



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #15 SUMMARY

Quarterly Briefing on the Manor Expressway Project

Strategic Plan Relevance: Regional Mobility given that the Manor Expressway will reduce congestion and improve mobility in the area

Department: Engineering

Associated Costs: Not applicable

Funding Source: Not applicable

Board Action Required: No

Description of Matter: The report is a comprehensive account of the activities on the Manor Expressway Project during the 3rd quarter of 2013

Reference documentation: Quarterly Progress Report on the Manor Expressway Project
- Phases I & II

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MANOR EXPRESSWAY PROJECT - PHASES I & II

Quarterly Progress Report



No. 17 | October 2013



ATKINS

Independent Engineering Report



CENTRAL TEXAS
Regional Mobility Authority

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MANOR EXPRESSWAY PROJECT - PHASES I & II
Quarterly Progress Report
No. 17
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INTRODUCTION

This report documents and describes Phase II of the Manor Expressway Project during the period from June 26, 2013 to September 25, 2013. This Project is being developed and constructed by the Central Texas Regional Mobility Authority (“Mobility Authority”). The Project is funded by a combination of funds including, a State Infrastructure Bank loan, Series 2011 Senior Lien Bonds, Series 2011 Subordinate Lien Bonds, TxDOT grant funds, and Mobility Authority funds.

PROJECT DESCRIPTION

The Manor Expressway Project is an approximately 6.2-mile toll project located in Travis County along the existing U.S. Highway (US) 290 corridor between US 183 and just east of State Highway (SH) 130. This project will upgrade the existing US 290 four-lane divided highway to a controlled access highway facility with three tolled mainlanes and three non-tolled frontage lanes in each direction. The tolled mainlanes will provide grade-separated access through several local intersections that currently experience significant congestion throughout the day, and will provide a more expeditious route to traverse the US 290 corridor. Local traffic will continue to access adjacent properties by use of non-tolled frontage roads and signalized intersections at cross streets. The Manor Expressway Project also includes four direct connectors at the US 183 interchange that allow for continuous movement from the US 183 interchange to the Manor Expressway Project.

The Manor Expressway Project is being implemented in three phases as shown on Figure 1 and described below.

Manor Expressway Project - Phase I

Phase I of the Manor Expressway Project includes completion of four tolled direct connectors and associated pavement at the US 183 interchange that provide direct access to and from the Manor Expressway Project mainlanes. Toll gantries were installed to toll each of the direct connectors. Frontage roads between the US 183 interchange and Cross Park Drive were also constructed in this phase. Access to the westbound direct connectors from the westbound frontage road has been achieved by construction of an entrance ramp located just west of Tuscany Way. Construction of Phase I of the Manor Expressway Project has been completed, and is currently open to tolled traffic.

Manor Expressway Project - Phase II

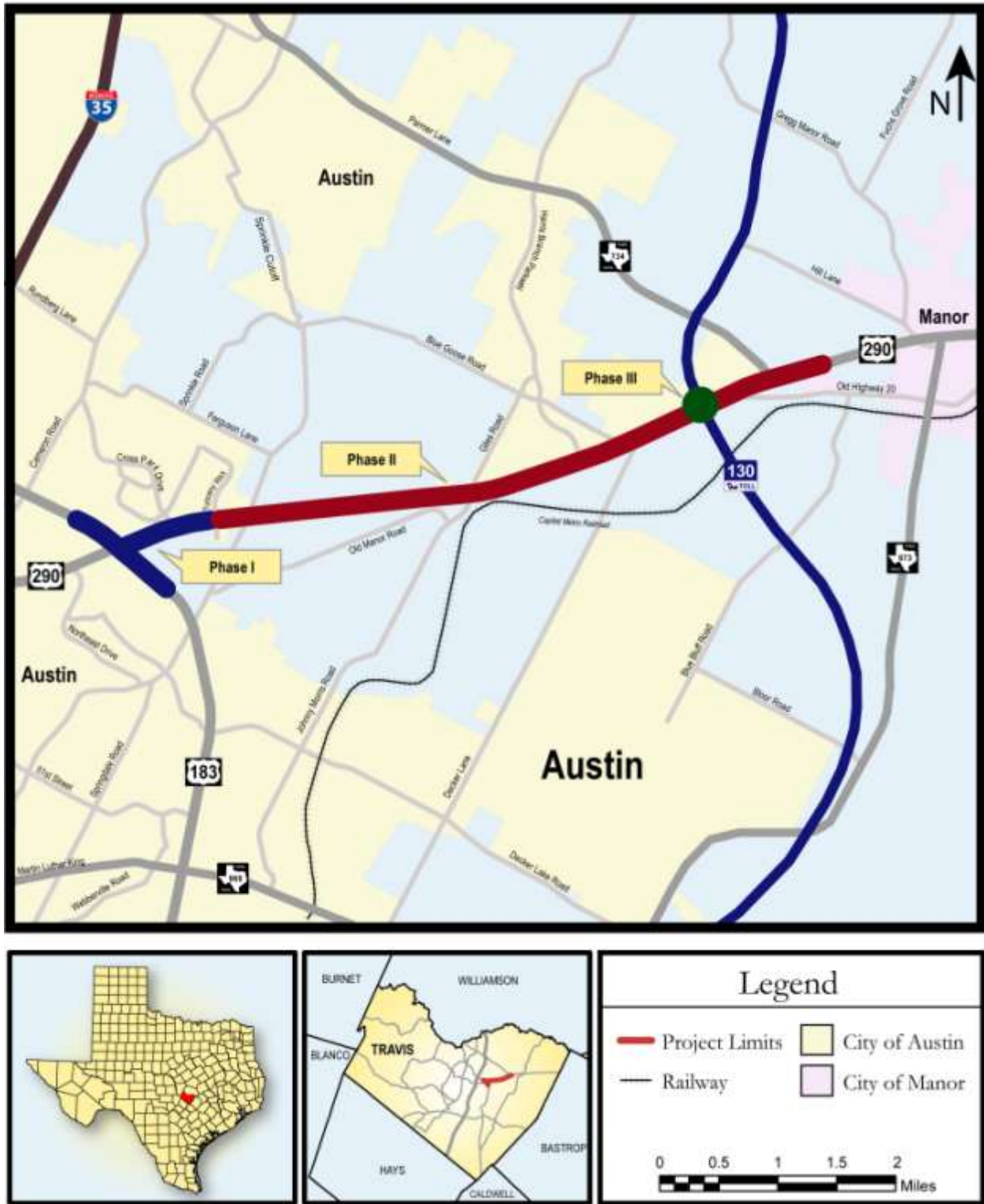
Phase II of the Manor Expressway Project includes completion of the Manor Expressway Project from Phase I at the US 183 interchange to the eastern limits east of SH 130. Three tolled mainlanes and three lane non-tolled frontage roads will be constructed in each direction as well as all associated ramps, auxiliary lanes, toll gantries, and ramp gantries. Phase II of the Manor Expressway Project includes an interim milestone that provides grade-separated intersections

