



COLORADO

Department of Transportation

Statewide Bridge Enterprise



Bridge Enterprise Q1 FY2019 Quarterly Report

November 18, 2018

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Bridge Enterprise Q1 FY2019 Quarterly Report

Introduction

This report is the 30th Quarterly Report (Report) published in support of the Colorado Bridge Enterprise (BE or “Program”). This Report outlines progress and accomplishments associated with the Program for work completed during July, August, and September of 2018; which coincides with the first quarter of CDOT’s 2019 fiscal year (Q1 FY2019). Detailed information regarding the FASTER (Funding Advancement for Surface Transportation and Economic Recovery) legislation, program development activities, bond program, previous significant milestones and achievements can be found in the previous Program Annual Reports and Quarterly Reports viewable on the Colorado Department of Transportation (CDOT) website at www.coloradodot.info/programs/BridgeEnterprise.

The following is an itemization of significant Q1 FY2019 achievements, some of which are discussed in further detail later in the report:

- Drafted and finalized the 29th Colorado Bridge Enterprise Quarterly Report for Q4 FY2018.
- Completed monthly updates to the overall Program Schedule for work completed in July, August, and September of 2018.
- Approved the 1st Budget Supplement of FY2019 to establish funding for:
 - Construction phase for I-25 SB over CO RD 640 and Butte Creek and I-25 NB over CO 103 and Butte Creek (N-17-BN/S)
 - Feasibility study for I-70 over Forest Service Road (F-13-S_MINOR)
- Approved the 2nd Budget Supplement of FY2019 to establish funding for the design and environmental phases for I-70 over Clear Creek (F-15-BL) and the construction phase for SH 71 over Arkansas River (L-22-L).
- Approved the 3rd Budget Supplement of FY2019 to increase the current right-of-way and utility phase budgets for I-25 over County Road 48 (B-16-EU).
- Recognition of new Bridge Enterprise Chair, Vice Chair and Secretary.
- Updated program status for various program metrics including Major Achievements, Total Program Financial Performance, Status of FASTER Eligible Structures and Status of 2010A Bond Structures.
- Continued efforts to reduce excess budget on projects with completed phases and reallocated the budget savings to other BE projects.
- Performed maintenance on the program baseline risk-based probabilistic cost estimate.
- Evaluated 117 newly eligible structures and updated the BE Prioritization Plan.
- BE staff are working in conjunction with CDOT Staff Bridge Branch to develop an evaluation model to identify candidate projects for the FY18 FHWA Competitive Highway Bridge Program.

Program Highlights

Project Progress Update

Since the BE milestone payment schedule for Central 70 was released in September 2017, BE has been aggressively programming available resources and advancing shelf projects to construction once all required clearances are obtained (e.g. ROW, RR, environmental). Eight shelf projects have been funded for construction since this information became available. During Q1 FY2019, the following progress was made toward completing the shelf program:

- Additional funding was approved to increase the current ROW and utility phases for I-25 over County Road 48 (B-16-EU), and to progress the project toward advertisement.
- The construction phase for SH 71 over Arkansas River (L-22-L) was initiated.



Image 1. Existing SH 71 over Arkansas River (L-22-L)



Image 2. Existing I-25 over County Road 48 (B-16-EU)

Preconstruction funding was approved for the FASTER Eligible component of the I-70 Floyd Hill to Veterans Memorial Tunnels Improvement project. This project is intended to address one of the most congested locations on the westbound I-70 mountain corridor.

Construction funding was approved to address two structures, I-25 SB over CO RD 640 and Butte Creek and I-25 NB over CO 103 and Butte Creek (N-17-BN/S). The substructures of both existing structures have “poor” rating.

