



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #13 SUMMARY

Quarterly briefing on the MoPac Improvement Project.

Strategic Plan Relevance: Regional Mobility

Department: Engineering

Associated Costs: N/A Briefing Only

Funding Source: N/A

Board Action Required: No

Description of Matter:

The report is an account of the activities on the MoPac Improvement Project from April through June, 2014.

Reference documentation:

GEC Quarterly Activities Report and Board Presentation

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◀◀ MOPAC
IMPROVEMENT
PROJECT ▶▶

QUARTERLY
PROGRESS
REPORT

No. 15 | July 2014





CENTRAL TEXAS
Regional Mobility Authority

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QUARTERLY PROGRESS REPORT No. 15

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 will be 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 HILL to design and build the MoPac Improvement Project. The agreement requires the project to be substantially complete by September 17, 2015. 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 April through June 2014.

LOCATION MAP



KEY TO LINES

- Express Lane Southbound
- Express Lane Northbound
- ⋯ Union Pacific Railroad
- ⋯ Capital Metro Rail



Segment 1: Parmer to UPRR
Segment 2A: UPRR to US 183
Segment 2B: US 183 to RM 2222
Segment 3: RM 2222 to Enfield
Segment 4: Enfield to Cesar Chavez

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

- Weekly task force meetings continue and over the shoulder informal reviews have been ongoing. The Mobility Authority's GEC is performing oversight of the D/B Contractor activities.
- The following were reviewed by Oversight Team and accepted:
 - Segment 4 Northbound Undercrossing 100% Design Plans in April
 - UPRR Pedestrian Bridge 100% Design Plans in April
 - Early Release for Construction (ERFC) Segment 1, 2A in April
 - Release for Construction (RFC) Design for:
 - Windsor Rd SB Bridge in April
 - RM2222 NB Bridge in April
 - Segment 3 Ph 1B in May
 - Segment 4 Ph1, 2 in May
 - Segment 4 Ph 3 in June
 - Segment 4 NB Undercrossing in June
 - UPRR Pedestrian Bridge in June
- Received Water Pollution Abatement Plan (WPAP) approval from TCEQ in April
- Reviewed CO-01A 5th Street Reconfiguration Preliminary Design and Final Design Exception Report in June.
- Numerous design change reviews and Requests for Information.
- Coordination continues with UPRR and CapMetro for work within their ROW.
- Change Order development and design revisions have been ongoing.

CONSTRUCTION ACTIVITIES

- D/B Contractor continued with striping and Metal Beam Guard Fence (MBGF) removals.
- Placement of temporary traffic barrier continued along the corridor.
- Erosion control measures were maintained and new installations were placed for areas commencing construction along the corridor.
- Fabrication of pre-cast concrete barrier rail continues at Tricon in New Braunfels, TX.
- Fabrication of sound wall panels continues in Kerville, TX.
- Installation of drilled shafts for bridges.
- MoPac Corridor Courtesy Patrol is operating as required.
- Roadway maintenance is being performed as required.
- Installation of temporary lighting along the corridor.
- Installation of drainage structures along the corridor.
- Excavation and grading for retaining walls.
- Utility relocations.
- Removals of pavement markings and replacement.

PROJECT PROGRESS

As of June 30, 2014, 49% of the 882 calendar days to scheduled Substantial Completion have expired. The Contractor’s latest schedule indicates the project is maintaining schedule for Substantial Completion on September 12, 2015. However, the GEC team has identified several issues of concern and is working with the Contractor to address these issues to meet the contractual Substantial Completion Date. There are 444 calendar days until Substantial Completion and the Contractor is allowed an additional 120 calendar days for Final Acceptance.

Construction Progress through June 2014

Based on the assessment of the GEC, the summary of the project progress achieved on major work tasks through the end of June 2014 is as follows:

MoPac Improvement Project Progress For the Period Ending June 2014

Design + Construction Tasks	% Complete
Geotech/Survey	100%
Development Design	89%
Environmental Monitoring	29%
Traffic Control/Detours/Temp Barrier	30%
Earthwork/Demolition/Removals/Drainage	13%
Structures/Bridges/Retaining Walls	7%
Sound/Neighborhood Walls	0%
Utilities	10%
Pavement/Subbase/Base Course	0%
Permanent Lighting/Signing/Striping	1%
Toll Facilities	0%
Landscaping/Shared Use Path/Sidewalks	0%

CH2M HILL’s Substantial Completion date per their approved baseline schedule is September 12, 2015.

