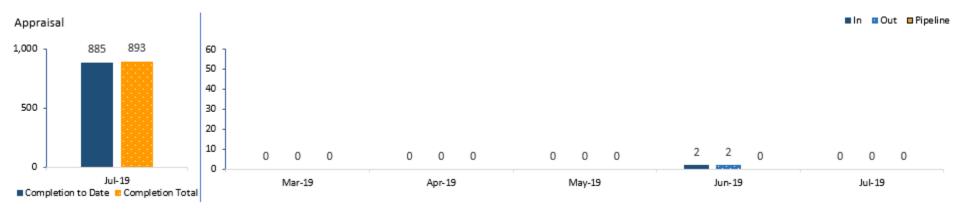
- 1. "Plan": Negotiated schedule as of December 2014.
- 2. Design developments and lag in data entry can cause slight changes to plan and actual counts.

Source: August 1, 2019 ROW Executive Report

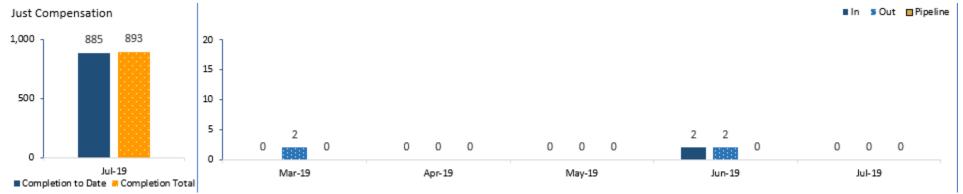
Actual parcels delivered compared to planned (positive)



ROW – CP 1 Pipeline by Process (1 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



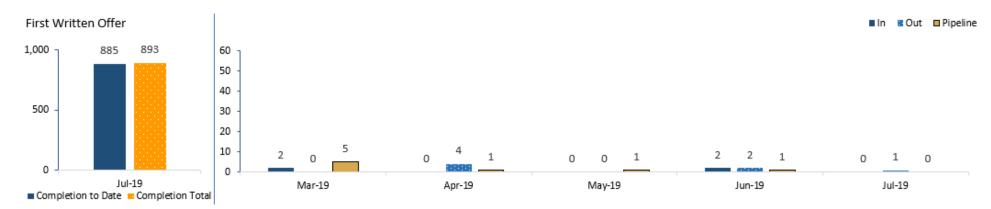
Parcels in pipeline pending DGS setting Just Compensation.

Note:

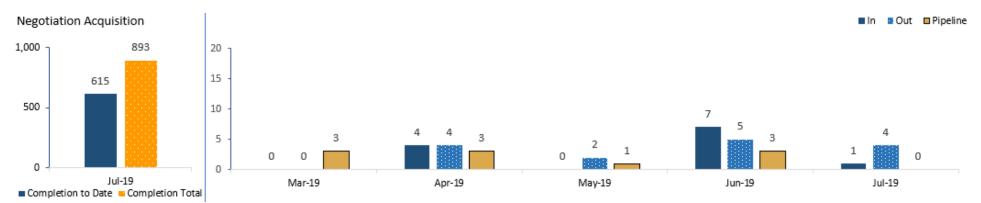
Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 1 Pipeline by Process (2 out of 4 pages) Volume of Activity by Process (Flow) – Pipeline



Pipeline consists of railroad parcels and non-railroad parcels.



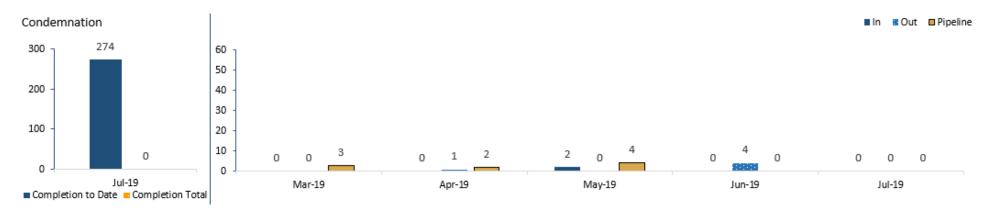
Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO).

Note:

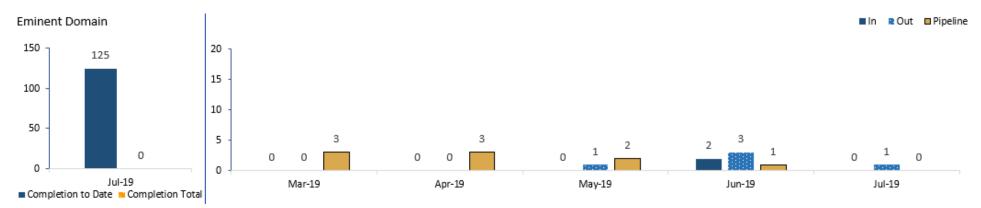
1. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 1 Pipeline by Process (3 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



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

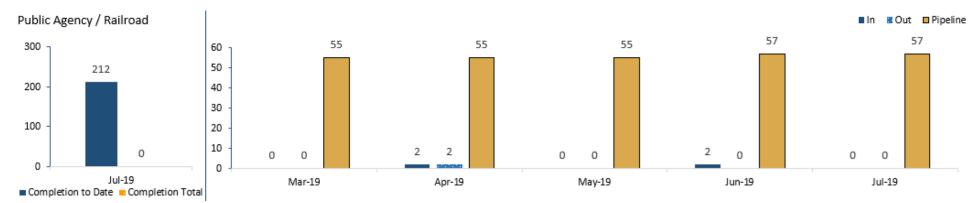
Notes:

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

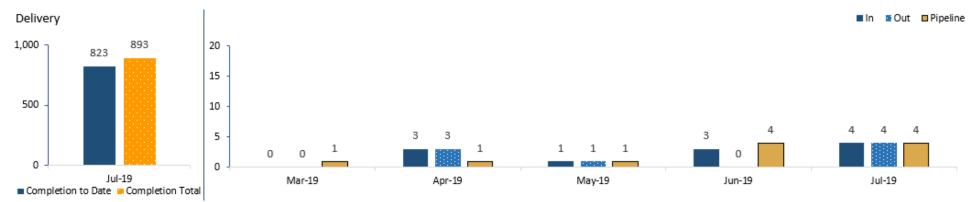
Source:



ROW – CP 1 Pipeline by Process (4 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



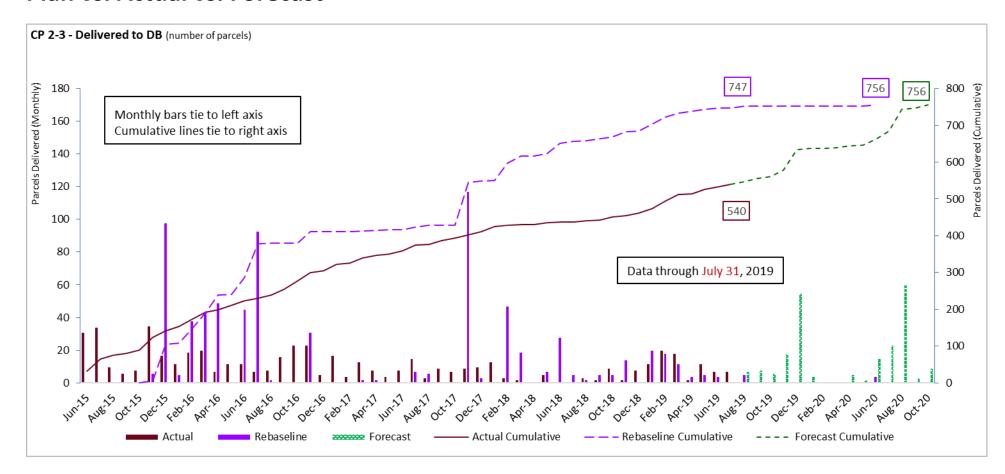
Pipeline consists of parcels requiring relocation and parcels available to be transferred to DB.

Notes:

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



ROW – CP 2-3 Parcels Delivered to DB by Month Plan vs. Actual vs. Forecast

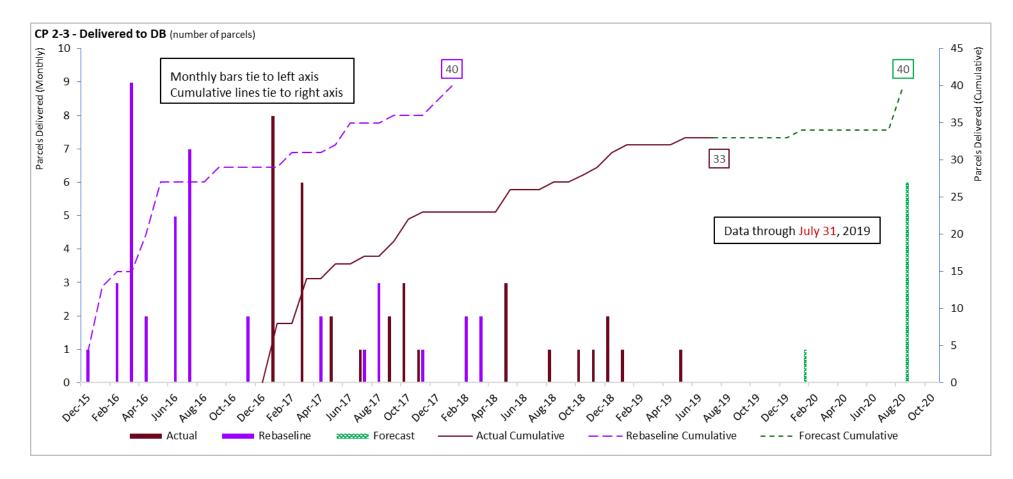


Notes:

- 1. The "Plan" schedule shown previously has been replaced with the "Rebaseline" schedule that reflects current contractual delivery schedule based on design developments.
- "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as new parcels added for design developments and utility relocations are approved.



ROW – CP 2-3 Priority Parcels Delivered to Design-Build by Month Plan vs. Actual vs. Forecast

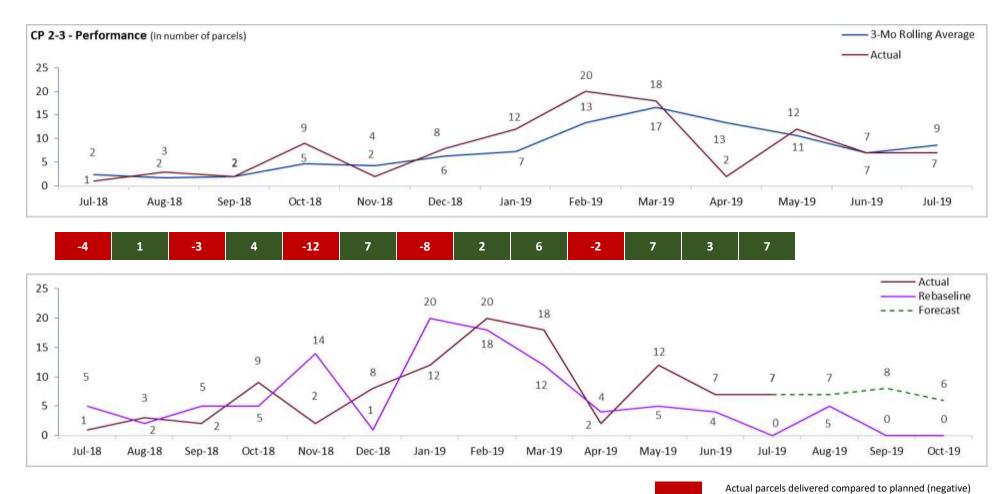


Notes:

- 1. The "Plan" schedule shown previously has been replaced with the "Rebaseline" schedule that reflects current contractual delivery schedule based on design developments.
- 2. "Forecast": Continually refined based on expected delivery depending on phase in acquisition process (such as hearing scheduled, suit filed, DGS contract approval, or parcels certified for delivery) or stage in the design process.
- 3. Total number of parcels will be updated as priority parcels are approved.



ROW – CP 2-3 Historic Performance



Notes:

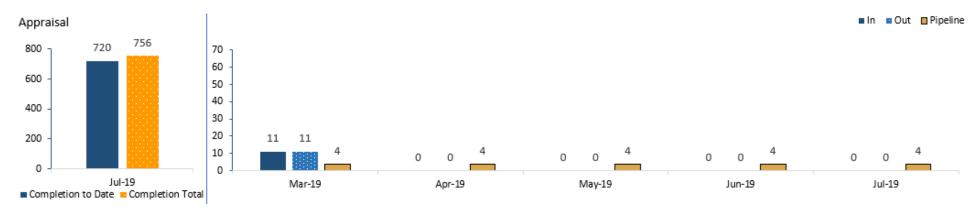
- 1. The "Plan" schedule shown previously has been replaced with the "Rebaseline" schedule that reflects current contractual delivery schedule based on design developments.
- 2. Contract executed in June 2015; 31 parcels delivered after contract execution
- 3. Design developments and lag in data entry can cause slight changes to plan and actual counts.

August 1, 2019 ROW Executive Report

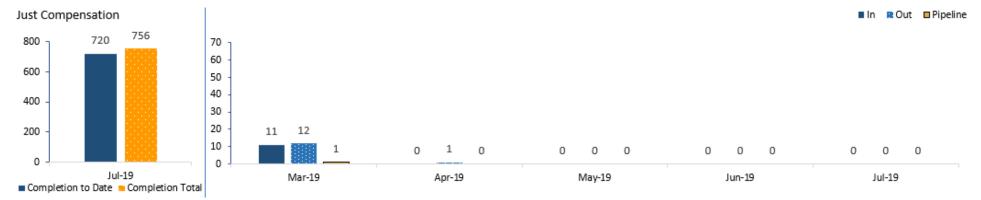
Actual parcels delivered compared to planned (positive)



ROW – CP 2-3 Pipeline by Process (1 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



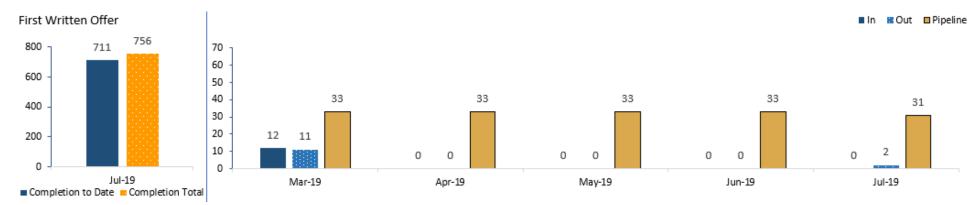
Parcels in pipeline pending DGS setting Just Compensation.