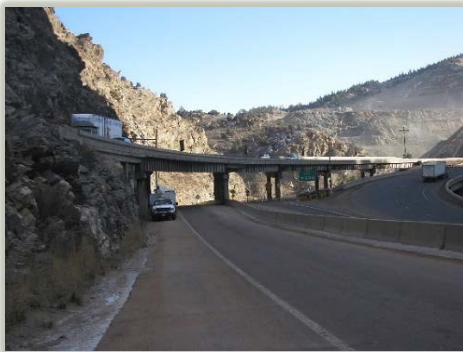


Image 3. Existing I-70 over Clear Creek (F-15-BL)



Image 4. Existing I-25 SB over CO RD 640 and Butte Creek and I-25 NB over CO 103 and Butte Creek (N-17-BN/S)

BE Eligible Structure Population

As of the end of June 2018, there were a total of 217 structures considered eligible to receive FASTER funding. Due to refinements to BE eligibility criteria, the structure count increased to a total of 334 in July 2018. The progress status associated with the 217 and 334 is itemized in *Table 1* and *Table 2* respectively.

Table 1. Project Status of FASTER Eligible Structures as of Q4 FY2018

| Project Phase | # of Structures |
|--------------------|-----------------|
| Remaining | 52 |
| In Design | 6 |
| Design Completed | 7 |
| In Construction | 20 |
| Projects Completed | 132 |
| Total | 217 |

Table 2. Project Status of FASTER Eligible Structures as of Q1 FY2019

| Project Phase | # of Structures |
|--------------------|-----------------|
| Remaining | 167 |
| In Design | 9 |
| Design Completed | 2 |
| In Construction | 22 |
| Projects Completed | 134 |
| Total | 334 |

Figure A. Current Status of FASTER Eligible Structures

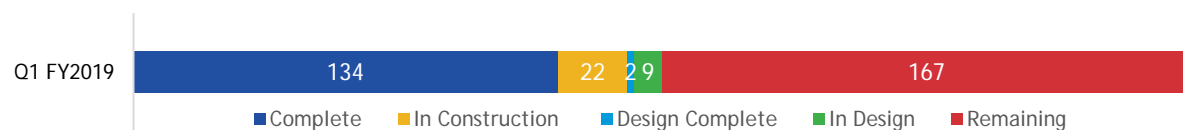
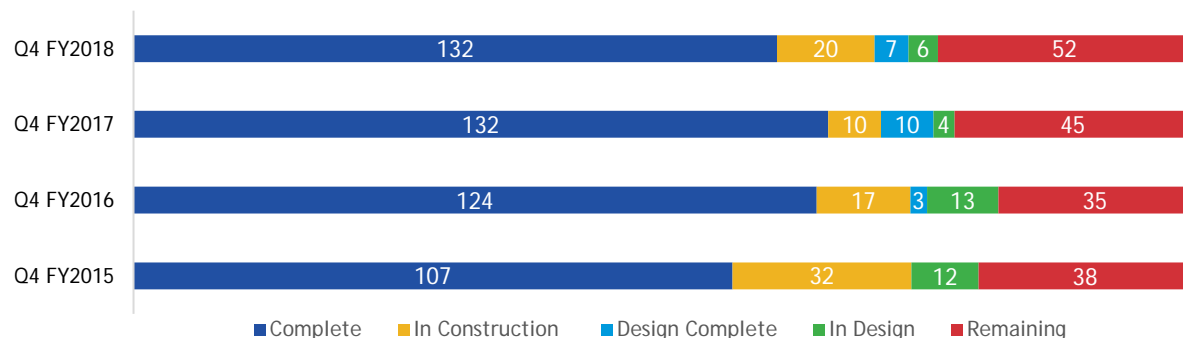


Figure B. Historic Status of FASTER Eligible Structures



Other relevant Q1 FY2019 bridge statistics are as follows:

- Approximately 47% of FASTER eligible structures are now in construction or completed.
- Approximately 3% of FASTER eligible structures are currently in design or design is completed.
- 50% of FASTER eligible structures are remaining.

Completed Projects

Two structures were completed during this period as itemized in *Table 3*.

