



Board Report

File #: 2017-0827, File Type: Program

Agenda Number: 31.

CONSTRUCTION COMMITTEE JANUARY 18, 2018

**SUBJECT: BOARD DELEGATED AUTHORITY FOR LOP
BUDGET MANAGEMENT**

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

CONSIDER:

- A. RECEIVING AND FILING report on the Board delegated authority to the Chief Executive Officer (CEO) one-year pilot program authorizing negotiation and execution of project related agreements, including contract modifications, up to the Life-of-Project (LOP) budgets on Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and Section 2 Projects; and
- B. AUTHORIZING the Chief Executive Officer to negotiate and execute project related agreements, including contract modifications, up to the authorized Life-of-Project Budget on all transit and regional rail capital projects program-wide.

ISSUE

On January 26, 2017, the Board of Directors delegated the CEO authority, for a pilot period of one-year, to execute project related agreements including contract modifications up to the LOP budget on the four mega transit corridor projects currently in progress - Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and Section 2 Projects. The Board also directed staff to provide monthly reports, which included any pending project-related agreements, change orders, contract modifications and any significant changes to project contingency. This report summarizes the results and impacts of this one-year pilot program, and recommends the continuation and expansion of the program.

DISCUSSION

Metro construction projects are often fast-moving, challenging and complex. Quick decision-making is required to take advantage of opportunities to keep the project moving and avoid costly delays. These opportunities require actions to be taken by project management to direct contractors through execution of contract modifications. As Metro projects have grown in size and complexity over the years, the authorization levels delegated to staff and the CEO have not kept pace with the demands

of the projects. On a large mega-project, the CEO's authorization level is often exceeded, thus requiring Board approval of an action.

The need to bring a contract modification to the Board for approval can add at least two months in the authorization process for all actions including time sensitive actions that may impact the project schedule critical path. By continuing the current Board delegated authority to the CEO, contractors will have the opportunity to start time-sensitive critical work immediately. Time is critical to achieving a successful project completion date and any time delay to a project can have exponential cost risks, including extended overhead payments due the contractor should the project be delayed.

In the most recent Los Angeles Construction Market Analysis Update received by the Board in September 2015, contractors working on Metro projects have indicated that the time in processing changes is a significant cost and schedule risk. As a result the contractors have had to include contingencies in their contract prices to address this risk. Any extended time in processing changes also puts subcontractors, including Disadvantaged Business Enterprises (DBEs), at risk of not receiving timely payment for work performed.

Under the current pilot program, changes and modifications are thoroughly reviewed and evaluated by a number of Program Management and Vendor/Contract Management (V/CM) executive management staff as follows:

- Up to \$500,000 by Director, Contract Administration and Project Manager;
- Above \$500,000 up to \$1M by Executive Officer, Vendor/Contract Management (V/CM) and Deputy Chief Program Management Officer;
- Above \$1M up to \$5M by Chief V/CM Officer and Chief Program Management Officer; and
- Above \$5M are elevated to the CEO for approval.

Based on the cumulative contract value, including changes and modifications executed under the Pilot Program, there was an overall increase in DBE participation across all four mega transit corridor projects during the one-year pilot period. Continuing forward, staff will review each change and modification for DBE participation to ensure opportunities for DBEs are maximized.

Results of the Program

As approved by the Board at the January 26, 2017 meeting, staff has implemented the pilot program and provided monthly reports to the Board. Staff also conducted an analysis to assess the program results and impact during the one-year pilot period.

Avoidance of Schedule Delays

Based on the data collected during the one-year pilot period, cumulatively among the four mega transit construction projects, change items were elevated to the CEO for expeditious action needed rather than waiting for the process for Board approval. This delegation resulted in projects avoiding schedule delays of up to 6 months and their related cost impacts. Metro staff has estimated that the pilot program has cumulatively generated cost savings that ranges from \$22.5M to \$30M, measured by project schedule delay avoidance. These cumulative cost savings are approximated using the average cost to the Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and 2 Projects for schedule delays range from \$3.3 to \$5 million per month for a total of \$6.6 to \$10

million per action for a 2-month delay.

