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COLORADO

Department of Transportation

Office of the Chief Engineer

4201 E. Arkansas Ave., Room 262
Denver, CO 80222

DATE: November 19, 2014
TO: Transportation Commission
FROM: Josh Laipply, Chief Engineer
Scott Richrath, Chief Financial Officer
Richard Zamora, Office of Program Management Director
SUBJECT: Program Management Workshop

Purpose

The Program Management Workshop provides the Transportation Commission with an update on the delivery of programs and significant projects. This month there is a focus on the RAMP Partnership and Operations projects as well as a first look at a new measure for total program reporting based on construction expenditures.

Action

The program management items presented here are for Transportation Commission information and comment. As we continue to develop program management reports, input from the commission on which types of reports clearly present program status is valuable.

Several RAMP Partnership and Operations projects are included in the Budget Supplement this month. Supporting information is attached to this memorandum for the Transportation Commission to provide feedback on the requests during this workshop.

Details

Program Management Update

A primary performance metric for the integration of Cash Management and Program Management is the cash balance. Included in the Powerpoint is a diagram reporting actual cash balances for all CDOT funds—including Local Agency, Flood, etc.—against our path to target that has been set. New this month, a “delta” between the Target and Actual cash balance is provided.

The Cash balance is approximately \$1,291.3 million, \$115.5 million above the target. The Cash plus Cash Equivalents balance is approximately \$1,650.9 million, \$81.2 million below the target. The lower Cash plus Cash Equivalents balance is driven primarily from increased advanced construction conversions and the FHWA continuous resolution that currently reduces obligation limits.



We are exploring use of a new metric to monitor program delivery at the statewide level. This metric has been coined as the expenditure performance index (XPI). In summary, an expenditure curve is created based on historical spending trends for a desired program delivery goal. At any given point in time the XPI can be calculated by dividing actual expenditures by the expenditure curve value for the desired program size. An XPI equal to or greater than one indicates we are on track to deliver the desired program size.

We would like Transportation Commission feedback on future use of this metric as opposed to schedule performance index at the statewide and funding category levels.

This month's presentation includes a focus on the RAMP Partnership and Operations and Safety programs. The Transportation Commission receives updates monthly for all programs and receives a rotating focus into individual programs. These updates are included in the attached PowerPoint presentation.

RAMP Local Agency and CDOT Administered Projects that require Intergovernmental Agreements (IGAs) are shown in the PowerPoint presentation. As of October 29th, 33 RAMP IGAs are fully executed and 8 more are in the signature process. Staff anticipates receiving several other signed IGA contracts back to HQ for final execution prior to the end of the year. Fourteen IGAs are still being prepared for signature.

An overview of the Safety program, in particular projects with FASTER Safety and HSIP (Highway Safety Improvement Program) funds is included in this month's presentation. It is important to note that some of these projects may have additional funding sources, such as RAMP and Asset Management, and as such may also be tracked in other programs.

Plan to Improve Project Award Process

To date in calendar year 2014, there have been 31 Rejections at the Table (RATs) which accounted for \$73.5 M of the construction program. In the near-term, CDOT will work with region staff to develop the best strategy for advertising and re-advertising projects. This will include advertising projects sooner, publishing a known list of project Ad dates, greater interaction with region staff, and more thorough estimates to identify potential high risk items as well as obtaining independent cost estimates for select projects. With some projects being re-advertised immediately after rejection, and sometimes more than once, guidelines will be established to determine how to proceed when there is a RAT. This may include advertisement of projects online and by email to major players in surrounding states to attract more potential bidders. The Office of Program Management will also help coordinate and influence project advertisement schedules. In addition the Office of Program Management is working with the Regions to obtain independent cost estimates for several of the RAMP Partnership and Operations projects.



No other state has a statute in place like Colorado for dealing with RAT's. In the long term, CDOT is considering seeking repeal of HB 99-1031 through the legislative process. If HB 99-1031 is repealed, the CDOT Bid Rules and the Manual on Letting and Award will be revised to include more reviews after bid openings for cases where there are fewer than 3 bidders on a project. A decision to award or reject the contractor bid would require Chief Engineer approval as well as sign-off by members of an Award Committee and decisions documented in the Award Committee Minutes.

Next Steps

CDOT staff will continue to make regular Program Management updates through workshops on the Commission agenda. These workshops will be jointly developed by the Chief Financial Officer and the Chief Engineer since the agency is adopting project delivery and financing methods that integrate cash management and program management.





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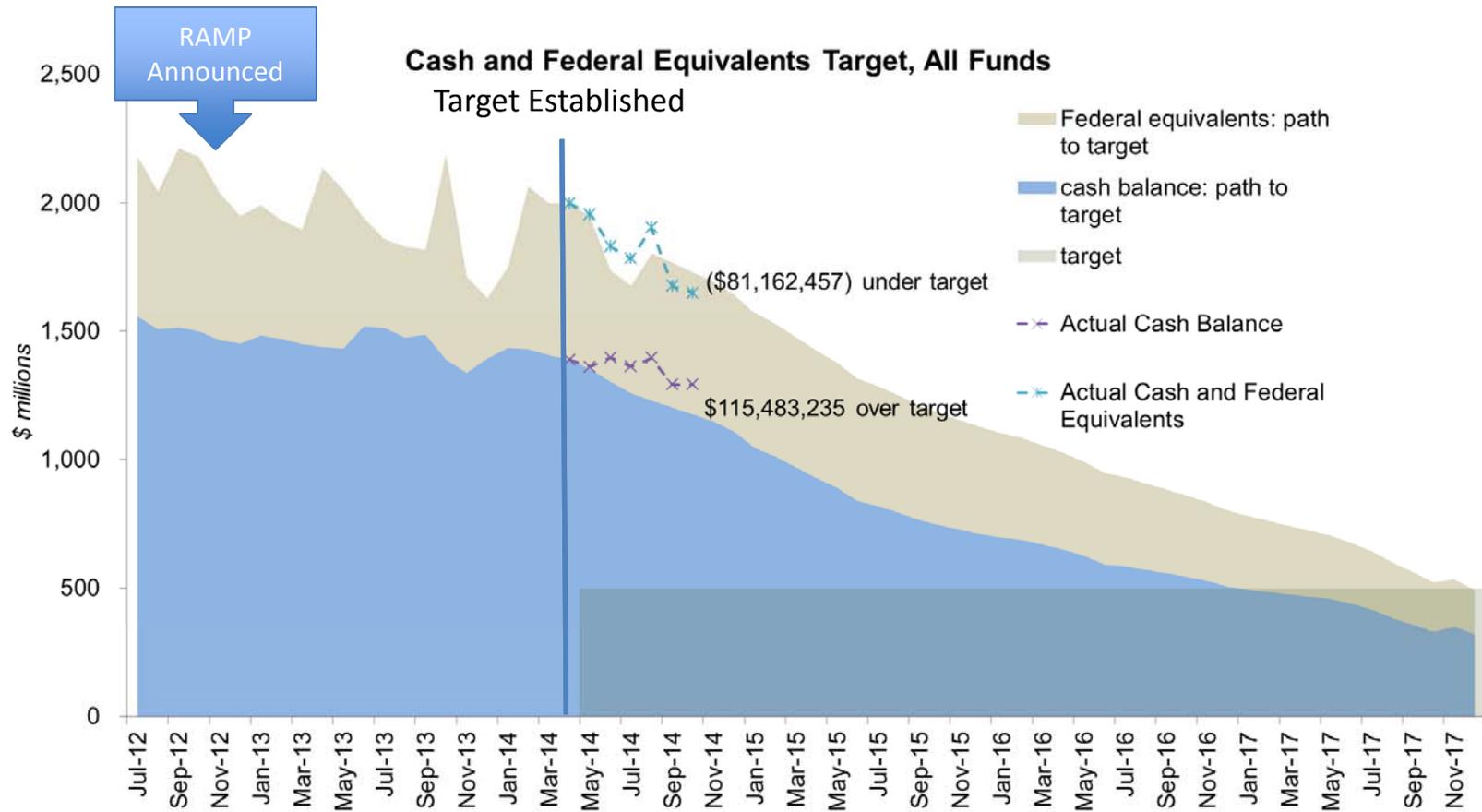
Department of
Transportation