Table 3. Completed Structures

| Region | Original Structure ID | County | Facility Carried over Featured Intersection |
|--------|-----------------------|--------|---|
| 3 | F-10-L | Eagle | I-70 EB over US 6, RR, Eagle River |
| 3 | G-03-Q | Mesa | I-70 WB over Colorado River Overflow |



Image 5. F-10-L Rehabilitated Deck



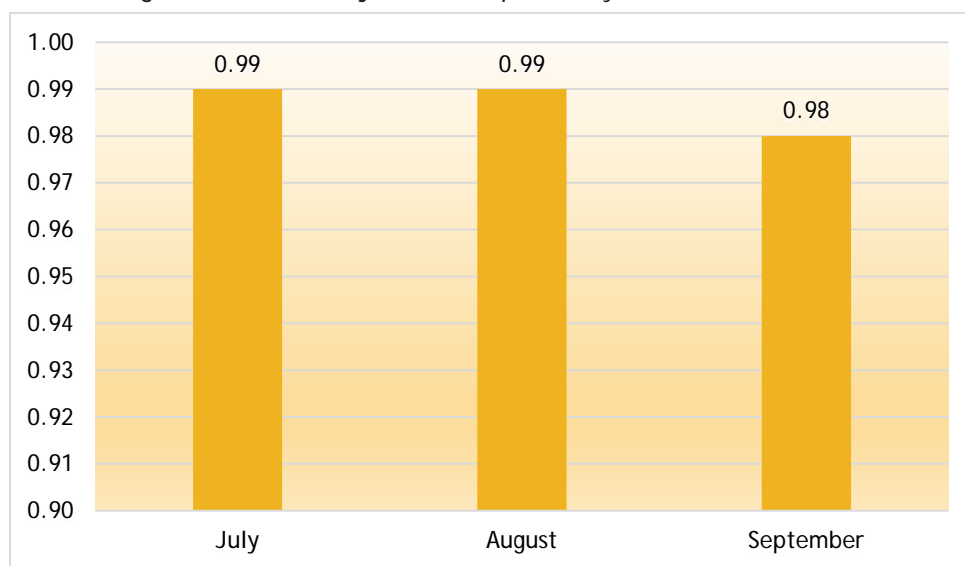
Image 6. G-03-Q Rehabilitation

Program Activities and Accomplishments of Q1 FY2019

Program Schedule Update

The program schedule was updated three times during the period for work completed in July, August, and September of 2018. This includes publishing the monthly updated program bar-chart schedule, cost and schedule database, and list of projects with a Schedule Performance Index (SPI) less than 0.90. This information was consolidated and distributed to the Regional Transportation Directors (RTDs) and their respective Program Engineers. The SPIs reported for each month during the quarter are graphically depicted in *Figure C* below. The Active Project SPI provides a high-level snapshot of the actual performance vs the planned performance of projects in the BE program.

Figure C. Active Projects SPI Reported by Month, for the Period



Central 70 Project Update

The FASTER Eligible portion of the Central 70 project includes approximately 8.5 miles of I-70 between Brighton Blvd. and I-270 in Denver. Six FASTER eligible structures will be addressed by the project, including the Viaduct (I-70 over US6, UPRR and CCD St.). These structures represent approximately 60% of BE's current statewide eligible bridge deck area. Additionally, the Viaduct was identified as one of the 30 worst bridges in the state when the Enterprise was created in 2009, and will be the last of the 30 worst bridges to be addressed.

In Q1 FY2019, BE staff continued coordination with the project team to track project progress and refine BE program models as necessary. BE has incorporated the proposed Second Amendment to the IAA into the cash flow forecast. This amendment adds two new milestones and extends out the schedule with substantial completion now forecast at 9/21/22 rather than 7/16/22. The forecast expenditures did not increase, only the timing of the expenditures. The Central 70 groundbreaking ceremony was held on August 3rd. The project completed several additional significant milestones which are summarized in *Table 4* below.