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

UPCOMING ANTICIPATED PROGRESS ACTIVITIES

July 2014

- UPRR Right of Entry (ROE) Applications and Construction Submittals
- Soundwall 03 100% Review
- Segment 1 and 2 Median Earthwork
- Segments 1 & 2A Plan Acceptance
- Segments 1 & 2A and Phase 1 Construction
- Segment 2B Phase 1 Drainage and Structures Construction
- Segment 3 Sound Wall Shaft Construction
- Segment 3 Drainage Structures
- Segment 3 Duct Bank Relocation
- Segment 3 Overhead Sign Foundations
- Segment 3 Drainage Structures
- Segment 4 Temporary Traffic Control Implementation
- Segment 4 12" Waterline Relocation Segment
- RM 2222 SB, Enfield Bridge, Westover, Cap Metro, and 45th Street Bridge Construction
- Median Widening at US 183 to Enfield
- Jack and Bore for Undercrossing Drainage
- Pre-stressed Beam Fabrication
- Soundwall Panels and Post Fabrication

August 2014

- Set Girders at Enfield
- Set Girders at 2222 SB
- Set Girders at 45th Street
- Segment 3 Utility Relocations
- Sound Wall Construction
- Neighborhood Wall Construction
- Utility Relocation at Enfield
- Outside Widening at US 183 to Enfield
- UPRR Bridge Construction
- Pre-stressed Beam Fabrication

September 2014

- Segments 1 and 2A Begin install of Permanent Precast Barrier
- Far West Toll Equipment Site Construction
- Segment 4 Structural Excavation and Soil Nail Walls
- Westover and Windsor Bridge Substructures
- Water Line Relocate at Cesar Chavez
- RM 2222 NB Bridge Construction
- 45th Street Hardscape

PROGRESS PHOTOS



Sound Wall Mockup Inspection - April 2014



Median Traffic Barrier Demolition near Steck Avenue – April 2014



RM 2222 Bridge Foundation Drilling – April 2014



Retaining Wall Construction in Median at RM 2222 – June 2014

PROJECT FINANCIAL STATUS

All CH2M HILL draw requests are accompanied by an approved progress schedule.

Summary of Project financial status through June 2014

Original CH2M HILL Contract Amount:	\$136,632,100
<i>Authorized Changes (Change Order and/or Amendments):</i>	
Previous Period Change Orders	\$213,733.58
Current Change Order No. 02- Toll Gantry Pavement Requirements	<u>\$0.00</u>
Current Authorized Contract Amount:	\$136,845,833.58
CH2M HILL Payments:	
Amount of Draw Nos. 01-09 (July 2013 – March 2014)	\$24,143,102
Amount of Draw No. 10 (April 2014)	\$2,939,197
Amount of Draw No. 11 (May 2014)	\$1,889,030
Amount of Draw No. 12 (June 2014)	<u>\$2,305,094</u>
Total Requested Amount To-Date through Draw No. 12:	\$31,276,423
Retainage withheld**:	<u> \$0</u>
Approved Amount for Work Completed through Draw No. 12:	\$31,276,423
Total Project Budget Expended Through June 2014:	22.9%
Amount remaining for work to be completed:	\$105,569,410