Program Management Update November 19, 2014



Cash & Equivalents Target Balance

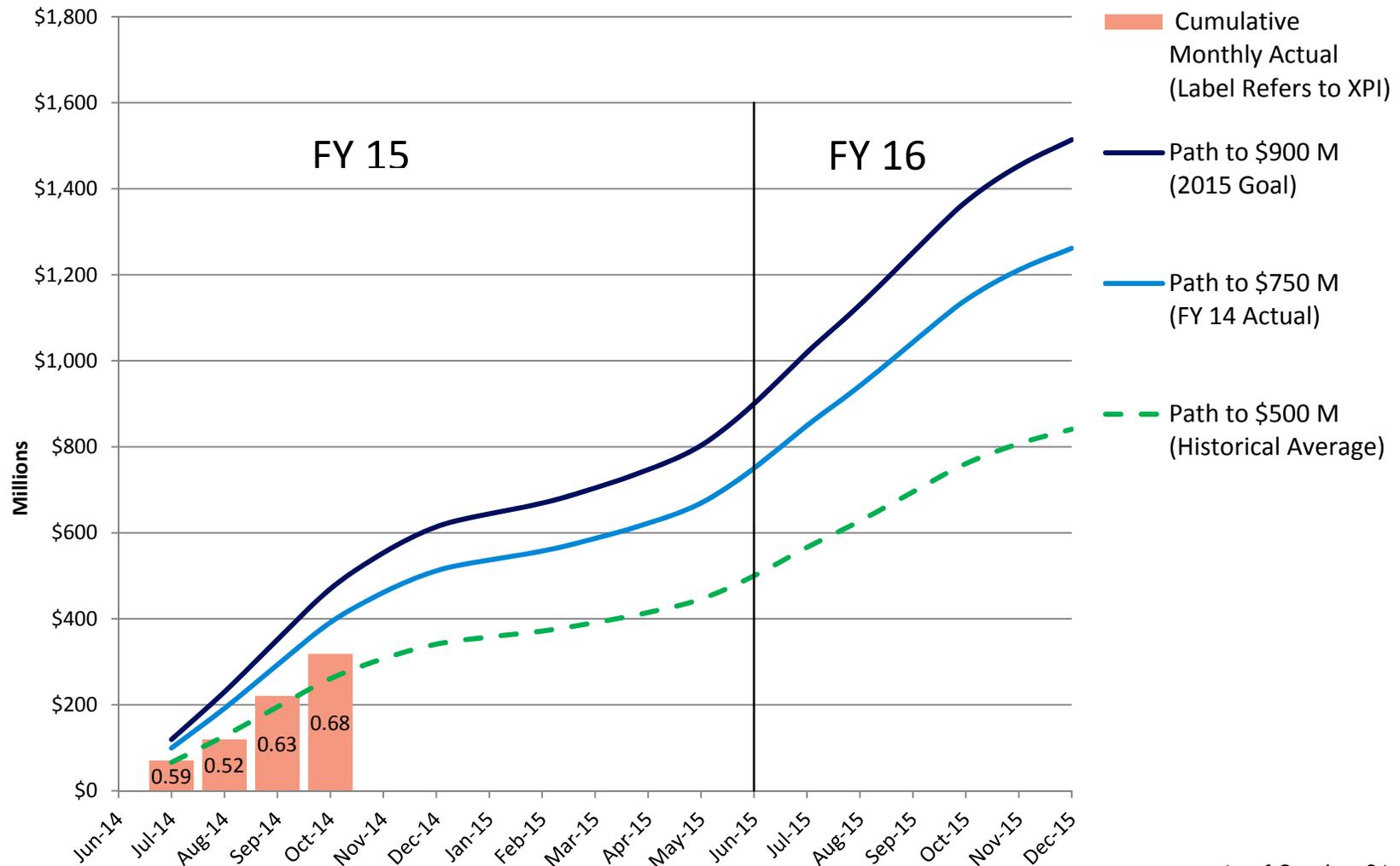


As of November 7, 2014



Expenditure Performance Index

Total Construction Expenditures FY 15



As of October 31, 2014



PMO Reporting Overview by Program

Program	Financial Performance (\$Millions)			Schedule	Quarterly Rotation
	Program Expenditure through 9/19/2014	Program Expenditure through 10/17/2014	\$ Change	SPI	
Flood	\$109.2	\$113.5	\$4.3	1.00	Oct.
RAMP P&O (Local Agency)	\$1.1	\$1.2	\$0.1	0.53	Oct.
RAMP P&O (CDOT)	\$96.6	\$106.2	\$9.6	0.70	Nov.
RAMP P&O (Overall)	\$97.7	\$107.4	\$9.7	0.70	Nov.
Safety Projects - FASTER and HSIP	N/A	\$390.6	N/A	N/A	Nov.
Other CDOT Projects	N/A	N/A	N/A	N/A	Dec.
Asset Management	\$447.9	\$559.0	\$111.1	0.61/0.99	Dec.

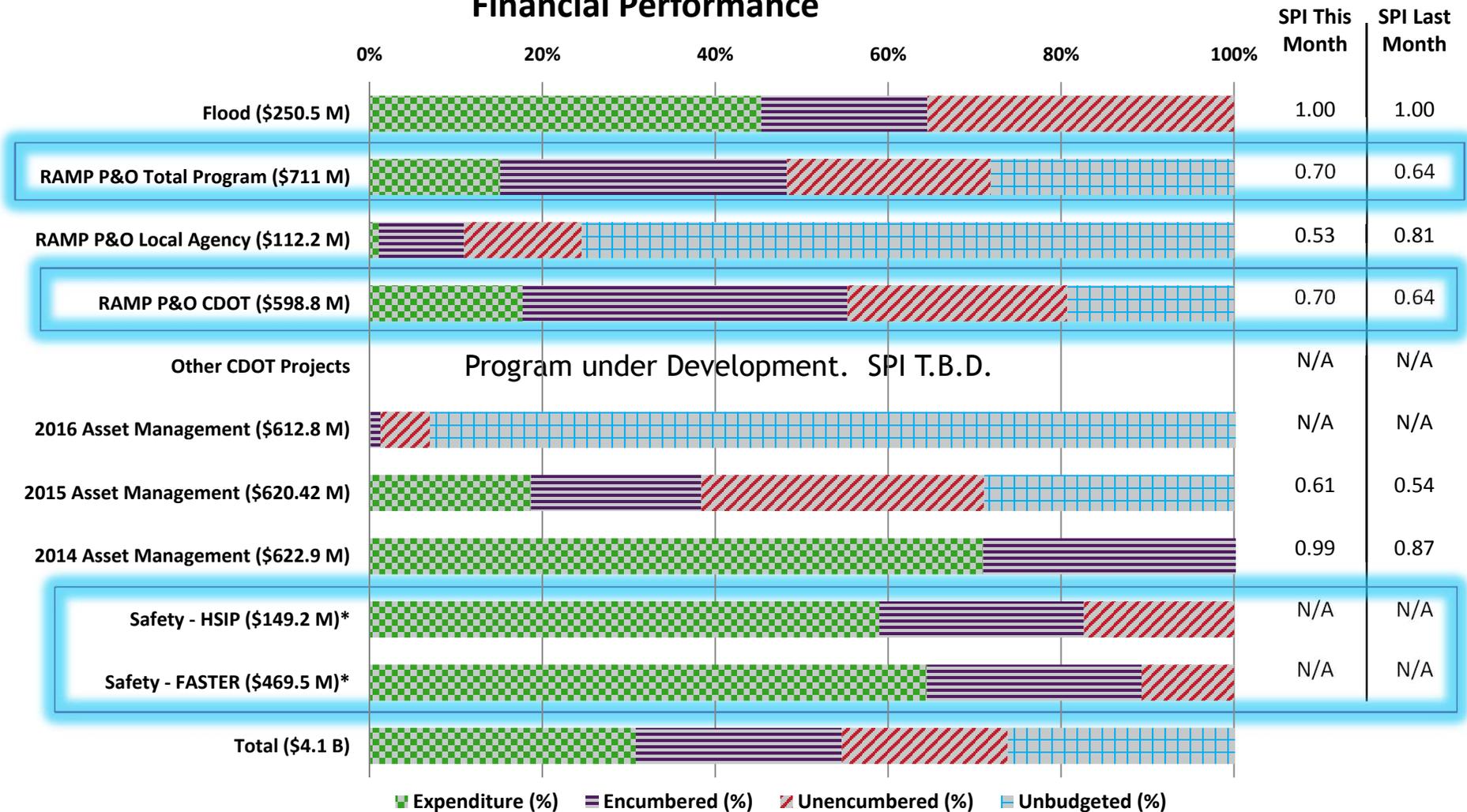
Notes: Asset Management expenditures are a combination of 2014, 2015, 2016. Asset Management expenditures include MLOS and Roadway Equipment while these are excluded in the overall program SPI. N/A - Program in development and data not available at this time. SPI's shown are for Preconstruction.