Image 7: Central 70 Groundbreaking Ceremony

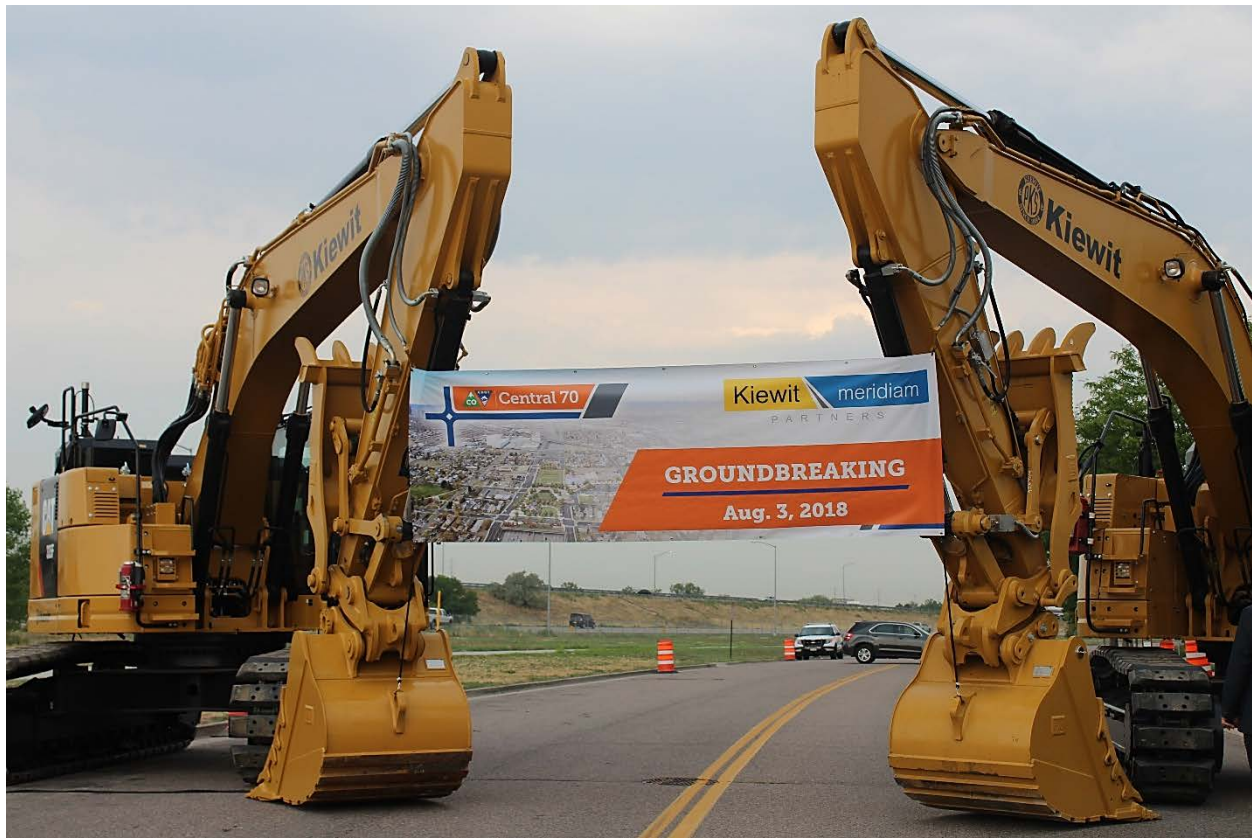


Table 4. Completed Central 70 Project Milestones

| Date | Milestone |
|--------------------|--|
| July 10, 2018 | Notice to Proceed (NTP) 2 issued by the Department - commencement of construction related activities and operations and maintenance (O&M) during construction (excluding snow and ice) |
| July 18, 2018 | NTP3 issued by the Department - commencement of snow and ice O&M activities |
| July 19, 2018 | PUC Approval of UPRR General and Stage 1.1 Construction |
| July 25, 2018 | PUC Application submitted to PUC for UPRR Stage 1.2 Construction |
| July 31, 2018 | Media event to present \$2 million in funding support to Brothers Redevelopment |
| August 3, 2018 | Groundbreaking Ceremony |
| August 10, 2018 | IGA signed with City of Denver providing \$100,000 for fresh food access (ROD commitment) |
| August 15, 2018 | Public Utilities Commission (PUC) Approval of Union Pacific Railroad (UPRR) Stage 1.2 construction |
| August 16, 2018 | Completion of Swansea sound barrier and art wall |
| August 16, 2018 | Began UPRR Phase 1 construction |
| September 6, 2018 | Noise Variance approved by Denver Board of Public Health and Environment |
| September 17, 2018 | Closure of 46th Avenue between Brighton Boulevard and York Street |

Floyd Hill Project Update

In summer 2017, CDOT and the Federal Highway Administration (FHWA) began phase two of studying and planning improvements on westbound I-70 from Floyd Hill to the Veteran's Memorial Tunnel. The FASTER eligible component of this project is the replacement of F-15-BL, which carries westbound traffic on I-70 over Clear Creek and US 6 at the base of Floyd Hill. BE is planning to capitalize of the economy of scale of the larger project to address F-15-BL.