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

Summary of Change Orders During Reporting Period

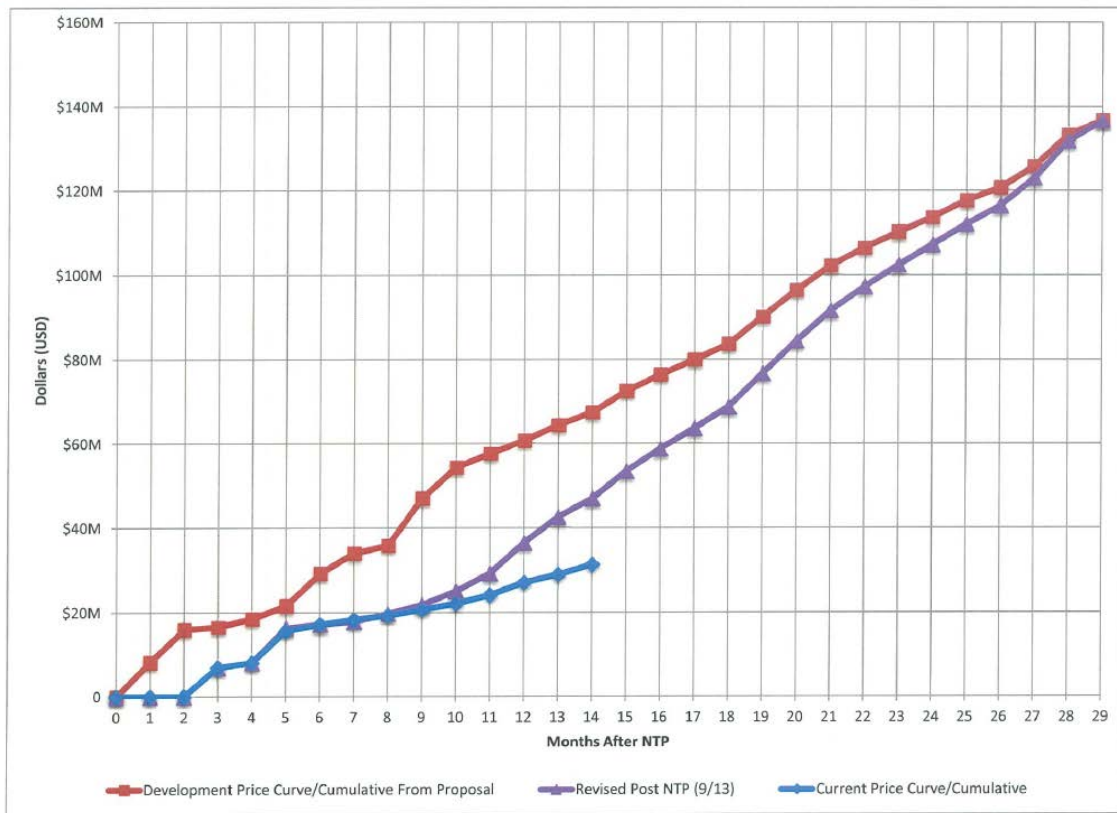
Change Order No. 02 – Toll Gantry Pavement Requirements –This change order is for a change in scope to replace jointed concrete reinforced pavement with asphalt at toll gantry locations. This change order was a \$0 cost change to the scope, submitted February 27, 2014 and executed in March 2014.

Project Cash Flow Curve – March 2014

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



PAYMENT CURVE
COMPARITIVE GRAPH



EMPLOYMENT REPORTING STATUS

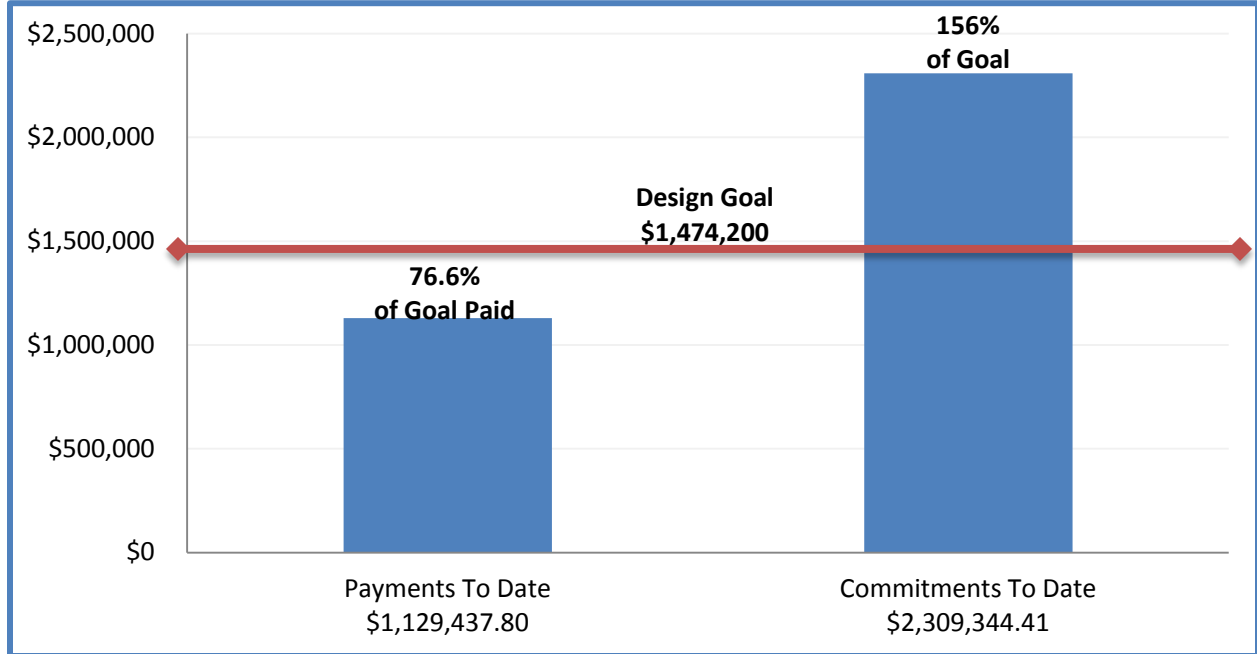
Design and construction of the MoPac Improvement Project is estimated to have supported approximately 203 jobs during the reporting month of June 2014. This estimated number of jobs supported by the project includes: the design personnel and management staff; the construction personnel and their subcontractors; construction management staff, including inspectors and subconsultants; and the general engineering consultant staff and their subconsultants.