As of October 17, 2014



PMO Reporting Overview by Program

Financial Performance

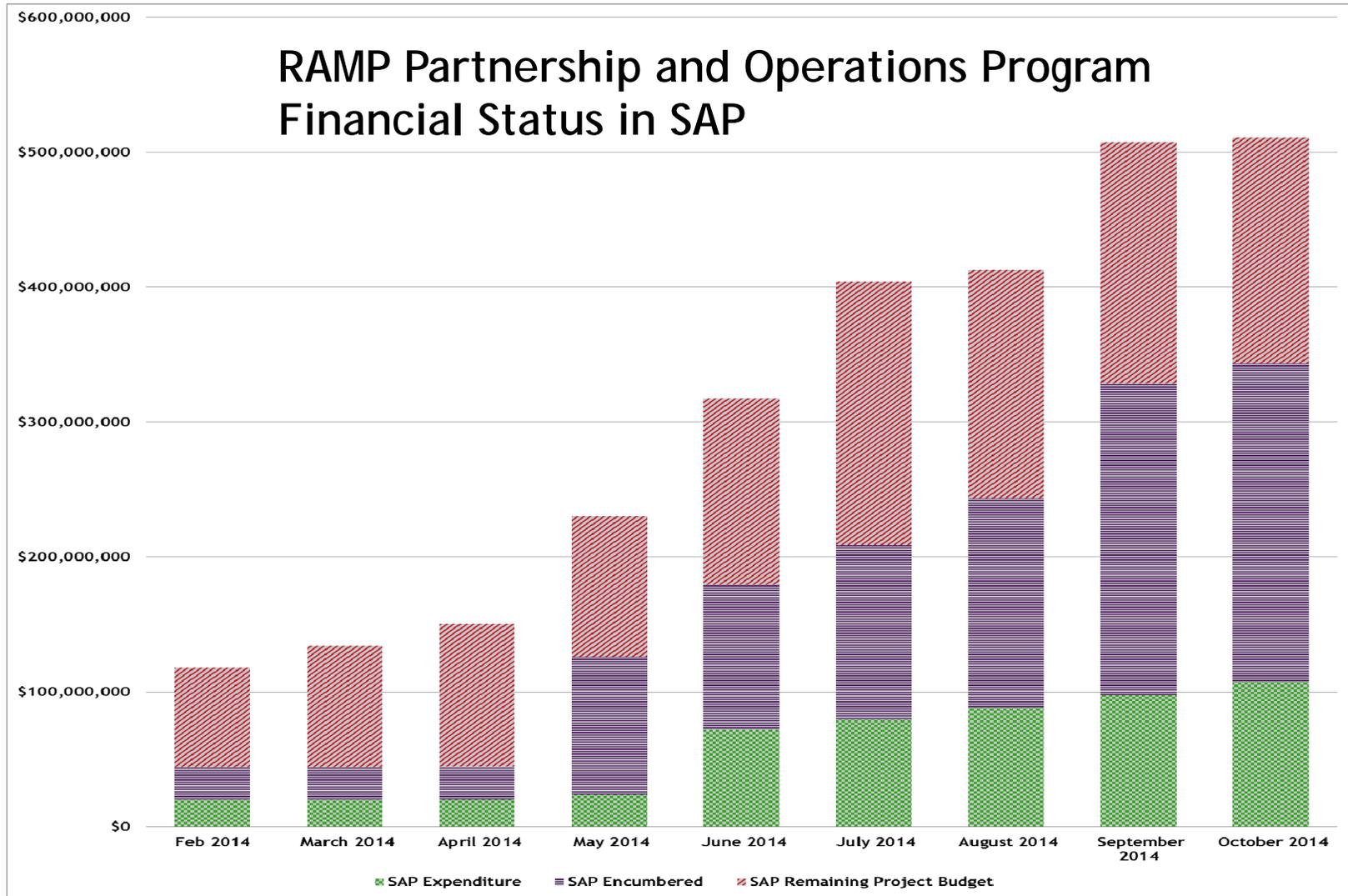


Total Cumulative Program Amounts are for the duration of the program. Program amounts and duration vary for each program. *HSIP and FASTER expenditures shown are for all projects with FASTER and HSIP funding and includes Asset Management and RAMP Projects. RAMP P&O refers to RAMP Partnership & Operations.