Note:

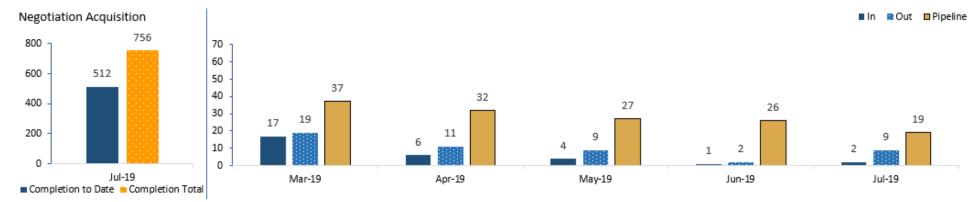
1. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 2-3 Pipeline by Process (2 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



Pipeline consists of railroad parcels and non-railroad parcels.



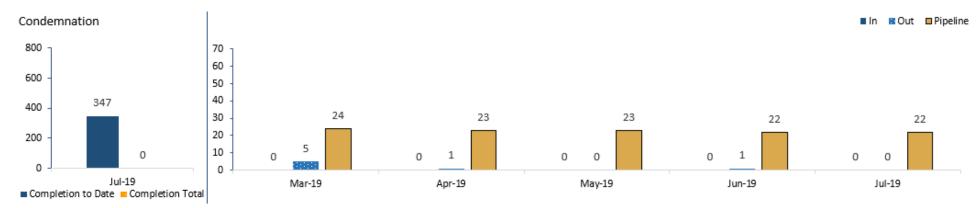
Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO).

Note:

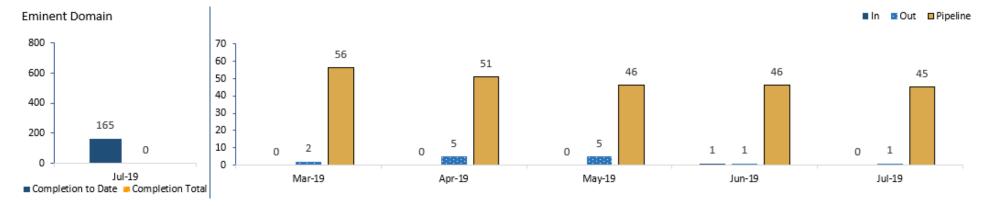
1. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 2-3 Pipeline by Process (3 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



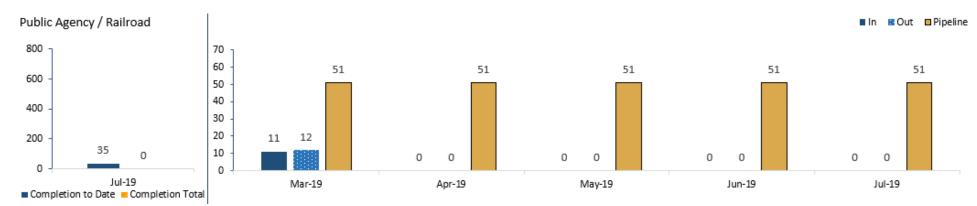
Pipeline comprised of suits (parcels) at Caltrans legal pending filing with the courts seeking Court Orders of Possession.

Notes:

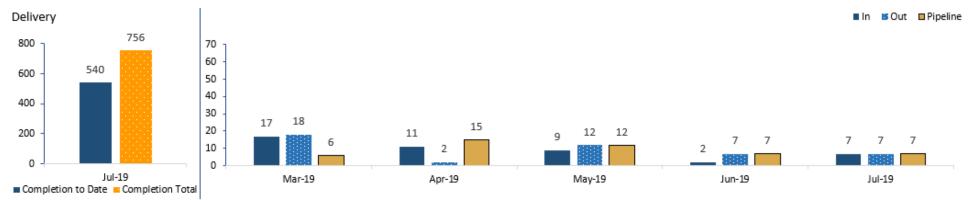
- Total number of parcels that may take the condemnation route is unknown.
- Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 2-3 Pipeline by Process (4 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



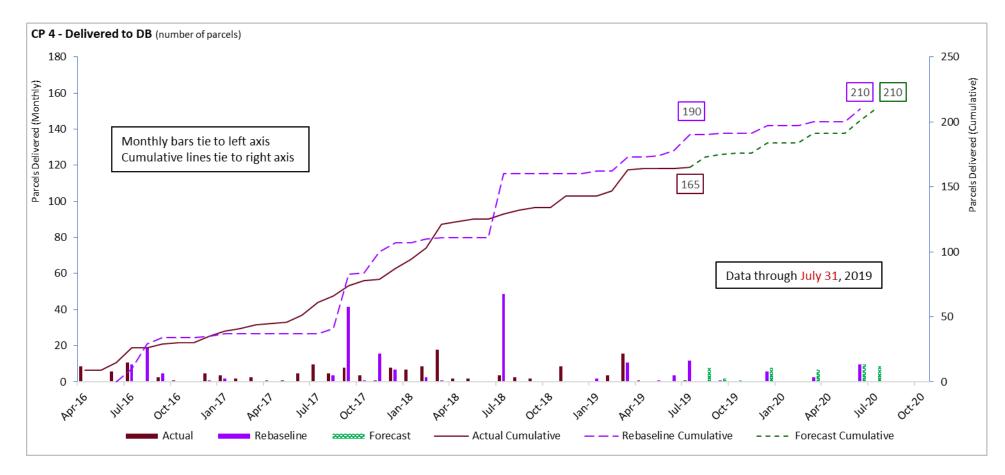
Pipeline consists of parcels requiring relocation and parcels available to be transferred to DB.

Notes:

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



ROW – CP 4 Parcels Delivered to DB by Month Plan vs. Actual vs. Forecast

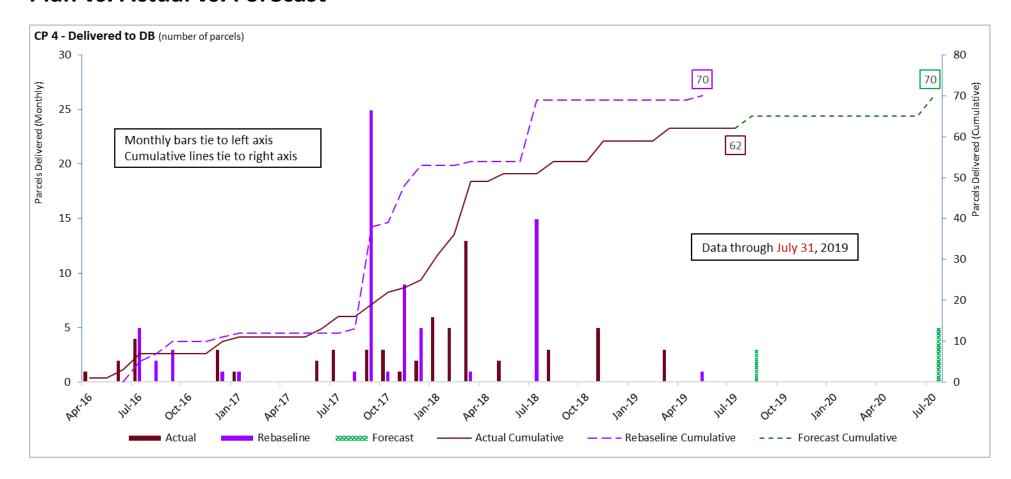


Notes:

- 1. The "Plan" schedule shown previously has been replaced with "Rebaseline" schedule that reflects current contractual delivery schedule based on new parcels added for design developments and utility relocations
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as new parcels added for design developments and utility relocations are approved.



ROW – CP 4 Priority Parcels Delivered to Design-Build by Month Plan vs. Actual vs. Forecast

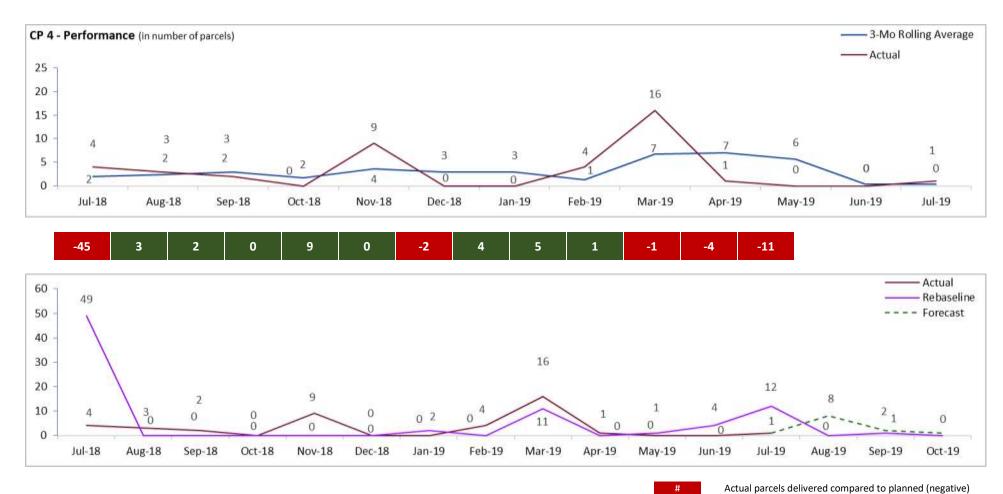


Notes:

- 1. The "Plan" schedule shown previously has been replaced with the "Rebaseline" schedule that reflects current contractual delivery schedule based on new parcels added for design developments and utility relocations.
- 2. "Forecast": Continually refined based on expected delivery which is driven by factors such as design developments, owner suit, and phase in the acquisition process (OP hearing/settlement, DGS contract approval, or certification for delivery).
- 3. Total number of parcels will be updated as priority parcels are approved.
- 4. Planned delivery spike in delivery September 2017 is due to major design change (ATC 11).



ROW – CP 4 Historic Performance



Notes:

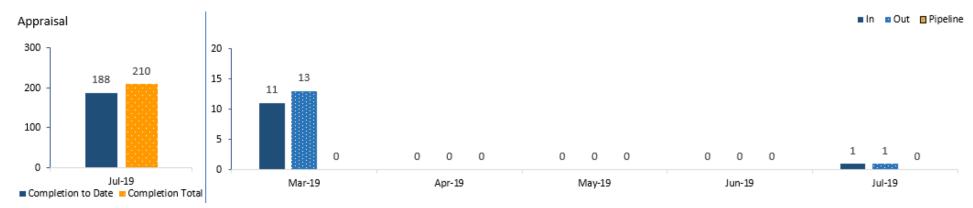
- 1. The "Plan" schedule shown previously has been replaced with the "Rebaseline" schedule that reflects current contractual delivery schedule based on design developments.
- 2. Design developments and lag in data entry can cause slight changes to plan and actual counts.

Source: August 1, 2019 ROW Executive Report

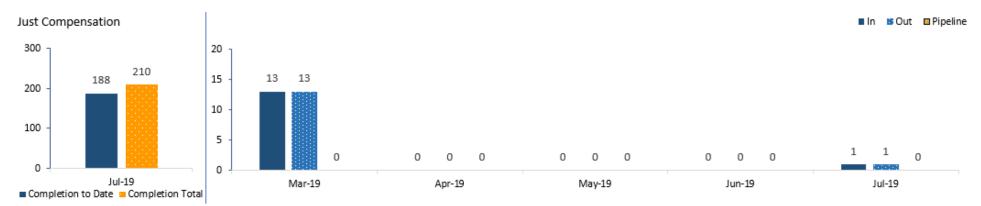
Actual parcels delivered compared to planned (positive)



ROW – CP 4 Pipeline by Process (1 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



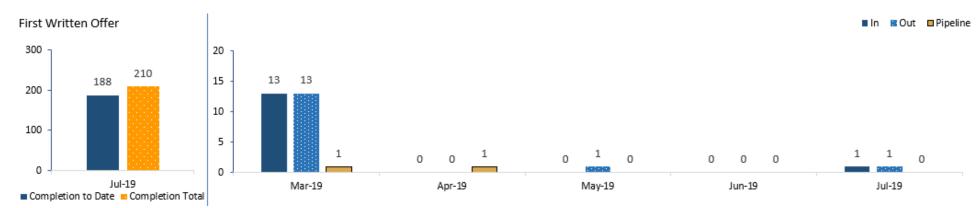
Parcels in pipeline pending DGS setting Just Compensation.

Note:

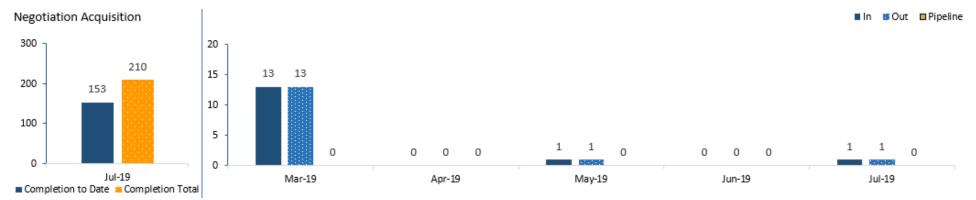
1. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 4 Pipeline by Process (2 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



Pipeline consists of railroad parcels and non-railroad parcels.



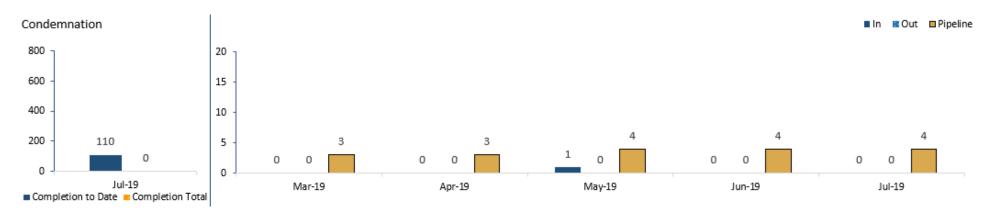
Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO).

