



**CENTRAL TEXAS
Regional Mobility Authority**

Meeting Date: October 28, 2015
AGENDA ITEM # 24

Quarterly briefing on the
MoPac Improvement Project.

Strategic Plan Relevance: Regional Mobility
Department: Engineering
Contact: Wesley M. Burford, P.E., Director of Engineering
Associated Costs: N/A
Funding Source: N/A
Action Requested: Briefing and Board Discussion Only

Summary:

The report is an account of the activities on the MoPac Improvement Project from July through September, 2015.

Backup provided: GEC Quarterly Activities Report and Board Presentation



◀◀ MOPAC
IMPROVEMENT
PROJECT ▶▶

QUARTERLY
PROGRESS
REPORT

No. 20 | October 2015





**CENTRAL TEXAS
Regional Mobility Authority**

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PROJECT PARTNERS





QUARTERLY PROGRESS REPORT No. 20

INTRODUCTION

The MoPac Improvement Project is a \$204 million project which will add one Express Lane in each direction along an approximately 11-mile stretch of MoPac from Cesar Chavez Street in downtown Austin to Parmer Lane north of Austin within existing right of way. The Project is an effort to address the mobility problem in this corridor and takes into account the needs of drivers, transit riders, pedestrians, bicyclists, and the concerns of surrounding neighbors.

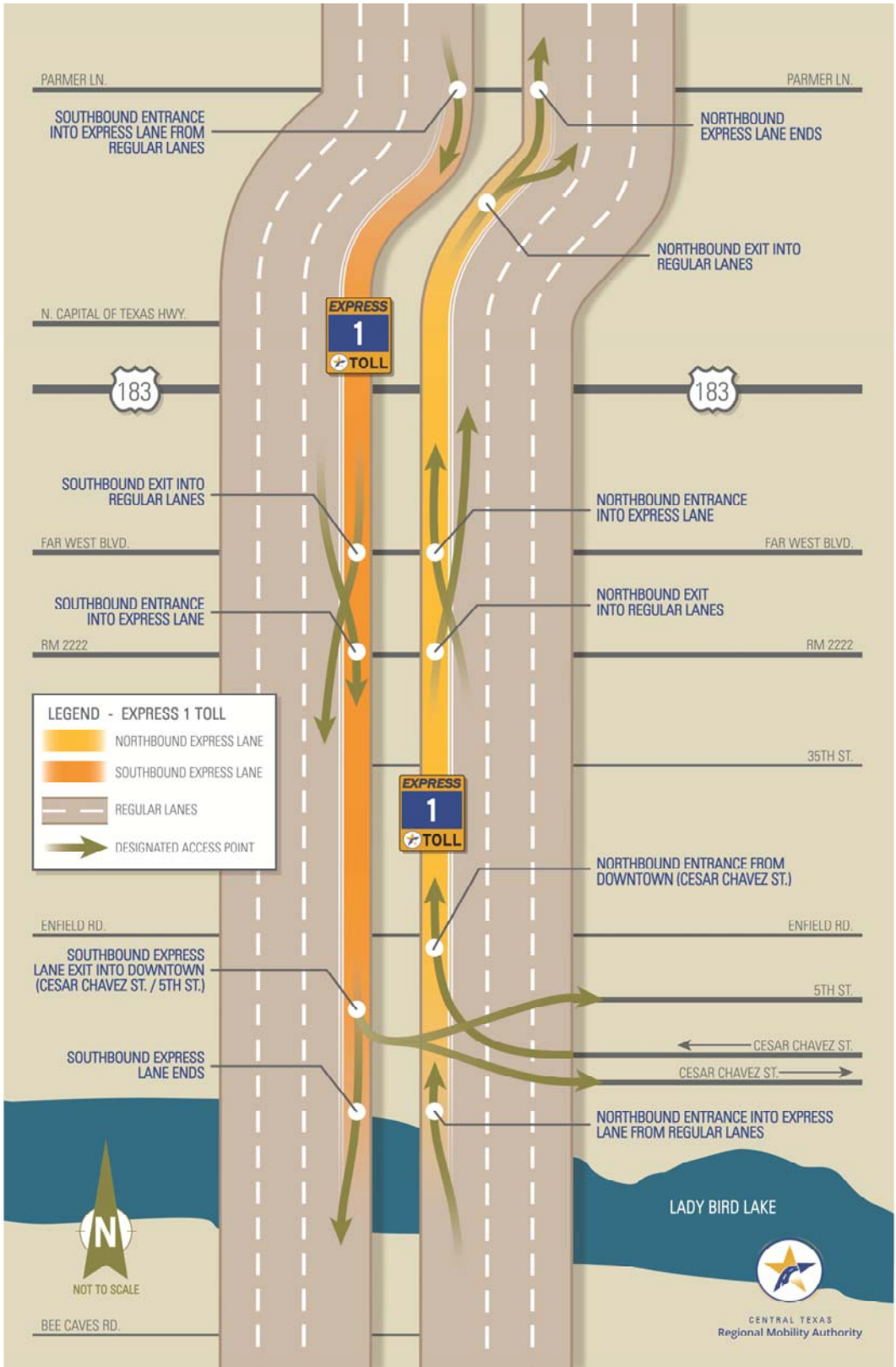
Environmentally cleared in August 2012, the Project is being built in cooperation with the Texas Department of Transportation (TxDOT), the Capital Area Metropolitan Planning Organization (CAMPO), the City of Austin, Capital Metro (CapMetro), and the Federal Highway Administration (FHWA).