As of October 17, 2014



Status of RAMP Program

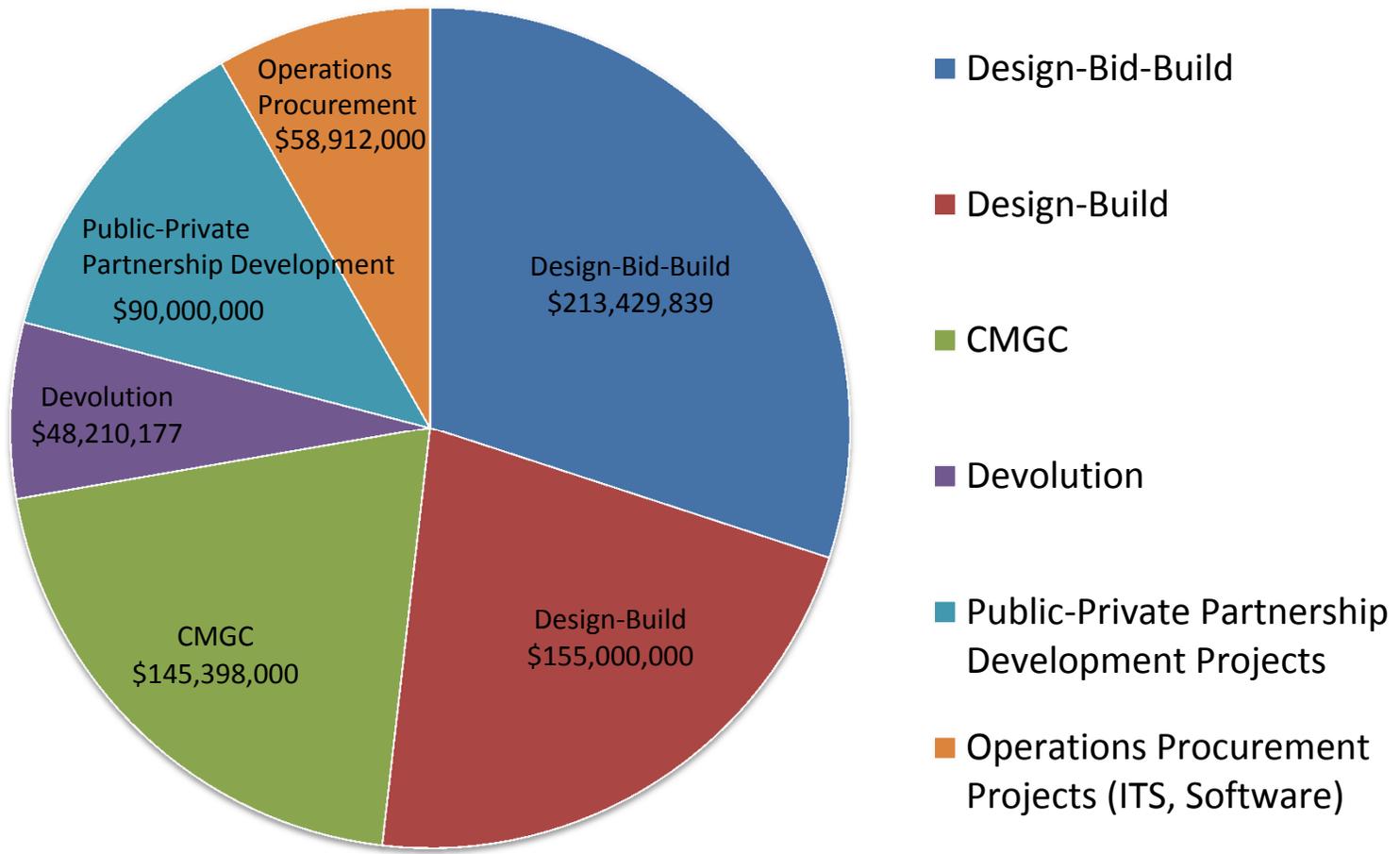


As of October 17, 2014



Status of RAMP Program

\$711M RAMP Request by Project Delivery Method



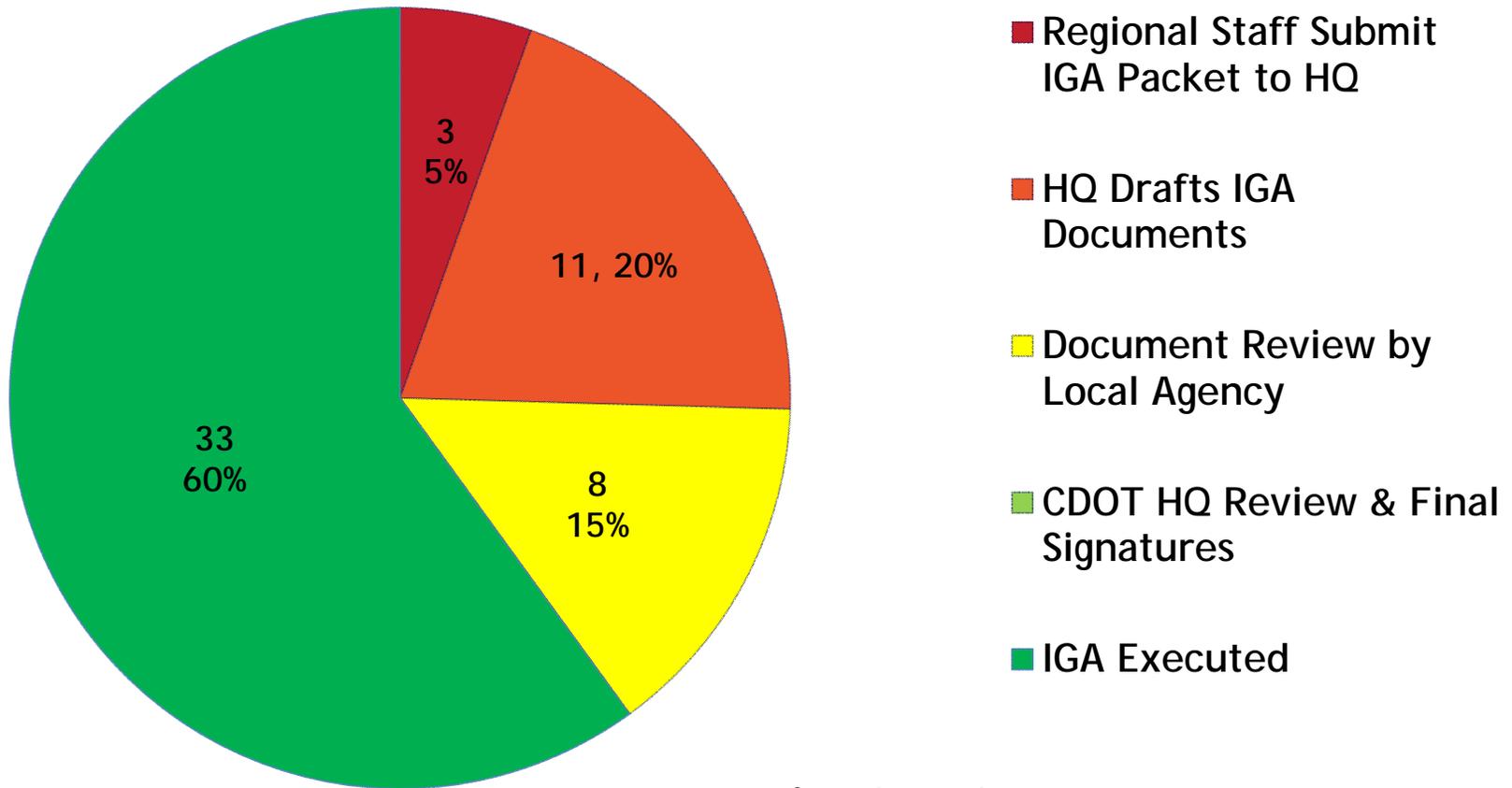
As of October 17, 2014



Status of RAMP IGAs

Current IGA Progress - RAMP P&O Program

Total # of IGAs: 55

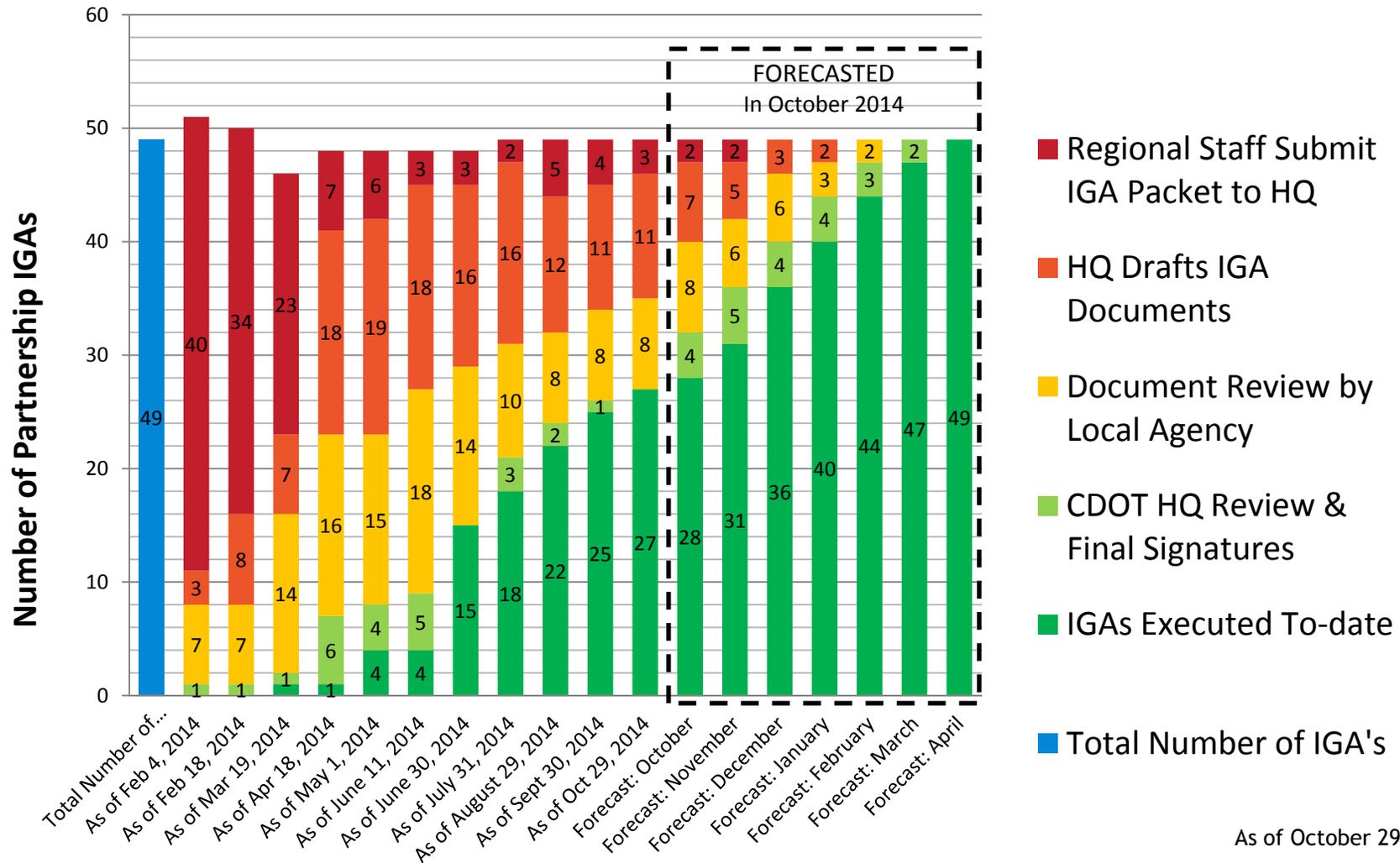


As of October 29th, 2014



Status of RAMP IGAs

RAMP Partnership IGA's

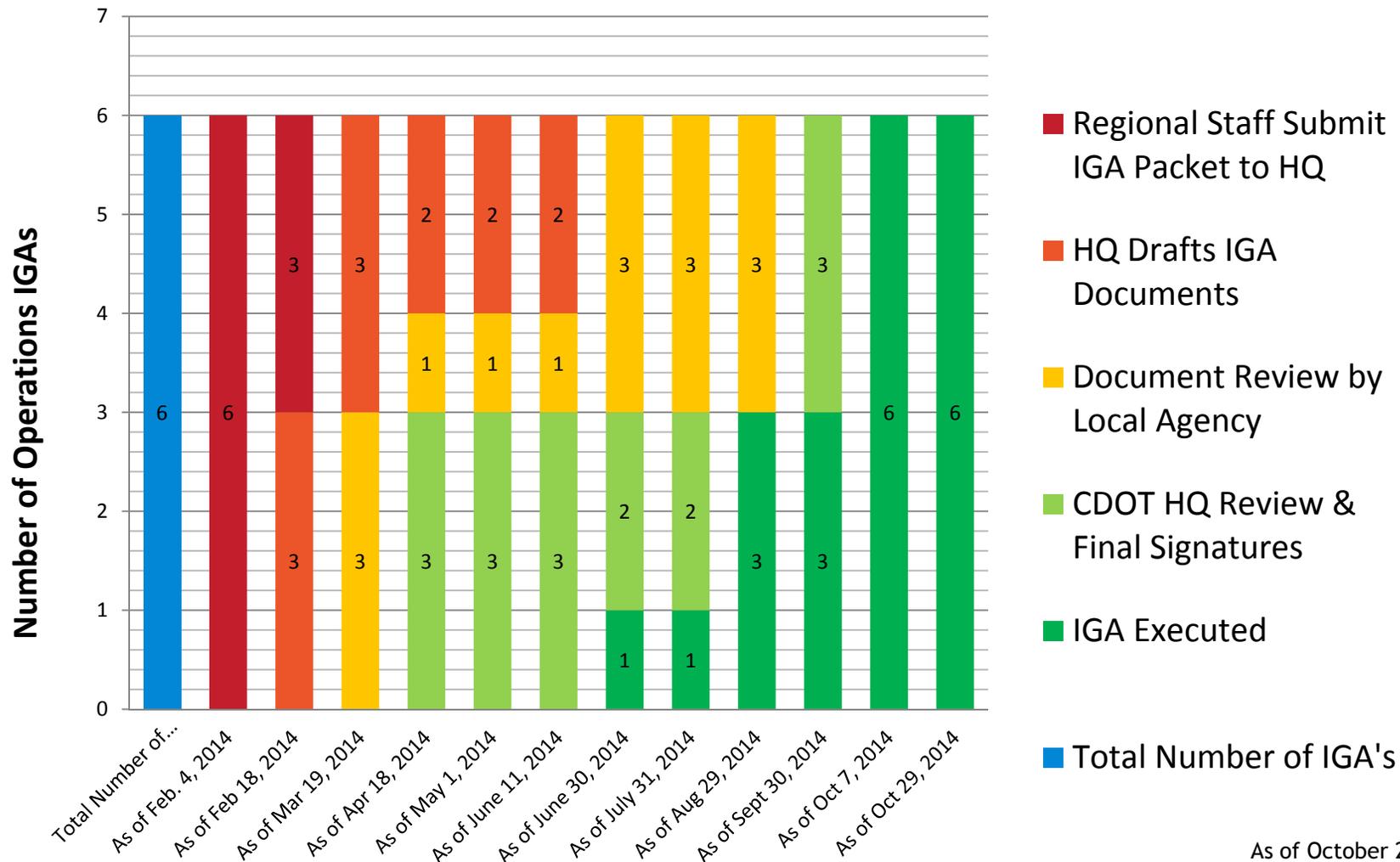


As of October 29, 2014



Status of RAMP IGAs

RAMP Operations IGA's



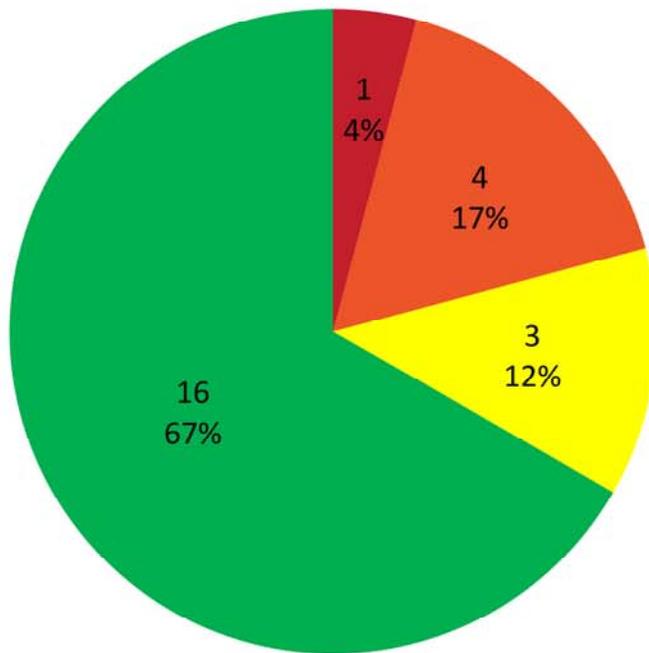
As of October 29, 2014



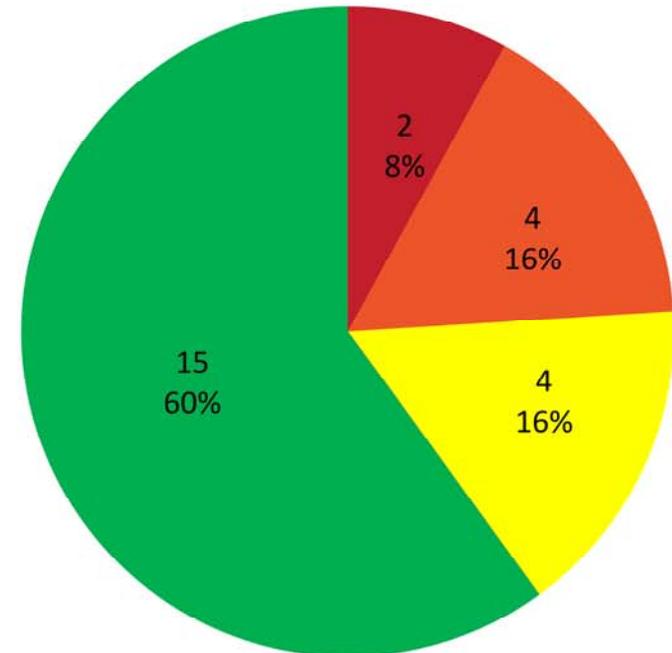
Status of RAMP IGAs

Comparison the IGA Status of Locally vs CDOT Administered RAMP Projects

24 Locally Administered Projects



25 CDOT Administered Projects



- Regional Staff Submit IGA Packet to HQ
- HQ Drafts IGA Documents
- Document Review by Local Agency
- CDOT HQ Review / LA Signatures
- IGA Executed