Note:

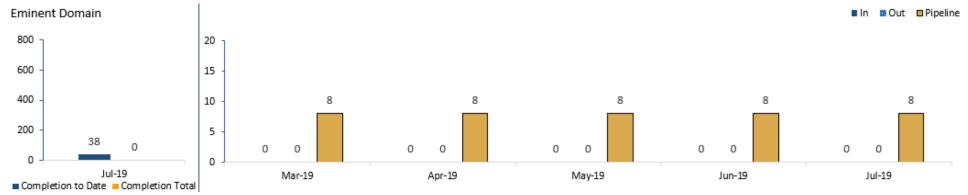
1. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 4 Pipeline by Process (3 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



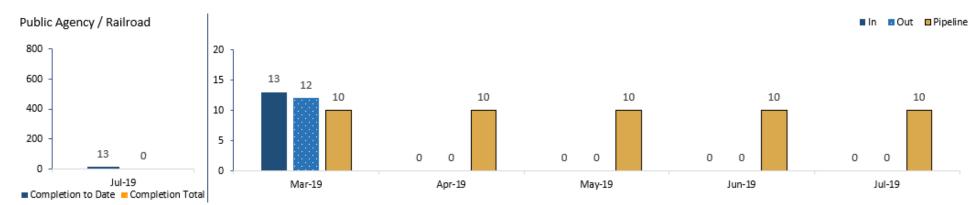
Pipeline comprised of suits (parcels) at Caltrans legal pending filing with the courts seeking Court Orders of Possession.

Notes:

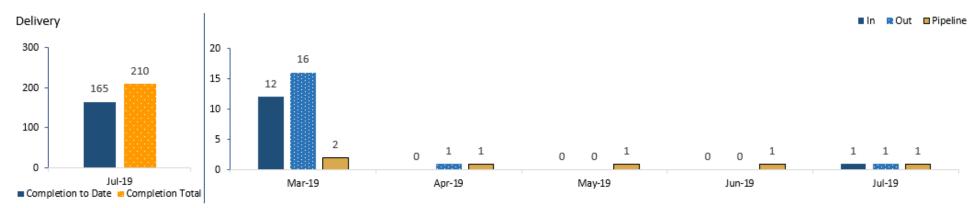
- 1. Total number of parcels that may take the condemnation route is unknown.
- 2. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.



ROW – CP 4 Pipeline by Process (4 out of 4 pages) Volume of Activity by Process (Flow) - Pipeline



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



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

Notes:

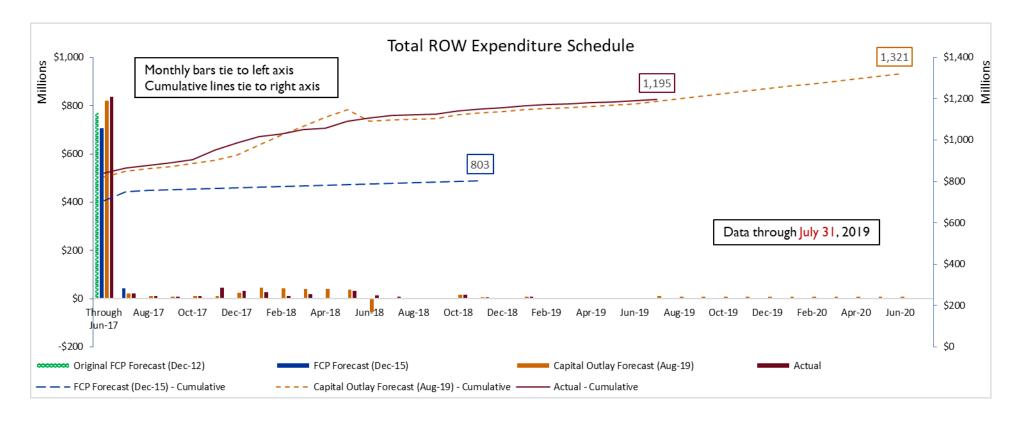
- 1. Total number of public parcels to be identified.
- 2. Lag in data entry and parcel count changes due to design developments may create month-to-month variances in the parcel flow pipeline.

SOW Executive Report



ROW – Total Expenditure by Month

Forecast vs. Actual



Notes

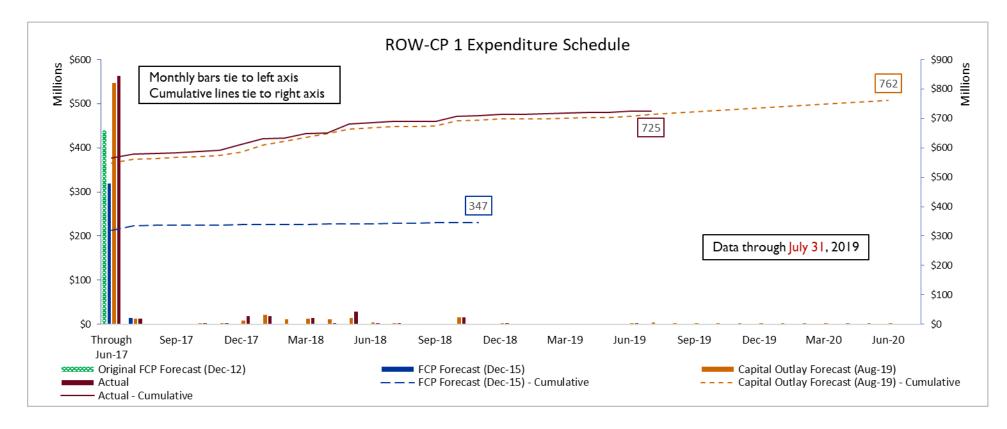
- 1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
- 2. \$24M of ROW preliminary costs is not allocated to specific construction package (CP).
- 3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- 4. Total ROW budget in Original FCP is \$774M and was forecasted to be fully spent by June 2015.
- 5. December 2015 FCP was not approved, and was only used to track expenditure performance prior to the approval of March 2016 FCP.
- 6. Numbers may not add due to rounding. Variance in FCP and Capital Outlay numbers due to timing differences.
- 7. The forecast source is now the Capital Outlay report which captures all funding. The FCP only captured FRA (ARRA) eligible costs.

Sources:



ROW – CP 1 Expenditure by Month

Forecast vs. Actual



Notes:

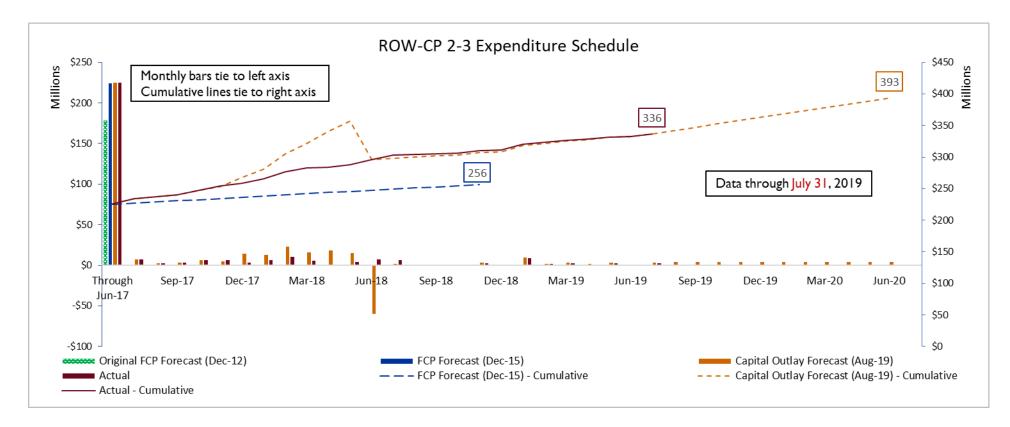
- 1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
- 2. Does not include CP 1D (North Extension) acquisition costs.
- 3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- 4. CP 1 ROW budget in Original FCP is \$441M and was forecasted to be fully spent by June 2015.
- 5. December 2015 FCP was not approved, and was only used to track expenditure performance prior to the approval of March 2016 FCP.
- 6. Numbers may not add due to rounding. Variance in FCP and Capital Outlay numbers due to timing differences.
- 7. The forecast source is now the Capital Outlay report which captures all funding. The FCP only captured FRA (ARRA) eligible costs.

Sources:



ROW – CP 2-3 Expenditure by Month

Forecast vs. Actual



Notes:

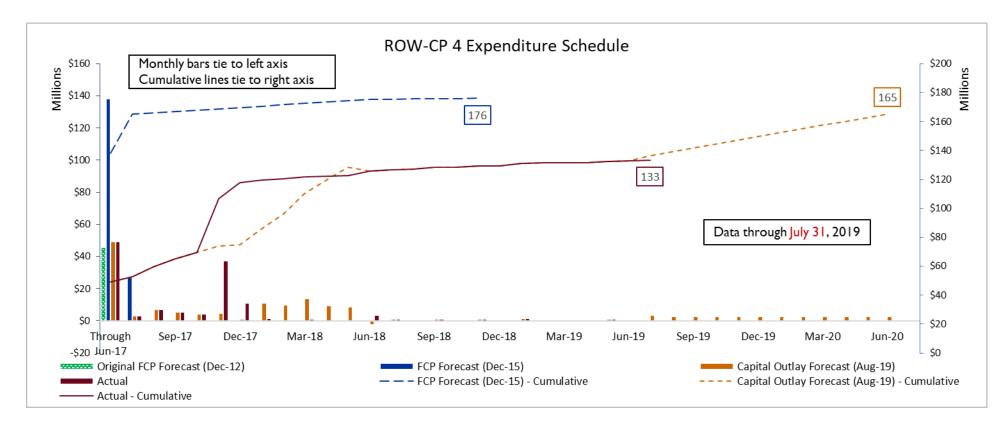
- 1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
- 2. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in Dec-012.
- 3. CP 2-3 ROW budget in Original FCP is \$179M and was forecasted to be fully spent by Jun-2015.
- December 2015 FCP was not approved, and was only used to track expenditure performance prior to the approval of March 2016 FCP.
- March 2017 actual expenditure includes ROW Working Capital Allocation (WCA) reversal reallocation.
- 6. The forecast source is now the Capital Outlay report which captures all funding. The FCP only captured FRA (ARRA) eligible costs.

Sources:



ROW – CP 4 Expenditure by Month

Forecast vs. Actual



Notes:

- 1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
- 2. CP 4 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 December 2012.
- 4. CP 4 ROW budget in Original FCP is \$46M and was forecasted to be fully spent by June 2015.
- December 2015 FCP was not approved, and was only used to track expenditure performance prior to the approval of March 16 FCP.
- 6. Numbers may not add due to rounding. Variance in FCP and Capital Outlay numbers due to timing differences.
- 7. The forecast source is now the Capital Outlay report which captures all funding. The FCP only captured FRA (ARRA) eligible costs.

Sources:



Operations Report Metrics Project Development



Project Development Clearance Metrics - Context

- The following slides track several metrics for each project section/project related to:
 - · Schedule and physical percent complete.
 - · Key milestones.
 - Actual, planned and forecasted costs-to-completion dates:
 - Program, RC, and EEC budgets and schedules have been updated following Board approval of the 2018 Business Plan and Program Baseline Delivery Plan.
 - For this report, the budget and forecast estimates are identical. Actuals have been updated through July 2019.
 - Monthly actual costs come from RC and EEC invoices the Authority receives.
 - Project Development Milestone Schedule page provides an overview of upcoming milestones across all project sections and projects.

^{1.} The Project Development budgets in this Operations Report include all funding sources (Prop 1A, 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.



Project Development Milestones Schedule (to ROD) Information through July 31, 2019

Program Priority	Segment	Progress to Date	Next Steps
1	San Francisco to San Jose (F2J)	 Presented the staff-recommended State's Preferred Alternative at Community Working Groups Meetings and at briefings for Caltrain and various cities and counties in the corridor. Submitted Administrative Draft EIR/EIS #1 for Authority and legal counsel review. Prepared analyses to support environmental permitting with Bay Conservation and Development Commission (BCDC) as part of ongoing coordination efforts. Submitted finalized Checkpoint B Summary Report to USACE and EPA. 	 Conduct Open House meetings in support of Preferred Alternative in August. Presentation to the Authority Board of Directors on September 17. Respond to comments from Authority and legal counsel review of the compiled Administrative Draft EIR/EIS. Revise the project schedule to include changes in environmental processes to reflect FRA award of NEPA Assignment. Receive Checkpoint C draft #2 for internal Authority review. Continue coordination with BCDC regarding Visitacion Creek permitting. Continue coordination with Universal Paragon Corporation's proposed Brisbane Baylands Specific Plan. Authority senior staff continue to meet with Caltrain executive staff regarding 4th and King Station, Millbrae Station and blended operations.
2	San Jose to Merced (J2Y)	 Continued preparation and review of Checkpoint C technical reports; also completed review of the initial draft Checkpoint C Summary Report and draft Section 408 package. Continued revising the initial administrative draft EIR/EIS in response to CEQA/NEPA consistency and legal adequacy reviews, CEQA Guidelines updates (including LOS to VMT transition), and other new direction. Prepared presentations and conducted Technical and Community Working Groups, stakeholder, and agency outreach on the staff-recommended State's Preferred Alternative. 	 Complete presentations and public, stakeholder, and agency outreach on the staff-recommended State's Preferred Alternative in August and September. Complete the staff report, public outreach report, Authority Board memo, CEQA resolution, and NEPA resolution for the staff-recommended Preferred Alternative. Present the staff-recommended Preferred Alternative to Authority Board of Directors on September 17. Transmit Record Set PEPD and footprint validation package for Alternatives 1-4 to FRA. Submit the revised administrative draft EIR/EIS in response to legal adequacy and CEQA/NEPA consistency reviews, updated CEQA Guidelines and other new direction in mid-September for legal and environmental program backchecks. Complete the Checkpoint C and Section 408 materials and submit to USACE and USEPA for review, preliminary LEDPA concurrence, and Section 408 determination. Complete the Geotechnical Investigation Plan for the western and eastern approaches to Pacheco Pass and associated seismic faults. Advance environmental clearance for Phase 2 geotechnical investigations in Santa Clara and Merced counties (Pacheco Pass west approach).
3	Central Valley Wye (M-F)	 Provided Biological Assessment to U.S. Fish and Wildlife Service and National Marine Fisheries Service for review. Started preparation of the Central Valley Wye Draft Supplemental EIS for NEPA circulation. Continued process of recording comment submissions to draft supplemental EIR. 	 Prepare comments to agency comments to draft Supplemental EIR/EIS for review and response. Prepare for circulation of draft supplemental EIS on September 13, 2019.