The scope of work and cost of the FASTER eligible portion of the project are largely unknown since refinements to the preferred design alternative are still ongoing. BE staff are currently participating in Floyd Hill Technical Team meetings to ensure that the preferred design alternative will meet BE objectives. Staff is also meeting regularly with the project team to provide guidance on funding eligibility and the timing of future budget supplements. The project is currently scheduled to start construction in summer 2020 (FY21). External funding sources needed to budget completely the project are still being investigated.

FHWA Rural Bridge Grant

The Notice of Funding Opportunity (NOFO) was released on September 5, 2018 for the FY18 FHWA Competitive Highway Bridge Program. BE staff are working in conjunction with CDOT Staff Bridge Branch to develop an evaluation model to identify candidate projects for the grant applications. The model will be refined to recommend projects with the highest probability of award based on the Selection Criteria outlined in the NOFO.

The following key details were provided in the NOFO:

- \$225M to be awarded for a competitive highway bridge program - one time opportunity
- Colorado is one of 25 qualifying states - only state DOTs are eligible to apply
- Funds for highway bridge replacement and rehabilitation projects that demonstrate cost savings by bundling a minimum of two projects into a single contract
- Funding must be obligated by September 30, 2021, expended by September 30, 2026
- Limit of three applications per state

Budge and Encumbrance Balances

Bridge Enterprise staff continues to coordinate with the Region staff to de-budget projects that are substantially complete in accordance with the SB 16-122. *Table 5* shows the encumbrance and budget balances as of September, 2018, by Region, for projects that have been substantially complete for more than six months.

Table 5. Projects Substantially Complete over Six Months Aging Encumbrance and Budget Balances

| Region | Encumbrances (\$) | Budget Balances (\$) | Projects | Phases |
|-------------------------------------|-------------------|----------------------|--------------|-------------|
| 1 | 1,020,333 | 172,650 | 3 | 4 |
| 2 | - | - | 0 | 0 |
| 3 | - | - | 0 | 0 |
| 4 | - | - | 0 | 0 |
| 5 | - | - | 0 | 0 |
| | | | | |
| Total | 1,020,333 | 172,650 | 3 | 4 |
| | | | | |
| % of Total Current Program | 1.8% | 0.0% | 10.3% | 5.8% |
| | | | | |
| Previous Quarter (Q4 FY2018) | 1,506,757 | 432,471 | | |
| Difference | -486,424 | -259,821 | | |

Since June 30, 2018 the budget and encumbrance balances decreased by \$746,245. During this time, two projects were removed from the project count.

Removed/Closed Out:

- Arapahoe/Cherry Creek (F-17-DM)
- SH 90/Dolores River (K-01-C)

Additions:

- None

Financial Information

The following is a program overview of financial statistics as of September 30, 2018.

- The program has multiple funding sources including: proceeds from the Build America Bond program, FASTER bridge dollars which is commonly referred to as the statewide pay-go program (collected yearly revenues from vehicle registrations), Bank of America Loan, and Other Funds which are primarily Federal-aid BR funding.
- From program inception (life-to-date) through September 30, 2018, a total of \$1,315.0M has been budgeted (all funding sources), and Expenditures and Encumbrances are \$933.0M and \$49.1M (all funding sources), respectively. Reference *Table 6* below for details by funding source.
- For comparison purposes, the totals from the previous quarterly report (Q4 FY2018) are also reported in the far-right column.
- All \$307.9M of bond proceeds and interest earnings available have been expended as of June 30, 2016.