The Express Lanes will be located in the middle of the MoPac corridor separated from the existing general purpose lanes by a four foot wide striped buffer zone with flexible pylons. Drivers will be able to access the MoPac Express Lanes at Cesar Chavez Street, near Far West Boulevard, or near Parmer Lane. While this addition of lanes will require widening of the pavement, the Express Lanes project requires no property acquisition and all existing non-toll general purpose lanes and the UPRR corridor will remain.

In addition to the Express Lanes, the MoPac Improvement Project will include: sound walls; a collector-distributor road under Steck Avenue; aesthetic enhancements and significant landscaping; bicycle and pedestrian improvements including two shared-use paths; full mainlane overlay with porous friction course (PFC) pavement which serves as a wet weather safety improvement measure; enhanced incident management (cameras and traffic data collection); and a significant community relations effort.

The Mobility Authority entered into a contract with CH2M to design and build the MoPac Improvement Project. The agreement currently requires the project to be substantially complete by September 27, 2015; however, there is a Change Order in process that would add days once fully executed. The Contractor developed an acceptable Baseline CPM (Critical Path Method) Schedule for the Project. The Mobility Authority issued Notice to Proceed (NTP) on April 18, 2013.

This report describes the status of the MoPac Improvement Project and documents the activities accomplished from July through September 2015.



SUMMARY OF ACTIVITIES

The following activities have been accomplished by the Mobility Authority, its consultants, and the D/B Contractor during the reporting period.

DESIGN ACTIVITIES

- Task force meetings continue on an as-needed basis and over the shoulder informal reviews have been completed. The Mobility Authority's GEC is performing oversight of the Contractor activities.
- Reviewed and accepted Notice of Design Changes (NDC) for specific design changes.
- Review of Owner-Directed Change Order Work design plans.

CONSTRUCTION ACTIVITIES

- **Segments 1 & 2A (Parmer Lane to US 183)**
 - Shared Use Path (SUP)
 - Flatwork
 - Retaining Walls
 - Toll Gantry Structure Installation
 - Retaining Wall Construction
 - Cap Metro and UPRR Bridge Deck Concrete Pours
 - Cast-in-Place Concrete Barrier on Media Side
 - Curb Placement
 - Permanent Lighting
 - Topsoil in Median
 - Utility Work
 - Preparation for Overhead Sign at Parmer Lane
 - Construction of Toll System Site at Parmer Lane
- **Segment 2B (US 183 to RM 2222)**
 - Median Widening from Far West to RM 2222
 - Toll Gantry Erection at RM 2222 and Far West Boulevard
 - Permanent Lighting
 - Retaining Wall Construction
 - RM 2222 Bridge Demolition and Deck Panels
 - Installation of Drainage Structures
 - Utility Work
 - Paving in advance of Concrete Traffic Barrier Installation
- **Segment 3 (RM 2222 to Enfield Road)**
 - Drilled Shafts and Foundation Work
 - Retaining Wall Construction
 - Sound Wall Construction
 - Installation of Drainage Structures
 - Utility Work Including ITS Fiber Optic Backbone and Watermain Installation
 - 42" Waterline Boring Under MoPac - 75' of Approximately 300' Completed