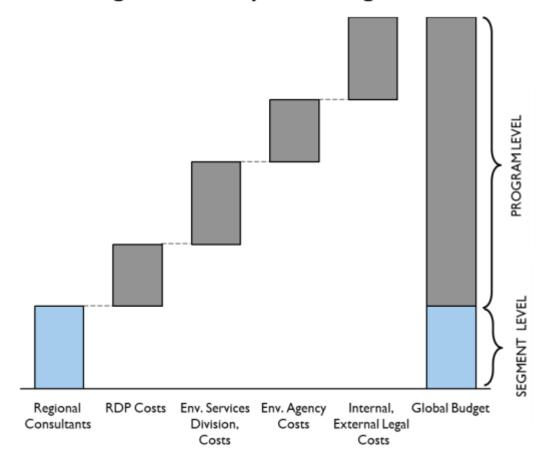
Project Development Milestones Schedule (to ROD) – cont'd Information through July 31, 2019

Program Priority	Segment	Progress to Date	Next Steps
4	Locally- Generated Alternative (F-B)	 As the NEPA Lead Agency, readied the F-B LGA Final Supplemental EIS for federal Cooperating Agency review. 	 Incorporate federal cooperating agency comments into the final supplemental EIS. Prepare to release the Final Supplemental EIS for the 30-day wait period.
5	LA to Anaheim	 Continued coordination with BNSF on project elements. Continued to work with Regional Consultant on revised scope, schedule and budget to include BNSF "East of Fullerton" analysis and integration into the draft EIR/EIS, as part of the development of Task Order 2A. Record of Decision date was revised to December 2021 as approved in the PUR (May 2019). This date complies with the ARRA grant deadline of December 2022. 	 Continue coordination with Metro, Metrolink and other operators on LA Union Station Program and shared corridor strategies. Continue coordination with BNSF. Continue development of Regional Consultants Scope of Work for Task Order 2A, with a targeted execution date of September 1, 2019.
6	Burbank to LA	 Internal reviews and revisions of the majority of sections of the administrative draft EIR/EIS are complete. Finishing Team review process will resume following the ongoing revision to the air quality analysis with updated construction assumptions. Completed review of draft PEPD addendum submittal for Burbank Station Refined B alternative. Relevant pages of PEPD set were submitted to the cities of Los Angeles, Glendale, Burbank, and the Burbank-Glendale-Pasadena Airport Authority for review. 	 The administrative draft's technical analysis with revised construction assumptions for air quality analysis is currently underway. Finishing team to complete work on administrative draft EIR/EIS. Main Street traffic analysis to be completed. Execute third party agreement with the City of Glendale.
7	Palmdale to Burbank	 Progressing Checkpoint B document to address USACE and EPA comments. Completed draft Record Set PEPD documents. Submitted compiled administrative draft EIR/EIS for internal Authority review. 	 Continue coordination with USACE and EPA on Checkpoint B document as part of the 404 permitting process. Submit revised Record Set to FRA to incorporate changes in project definition. Complete revisions and backcheck of administrative draft EIR/EIS prior to finishing team. Cooperating agency review planned for October.
8	Bakersfield to Palmdale	 Received comments of Section 106 Finding of Effect (FOE) document. Continued coordinating responses. Prepared comment response matrix for cooperating agency comments. Held meeting with Cesar Chavez National Monument (CCNM) consulting parties on July 11. 	 Progress consultation with the CCNM and other consulting parties to finalize alignment options. Additional engineering analysis of the potential for a "full avoidance" alternative. Schedule for public comment period/release of the Draft EIR/EIS dependent on outcome of Section 106 consultation with National Chavez Center (NCC) and consulting parties. Next meeting is set for August 28.
9	HMF	 Environmental clearance approach on hold. Environmental screening criteria and clearance approach still under discussion. 	 Assess schedule performance once screening criteria and environmental clearance approach are finalized.



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

Cost Categories for Scope and Budget Definition



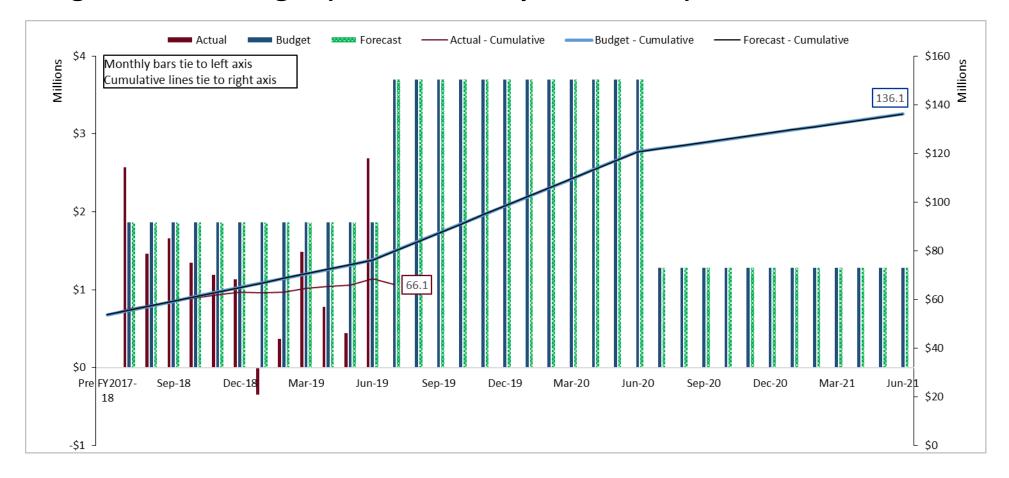
Cost Categories

- Regional consultants' and Engineering and Environmental consultants' costs include project management, outreach, planning, engineering and environmental activities.
- RDP costs include environmental management, coordination, and technical reviews.
- Environmental Services Division costs reflect management and staff costs for overseeing project development program delivery.
- Environmental agency costs are costs for agency staff to attend meetings, review technical reports, and provide technical guidance.
- Internal, External Legal costs are costs associated with in-house and outside legal reviews.

- 1. August 2018 reporting update reflected the reallocation of costs to more clearly distinguish between Regional Consultants and Program Costs which include categories identified in gray.
- 2. Program and Project Mitigation Budgets and Forecasts are included within the ROW Construction Budget (refer to Total ROW Expenditure by Month slide).



Program Level Budget (Non-Section Specific Costs)¹



- 1. Based on actual costs and future estimates for the Authority environmental staff, RDP Environmental, in-house and external legal review and resource agency staffing agreements and review.
- 2. Cumulative Budget line is same as Forecast line, thus hidden.
- 3. A new workplan was implemented beginning October 15, 2018 and extends through July 2020.
- 4. Program forecasts have been updated for July 1, 2018 through March 2021 when the last project-level EIR/EIS is to be completed.
- 5. Increased costs for June 2019 a result of fiscal year-end accruals and payment of previously invoiced costs.



Project Development Schedule (to ROD) - Information through July 31, 2019

•		-				•	•					<u> </u>						
Program Priority	Segment	Progress		Need Statement		Need Statement				Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alternative for Draft EIR/EIS		aft EIR/EIS	Publish Final EIS & Obtain ROD		Date EIR/EIS To Be Completed	
		Due Dates	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month				
Document Complete	Merced to Fresno	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%											
Document Complete	Fresno to Bakersfield	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%											
Document Complete	CV Electrical Interconnections	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%											
1	San Francisco to San Jose	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Sep-19 90%	Sep-19 Sep-19 95%	Mar-20 Mar-20 46%	Mar-20 Apr-20 47%	Apr-21 Apr-21 0%	Apr-21 Apr-21 ¹ 0%	Apr-21	Apr-21				
2	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Sep-19 90%	Sep-19 Sep-19 95%	Dec-19 Feb-20 41%	Dec-19 Mar-20 43%	Dec-20 Jan-21 0%	Dec-20 Dec-20 ² 0%	Dec-20	Dec-20				
3	Central Valley Wye (M-F)	Plan Forecast % Complete	Complete Complete 100%	May-18 Sep-19 90%	Apr-20 May-20 0%	Apr-20 Sep-20 ³ 0%	May-20	Sep-20										
4	Locally Generated Alternative (F-B)	Plan Forecast % Complete	Complete Complete 100%	Jul-19 Aug-19 92%	Jul-19 Oct-19 ⁴ 92%	Aug-19 Oct-19	Aug-19 Oct-19											
5	Los Angeles to Anaheim	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Nov-20 TBD TBD	Nov-20 Nov-20 68%	Dec-21 Dec-21 0%	Dec-21 Dec-21 0%	Dec-21	Dec-21				
6	Burbank to Los Angeles	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Oct-19 70%	Sep-19 Oct-19 70%	Aug-20 Aug-20 0%	Aug-20 Aug-20 ⁵ 0%	Aug-20	Aug-20				
7	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Dec-19 Jan-20 64%	Dec-19 Jan-20 64%	Feb-21 Feb-21 0%	Feb-21 Feb-21 ⁶ 0%	Feb-21	Feb-21				
8	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-19 Oct-19 84%	Jul-19 Mar-20 84%	Jun-20 Jun-20 0%	Jun-20 Jun-20 ⁷ 0%	Jun-20	Jun-20				
9	НМЕ	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-16 TBD 0%	Apr-16 TBD 0%	Sep-16 TBD 0%	Sep-16 TBD 0%	Feb-21 TBD 0%	Feb-21 TBD 0%	TBD	TBD				

⁷ Potential 6-month delay (External Agency Coordination: CCNM). Developing mitigation plans to minimize or eliminate associated schedule impacts.



¹ Potential 2-month delay (CEQA Guideline Changes). Developing mitigation plans to minimize or eliminate associated schedule impacts.

² Potential 4-month delay (CEQA Guideline Changes). Developing mitigation plans to minimize or eliminate associated schedule impacts.

³ Actual 4-month delay (day for day slip due to lack of NEPA Assignment).

⁴ Actual 3-month delay (day for day slip due to lack of NEPA Assignment).

⁵ Potential 5-month delay (Construction assumptions update and External Agency coordination: Burbank Airport). Developing mitigation plans to minimize or eliminate associated schedule impacts.

⁶ Potential 6-month delay (External Agency Coordination: Una Lake). Developing mitigation plans to minimize or eliminate associated schedule impacts.

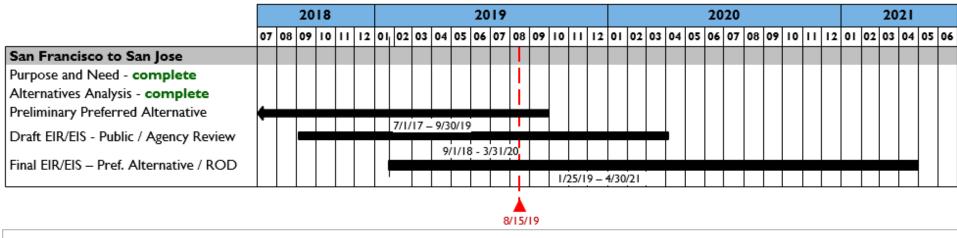
Project Development Schedule (to ROD) - cont'd. -Information through July 31, 20191

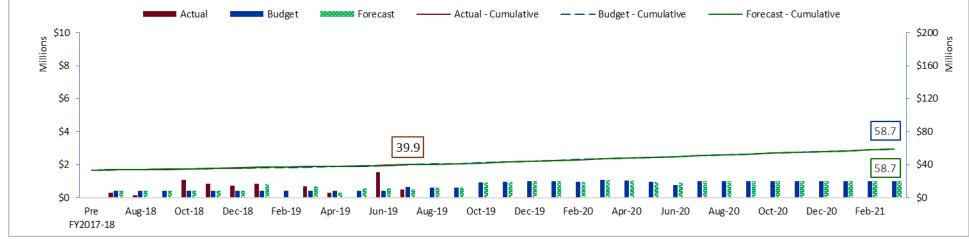
Program Priority	Segment	Schedule Status and Mitigation Strategies
Document complete	Merced to Fresno	EIR certified and project approved May 2012; FRA ROD issued September 2012
Document complete	Fresno to Bakersfield	EIR certified and project approved May 2014; FRA ROD issued June 2014 Supplemental EIR certified and locally generated alternative approved October 2018
Document complete	CV Electrical Interconnections	Environmental Evaluation Has Been Completed Using an environmental re-examination process, it was determined that the electrical interconnection and network upgrades for PG&E sites 8 through 12 supporting the test track do not require preparation of a supplemental environmental document. As a result, the environmental review has been completed, shaving a year off the schedule.
1	San Francisco to San Jose	Schedule updated to reflect incorporation of additional materials to achieve ROD in April 2021.
2	San Jose to Merced	Schedule updated to reflect incorporation of additional materials and respond to administrative draft review comments to achieve ROD in December 2020.
3	Central Valley Wye (M–F)	Schedule updated to reflect delay in approval of NEPA assignment to achieve ROD in September 2020.
4	Locally Generated Alternative (F–B)	Schedule updated to reflect delay in approval of NEPA assignment to achieve ROD in October 2019.
5	LA to Anaheim	Schedule updated consistent with May 2019 Board-approved baseline update to achieve ROD in December 2021.
6	Burbank to LA	Schedule updated consistent with May 2019 Board-approved baseline update to achieve ROD in August 2020.
7	Palmdale to Burbank	Schedule updated consistent with May 2019 Board-approved baseline update to achieve ROD in February 2021.
8	Bakersfield to Palmdale	Schedule updated consistent with May 2019 Board-approved baseline update to achieve ROD in June 2020.
9	НМЕ	Environmental clearance approach on hold and under review; dates are subject to change pending Authority decision regarding site screening criteria and type of environmental clearance documentation needed.

¹ Original and revised target dates are consistent with Baseline Update Report presented and accepted at the May 2019 Authority Board meetings. Dates assumed FRA was to grant NEPA Assignment, May 1, 2019.