As of October 29th, 2014



CDOT Administered Projects – IGA Progress / Planned Advertisement

RAMP Program - CDOT Administered Projects						As of: 10/29/2014				
RAMP Tracking Number	WBS (PCN or SAP)	Project #	Project Information	Advertisement	Budget	IGA Progress				
						Current TC Approved Total Project Cost	Regional Staff Submit IGA Packet to HQ	HQ Drafts IGA Documents	Document Review by Local Agency	CDOT HQ Review / LA Signatures
3.14	19351 / 19459	NH 0702-332 / -335	I-70 Eagle Interchange Upgrade	D-B-B	\$9,887,365					
5.14	18972	NH 2851-008	US 285 Antonito Storm Drain System Replacement	D-B-B	\$2,742,429					
2.22	18367	IM 0252-414	I-25 Fillmore Interchange Diverging Diamond Interchange (DDI) Conversion	D-B-B	\$23,300,000					
2.21	19039	IM 0252-423	I-25 and Cimarron Interchange Reconstruction	Design-Build	\$95,000,000					
2.23	19522	NHPP 0212-007	SH 21 / Old Ranch Rd. Interchange Completion	D-B-B	\$10,333,779					
4.20	12372	STE M455-106	US 287: (North College) - Phase 1: LaPorte ByPass to SH1 (CDOT), Phase 2 & 3: (Locals)	D-B-B	\$36,157,682					
3.40	18244 / 19910	STA 009A-034	SH 9 Grand County Safety Improvements	D-B-B	\$46,000,000					
5.13	19397	FSA 145A-057	SH 145 at CR P Safety Improvements	D-B-B	\$1,660,194					
3.24	19911	NHPP 0701-223	I-70 Horizon Drive	D-B-B	\$5,250,000					
5.08	19908	FSA 172A-019	SH 172 / 151 Signalization	D-B-B	\$1,800,000					
5.06	19909	NHPP 5502-079	US 550 Sky Rocket Box Culvert Replacement	D-B-B	\$2,000,000					
5.15	19411	NH 062A-016	SH 62 Ridgway Street Improvements	D-B-B	\$13,291,257					
3.12.29	19930	C 0131-064	SH 9 - Frisco to Breckenridge: Iron Springs Alignment	D-B-B	\$22,013,668					
3.09	19094	STA 0702-327	I-70 Vail Underpass (Simba Run)	D-B-B	\$20,800,000					
5.18	19643	NHPP 0242-059	US 24 Enhancement Project in Buena Vista	D-B-B	\$2,497,090					

Fully Executed IGAs

Fully Executed IGAs



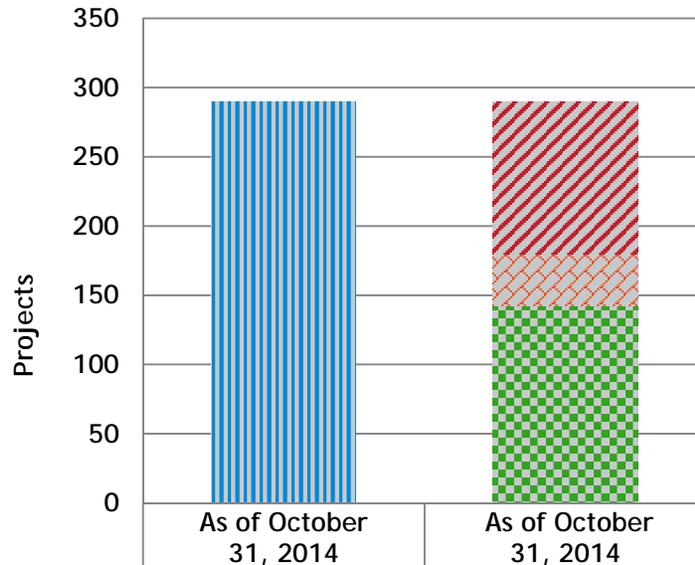
CDOT Administered Projects – IGA Progress / Planned Advertisement

RAMP Program - CDOT Administered Projects											As of: 10/29/2014	
	Project Information				Advertisement	Budget	IGA Progress					
	RAMP Tracking Number	WBS (PCN or SAP)	Project #	Project Name	Delivery Method	Current TC Approved Total Project Cost	Regional Staff Submit IGA Packet to HQ	HQ Drafts IGA Documents	Document Review by Local Agency	CDOT HQ Review / LA Signatures	IGA Executed	
Devolution IGAs	2.01	19964	C 067A-034	SH 67 in Victor Devolution (cash payment)	Devolution	\$307,702						Devolution IGAs
	2.07	19965	C R200-203	US 24 Business Route Devolution (cash payment)	Devolution	\$2,602,475						
	3.06	20087	C 0131-064	SH 6/SH 13 in Rifle Devolution	Devolution	\$5,600,000						
2014 Ad Dates	2.31	19205 / 19208 / 19408	IM 025A-024 / FBR 025A-019	I-25 Ilex to 1st St. in Pueblo	Design-Build	\$33,200,000						2014 Ad Dates
	2.33	19056 / 19751	FSA 0503-081	US 50 / SH 45 Interchange, Wills to Purcell-Pueblo	D-B-B	\$10,000,000						
	1.81	19086	C 0403-056	US 40 East Berthoud Pass Remote Avalanche Control System Pilot Program (Stanley Slide Path)	D-B-B	\$1,275,000						
2015 Ad Dates	2.20	19906	STA 0503-083	US 50 / Dozier / Steinmeier Intersection / Signal Improvements	D-B-B	\$1,500,000						2015 Ad Dates
2016 Ad Dates	1.46	19192	STU 0252-429	I-25 and Arapahoe Rd. Interchange	CMGC	\$74,000,000						2016 Ad Dates
	2.05	19954	STR 160A-028	US 160 Turnouts	D-B-B	\$1,015,000						
	1.02	18999	C 4701-124	C-470 Managed Tolloed Express Lanes: Kipling to I-25	Design-Build	\$200,000,000						
Project does not require an IGA	1.07	17810	C 0703-360	Eisenhower-Johnson Memorial Tunnels (EJMT) Fire Suppression System	Design-Build	\$25,000,000				N/A		Project does not require an IGA
	4.05a	19626	-	I-25: 120th to SH 7 Tolloed Express Lanes (extension granted)	TBD - P3	\$1,040,000,000				TBD		
	4.05b	14276 18319 18357 18844	-	I-25: SH 7 North Tolloed Express Lanes (extension granted)	TBD - P3					TBD		
	NA	-	-	HTPE P3 Development Fund	N/A	\$200,000,000				N/A		
	NA2	19879	-	WB Twin Tunnels Expansion	CMGC	\$55,000,000				N/A		
25			Subtotals				2	4	4	0	15	
IGAs Complete (%) compared to Total # of CDOT Administered Projects (w/ IGAs)							8%	16%	16%	0%	60%	

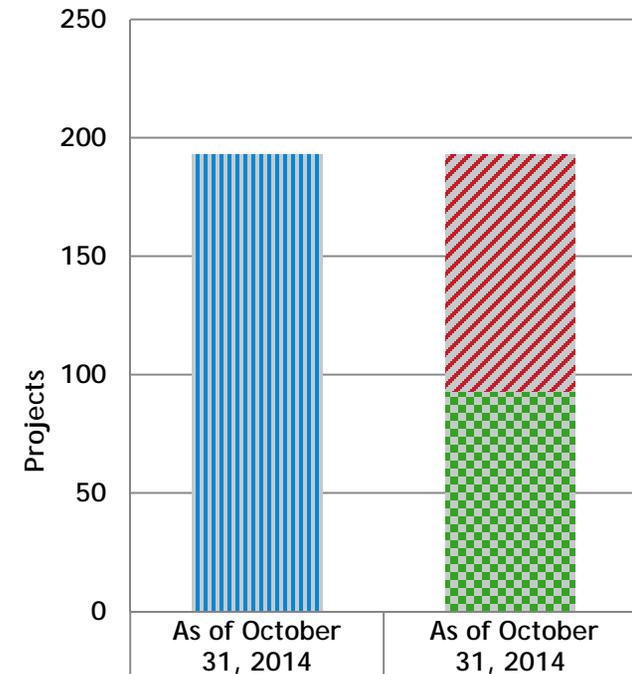


Status of Safety Projects *

Status of Projects with FASTER Funds



Status of Projects with HSIP Funds



	As of October 31, 2014	As of October 31, 2014
Total number of Projects with FASTER Funds	290	
FASTER Work In Design		110
FASTER Work Under Construction		38
FASTER Work Complete		142

	As of October 31, 2014	As of October 31, 2014
Total number of Projects with HSIP Funds	193	
HSIP Work On-going		100
HSIP Work Complete		93

* Status for Safety projects, both FASTER and HSIP are as of FY2010. Projects prior to FY2010 may still be ongoing but are not included in this status update.

As of October 31, 2014



Plan to Improve Project Award Process

Why we are doing this?