- **Segment 4 (Enfield Road to Cesar Chavez)**
 - Southbound Undercrossing Excavation – Reached Final Excavation Level at Approximately 25-30’ Below Grade
 - Asbestos Remediation Continuing
 - Retaining Wall Construction
 - Utility Work Including ITS Fiber Optic Backbone
 - Northbound Undercrossing Structures Redesign Issued for Construction
- Roadway maintenance is being performed as required

PROJECT PROGRESS

The Contractor has exceeded the original Completion date of September 17, 2015. It is anticipated the Substantial Completion date will be modified to allow additional time for the design and construction of a number of Owner-Directed changes with the full execution of Change Order 15. This Change Order would add 101 days once fully-executed and extend Substantial Completion to December 27, 2015 with final acceptance scheduled for April 26, 2016. The GEC oversight team is assessing and monitoring progress and believes that even with the anticipated time extension the Contractor will not meet the projected schedule.

Previously, the D/B Contractor brought on additional resources (self-performing and subcontractors) to help with productivity. As a significant portion of the contracted work is approaching completion for two of those mobilized subcontractors, the resources from those subcontractors have been substantially scaled back. The third subcontractor is currently working on the excavation for the undercrossings near downtown, and has made considerable progress. Contractor and Oversight Team members continue to explore options regarding traffic detours and alternative methods of construction relating to the undercrossing work. The D/B Contractor continues to assess future opportunities to expedite the delivery of the Project. The Oversight Team will continue to work with the Contractor to identify opportunities to expedite activities.

Progress continues on the construction activities associated with the City of Austin 42” waterline relocation. Trenching work for, and the installation of, the related 12” water line on the TxDOT property at Camp Hubbard has been completed. Trenching for the 42” line across the Camp Mabry property has concluded, and the installation of the pipe has begun.

All three sections of the Pedestrian and Bicycle Bridge, which will span over the UPRR, have been set in place. Work on the approaches to the bridge will commence in the next quarter.

Sound wall construction, a subject of considerable public interest, continues to progress, moving up to the Enfield Road bridge from 10th Street. Column and panel installation will continue to move northward in the upcoming months.

Primary issues currently reported by the D/B Contractor impacting the project schedule include weather and the lack of scheduled production in the shoring for the excavation associated with the construction of the undercrossings for the direct connections to downtown.

Construction Progress through September 2015

Based on the assessment of the GEC, the summary of the project progress achieved on major work tasks through the end of September 2015 is as follows:

MoPac Improvement Project Progress For the Period Ending September 2015

Design + Construction Tasks	% Complete
Development Design	96%
Traffic Control/Detours/Temp Barrier	47%
Earthwork/Demolition/Removals/Drainage	39%
Structures/Bridges/Retaining Walls	54%
Sound/Neighborhood Walls	45%
Geotech/Survey	100%
Utilities	79%
Pavement/Subbase/Base Course	27%
Environmental Monitoring	65%
Lighting/Signing/Striping	56%
Toll Facilities	62%
Landscaping/Shared use Path/Sidewalks	14%

SCHEDULE OF CONTRACTUAL PROJECT MILESTONES

- **February 27, 2013:** Selection of Best Value Proposer
- **April 18, 2013:** NTP Issued
- **September 17, 2015:** Substantial Completion
- **January 15, 2016:** Final Acceptance

Contractual Completion Dates upon full execution of Change Order 15 for additional 101 Days

- **December 27, 2015:** Substantial Completion
- **April 26, 2016:** Final Acceptance

NEXT QUARTER ACTIVITIES

- **Segments 1 & 2A (Parmer Lane to US 183)**
 - Shared Use Path
 - Grading Approaches for Pedestrian Bridge
 - Retaining Walls
 - Continuing Construction of Segment from Walnut Creek to Capital of Texas Highway