Table 6. Program Financial Statistics as of September 30, 2018 (\$ in Millions)

| | Build America Bonds 2010 A Proceeds | FASTER Bridge Loan | Bank of America Loan | Other Funds | Total Q1 FY2019 | Total Q4 FY2018 |
|--------------|---|--------------------------|----------------------------|----------------|--------------------|--------------------|
| Budget | \$307.9 | \$902.9 | \$40.7 | \$63.5 | \$1,315.0 | \$1,294.3 |
| Expenditures | \$307.9 | \$520.9 | \$40.7 | \$63.5 | \$933.0 | \$917.6 |
| Encumbrances | \$0.0 | \$49.1 | \$0.0 | \$0.0 | \$49.1 | \$40.8 |

- The Statewide Bridge Enterprise program currently consists of 137 funding-eligible structures; including 89 structures budgeted with bond funds. The structure count has increased due to the addition of two new structures (H-13-G and K-18-U). The current programmed amount for these 137 structures is approximately \$1,423.3M. *Table 7* below provides an itemization of current funding sources for the Bridge Enterprise program.

Table 7. Current Allocation Plan (\$ in Millions)

| Build America Bonds | FASTER Bridge | Other Funds | Bond Interest | Total |
|------------------------|---------------|-------------|---------------|-----------|
| \$298.1 | \$1,011.2 | \$104.2 | \$9.8 | \$1,423.3 |

The Program Allocation Plan¹ tracks BE projects programmed since the beginning of the Bond Program by funding source, pre-construction activity and construction activity. In addition, the Program Allocation Plan includes projects that have yet to be budgeted, primarily FY2019, and also includes budget adjustments that have not been posted to the accounting system as of September 30, 2018. Projects that were budgeted prior to the Bond Program are shown in summary at the bottom of the third page as Pre-Bond Projects. The program life-to-date (LTD) total liabilities for the BE program are \$1,423.3M, a slight decrease of \$1.7M from the \$1,425.0M total liability reported on June 30, 2018. This is primarily the result of releasing budget savings and more refined estimates.

The Four-Year Quarterly Cash Flow Projection (*Figure D*) depicts all current available BE cash balances, forecast revenues, and forecast expenditures for currently programmed projects. BE liabilities and the timing of milestone payments for the Central 70 project are now known due to Financial Close on December 21, 2017. These changes have been incorporated in the cash flow. This forecast model also considers Resolution BE 15-8-2 which sets parameters for the use of BE funds during the construction