- For 2014 CY YTD
 - 31 Rejections at Table (RATs) impacting \$73.5 million of construction

As of October 31, 2014



Plan to Improve Project Award Process

Near-term Plan

- a) Advertise projects sooner!
- b) Publish known list of project Ad dates
- c) More interaction with region staff.
 - Identify high risk items for more thorough estimate
 - Develop Guidelines for RAT;

As of October 31, 2014



Plan to Improve Project Award Process

Near-term Plan

- d) Advertise projects online and across state lines to attract more potential bidders.
- e) Program Management will coordinate/influence the advertisement of projects.
- f) Obtain independent cost estimates for several RAMP Partnership and Operations projects

As of October 31, 2014



Plan to Improve Project Award Process

Long-term Plan

No other states have RAT statute in place like Colorado. Considering seeking repeal of HB 99-1031 through the legislative process

If HB 99-1031 is repealed, the CDOT Bid Rules and the manual on Letting and Award would be revised to include more reviews after bid openings for cases where there are fewer than 3 bidders on a project. A decision to award or reject the contractor bid would require Chief Engineer approval as well as sign-off by members of an Award Committee and decisions documented in the Award Committee Minutes.

As of October 31, 2014



Update on RAMP Projects

Several RAMP Projects are included in a memorandum within the PMO Workshop tab that provide:

- Information or an Update to the Commission, or
- Explanation of an action requested in the Budget Supplement

As of October 31, 2014



Coming Attractions

- Update of Cash Balance
- Updated Expenditure Performance Index
- Overview of Asset Management

As of October 31, 2014



DATE: November 19, 2014
TO: Transportation Commission
FROM: Director, High Performance Transportation Enterprise
SUBJECT: RAMP allocation--HPTE Development Fund

Purpose

As agreed when the allocation was made, the purpose of this memo is to report before the end of this calendar year on the plan for applying this allocation to a project or projects.

Action

HPTE is requesting the Commission to continue the allocation for one or more of the purposes described in this memo.

Background

As part of the initial RAMP application process, The Commission allocated \$40m to a Development Fund for use by HPTE in advancing revenue generating projects being pursued by HPTE.

The Commission subsequently approved the re-allocation of \$4.6m of the \$40m for use in meeting unexpected costs of the PPSL project. HPTE's expectation is the \$4.6m will be "repaid" into the Development Fund allocation from the proceeds of a commercial loan now being negotiated by HPTE for the PPSL project.

Details

HPTE is proposing a plan to use the Development Fund to advance revenue generating projects in a manner which satisfies the requirements of the RAMP program (e.g., completion by 2018), which meets the intent of the initial allocation (e.g., facilitate mobility in the Metro area by advancing revenue generating projects), and which potentially preserves the Development Fund for future use.

The proposal is this: The Development Fund allocation would be used, as the financial circumstances warranted, to (i) directly fund; (ii) provided credit support (e.g., as a reserve fund) for; and/or (iii) to make subordinated loans on a revolving basis to the following projects with the following priority:

- 1) C-470 (a funding gap is currently projected--higher level T&R underway).
- 2) Completion of I-25N segments 2 and 3, as originally planned, or other elements of the North I-25 corridor that would facilitate advancement of a revenue generating project .
- 3) Other segments of the Metro beltway that meet RAMP requirements and have political support. This could include the Jefferson Parkway project, subject to a number of conditions. The project is being actively considered by the affected local governments as part of a PEL process exploring completion of the Metro beltway. While conditions that would warrant CDOT support for the project have not yet been met, this potential project could warrant support from CDOT and HPTE.

Key Benefits

This flexible treatment of the Development Fund allocation will permit HPTE to react quickly to rapidly changing circumstances and to optimize its use in facilitating the completion of key mobility projects.

Options and Recommendations

- Staff Recommendation: In December, TC could adopt a resolution that "earmarks" the HPTE Development Fund to the three projects listed. When a corridor is ready to go but is in need of the HPTE funds, a separate action would be requested by the Commission to direct the funds and designate the manner in which the funds would be provided (direct fund, credit support, or subordinated loan) after receiving and considering the recommendation of the CDOT and HPTE staff.
- The Transportation Commission could change the recommended list of projects or the priority order of the projects.
- The Transportation Commission could choose not to move forward with funds for any of the HPTE priorities.

Next Steps

Formal action will be requested in December based on the results of the November workshop.



COLORADO
Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: November 20, 2014
TO: Transportation Commission
FROM: Region 1 Director
SUBJECT: I-70/Grapevine and US 285 at Pine Valley RAMP Operations Funding Swap Request

Purpose

The purpose of this memorandum is to request concurrence to defer the Region 1 US 285 at Pine Valley RAMP Operations project (RAMP 1-63) indefinitely and use that money to fully fund the I-70/Grapevine RAMP Operations project (RAMP 1-56).

Action

Region 1 is requesting concurrence to defer the Region 1 US 285 at Pine Valley RAMP Operations project and use that money to fully fund the I-70/Grapevine RAMP Operations project.

Background

Both the I-70/Grapevine and US 285 at Pine Valley RAMP Operations projects were advertised on July 17, 2014. Bids for both projects were rejected because they were more than 25% above the engineer's estimate. The I-70/Grapevine project scope was reviewed and adjusted. Based on a revised engineer's estimate the I-70 Grapevine project still has a budget shortfall of \$127,000. Region 1 coordinated with Transportation Systems Management and Operations (TSMO) and TSMO agrees that the US 285 at Pine Valley should be deferred indefinitely and the funding dedicated to that project be used to cover the I-70/Grapevine shortfall.

Details

Both the I-70/Grapevine and US 285 at Pine Valley RAMP Operations projects were advertised on July 17, 2014. Bids for both projects were rejected because they were more than 25% above the engineer's estimate. Discussions with contractors subsequently indicated that schedule of the ad was an issue due to current work load and that winter ad for spring construction may result in better pricing.

The I-70/Grapevine project scope and plans have been reviewed and adjusted. Based on a revised engineer's estimate the I-70 Grapevine project still has a budget shortfall of \$127,000. Region 1 coordinated with Transportation Systems Management and Operations (TSMO) and TSMO agrees that the US 285 at Pine Valley should be deferred indefinitely and the funding dedicated to that project be used to cover the I-70/Grapevine shortfall.

The deferred work on US 285 will be included in other upcoming US 285 corridor projects.

Recommendation

Concur with proposed direction to defer the US 285 at Pine Valley RAMP Operations project and use the funding to cover the \$127,000 shortfall on the I-70/Grapevine RAMP Operations project.





COLORADO

Department of Transportation

Region 1

DATE: November 20, 2014

TO: Transportation Commission

FROM: Region 1 Director

SUBJECT: Region 1 C-470 RAMP Project Update -

Purpose

The purpose of this memorandum is to provide the Transportation Commission a status update on the C-470 RAMP Project.

Action

Information only.

Background

Region 1 had committed to provide the Transportation Commission a project status update on the C-470 RAMP project.

Details

- The Level 3 Tolling and Revenue study is now underway and information on net toll proceeds is anticipated in mid to late-January, 2015.
- Region 1 has hired a firm to conduct an independent cost estimate (ICE)
- It is anticipated there will be a funding gap, the magnitude of which will be known after the Level 3 T&R report is complete. In preparation several options are being explored to address the anticipated funding gap including:
 - Potential \$4 million to \$6 million of HSIP funding
 - Use of up to \$40 million from the HPTE Development Fund
- Anticipate a December workshop Item to share information on the Final Earnst &Young Report

Next Steps

December workshop to review final Earnst & Young Report

Complete independent cost estimate

Confirm HPTE's ability to allocate a portion of Development Fund

February Transportation Commission Workshop with potential action to move project from "red" to "green"





COLORADO Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: November 20, 2014
TO: Transportation Commission
FROM: Region 1 Director
SUBJECT: I-70 Eastbound Peak Period Shoulder Lane Project Update

Purpose

The purpose of this memorandum is to provide a status update on the I-70 Eastbound Peak Period Shoulder Lane (PPSL) project, including an upcoming request to budget the remaining \$29.1 million for Package 3 of the project.

Informational Item

This item is included as an informational item only in November and will be brought back to the Transportation Commission for review and approval upon closure of the HPTE loan. There are two informational items are included in the budget supplement.

Background

The Eastbound PPSL project consists of 3 packages. Package 1 includes excavation, walls, and patching for widening of eastbound I-70 in six areas. Package 2 includes reconstruction of the SH 103 bridge and ramps. Package 3 consists of the East Idaho Springs (MP241) Interchange reconstruction, HMA overlay from Empire to Idaho Springs, and ITS infrastructure installation and testing.

The I-70 Eastbound PPSL project packages 1 and 2 are under construction and work is progressing. Package 3 is currently in preconstruction. Budgeting the additional design and construction funds will allow Package 3 to remain on schedule for obtaining a Construction Agreed Price proposal in late January, 2015. Funding needs to be in place no later than January 8th, 2015.

Details

The budget for Package 3 is approximately \$28.6 million and the funding is combination of Bridge Enterprise (\$9.6 million) and an HPTE commercial loan (\$19.5million). The Bridge Enterprise portion of \$9.6 million has been added to the STIP so that the budget request can be heard by the Bridge Enterprise board. Region 1 is submitting a budget request for the remaining \$29.1 million for the project, which includes \$500k for the remaining design and \$28.6 million requested for construction of Package 3. Region 1 will request the budget for the project in December 2014 so the project can remain on schedule to request a Construction Agreed Price proposal for Package 3 in late January 2015.

Additionally, CDOT expects to have a long lead time procurement in December 2014 for fiber, overhead signs, and monotubes. The commercial loan will not be available until after the notice to proceed is required for the long lead time procurement. Therefore, Region 1 is allocating \$4.5 million of RPP funds until the loan is approved and can return the RPP funding to the Region.

Recommendation

Authorize funding for the remaining design and construction so the project can remain on schedule to request a Construction Agreed Price proposal in late January 2015.