San Francisco to San Jose

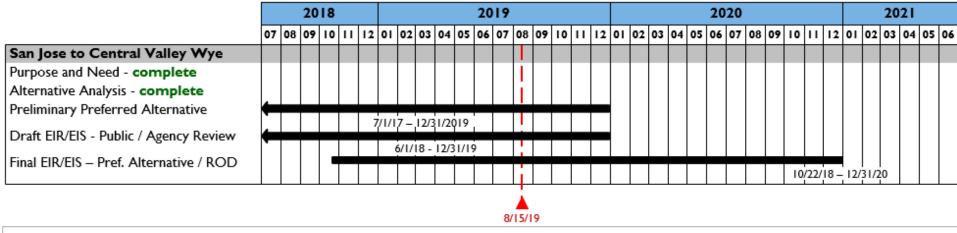


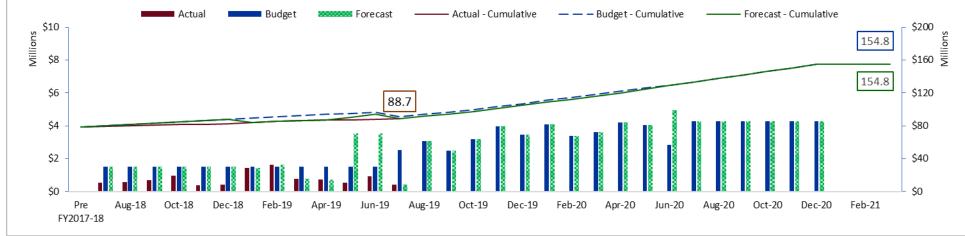


- 1. All estimates are preliminary and subject to change.
- 2. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 3. Budget and Forecast have been updated to reflect the revised ROD date changes. Note that for this report, the budget and forecast are identical.



San Jose to Merced

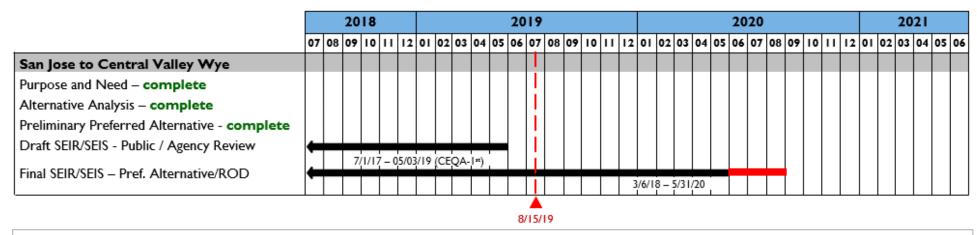


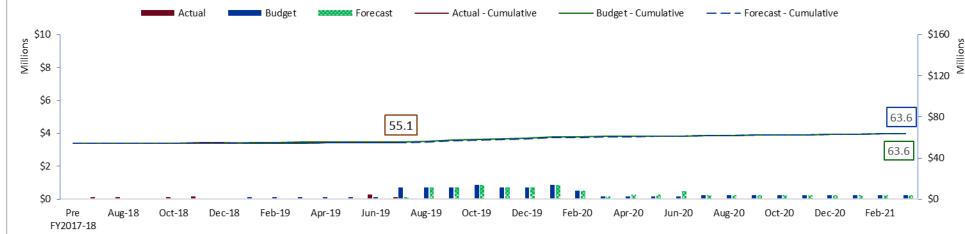


- 1. All estimates are preliminary and subject to change.
- 2. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 3. Budget and Forecast have been updated to reflect the revised ROD date changes. Note that for this report, the budget and forecast are identical.



Central Valley Wye (M-F)

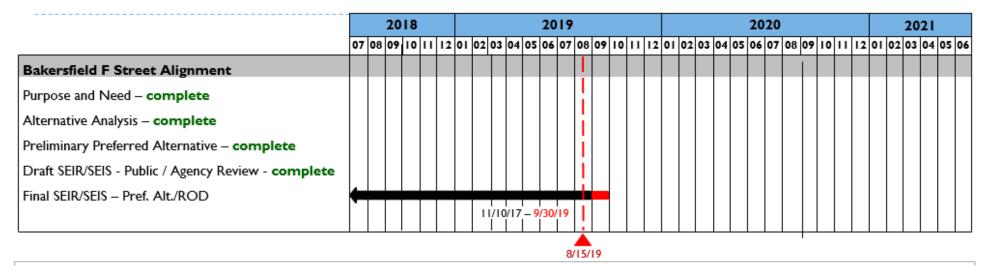


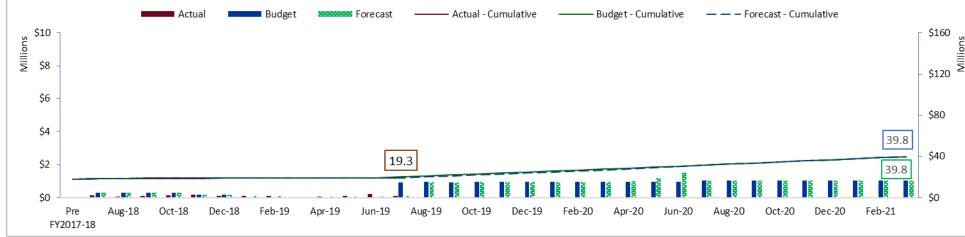


- 1. All estimates are preliminary and subject to change.
- 2. Purpose and Need and the Alternatives Analysis were achieved as part of the Merced to Fresno EIR/EIS, completed in September 2012.
- 3. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 4. The Authority released the Draft EIR/EIS in May 2019 under the State authority under the California Environmental Quality Act (CEQA) under a CEQA-first strategy to advance the environmental review. The Authority is currently evaluating options and risks associated with the delays to NEPA and the Record of Decision (ROD).



Locally Generated Alternative (F-B)

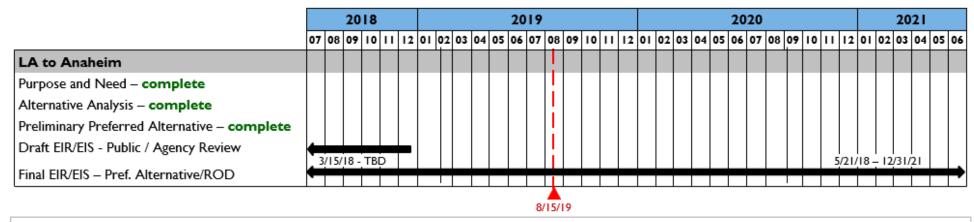


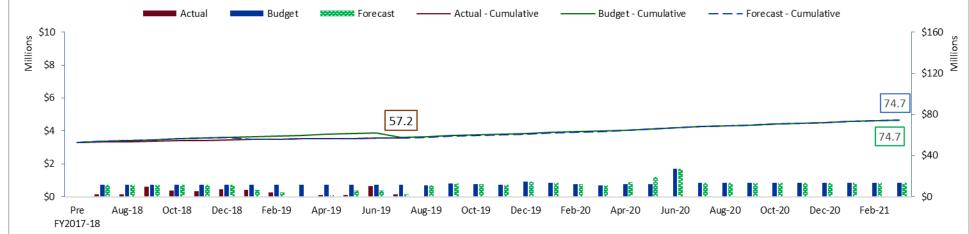


- 1. All estimates are preliminary and subject to change.
- 2. Purpose and Need and the Alternatives Analysis were achieved as part of the Fresno to Bakersfield EIR/EIS, completed in June 2014.
- 3. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 4. CEQA NOD was delivered in October 2018, while NEPA ROD is awaiting NEPA assignment / FRA for ROD.



LA to Anaheim

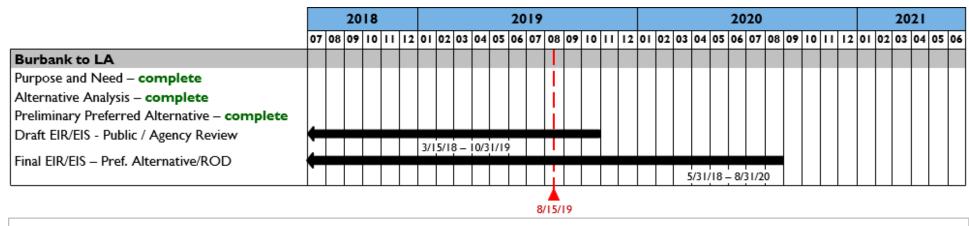


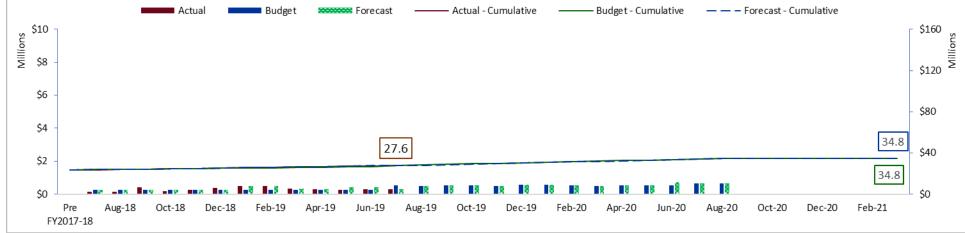


- 1. All estimates are preliminary and subject to change.
- 2. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 3. Budget and Forecast have been updated to reflect the revised ROD date changes.
- 4. Release date to be modified based on discussion with Executive Management.



Burbank to LA

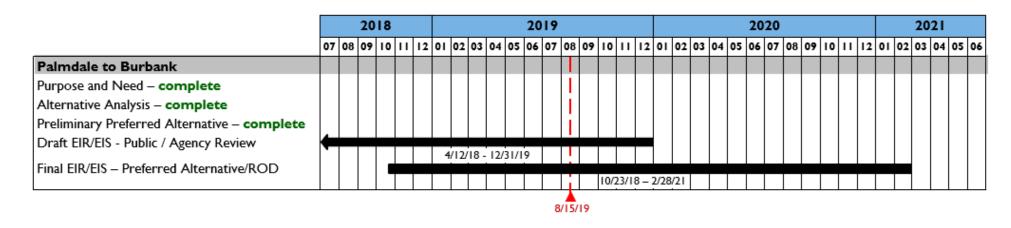


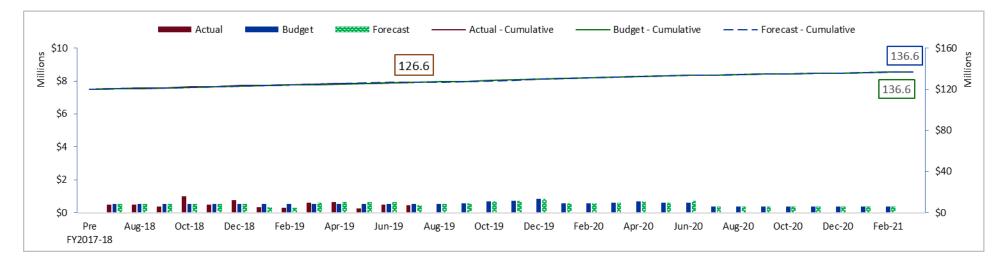


- 1. All estimates are preliminary and subject to change.
- 2. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 8. Budget and Forecast have been updated to reflect the revised ROD date changes. Note that for this report, the budget and forecast are identical.
- 4. We anticipate a potential 6-month delay in project delivery due to ongoing consultation with Consulting Parties and effort to design and evaluate a new alternative in the Draft EIR/EIS. We are developing mitigation strategies to minimize any potential delay.



Palmdale to Burbank

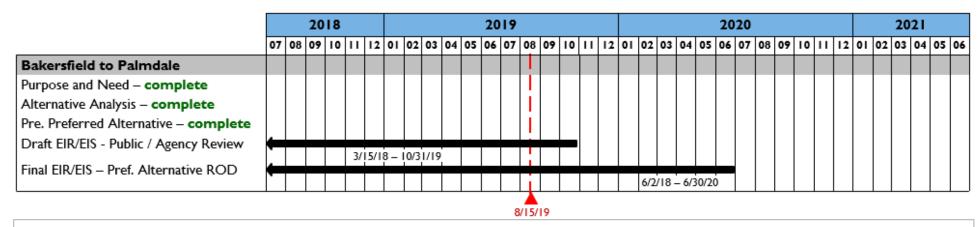


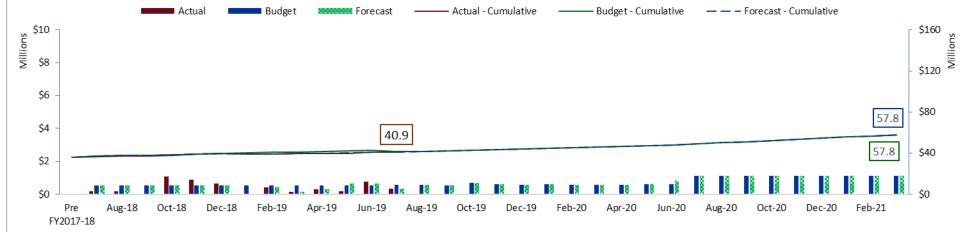


- 1. All estimates are preliminary and subject to change.
- For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 3. Budget and Forecast have been updated to reflect the revised ROD date changes. Note that for this report, the budget and forecast are identical.



Bakersfield to Palmdale

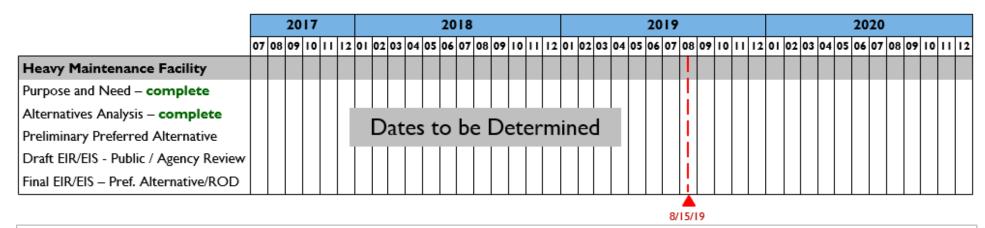


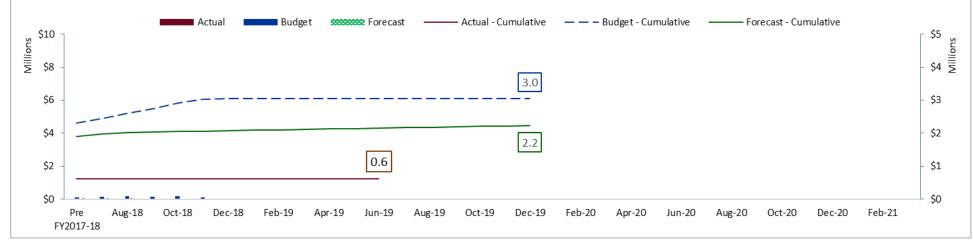


- 1. All estimates are preliminary and subject to change.
- 2. For financial estimates, actuals have been updated through July 2019. Forecast cost are through July 2021.
- 3. Budget and Forecast have been updated to reflect the revised ROD date changes. Note that for this report, the budget and forecast are identical.