- Median Widening and Asphalt Paving at Cap Metro and UPRR Approaches
 - Grading Topsoil in Median
 - Construction of Median Concrete Rip Rap
 - Median Lighting
 - Bridge Rail at Cap Metro Crossing
 - Bridge Deck Widening at UPRR Crossing
 - Construction of Toll System Site at Parmer Lane
 - Construction of Electrical Services and Median Lighting
- **Segment 2B (US 183 to RM 2222)**
 - Median Widening at Steck
 - Construction of Collector-Distributor Road at Steck
 - Retaining Wall Construction
 - Bridge Deck Widening at RM 2222
 - Construction of Median Rail and Concrete Safety Barrier
 - Northbound RM 2222 Bridge Girder Set
 - Median Widening and Asphalt Paving at RM 2222 Approaches
 - Construction of Concrete Sidewalk along Frontage Road
 - Construction of Electrical Services and Median Lighting
- **Segment 3 (RM 2222 to Enfield Road)**
 - Enfield Bridge Rail and Retaining Wall Construction
 - Windsor Bridge Superstructures and Deck Widening
 - Westover Bridge Superstructures and Deck Widening
 - ITS/Lighting from 45th to Enfield
 - Retaining Wall Construction
 - 42" Waterline Construction
 - Noise Barrier Construction
 - Construction of Sign Structures
 - Roadway Widening NB from 45th St. to Hancock
- **Segment 4 (Enfield Road to Ladybird Lake)**
 - Construction of NB and SB Undercrossings
 - Noise Barrier Construction
 - NB Ramp Construction South of Enfield
 - Construction of Temporary NB 6th St. Entrance Ramp
 - Construction of NB Enfield Entrance Ramp
 - Construction of Concrete Rail
 - Construction of NB Main Lanes Detour
 - Construction of Sign Structures
 - Construction of Retaining Walls
 - Placement of Rock Rip Rap at Johnson Creek Outfall

PROGRESS PHOTOS



Bridge Bent Construction at Union Pacific Rail Crossing



Bridge Bent Construction at Union Pacific Rail Crossing



Sound Wall Construction near Enfield Road and Johnson Creek Trail



Expansion of Northbound Bridge over Windsor Road



Sound Wall Foundation Work at 45th Street



Paving of Southbound Express Lane between Far West and RM 2222



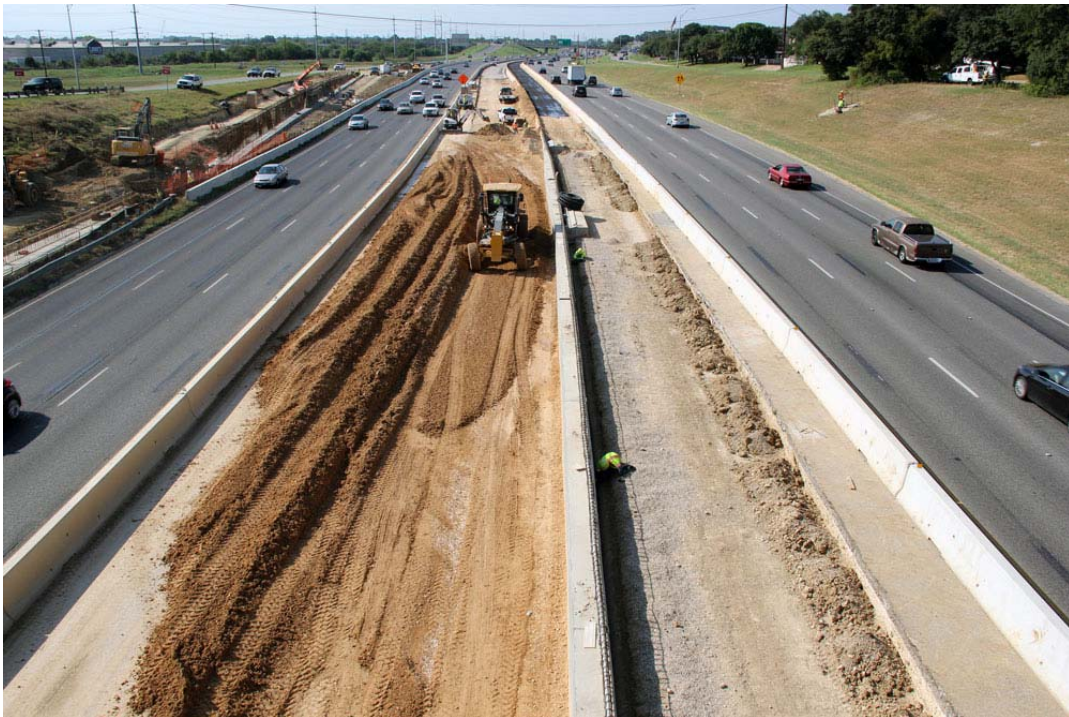
Drilling Foundations for Sound Walls north of Enfield Road