COLORADO

Department of Transportation

Office of the Chief Engineer

4201 East Arkansas Ave, Suite 262
Denver, CO 80222

MEMORANDUM

TO: TRANSPORTATION COMMISSION

FROM: JOSHUA LAIPPLY, CHIEF ENGINEER AND KAREN ROWE, R2 RTD

DATE: NOVEMBER 20, 2014

SUBJECT: ILEX PROJECT FUNDING REQUEST

Purpose

Procedural Directive 703.0 - "Annual Budget, Project Budgeting and Cash Management Principles" requires approval by the Transportation Commission for RAMP partnership projects when the bids received are greater than or equal to 7.5% above the original approved amount. Region 2 is requesting Transportation Commission approval to budget additional funds to the Ilex to 1st Design Build RAMP project 2-31 that will exceed 7.5%.

Action

CDOT Region 2 is requesting the Transportation Commission to approve the addition of Region Priority Program (RPP) funds to award RAMP project 2-31 (project code 19408) that is above 7.5% the original budget.

Background

The RAMP Project 2-31 needs additional budget exceeding the 7.5% limit of the original budget. The final bids will be opened on November 13th. The local agency match for the project was around 24% with the match coming from the value of two roads (SH 227 and SH 233) that were devolved from CDOT to the City of Pueblo and Pueblo County. The additional budget needed to award the project will be funded with the Regional Priority Program (RPP). The project will be completed by the end of 2017 or sooner.

Details

Ilex to 1st St. Design Build project had bids open on August 21, 2014. All bids exceeded the Guaranteed Maximum Price (GMP) from 3 Design Build teams. Region 2 worked with contracts and the attorney general's office to enter into best and final offer (BAFO) negotiations with the highest scoring of the three shortlisted Design Build teams. The original budget was \$ 32,150,000 and the additional funds needed to award the project would have been \$12,239,836 (38% increase) for a total project cost of \$44,389,836. Region 2 decided to review the project and determined a reasonable reduction in scope while remaining consistent with the original project goals. The BAFO will be opened on Nov. 13th, 2014. The additional funds will come from the Pueblo Area Council of Governments portion of Regional Priority Funds (RPP). Pueblo County and the City of Pueblo do not have additional funds to contribute to the project. The exact amount required will be known by Commission on November 19th but was not available at the time of



packet production. By receiving Transportation Commission approval to add additional funds, the project can be awarded quickly and complete construction no later than the end of calendar year 2017.

Key Benefits

By adding the additional funds to the Ilex to 1st RAMP project and the partnered Bridge Enterprise project, the two projects will be awarded and kept on schedule for completion before the end of 2017.

Next Steps

CDOT will award the Ilex to 1st RAMP project with the additional funds.





COLORADO

Department of Transportation

Office of the Chief Engineer

4201 East Arkansas Ave, Suite 262
Denver, CO 80222

MEMORANDUM

TO: TRANSPORTATION COMMISSION
FROM: JOSHUA LAIPPLY, CHIEF ENGINEER AND KAREN ROWE, R2 RTD
DATE: NOVEMBER 20, 2014
SUBJECT: RAMP PROJECT 2-21 I-25/CIMARRON PROJECT FUNDING INCREASE REQUEST

Purpose

Procedural Directive 703.0 - "Annual Budget, Project Budgeting and Cash Management Principles" requires approval by the Transportation Commission for RAMP partnership projects when the bids received are greater than or equal to 7.5% above the original approved amount. Region 2 is requesting Transportation Commission approval to budget additional funds to the I-25 and Cimarron Design Build RAMP project 2-21 that will exceed 7.5%.

Action

CDOT Region 2 is requesting the Transportation Commission to approve the addition of \$20 million of Region Priority Program (RPP) funds to allow RAMP project 2-21 I-25/Cimarron Interchange procurement process to continue to progress with the expectation a portion of the RPP funds will eventually be replaced with additional local funds.

Background

The RAMP 2-21 - I-25 Cimarron project will need additional funding. Based on the bid opening on Ilex, CDOT Region 2 has re-evaluated the current cost estimate and determined that it needs to be updated based on current construction bids. CDOT has determined that an additional \$20 million is needed to the project budget (total costs) based on discussions with the Design Build teams and CDOT cost estimates. The Guaranteed Maximum Price (GMP) for I-25 Cimarron needs to be increased to keep the project moving forward.

Details

The Region 2 team has determined the project is underfunded based on current construction bidding being higher than estimates a year ago. CDOT staff has estimated that an additional \$20 Million should be budgeted to the project to move forward with the design build teams and in alignment with FHWA regulations. We recommend delaying the project by 2 months (Ilex lost 4 months to opening bids that were above the GMP) to add the additional funds needed to proceed with this project. CDOT is looking at possible scope reduction and items that the City will take responsibility to fund. There is a delay in the schedule with Best Value scoring moving from mid November to mid January (losing two months in the procurement schedule).



CDOT continues to work with the City of Colorado Springs to see what portions of the project can be paid for by them or removed from the project and funded separately. After adding the \$20 M RPP, we can determine final local funds, revise the IGA, and then switch local funding for RPP funds thereby keeping the project on schedule.

Key Benefits

By adding the additional funds to the project CDOT will likely be able to select a design build team in January 2015 and keep the project on schedule for completion before the end of 2017.





COLORADO

Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: November 20, 2014
TO: Transportation Commission
FROM: Region 4 Director
SUBJECT: RAMP Funding Request - I-25 (North) Tolled Express Lanes from 120th to SH 7 (RAMP#4-5a)
(Southern segment)

Purpose

The purpose of this action is to request RAMP funds for the design and environmental work for the project to add a managed lane on I-25 from south of 120th Avenue north to E-470 (approximate MP 222 to MP 228) in Broomfield and Adams County. This project will connect to and extend the managed lane project currently under construction from US 36 to near 120th.

Action

Approve \$2.85M in RAMP funds from the \$55M for the I-25 120th North project to finish the design and environmental work in preparation for the construction of the managed lanes project.

Background

The north I-25 corridor was authorized for \$90M in the RAMP program, with \$55M for a project from 120th Ave. north to add managed lanes and \$35M north of SH 66 to move toward a PPP. To date, 10% of the \$90M in RAMP funds were approved in order to proceed with preconstruction and Tolling and Revenue (T and R) activities. The 10% of the funds for the 120th north project have been going to the design, including survey and analyzing template options. The \$35M project is under a separate request.

Due to escalating unit prices and requirements to provide a wider paved template than originally anticipated, the project's northern terminus is still to be determined. Region 4, Region 1, and HPTE are coordinating on the project and are formulating a funding package to best leverage the RAMP funds to extend the project as far north as possible.

Once the funding package is complete, anticipated by January, 2015, the project team will define the northern limit and additional requests for the remaining RAMP funds will be submitted.

Details

An engineering consultant has provided a survey, conceptual designs and cost estimates, and is developing the preliminary design and ROW requirements of the 120th North Project. Upon Transportation Commission (TC) funding approval the remaining preconstruction activities, the utility agreements and ROW will be completed by fall 2015. The design will be completed as an interim improvement in accordance with the EIS providing a managed lane on I-25 with immediate safety and operational benefits.

Region 4 personnel will submit the required documentation and obtain the FHWA Decision Document authorizing the project to complete the design and ROW purchases. In the fall of 2015 the completed plans will be advertised and bid.

It is anticipated that the bids will be accepted and the project will be awarded with the notice to proceed in fall of 2015, with lanes open and substantial completion by December, 2016.

Key Benefits

- A. Safety Improvements - In this section of I-25, the proportion of crashes was higher than expected when compared to similar facilities, much of it congestion related. By adding a managed lane the safety of the facility will be improved.



- B. Reliability - The managed lane will provide the express bus, local bus, ride sharing services, and toll paying SOVs with reliable trip time.
- C. Capacity - The extra lane increases the existing capacity and reduces the peak hour congestion.
- D. NEPA Clearance - The NEPA clearance has been started and is not anticipated to require significant staffing resources to complete the NEPA clearance.
- E. Meets Schedule - I-25 managed lane project can be designed and built within the required timeframe
- F. Potential for Partnership - The roadway improvements to I-25 provides an opportunity to partner with local agencies for funding. These opportunities will be further explored by the CDOT Management Team.
- G. PPP viability - The revenue earned from this project will provide reliable documentation of toll revenue for moving forward with improvements to I-25 north as a PPP project.

Recommendation

Authorize funding for design and environmental tasks for the I-25 Managed Lane project from 120th North.

Next Steps (if applicable)

Region 4, Region 1, and HPTE to complete the funding package in January

Region 4 will request additional RAMP funds for ROW acquisition and construction based on set project limits

TC action to allow the project to move forward with ROW acquisition, utility relocates, and construction activities

Attachments

Cost estimate for design and environmental



North I-25 120th Ave (SH 128) to SH 7 Preconstruction Estimate

	Estimate	Current budget	Request
Design	\$8,000,000.00	\$ 5,300,000	\$2,700,000.00
Environmental	\$ 350,000.00	\$ 200,000	\$ 150,000.00
Total	\$8,350,000.00	\$ 5,500,000.00	\$2,850,000.00





COLORADO
Transportation Commission

4201 East Arkansas Avenue, Room270
Denver, CO 80222-3406

DATE: November 20, 2014
TO: Transportation Commission
FROM: Region 4 Director
SUBJECT: RAMP Funding Request - I-25 (North) Tolled Express Lanes from SH7 to SH14 (RAMP#4-5b)
(Northern Segment / Crossroads Interchange in Larimer County)

Purpose

The purpose of this action is to approve RAMP funds for the design, ROW acquisition, and reconstruction of the Crossroads Interchange on I-25 at approximately MP 259 in Larimer County. This project will replace functionally obsolete bridges with structures that conform to the requirements of the North I-25 EIS.

Action

Approve the remaining RAMP funds from the \$35M for I-25 north of SH 66 to finish the design, ROW purchase and construction of the interchange Improvements.

Background

The north I-25 corridor was authorized for \$90M in the RAMP program, with \$55M for a project from 120th Ave. north to add managed lanes and \$35M north of SH 66 to move toward a PPP. To date, 10% of the \$90M in RAMP funds were approved in order to proceed with preconstruction and Tolling and Revenue (T and R) activities. The 10% of the funds used north of SH 66 were used for the T and R study, financial analysis of the corridor, and to develop designs and recommendations for expending the remaining \$31.5M in funds. The 120th north project is addressed under a separate request.