Heavy Maintenance Facility¹





- 1. Environmental clearance approach on hold and under review.
- 2. All estimates are preliminary and subject to change.
- 3. Budget and Forecast have not been updated to reflect the revised ROD date changes.



Four-month look ahead - milestones and other key deliverables, all sections/projects: Information through July 31, 2019

Program Priority	Milestone	Project Section	Due Date	Percent Completion	Status
1	Obtain Checkpoint B concurrence from USACE and USEPA	San Francisco to San Jose	August 2019	95%	Delay generated by need to provide a more detailed discussion of the Light Maintenance Facility project element. Delay does not affect overall schedule.
2	Submit administrative draft EIR/EIS for Cooperating Agency review	San Jose to Merced	December 2019	86%	Revisions to the initial administrative draft EIR/EIS, in response to Authority reviewers, CEQA Guidelines updates, and other new direction are in progress.
2	Publish draft Supplemental EIS for NEPA public review	Central Valley Wye (M-F)	September 2019	50%	CVY Draft Supplemental EIS will be released September 13, 2019 for public comment with obtainment of NEPA Assignment.
3	Prepare Final Supplemental EIR/EIS	Central Valley Wye (M-F)	April 2020	5%	Preparation to begin October 2019 following NEPA public review period. Comments on CEQA document entered in CommentSense
4	Release the Final Supplemental EIS	Locally Generated Alternative (F-B)	October 2019	92%	NEPA Assignment sets the schedule for the Record of Decision.
5	Prepare administrative draft EIR/EIS for Authority's legal and technical review	Los Angeles to Anaheim	August 2018	96%	The administrative draft EIR/EIS was accomplished. However, publication encountering delays because of need to incorporate BNSF "east of Fullerton" projects that requires modification to draft EIR/EIS.
6	Prepare administrative draft EIR/EIS for Authority's legal and technical review	Burbank to Los Angeles	November 2019	91%	Revisions to the initial administrative draft EIR/EIS, in response to Authority reviewers, are in progress.



Four-month look ahead - milestones and other key deliverables, all sections/projects: - cont'd. - Information through July 31, 2019

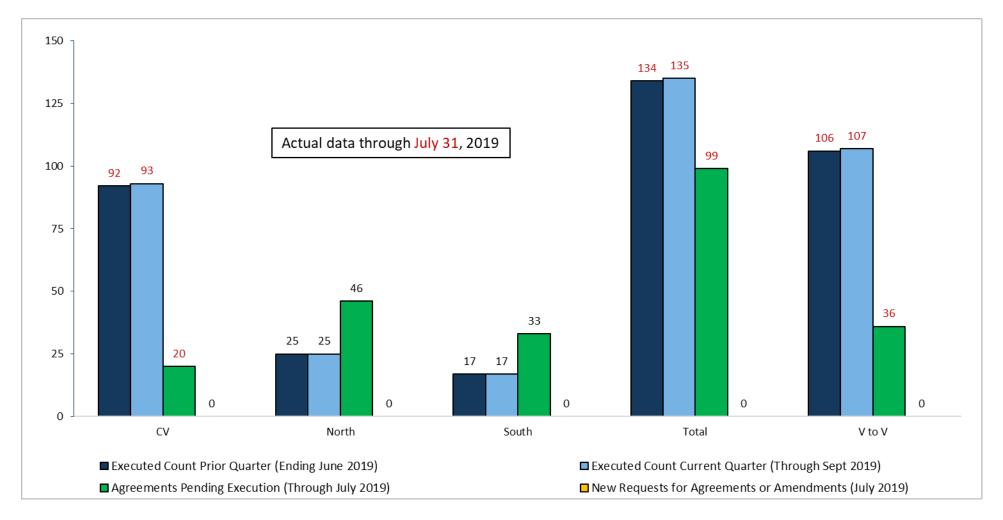
Program Priority	Milestone	Project Section	Due Date	Percent Completion	Status
7	Obtain Checkpoint B concurrence from USACE and USEPA	Palmdale to Burbank	September 2019	70%	Delayed. Addressing feedback received from USACE and USEPA.
8	Publish Draft EIR/EIS for public and agency circulation	Bakersfield to Palmdale	March 2020	84%	Schedule for public comment period/release of the draft EIR/EIS dependent on outcome of Section 106 consultation with National Chavez Center and consulting parties. We anticipate a potential 6-month delay in project delivery due to ongoing consultation with consulting parties and effort to design and evaluate a new alternative in the Draft EIR/EIS. We are developing mitigation strategies to minimize any potential delay.



Operations Report Metrics Third-Party Agreements



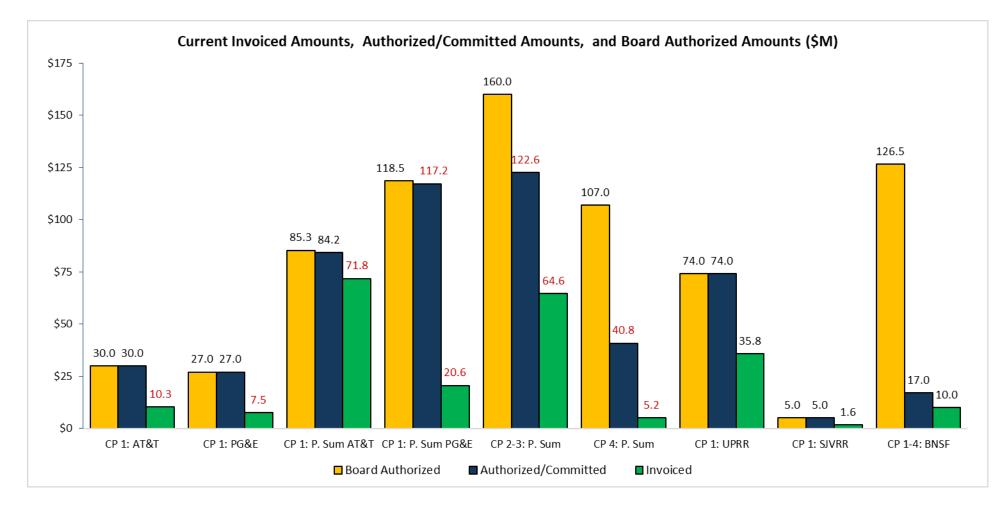
Central Valley, North, South, and Valley to Valley Executed and Unexecuted Agreements



- 1. Central Valley, North, and South total counts include Master/Cooperative Agreements and Reimbursement Agreements for environmental coordination and project development only.
- 2. Valley to Valley count is a subset of the agreements already represented.
- 3. The count for unexecuted 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.



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



- 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, irrigation facilities, and roadways that are in physical conflict with the proposed alignment.
- 2. Amounts shown for each Third-Party agreement are inclusive of funds shown in both the project budget and Third-Party budget line items.
- 3. Amounts expended by the DB's for this work will be reported as received.
- 4. \$5 million of SJVRR and BNSF agreements are both part of CEO delegated authority and not separate board items.



Operations Report Metrics Contract Management



Contract Management Metrics - Context

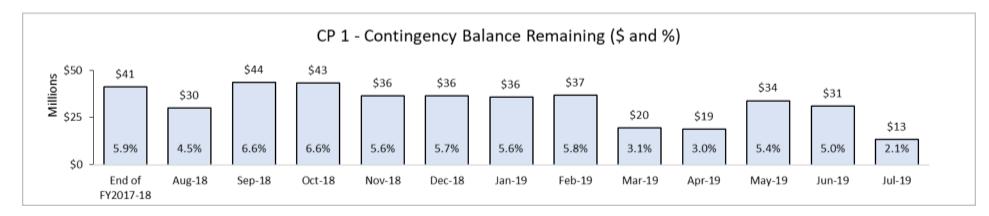
- There are 2 contract management metrics included:
 - Contingency Value
 - This value is based on remaining contingency as a percentage of the remaining contract balance.
 - Expenditure Schedule
 - Earned Value (EV) = Approved Invoices to Date.
 - Planned Value (PV) = Average Planned Values from the Original Approved Baseline Schedule.
 - Revised Planned Value = Average Planned Values from the most recent Approved Baseline Schedule.
 - Funding Contribution Plan (FCP) forecast value refers to forecasted Design-Build Contract expenditure in quarterly FCP.
- Contract management metrics for CP 1, CP 2-3, CP 4, 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 are made monthly.



CP 1 Contract Management – Contingency Value



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



Notes:

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

Source:

July 31, 2019 CP 1 Monthly Status Report.



CP 1 Contract Management Raw Data: Contingency Value

CP 1 – Contingency (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Contract Balance Remaining	698.2	669.2	664.6	653.0	648.0	644.0	637.5	630.2	630.0	623.4	624.6	626.1	635.7
Contingency	207.0	207.0	237.3	237.3	237.3	237.3	237.3	237.3	237.3	237.3	237.3	237.3	237.3
Change Orders (from contingency)	165.9	11.0	16.7	0.3	6.9	0.0	0.7	-1.0	17.1	0.8	0.0	2.8	17.8
Contingency Balance Remaining	41.1	30.0	43.6	43.3	36.4	36.4	35.7	36.7	19.6	18.8	33.9	31.1	13.3
Contingency %	5.9%	4.5%	6.6%	6.6%	5.6%	5.7%	5.6%	5.8%	3.1%	3.0%	5.4%	5.0%	2.1%

Note:

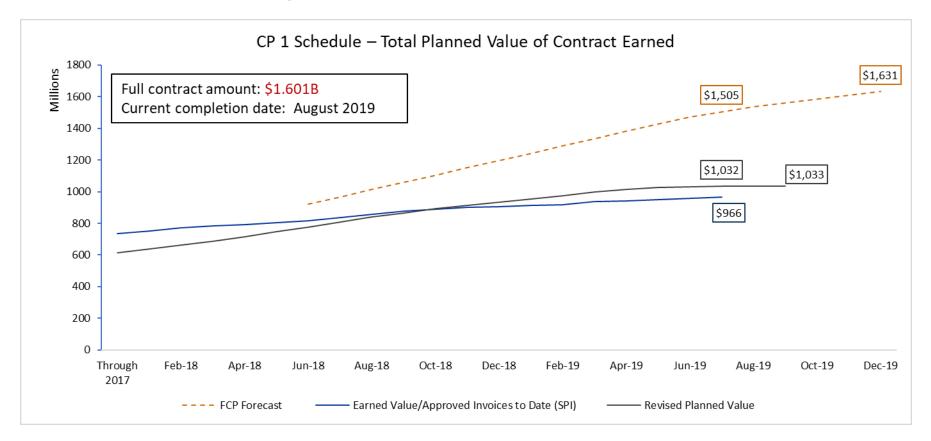
Source:

July 31, 2019 CP 1 Monthly Status Report.



^{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).

CP 1 Contract Management – Schedule Performance Index



Notes:

- 1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
- 2. The Planned Value line shown above is shown for historical reference. The Revised Planned Value line shown is from the accepted mid-point Planned Value curve from the current approved baseline schedule.

Sources:

FCP Forecast: Funding Contribution Plan, September 2018.
Earned Value/Approved Invoices to Date: July 31, 2019 CP1 Performance Metric Report.
FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP 1 Contract Management Raw Data: Schedule Performance Index

FY2018-19 CP 1 - Schedule (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
FCP Forecast Value	920.8	1,012.0	1,059.0	1,105.0	1,150.0	1,196.0	1,242.0	1,288.0	1,334.0	1,380.0	1,426.0	1,472.0	1,505.0
Earned Value	581.4	602.0	607.0	612.0	617.0	619.0	621.1	622.9	625.8	628.9	631.4	635.0	637.8
Invoiced to Date See Note 1	816.0	856.0	977.3	889.2	901.0	905.0	912.3	918.6	935.9	943.3	951.1	957.4	965.5
Planned Value See Note 2	777.3	840.6	864.4	892.6	914.3	932.9	953.0	974.0	996.0	1,015.0	1,027.0	1,032.3	1,032.4
Schedule Performance Index	75.0%	72.0%	71.0%	69.0%	68.0%	67.0%	68.0%	64.0%	63.0%	62.0%	61.0%	62.0%	62.0%

Notes

Sources:

FCP Forecast: Funding Contribution Plan, September 2018. EV: July 31, 2019 CP 1 Performance Metric Report.



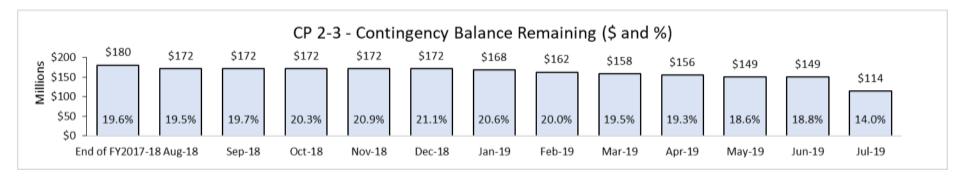
^{1.} The first value shown is EV associated with only the scope included in the revised approved baseline. The second value is the Earned Value taken from Performance Metric Reports and associated with the current contract total.

^{2.} The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule.

CP 2-3 Contract Management – Contingency Value



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



Notes:

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

Source:

July 31, 2019 CP 2-3 Monthly Status Report.