By example, in July 2017, Regional Connector Project was faced with an unexpected need to replace the three screw conveyers to the tunnel boring machine (TBM) as they had been damaged after striking unforeseen site conditions during the first of two mining drives. The tunnel boring activity is on the critical path for the entire project. The estimated cost for the task was in excess of \$1 million. Replacement was accomplished during the ten-week preparation period prior to launching the second drive. The task of overseas procurement, followed by the placement and fitting of the new screws into the TBM assembly was accomplished during the scheduled reset and made possible by the CEO authorizing the procurement and associated installation labor under the pilot program. Without the pilot program, a substantial delay to schedule, at a cost of \$5 million per month, would have been experienced owing to the lead-time connected with the development and approval of regular Board actions.

By another example, in late May 2017, Westside Purple Line Extension (PLE) Section 1 Project identified an opportunity to increase the project schedule float by advancing the excavation work at the Wilshire/La Brea Station, which is on the critical path of this project schedule. Those work activities estimated in excess of \$10 million were elevated to the CEO for review and approval. For this specific change, a prompt turn-around was needed to take advantage of the opportunity to increase the project schedule float. Any prolonged process to implement this change would have resulted in a lost opportunity to gain back float. Without the pilot program, at least two-thirds of the float savings could not have been realized. With the pilot program in place, the change was elevated for the CEO approval and for the work to begin in the field. With the pilot program in place for this specific change, 130 days were added to the project schedule float.

Additional Program Benefits

In addition to allowing the projects to expedite execution of changes rather than incurring delays due to a lengthy approval of changes, there were additional positive program benefits realized, which are summarized as follows:

- Provides staff with the flexibility, responsibility and authority to manage the fast moving projects consistent with the need for quick decision-making and approvals. This is consistent with the Inspector General Office's Capital Project Construction Management Best Practices Study that was presented to the Board in April 2016, which recommended that project/construction management staff in charge be empowered and responsible for the change control process, with support from co-located professional contract administrators. This approach creates streamlined and effective project management allowing for project decisions to be formalized quickly, thus avoiding schedule delays.
- Maintains transparency as projects are still required to seek Board approval for any action requiring LOP budget approval or increase. The Board receives project updates through detailed Monthly Project Status Reports, monthly updates on the project status to the Construction Committee, and the Annual Program Evaluation (APE) presentation.
- Keeps the big picture focus on overall project budget management as opposed to detailed change orders. Since inception of the pilot program through early December 2017, a total of fifteen (15)

project actions were or will be addressed at the CEO level rather than requiring Board approval, one of which is pending CEO approval and execution.

- Maintain consistency with industry best practices for effective project management. The timely processing of contract modifications is a key element of project successes. With the significant increase in number and size of projects and the accelerated implementation schedule for delivering Metro's Capital Program, including the projects on the 28 by 2028 initiative presented at the November 30, 2017 Board meeting, a streamlined project management is integral to successful project delivery. This approach is consistent with other national transit agencies including San Jose, Seattle, and Denver.

ALTERNATIVES CONSIDERED

The alternative to staff recommendation is to not extend the delegated authority to other transit capital and regional rail projects program-wide. However, this is not recommended as capital projects will benefit from streamlined and efficient project management.

NEXT STEPS

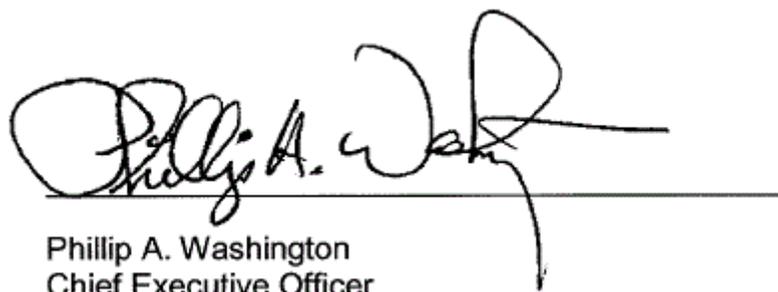
Staff will make the necessary changes to the policies and procedures to reflect this expanded delegation of authority to include all transit capital and regional rail projects program-wide. Monthly reports will be provided to the Board reflecting project related agreements and contract modifications executed under this delegated authority.

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