DBE STATUS

CH2M HILL 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.

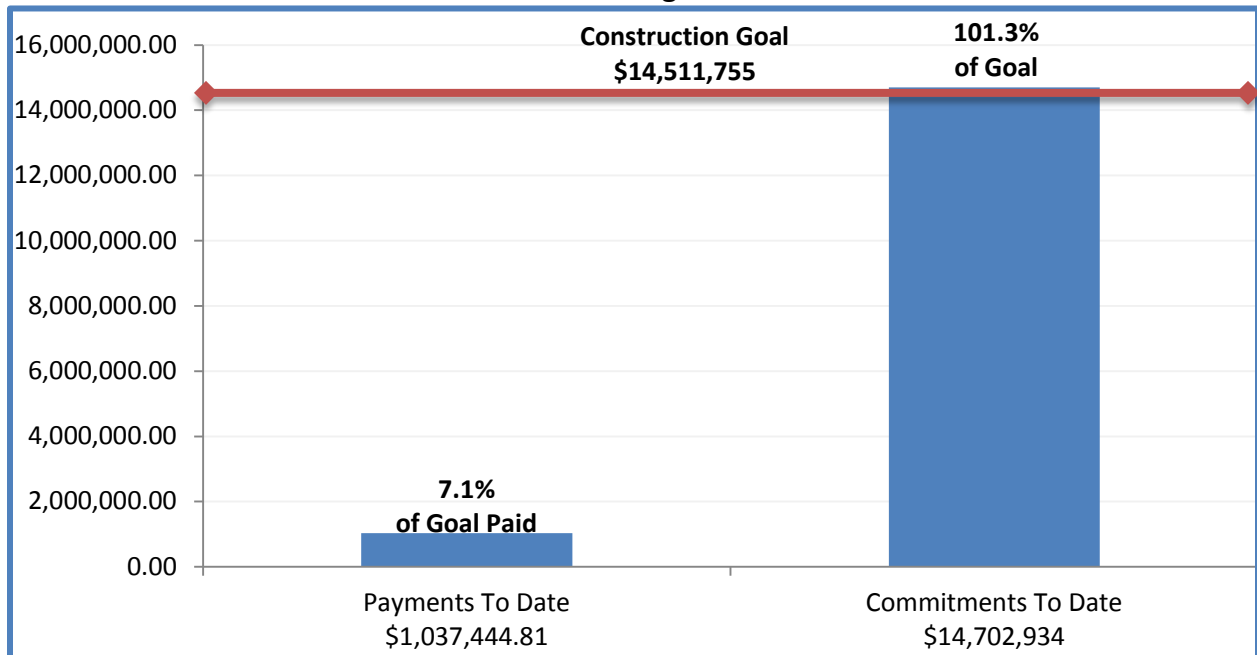
Design

DBE Design Commitment vs. Payment For Period Ending June 2014



Construction

DBE Construction Commitment vs. Payment For Period Ending June 2014



COMMUNITY RELATIONS

- The team staffs a **24/7 Hotline** (via both email and phone), and responds to the steady number of inquiries about the project. Within the reporting period, the team received fewer than 100 inquiries, the majority of which were concerned about the restriping of lanes. Other major themes were: general project questions; questions about express lanes management (i.e. discount for veterans, HOV drivers, or energy efficient vehicles; equity for underserved populations; maximum and minimum price for toll); concerns about tree removal at Enfield; concerns about the status of Sound Wall #3; questions about schedule and lane closures; and numerous inquiries about whether workers were present at specific times due to the issuance of speeding tickets to drivers.