CP 2-3 Contract Management Raw Data: Contingency Value

CP 2-3 – Contingency (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Contract Balance Remaining	921.4	881.5	874.2	847.9	820.2	815.5	812.2	811.6	807.7	806.7	804.0	794.5	812.5
Contingency	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2	261.2
Change Orders (from contingency)	80.9	0.0	0.1	0.1	0.0	0.0	4.2	5.0	4.7	2.2	6.1	0.0	35.6
Contingency Balance Remaining	180.3	172.0	171.9	171.7	171.7	171.7	167.5	162.5	157.8	155.6	149.5	149.5	113.9
Contingency %	19.6%	19.5%	19.7%	20.3%	20.9%	21.1%	20.6%	20.0%	19.5%	19.3%	18.6%	18.8%	14.0%

Note:

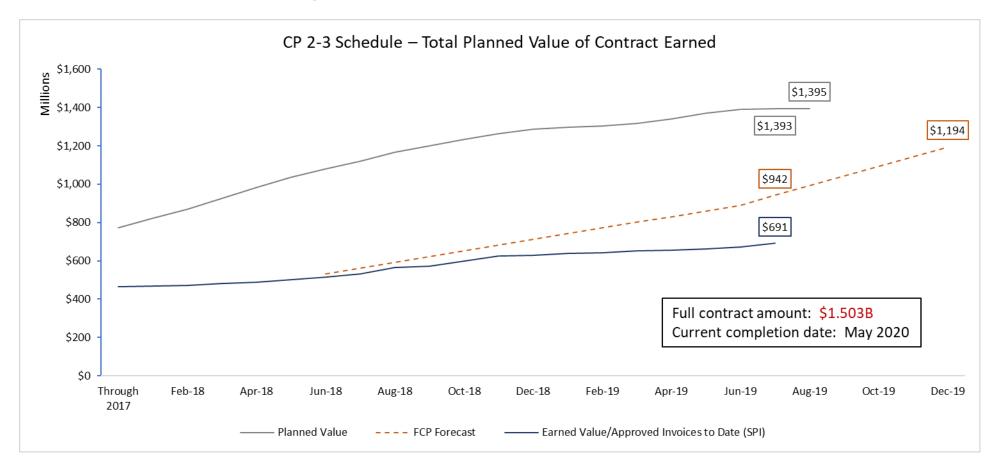
- 1. Contract Balance Remaining is the sum of the previous month's Contract Balance Remaining less the monthly approved invoice amount plus change orders (from contingency).
- 2. The executed positive and negative change orders for the period result in a net decrease in the current contract amount.

Source:

July 31, 2019 CP 2-3 Monthly Status Report.



CP 2-3 Contract Management – Schedule Performance Index



Notes:

- 1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
- 2. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule.
- 3. Revised planned values are being developed to align with the revised contract amount and completion date.

Sources:

FCP Forecast: Funding Contribution Plan, September 2018.
Earned Value/Approved Invoices to Date: July 31, 2019 CP 2-3 Performance Metric Report.
FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP 2-3 Contract Management Raw Data: Schedule Performance Index

FY2018-19 CP 2-3 - Schedule (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
FCP Forecast Value	531.3	591.2	621.1	651.0	681.0	710.9	741.0	770.8	800.8	830.7	860.7	890.6	942.0
Earned Value / Invoiced to Date See Note 1	515.3	563.5	570.9	597.3	625.0	629.6	637.3	642.9	651.5	654.7	663.4	672.9	690.6
Planned Value See Note 2	1,079.0	1,166.0	1,199.0	1,234.0	1,263.0	1,286.0	1,295.0	1,303.0	1,318.0	1,339.0	1,371.0	1,390.1	1,393.3
Schedule Performance Index	48.0%	48.0%	48.0%	48.0%	49.0%	49.0%	49.0%	49.0%	49.0%	49.0%	48.0%	48.4%	49.6%

Notes

- 1. This is the Earned Value taken from Performance Metric Reports.
- 2. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule.
- 3. Revised planned values are being developed to align with the revised contract amount and completion date.

Sources:

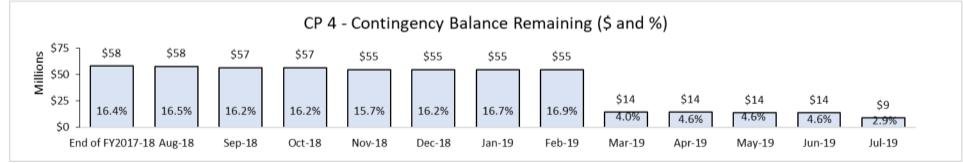
FCP Forecast: Funding Contribution Plan, September 2018. EV: July 31, 2019 CP 2-3 Performance Metric Report.



CP 4 Contract Management – Contingency Value



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



Notes:

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

Source:

July 31, 2019 CP 4 Monthly Status Report.



CP 4 Contract Management Raw Data: Contingency Value

CP 4 - Contingency (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Contract Balance Remaining	354.6	351.8	351.5	350.1	349.7	349.7	328.8	325.3	360.6	312.8	307.5	302.3	297.4
Contingency	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
Change Orders (from contingency)	3.8	0.0	1.2	0.0	1.8	1.8	0.0	0.0	40.7	0.0	0.3	0.0	5.4
Contingency Balance Remaining	58.2	58.0	56.8	56.8	55.0	55.0	55.0	55.0	14.4	14.4	14.1	14.1	8.7
Contingency %	16.4%	16.5%	16.2%	16.2%	15.7%	15.7%	16.7%	16.9%	4.0%	4.6%	4.6%	4.6%	2.9%

Note:

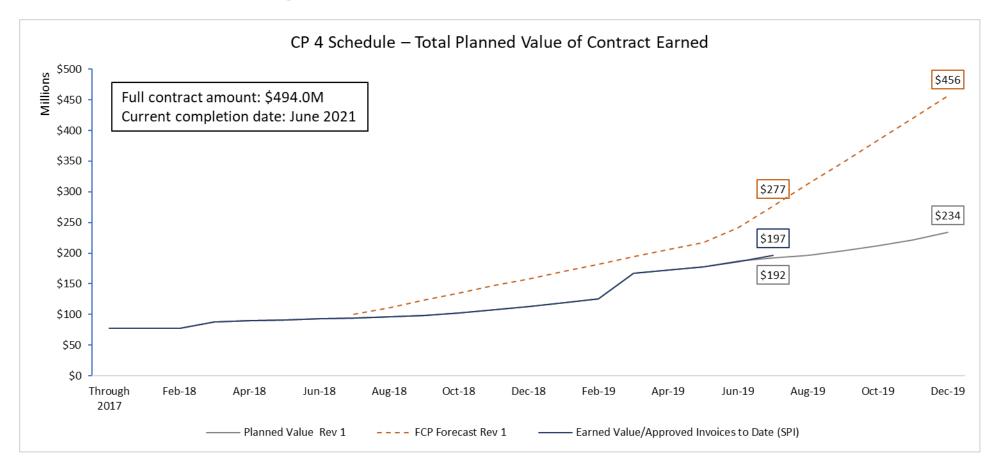
Source:

July 31, 2019 CP 4 Monthly Status Report.



^{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).

CP 4 Contract Management – Schedule Performance Index



Notes:

- 1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
- Total amount earned refers to progress on the schedule, not approved contract invoices.
- 3. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved revised baseline schedule.
- 4. The Revised (Contract) Baseline Schedule was approved in June 2019 and the planned values are based on this.

Sources:

Earned Value/Approved Invoices to Date: July 31, 2019 CP 4 Monthly Status Report. FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP 4 Contract Management Raw Data: Schedule Performance Index

FY2018-19 CP 4 - Schedule (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
FCP Forecast Value See Note 3	99.5	123.1	134.9	146.6	158.4	170.2	182.0	193.7	205.6	217.3	229.1	240.9	277.0
Earned Value / Invoiced to Date See Note 1	94.5	96.2	97.4	100.2	107.8.0	112.1	118.9	122.4	127.8	175.6	181.3	186.3	196.6
Planned Value See Note 2 & 3	301.6	333.2	350.3	371.1	385.8	400.1	412.0	419.4	437.4	441.6	445.5	187.3	192.2
Schedule Performance Index	31%	29%	28%	27%	28%	28%	28%	29%	29%	40%	41%	99%1	100%1

Notes:

- 1. This is the Earned Value taken from Performance Metric Reports and it is an estimate.
- 2. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule.
- 3. The Revised (Contract) Baseline Schedule was approved in June 2019 and the July 2019 planned value and SPI is based on this schedule.

Sources:

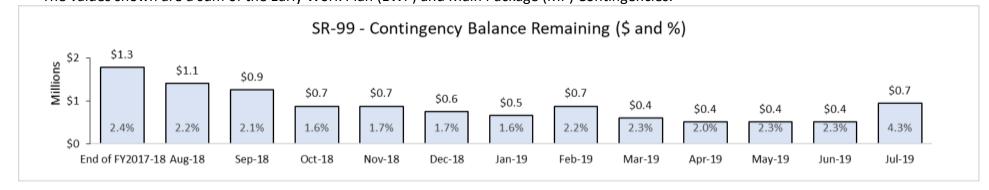
EV: July 31, 2019 CP 4 Performance Metric Report



SR-99 Contract Management – Contingency Value



If remaining contingency against amount of contract / work left falls below 5%, corrective action may be necessary. The values shown are a sum of the Early Work Plan (EWP) and Main Package (MP) Contingencies.



Notes:

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

Source:

July 31, 2019 SR-99 Monthly Status Report.



SR-99 Contract Management Raw Data: Contingency Value

SR-99 - Contingency (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Contract Balance Remaining	55.1	47.7	44.3	41.7	38.3	32.4	31.5	29.5	19.9	19.0	16.9	16.7	16.6
See Note 3	27.0	20.4	17.4	15.3	13.1	10.4	9.7	9.5	9.5	9.5	9.5	9.5	9.5
Contingency See Note 2	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Change Orders (from contingency)	4.6	0.0	0.1	0.3	0.0	0.1	0.1	-0.2	0.2	0.1	0.0	0.0	0.3
Contingency Balance Remaining See Note 2	1.3	1.1	0.9	0.7	0.7	0.6	0.5	0.7	0.5	0.4	0.4	0.4	0.7
Contingency % See Note 2	4.9%	5.1%	2.1%	1.6%	1.7%	1.7%	1.6%	2.2%	2.2%	2.0%	2.3%	2.3%	4.3%

Notes:

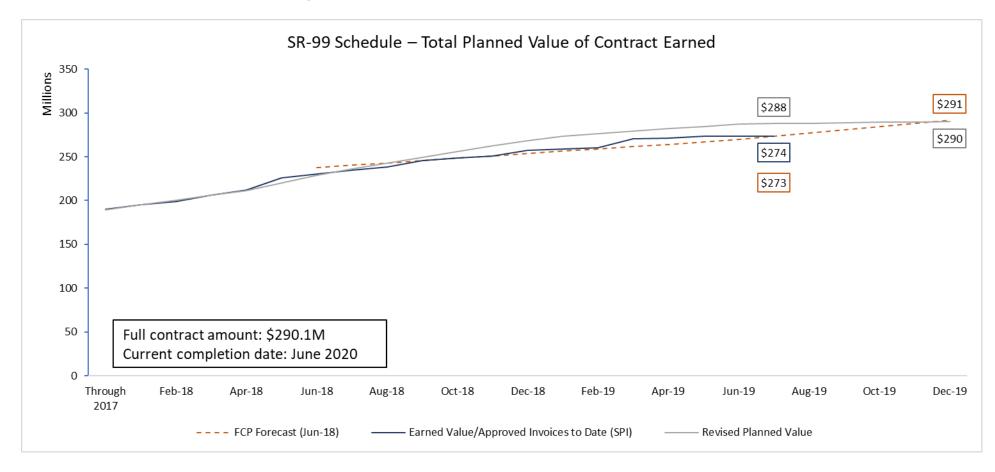
- 1. Contract balance only accounts for invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric.
- 2. The contingency values shown are from the Main Package only.
- 3. The top value of the Contract Balance Remaining is a combination of the EWP and MP values. The bottom value is the Main Package only.

Source:

July 31, 2019 SR-99 Monthly Status Report.



SR-99 Contract Management – Schedule Performance Index



Notes:

- 1. Total amount earned refers to progress on the schedule, not approved contract invoices.
- 2. The Planned Value line shown above is shown for historical reference. The Revised Planned Value line shown is from the current forecast.

Sources:

FCP Forecast: Funding Contribution Plan, September 2018.
Earned Value: July 31, 2019 SR-99 Performance Metric Report.
FCP Forecast will be updated based on quarterly Funding Contribution Plan.



SR-99 Contract Management Raw Data: Schedule Performance Index

FY2018-19 SR-99 - Schedule (\$ in millions)

	End of FY2017-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
FCP Forecast Value	237.8	243.1	245.7	248.4	251.0	253.6	256.0	259.0	261.6	264.3	267.0	269.6	273.3
Earned Value	230.7	238.7	242.1	245.8	250.8	254.6	258.6	260.6	270.2	271.1	273.2	273.4	273.6
Planned Value See Note 2	228.5	242.7	249.3	255.8	262.3	268.3	273.3	276.1	279.1	282.0	284.8	287.6	288.0
Schedule Performance Index	101.0%	98.0%	97.0%	96.0%	95.0%	95.0%	95.0%	94.0%	97.0%	96.0%	96.0%	95.0%	95.0%

Note:

Sources:

FCP Forecast: Funding Contribution Plan, September 2018 EV: July 31, 2019 SR-99 Performance Metric Report



^{1.} SR-99 contract with Caltrans is not a Design-Build contract. Earned value is not necessarily equal to invoice to data/actual cost amount.

Operations Report Metrics Finance/Budget



Finance/Budget Metrics – Context

- For FY2019-20, this report presents:
 - Budgeted expenditures based on the Capital Outlay budget.
 - Expenditures reflect paid invoices and material estimated costs for work performed, not yet paid.
 - Forecasts will shift periodically and align with FY2019-20 forecast from the F&A Capital Outlay Report.
- All data shown is at the end of each month:
 - There is a one-month lag to produce the F&A Capital Outlay Report.
 - For example, the September 2019 F&A Capital Outlay Report includes financial data through July 31, 2019.



As of July 31, 2019, the Authority has spent 2.2% of FY2019-20 Budget.