Southbound Underpass Excavation



Bridge Widening at Park Bend Drive/Waters Park Drive



Preparing to Pave Median near Steck Avenue



Sidewalk Construction along Northbound MoPac Frontage Road



Shared Use Path Construction along southbound MoPac Frontage Road near Loop 360

PROJECT FINANCIAL STATUS

Progress billings are received each period from CH2M for review and approval. Currently draw requests are accompanied by an accepted progress schedule. The D/B Contractor’s September 2015 Draw Request has not been received.

Summary of Project financial status through August 2015

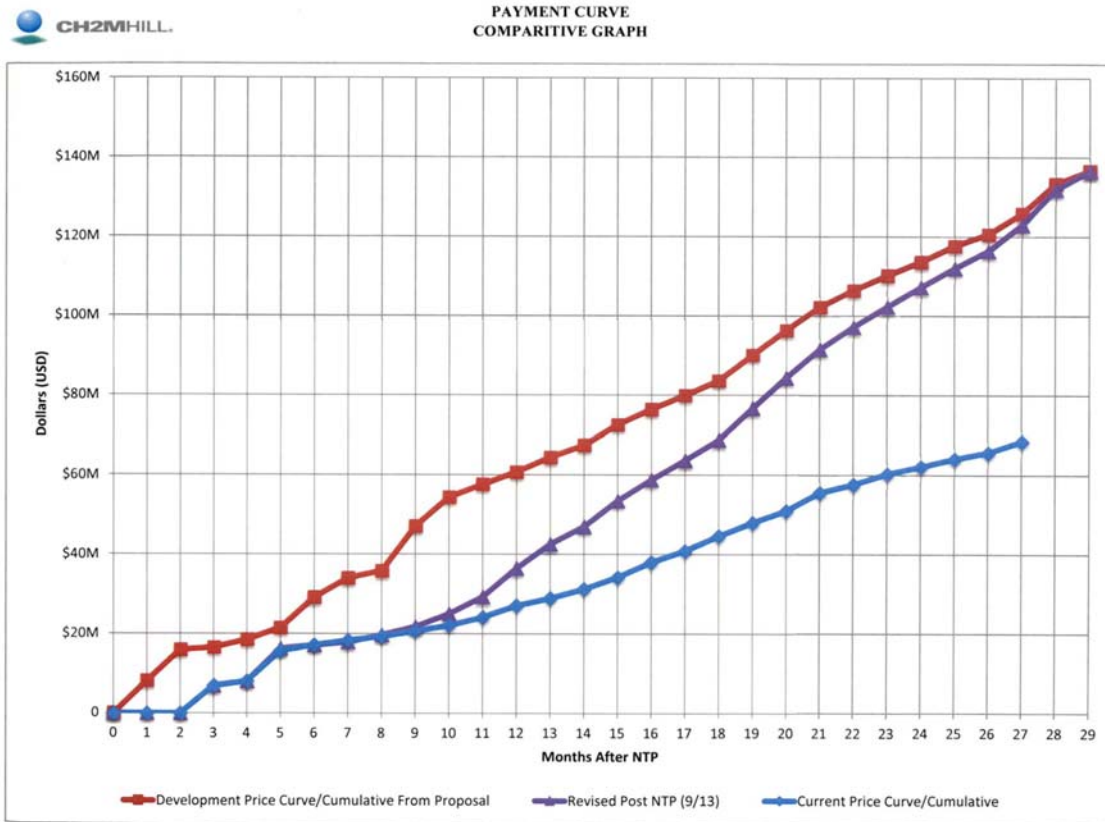
Original CH2M Contract Amount:	\$136,632,100
<i>Authorized Changes (Change Order and/or Amendments):</i>	
Previous Period Change Orders	\$3,729,078.50
Reporting Period Executed Change Orders:	\$0
Current Authorized Contract Amount:	\$140,361,179
CH2M Payments:	
Amount of Draw Nos. 01-24 (July 2013 – June 2015)	\$ 65,690,378
Amount of Draw No. 25 (July 2015)	\$2,438,150
Amount of Draw No. 26 (August 2015)	\$3,989,913
Total Requested Amount To-Date through Draw No. 26:	\$72,118,441
Retainage withheld*:	\$0
Liquidated Damages**:	(\$787,700)
Approved Amount for Work Completed through Draw No. 26	\$71,330,471
Total Project Budget Expended Through September 2015:	51.4%
Amount remaining for work to be completed:	\$ 68,242,738

*Retainage to be withheld only after 95% of the Authorized contract price has been paid.