Specific comments included:

- *“On north-bound MoPac starting at Enfield, the striping on the roadway is confusing, causing cars to drive erratically, or to straddle lanes. The "new" lane demarcation is not distinguishable from the old striping. Serious safety issue, especially for inexperienced drivers.”*
- *“Please revisit the removing the original lane dashes in the construction zone. The original lane lines look to have been painted over and the new lane lines are non reflective paint with reflectors in between. In the mornings traveling North the original lines are shiny and highly visible from the sun's reflection and the new lines are hard to see causing cars to veer and swerve in traffic.”*
- *“The north bound lane on MoPac starting at the Enfield Road exit and going through at least the Windsor Road exit, the old lane stripes are visible, especially during a rain and in the dark. It is very confusing as to where your lane is, especially for those merging onto the highway. Please cover-up the old lane markings.”*
- *“Due to construction, lanes on Mopac have been shifted. The re-striping of lanes on Mopac Northbound between 183 and Parmer was done poorly when compared to the rest of the highway. Previous lines are still highly visible, making it extremely difficult to distinguish between the new lanes and old lanes, even with heightened attention. As a commuter in this area, myself and other drivers are switching lanes unintentionally on a daily basis causing dangerous situations. When the sun is shining, the situation is even worse. I ask that the old lane stripes please be removed or more effort is made to reduce their visibility.”*
- *“On June 13 at 2:09AM, approximately how many workers were actively working, and where were they working (including the cross street(s) with Mopac and whether on the North or South bound lanes)? “*

- *“I was wondering where do I send bills for lost time sitting in rush hour traffic to? With lane capacity impacted by all the construction barriers, congestion has gotten ridiculous to the point where I see a lot of motorists using shoulders to navigate MoPac mayhem during peak periods. Is there at least something you can do to speed up construction.”*

Of note, specific to the restriping issue, the team has consistently responded to the community and media that we’ve gone back and remasked the old striping, utilized traffic buttons to clarify lane channeling, and we continue to investigate industry best practices.

- The **project website** (www.MoPacExpress.com) continues to be updated every week with detailed information about work activities planned for the upcoming week and how they are expected to impact drivers.
- The team continues to monitor **social media** and initiated several discussions on Twitter and Facebook regarding construction activities. At the end of the reporting period, Twitter had 2038 followers and Facebook had 139 likes.
- The **Earthcam cameras** are live and a feed is transmitted to the project website. There is a camera at MoPac and 45th Street and another at MoPac and 10th Street, and each camera shows a shot of four different views of the construction activities occurring.
- The **smartphone application** (available for Android and iPhone) as well as the **email and text alerts** are being updated and disseminated to members of the public who sign up for these services on the website. Alerts are issued anytime there is a major lane closure that is expected to cause backups. The website is now set up to display major alerts on the front page when they occur.
- The **Highway Advisory Radio (800 AM)** is live and updated every week with a new message about the work activities planned for the upcoming week and promotes other important topics such as work zone safety. The radio broadcast is advertised on multiple signs in the corridor as well as on the project website.
- **E-Newsletters** and the **MoPac Man blog** are distributed periodically to the mailing list with a project update. Within the reporting period, an E-Newsletter launched on May 14; a Blog was posted on April 10 and June 12.
- **Media coordination** continues and fewer stories have been printed and aired this quarter compared with last quarter. KLBJ had a story the week of April 7 which highlighted a general project update. The team continues to promptly respond to any media inquiry.
- **Business outreach** continues and the team continues to identify additional outreach opportunities. Presentations were given to the Austin Board of Realtors on May 28 and to the Platinum Top 50 Real Estate Group on May 30.
- **Community outreach** continues. The team provided presentations to the Capital Area Metropolitan Planning Organization (CAMPO) on April 14, to the Austin Contractors and Engineers Association Symposium on April 16, to the Westminster Retirement Community on May 22, and to the Highland Park West Balcones Area Neighborhood Association on June 16. The team continues to schedule additional presentations to be held throughout the year.

- **Adjacent project coordination** with the Mobility Authority’s multiple ongoing environmental studies continues. “MoPac Man” attended the MoPac South Open House in April, and plans to be at the 183 North Open House in July. In addition, the project had a display table at the Mobility Authority’s Manor Expressway Grand Opening on Saturday, May 17.