FY2019-20 Expenditures to Date (\$ billions)
(Data Through July 31, 2019)

Total Appropriation ^{3,4}		FY2019-20) Budget ^{2,9}	FY Expenditu	res to Date ^{5,9}	FY Expenditures % of Budget ⁹		
Jun-19	Jul-19	Jun-19	Jul-19	Jun-19	Jul-19	Jun-19	Jul-19	
19.286	19.286	1.787	2.255	0.999	0.049	55.9%	2.2%	

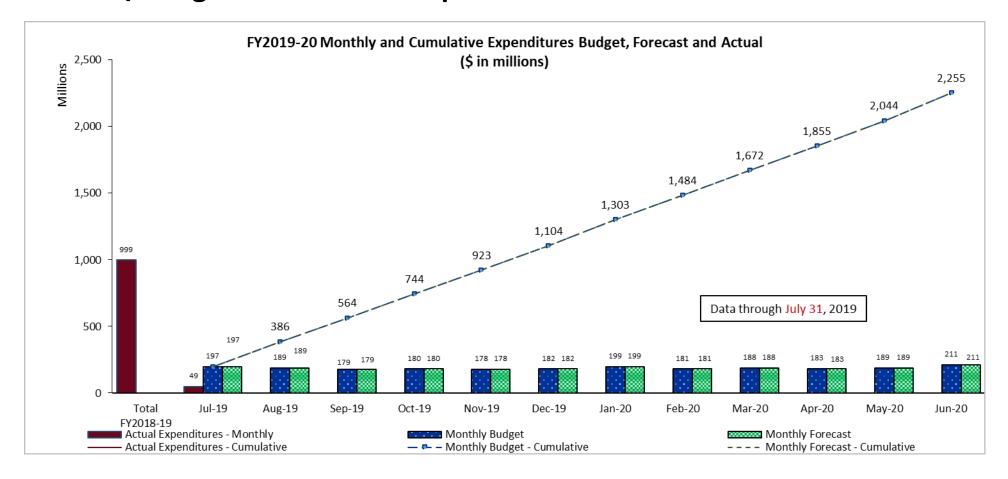
Total Expenditures to Date (\$ billions) (Data Through July 31, 2019)

		TOTAL		Planning	Construction ²			
ltem	Budget ⁷	Expenditures to Date ⁵	Budget	Expenditures to Date ⁵	Budget	Expenditures to Date ⁵		
ARRA Grant ⁸	2.547	2.547	0.487	0.487	2.060	2.060		
FY10 Grant	0.929	0	0	0	0.929	0		
Brownfields	0.001	0	0.001	0	0	0		
PROP 1A	3.184	2.194	0.575	0.473	2.609	1.721		
Cap and Trade	7.852	0.642	0.618	0.133	7.235	0.510		
Local Assistance	1.100	0.138	0	0	1.100	0.138		
Total ⁶	15.613	5.522	1.681	1.093	13.932	4.429		

- 1. Source: F&A Capital Outlay Report, September 2019; balance subject to change due to pending approval of federal reimbursements.
- Total Program and FY2019-20 budget supports activities reflected within the 2018 Business Plan and is based on a prioritization of executed contracts necessary for Central Valley development and construction, Silicon Valley to Central Valley segment planning, and Bookend Corridor project construction. In addition, the FY2019-20 budget prioritizes work related to completing the scope within the ARRA and FY10 grants.
- 3. The Authority's appropriation totals will increase with the proceeds received from future Cap and Trade auctions, under Health and Safety Code 39719(b)(2).
- 4. Cap and Trade Total Appropriation of \$11.448B (\$678M Project Development and \$10.770B Construction) reflects a one-time FY2014-15 Budget Act appropriation of \$649M, actual auction proceeds received to date of \$2.175B, and 25% of Cap and Trade auction proceeds dedicated to the Authority through continuous appropriation (SB-862) through December 2030 (AB-398), estimated at \$750M per year (\$8.624B). The Appropriation will be updated periodically based on actual Cap and Trade auction proceeds as required by Chapter 135, Health and Safety Code, Statutes 2017 (AB-398, Garcia).
- 5. Expenditures reflect paid invoices, invoices received and processed but not yet paid, and material estimated costs for work performed, not yet paid.
- 6. Numbers may not add due to rounding.
- 7. The Total Program budget remains \$15.613B.
- 8. ARRA Grant expenditures to date reflect \$5.9M in credits/refunds.
- 9. Budget and Expenditures or Jun-19 represent year-end totals for the prior fiscal year (FY2018-19).



Finance/Budget - FY2019-20 Expenditures



Notes:

- 1. Total Program and FY2019-20 budget supports activities reflected within the 2018 Business Plan and is based on a prioritization of executed contracts necessary for Central Valley development and construction, Silicon Valley to Central Valley segment planning, and Bookend Corridor project construction. In addition, the FY2019-20 budget prioritizes work related to completing the scope within the ARRA and FY10 grants.
- 2. The Authority's appropriation totals will increase with the proceeds received from future Cap and Trade auctions, under Health and Safety Code 39719(b)(2).
- 3. Expenditures reflect paid invoices, invoices received and processed but not yet paid, and material estimated costs for work performed, not yet paid.

Source:

F&A Capital Outlay Reports (August 2019 - September 2019)



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

FY2018-19 Raw Data

	July 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019
Total FY Budget	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B	\$1.8B
FY Expenditures to Date	\$89.5M	\$158.4M	\$233.2M	\$322.7M	\$398.5M	\$457.7M	\$510.2M	\$562.2M	\$655.5M	\$759.8M	\$814.2M	\$998.8M
Monthly Expenditures	\$89.5M	\$68.7M	\$75.0M	\$89.5M	\$75.8M	\$59.2M	\$52.5M	\$52.0M	\$93.3M	\$104.2M	\$54.5M	\$184.6M
Total FY Forecast	\$1.8B	\$1.8B	\$1.5B	\$1.5B	\$1.5B	\$1.4B	\$1.4B	\$1.5B	\$1.1B	\$1.1B	\$958.2M	\$998.8M

FY2019-20 Raw Data

	July 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020
Total FY Budget	\$2.3B											
FY Expenditures to Date	\$48.8M											
Monthly Expenditures	\$48.8M											
Total FY Forecast	\$2.3B											

Notes:

- 1. Total Program and FY2019-20 budget supports activities reflected within the 2018 Business Plan and is based on a prioritization of executed contracts necessary for Central Valley development and construction, Silicon Valley to Central Valley segment planning, and Bookend Corridor project construction. In addition, the FY2019-20 budget prioritizes work related to completing the scope within the ARRA and FY10 grants.
- 2. Expenditures reflect paid invoices, received and processed but not yet paid, and material estimated costs for work performed, not yet paid.
- Numbers may not add due to rounding.

Source:

F&A Capital Outlay Reports (September 2018 – September 2019)



Operations Report Metrics ARRA State Match Schedule

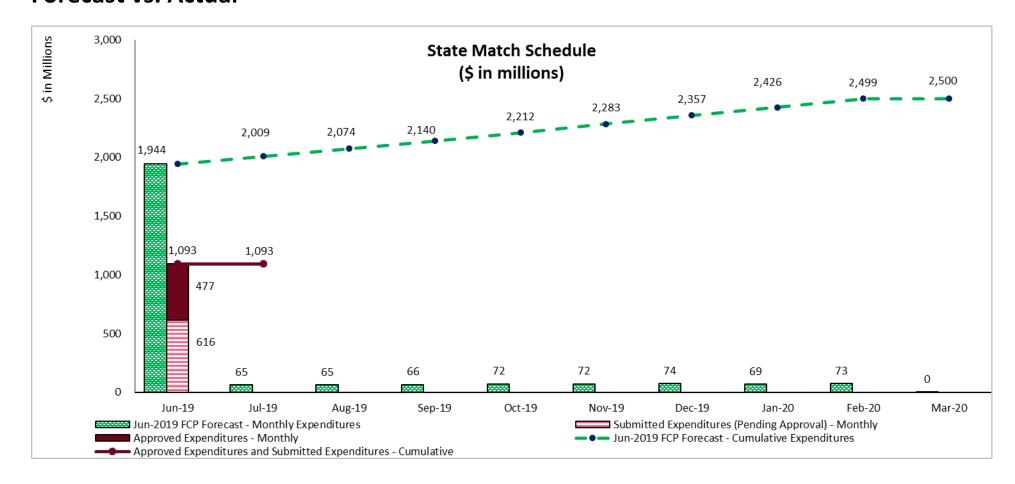


ARRA State Match Schedule – Context

- ARRA State Match is comprised of two expenditure types:
 - Project Development: Environmental Review, Preliminary Engineering Design, Project Administration, and other project development related costs.
 - Construction: Program Management, Project Construction Management, Right-of-Way, Design-Build Contracts, Third Party Agreements, Project Reserves, and Contingencies.
- The ARRA State Match schedule is based upon the Funding Contribution Plan, which includes:
 - Expenditures reflecting amounts paid and approved by the Federal Railroad Administration (FRA) as eligible ARRA Grant Match expenditures and expenditures pending approval.
 - Forecast expenditures.



ARRA State Match Expenditure by Month Forecast vs. Actual



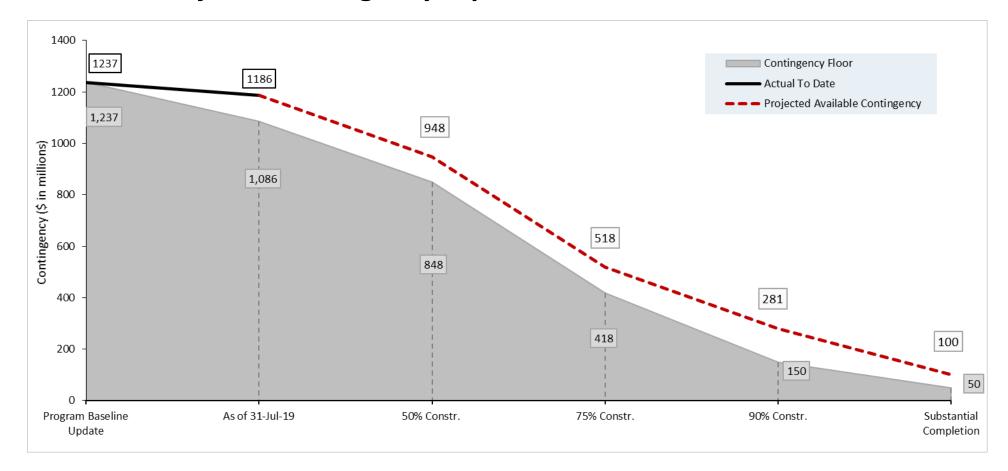
- 1. Data as of July 31, 2019
- 2. Total ARRA State Match expenditures approved by Federal Railroad Administration (FRA) are \$477M or 19.1% of the \$2.500B State Match obligation.
- 3. Total ARRA State Match expenditures submitted and pending FRA approval are \$615.9M.
- 4. The June 2019 FCP has been submitted to the FRA and is under review.
- 5. Numbers may not add due to rounding.
- Forecasts reflected in the FCP are reviewed throughout the fiscal year and are updated quarterly.



Operations Report Metrics Risk



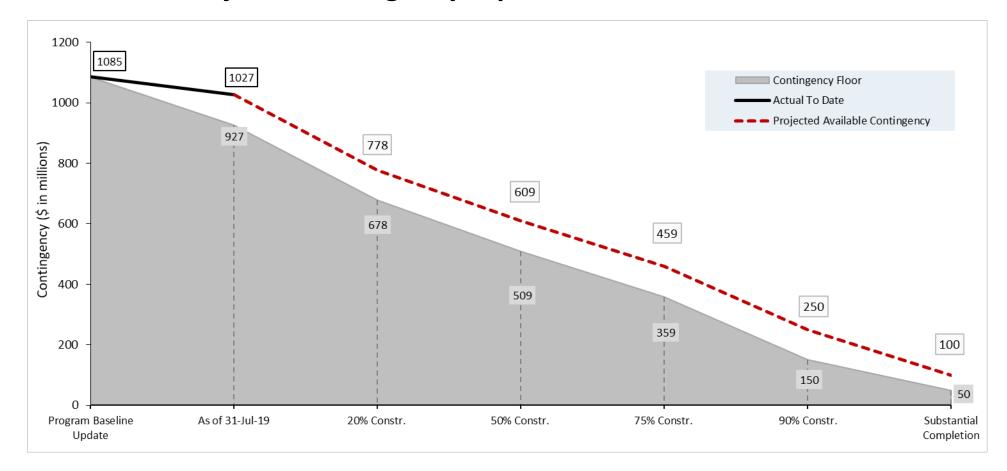
Risk CP 1 Project - Contingency report



- 1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project.
- 2. Contract through July 31, 2019.



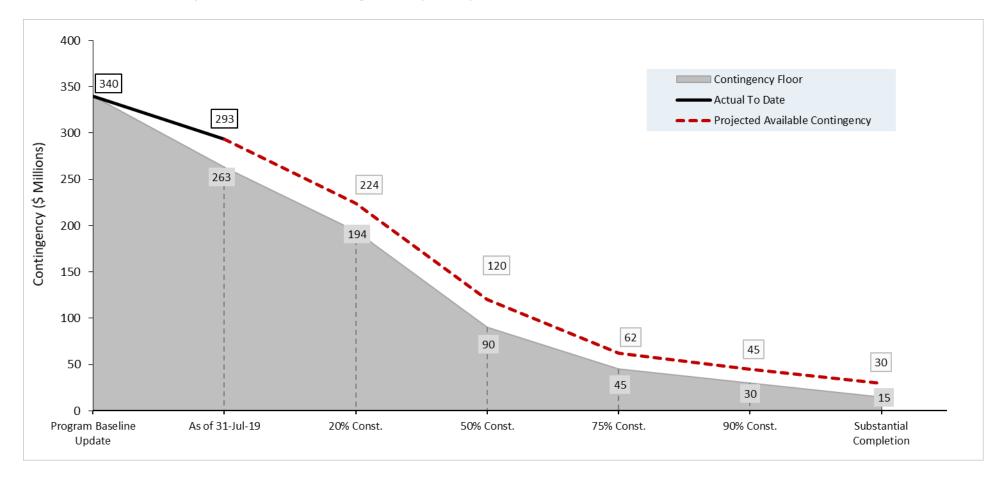
Risk CP 2-3 Project - Contingency report



- 1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 2-3 Project.
- 2. Contract through July 31, 2019.



Risk CP 4 Project - Contingency report



- 1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 4 Project.
- 2. Contract through July 31, 2019.