**Liquidated damages assessed for unauthorized lane closures

Project Cash Flow Curve – September 2015

Cash Flow Curves are provided by CH2M at the time of draw request submittal.



EMPLOYMENT REPORTING STATUS

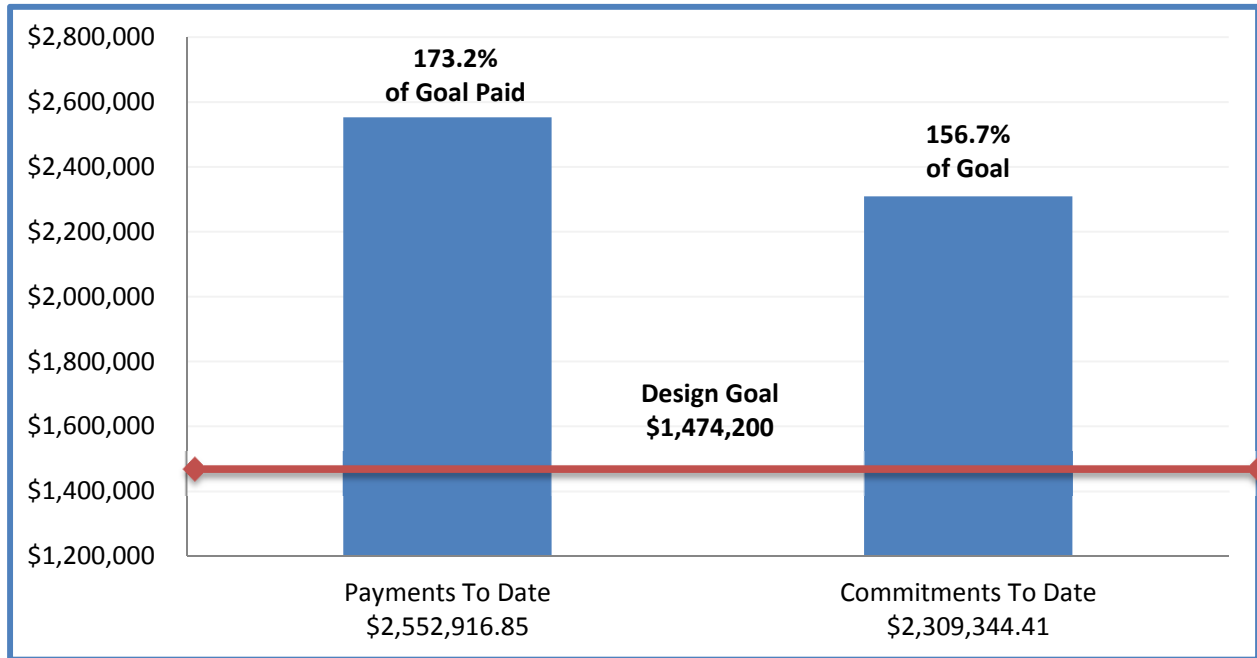
Design and construction of the MoPac Improvement Project is estimated to have supported approximately 429 jobs during the reporting month of September 2015. This estimated number of jobs supported by the project includes: the design personnel and management staff; the construction personnel and their subcontractors; construction management staff, including inspectors and subconsultants; and the general engineering consultant staff and their subconsultants.

DBE STATUS

CH2M plans to meet the Disadvantaged Business Enterprise (DBE) goal of 11.7% for both the design services and the construction work. The overall total DBE requirement for the project, based on the original contract value, is \$15,985,955. The current committed total for all DBE subcontracts is \$17,012,278. The charts below reference the current DBE Commitments vs. Payments to date.