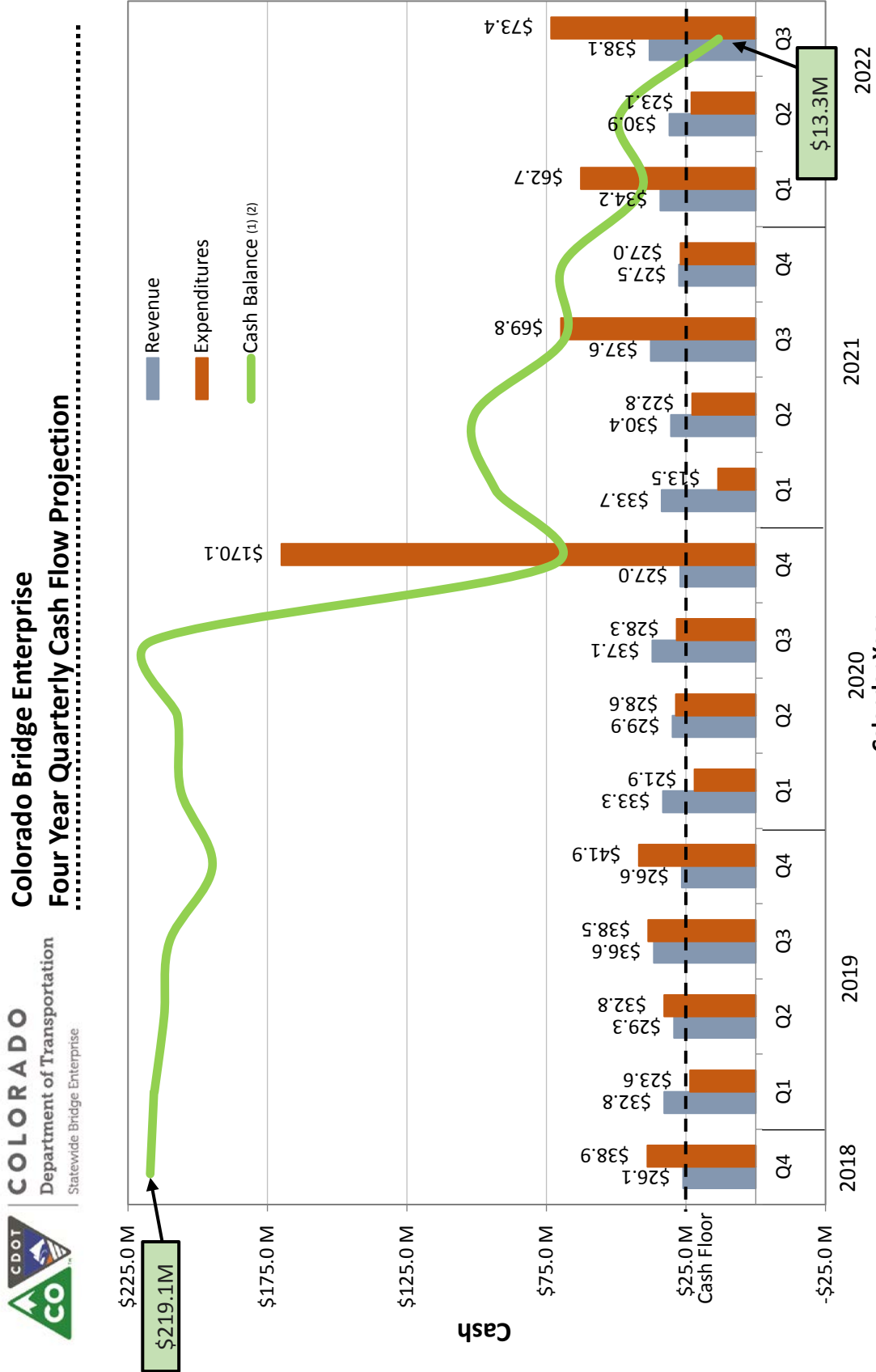
¹ Reference Appendix A for the Current Allocation Plan

period of the Central 70 project. In addition, the forecast contains the Capital Performance Payment (Availability) which grows at 2% per year.

Bridge Enterprise has forecast the cash balance to decrease by \$205.8M, mostly due to the Central 70 project during the period of the Four-Year Cash Flow (October 2018 through September 2022), down to \$13.3M. In accordance with the Second Amendment to the IAA, the final milestone and substantial completion payments are now both scheduled in September of 2022. Following substantial completion, the cash balance is expected to increase during the remainder of FY2023. In accordance with Resolution BE-17-11-1, the contingency for the BE share of potential Supervening Events has been included in the cash drawdown forecast.

BE will continue to monitor and update the model and incorporate the most current revenue, cash and drawdown forecasts. If necessary, BE will manage project Advertisement Dates in FY2022 in order to maintain a positive cash balance.