There are stipulations on how the remaining funds for north of SH 66 should be expended. A construction project has to be completed by 2017 and it should move CDOT toward a PPP opportunity. We reviewed several projects that can be completed within the required time frame, while maximizing the use of the available dollars, provide for mobility and safety, be in compliance with the EIS, and move us to a PPP opportunity. The corridor team analyzed several projects that meet the stipulations.

	Approx Cost Range (Millions)	Meets RAMP Schedule	No Major ROW Required	Expected NEPA Requirement	Conforms to EIS	Fits \$30 Million RAMP Funding	Further P3 Projects
Crossroads Interchange	\$22.9-\$32.1	X	X	Short ROD	X	X	X
SH 56 Interchange	\$49-\$68	X		Short ROD	X		X
SB I-25 Climbing Lane	\$9-\$13	X	X	CatEx		X	

The team recommends the Crossroads Project as It meets the above criteria while completing of a key section of roadway that enhances the ability to move forward in a logical sequence with future projects.

Details

An engineering consultant has been developing preliminary design as part of the EIS Implementation, surveying and providing a conceptual design the Crossroad Interchange Project. Upon Transportation Commission (TC) funding approval a task order will be issued to proceed and complete final design by fall 2015. The design will be completed in accordance with the EIS providing a longer, wider structure that will accommodate a future managed lane on I-25 while providing immediate safety and operational benefits.



Region 4 personnel will submit the required documentation and obtain the FHWA Decision Document authorizing the project to complete the design and proceed to advertisement. In the Fall of 2015 the completed plans will be advertised and bid. If ROW is required it will be minor and the region will process and purchase it in time for construction.

It is anticipated that the bids will be accepted and the project will be awarded with the notice to proceed in January 2016. It will take approximately 1½ years to construct this improvement.

Key Benefits

- A. Critical Component for Future Managed Lanes - The replacement of the functionally obsolete I-25 mainline bridges over Crossroads, and the improvement of the I-25 bifurcated profile invests in a critical component toward the vision to improve safety and mobility by implementing a managed lane on I-25. Crossroads is currently a pinch point or roadblock for developing the managed lanes by constructing this long-term component now; there is one less complication and bottleneck in the system.
- B. Safety Improvements - In this section of I-25, the proportion of fixed object crashes was higher than expected when compared to similar facilities. The majority of fixed object crashes involved guardrail. By improving the shoulders and removing the bifurcated vertical profile, the safety of the facility will be improved.
- C. Corrects Mainline Deficiencies - The northbound lanes are higher than the southbound lanes (bifurcated typical section) north of the Union Pacific Railroad (UPRR) Bridge. There is an existing sag curve between the UPRR Bridge and the Crossroads Bridge. The project would eliminate both the bifurcated typical section and the below standard sag curve.
- D. Minimal Right of Way - The project can be implemented without major right-of-way acquisition or displacements. If right-of-way is required, it is anticipated that only minor “slivers” of acquisition would be needed at locations where the ramps will tie into the I-25 mainline.
- E. Can be Accelerated/Low Risk - The project does not include significantly high risk Right-of-Way, Utility, NEPA, Floodplain, Irrigation, or Railroad coordination or clearances. Due to the relative low complexity, the project can be designed in 2015, advertised in 2016, and constructed by the end of 2017 or sooner. The NEPA clearance is anticipated to be an accelerated ROD (4 months or less), and is not anticipated to require significant staffing resources to complete the NEPA clearance.
- F. Cost Effectiveness - The project has a preliminary scoping cost estimate of \$22.9M to \$32.1M, which includes consultant design, CDOT costs, ROW, construction, and construction management.
- G. Improves Mobility - Based on the recent Traffic Operational Analysis Memorandum, dated January 8, 2014, this section of I-25 carries the second highest volume of traffic in the areas where only two lanes exist today. The project will not add additional lanes to I-25; however it provides the baseline infrastructure so that future projects to the north or south can tie into this project adding additional lanes and tolling equipment necessary for managed lanes that will significantly increase mobility.
- H. Meets Schedule - Crossroads Interchange can be designed and built within the required timeframe
- I. Potential for Partnership - The local roadway improvements to Crossroads Boulevard provides an opportunity to partner with local agencies for funding. These opportunities will be further explored by the CDOT Management Team.

Recommendation

Authorize the funding for design and construction of the Crossroads Interchange.

Next Steps (if applicable)

TC action in December to allow the project to move forward with remaining \$31.5M in RAMP funds Region 4 to complete the design and advertise the project late fall 2015 with a spring 2016 construction start

Attachments

Scope, schedule, budget memo from the engineering consultant (AECOM).



Memorandum

Date: October 30, 2014

To: Myron Hora, CDOT I-25 Corridor Manager

From: Alan Eckman, AECOM

Subject: Crossroads Boulevard Interchange, Bridge Replacement Project (RAMP)

This memorandum summarizes the anticipated scope of work for the Crossroad Interchange Bridge replacement and I-25 mainline roadway approach improvements, from north of the Union Pacific Railroad (UPRR) to north of Crossroads Boulevard Interchange.

The project would include the following major scope items:

a. Replace the existing I-25 mainline bridges over Crossroads Boulevard.

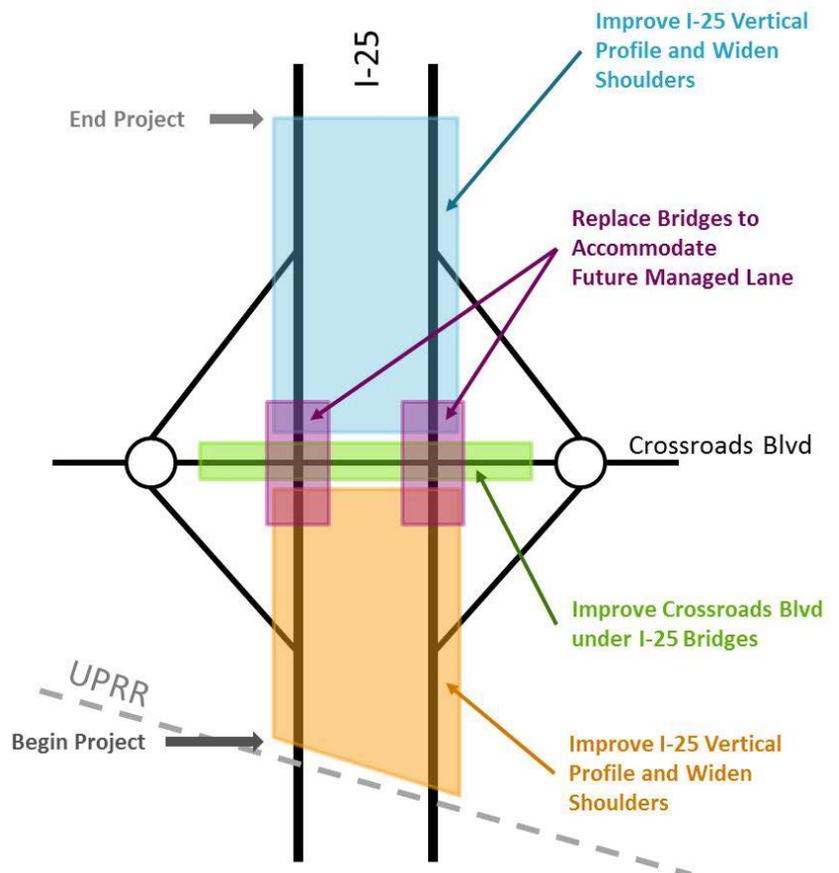
The bridges would be constructed to accommodate a 64-foot wide cross section in each direction. This allows the future managed lane to be implemented without widening of the bridge. The additional third general purpose lane to meet the 75-year EIS cross-section could be added by widening the bridges to the outside in the future.

b. Improve the I-25 mainline roadway approaches to the bridges.

The roadway would be improved approximately 4500-feet to the south, and 3500-feet to the north of the I-25 bridges over Crossroads Boulevard. The roadway approach reconstruction would improve the existing bifurcated vertical profile of northbound and southbound travel lanes. The roadway pavement would be constructed to a width of 52-feet wide, to accommodate 2-general purpose lanes, a 16-foot inside shoulder, and 12-foot outside shoulder. This would allow a future managed lane to be added in the center, by adding an additional 12-foot of pavement. The additional third general purpose lane to meet the 75-year EIS cross-section could be added by widening the pavement to the outside in the future.

c. Maintain the existing roundabout ramp terminals, with road and sidewalk improvement modifications to Crossroads Boulevard under the I-25 mainline bridges.

By reconstructing and lengthening the I-25 bridges over Crossroads Boulevard, roadway improvements to Crossroads Boulevard under the bridges would include widening the road to 2-lanes in each direction, sidewalks, and median and roadside safety improvements.



The schedule of the project assuming decision to proceed in November 2014 is estimated as follows:

1. Project Scoping and Design Contract Execution	November 2014
2. 30% Design/Field Inspection Review (FIR)	February 2015
3. 90% Design/Field Office Review (FOR)	August 2015
4. Project Advertisement	November 2015
5. Begin Construction	April 2016
6. End Construction	October 2017

The bid-build cost estimate is based on our current understanding of the project parameters and is at the conceptual scoping level. As directed by Myron Hora, the range represents -10% to +25% of the conceptual scoping estimate. The range is based on project management standards and accounts for unknowns given the level of design and fluctuations in unit prices.

	<u>Range</u>
Construction	\$17 Million to \$24 Million
Design	\$1.8 Million to \$2.4 Million
Construction Management/Oversight	\$3.7 Million to \$5.1 Million
Right-of-Way	<u>\$0.4 Million</u> to <u>\$0.6 Million</u>
Total	\$22.9 Million to \$32.1 Million