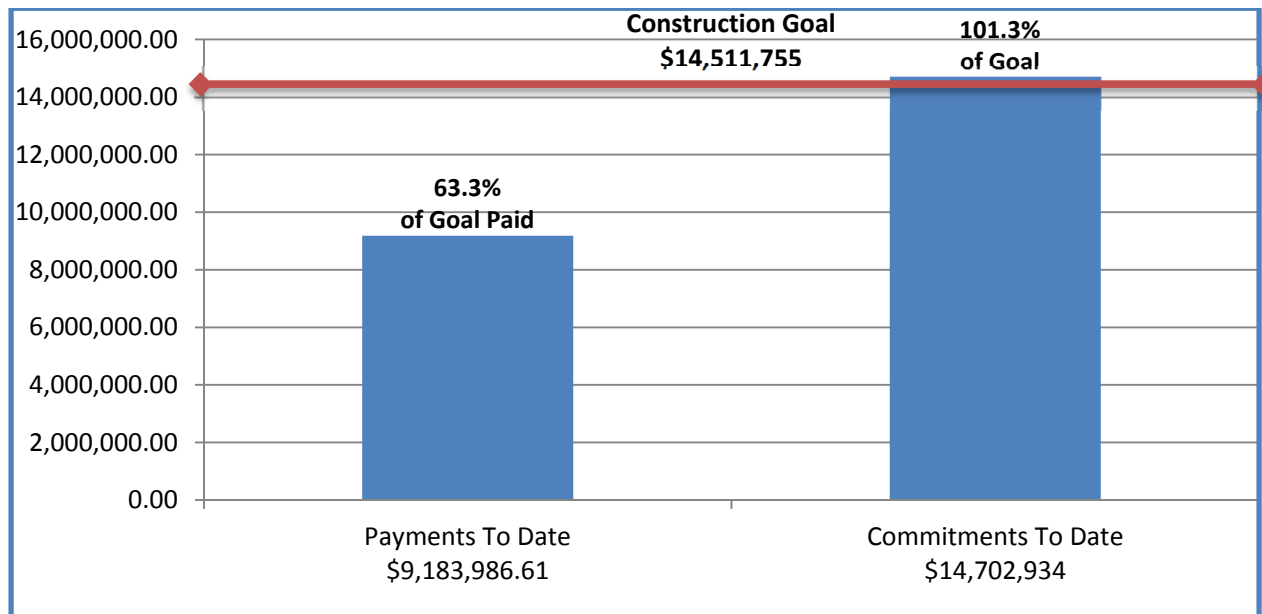
Design

DBE Design Commitment vs. Payment For Period Ending September 2015



Construction

DBE Construction Commitment vs. Payment For Period Ending September 2015



COMMUNITY RELATIONS

The Community Outreach Team utilizes a robust set of communication tools to supply timely information to numerous audiences. The team also provides several avenues for the public to ask questions and provide comments.

Within the reporting period, the team received and responded to approximately 75 inquiries via the 24/7 Hotline, Web Comment Form, and Email. The most recurring comment involved lane closure inquiries.

- Construction updates continue. The team provides daily and weekly updates for the project Website (www.MoPacExpress.com), Social Media (Twitter and Facebook), Smartphone Application (available for Android and iPhone), Email and Text Alerts, and the Highway Advisory Radio (800 AM).
- Social Media continues to be an effective tool for disseminating information and receiving feedback on the project. At the end of the reporting period, the Twitter account @improvementpac had approximately 2,800 followers and the Facebook page had approximately 400 “likes”.
- E-Newsletters and the MoPac Man blog are distributed periodically to the mailing list and posted to the website with a project update. Within the reporting period, a Newsletter was posted in July and a Blog in August.
- Express Lanes Education was initiated. Over 6,000 people visited the Express Lanes informational page and more than 4,500 participated in the “What MoPac Lane Are You?” quiz. The social media campaign aims to educate the public on how the new express lanes will work and highlight opportunities when they might be most useful.
- The project continues to receive steady news coverage. KXAN, KVUE, FOX7, Austin American Statesman, Community Impact are some of the news outlets that ran stories about the project. Topics included; project delays; worker shortage; sound walls; temporary traffic shifts, and the social media campaign.
- Community outreach continues. The team attended the Tarrytown Movie in the Park in September providing neighborhood residents the opportunity to ask questions regarding the project.