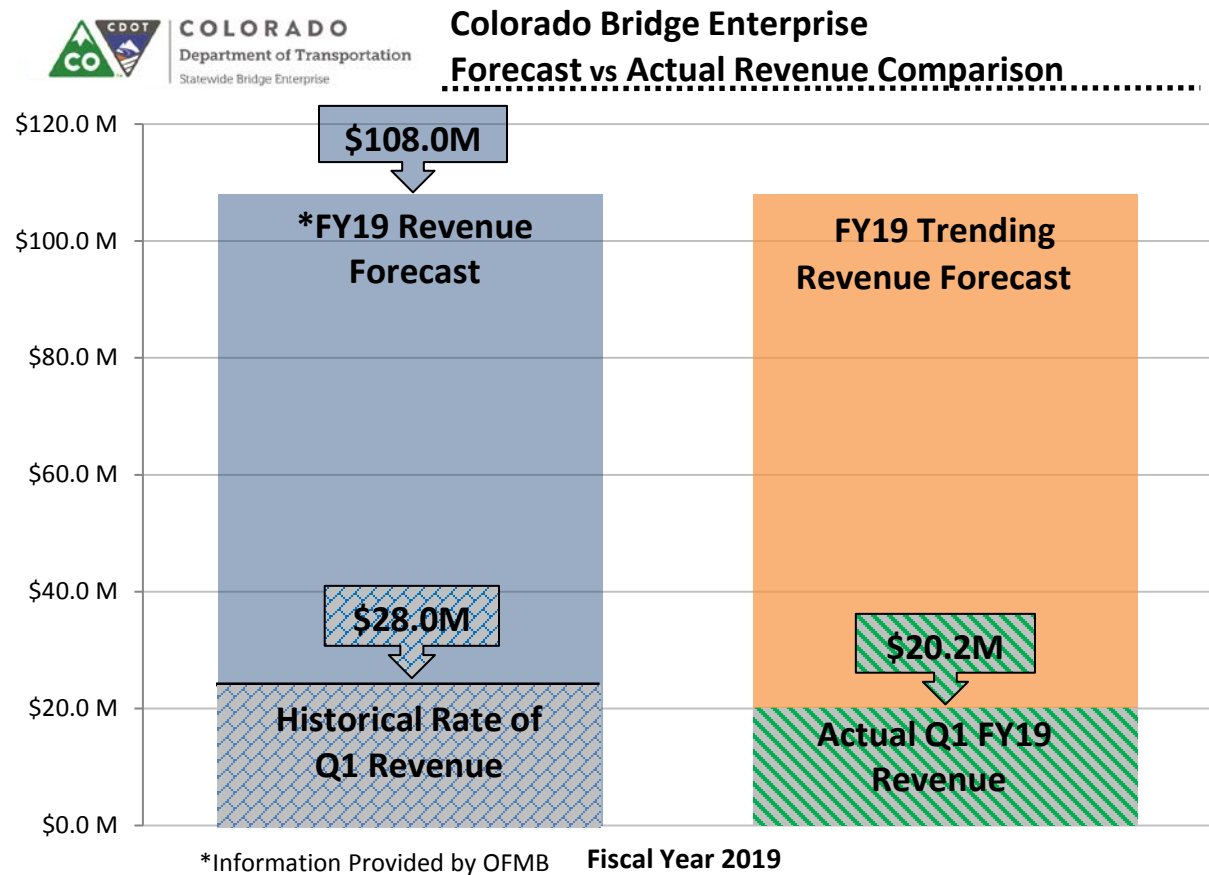
Figure D. Four Year Quarterly Cash Flow Projection



- (1) Cash balance line includes the use of \$172.3M of preconstruction activities for the Central 70.
- (2) Estimated impact to cash - assuming cash contribution to Central 70 project through Q1 2022, for milestone and availability payments from the most recent financial model.
- (3) Forecast negative cash will be refined as data and forecasts in the upcoming years are updated and will be mitigated by managing AD dates.

Actual Q1 FY2019 FASTER revenues were \$20.2M, which is \$7.8M below the historical rate of collection when applied to the revenue forecast of \$108.0M. CDOT Accounting is reviewing and believes it is a timing issue with the Colorado Department of Revenue remitting the revenue to BE, therefore actual revenues for FY2019 are not forecast to fall short of the budgeted amount. BE will follow up to see if this trend continues and will report back to the Board of Directors. This information is shown below in Figure E.

Figure E. Forecast vs Actual FASTER Revenue Comparison



The Total Program Financial Performance graph (*Figure F*) depicts actual expenditures and encumbrances against projected expenditures, inception to date (ITD). Projected expenditures are forecast at \$957M on September 30, 2018, an increase of \$3M since June 30, 2018. Actual LTD expenditures as of September 30, 2018 are \$933M as compared to \$918M on June 30, 2018, an increase of \$15M or 1.6%. The current encumbrance balance is \$49M compared to \$41M on June 30, 2018, an increase of \$8M or 19.5%.

Figure F. Total Program Financial Performance