at Tuscan Way and Springdale Road so that users of the direct connectors constructed as part of Phase I can bypass the existing signals at those intersections. These two grade-separated intersections provide for a minimum of two tolled lanes and two-lane non-tolled frontage roads in each direction. The work associated with the interim milestone, the Interim Development Work, has been completed.

Manor Expressway Project - Phase III

Phase III of the Manor Expressway Project includes construction of the seven remaining direct connectors at the SH 130 interchange. The Mobility Authority has no current plans to design or construct these direct connectors at this time. Phase III of the Manor Expressway Project will be developed as traffic conditions warrant and funding sources are identified.

Figure 1 - Project Location Map



PHASE I ACTIVITIES

Construction of Phase I of the Manor Expressway Project has been completed. The Phase I Contractor, Webber, LLC (“Webber”) achieved Final Acceptance on April 12, 2013. The facility is currently open to tolled traffic.

PHASE II DEVELOPMENT ACTIVITIES

Since the Quarterly Report in July, 2013, Central Texas Mobility Constructors, LLC (“CTMC”) has made substantial progress on the frontage road construction throughout Phase II of the Manor Expressway Project. During the reporting period, CTMC has completed construction of the pavement section (with the exception of the final asphalt surface course) of the westbound frontage road from the SH 130 interchange to the Harris Branch Parkway intersection; from the Giles Road intersection to the Arterial “A” intersection; and from the Springdale Road intersection to the western terminus of the Project. CTMC has completed installation of the final asphalt surface course (the stone matrix asphalt, or “SMA”) on the westbound frontage road from the Parmer Lane intersection to east of the Giles Road intersection. CTMC will continue to place the SMA on the westbound frontage road through October. Upon completion of the SMA, the westbound frontage road will be completed.

CTMC has also made substantial progress on the eastbound frontage road construction. During the reporting period, CTMC completed construction of the pavement section (with the exception of the SMA) of the eastbound frontage road between the SH 130 interchange and the eastern terminus of the Project. A small portion of the eastbound frontage road west of the Parmer Lane intersection remains incomplete due to an ATMOS gas metering station that has yet to be relocated. CTMC has completed installation of the SMA on the eastbound frontage road from the western terminus of the Project to the Decker Lane intersection. The remainder of the SMA will be placed after the adjustment of the ATMOS metering station. CTMC expects this relocation to be completed in November.

CTMC also continues to progress construction of the intersections throughout the Project. The Tuscan Way and Springdale Road intersections are nearly completed. The Arterial “A” intersection will be completed upon completion of the eastbound and westbound mainlane bridges at that intersection. CTMC has also made substantial progress on the Johnny Morris Road/Giles Road intersection, the Harris Branch Parkway intersection, and the Parmer Lane intersection.

Although CTMC’s focus has been on the frontage road and intersection construction, CTMC has advanced construction of select areas of the mainlanes. Specifically, CTMC has completed the concrete paving on the eastbound and westbound mainlanes between the Arterial “A” intersection and the Giles Road/Johnny Morris Road intersection. Furthermore, CMTC has completed the concrete paving on the westbound mainlanes between Walnut Creek and Tributary #5 to Walnut Creek. CTMC continues construction of mainlane bridge structures at the Arterial “A” intersection, the Johnny Morris Road/Giles Road intersection, and the Harris Branch Parkway intersection.

Since the last Quarterly Report in July 2013, CTMC has continued to relocate utilities throughout the project; only several utilities remain to be relocated. All utilities in conflict with the Project construction have been relocated with the exception of the ATMOS and Koch pipelines, and an AT&T communications line.

PHASE II PROGRESS PHOTOS

Westbound Frontage Road Work

Since the Quarterly Report in July 2013, CTMC has continued to focus on frontage road construction. Except for the final asphalt surface course, the westbound frontage road has been completed.



Asphalt Base on the westbound frontage road east of Giles Road (Looking West)



Asphalt Base on the westbound frontage road west of Giles Road (Looking Northwest)



Westbound frontage road near completion east of Harris Branch (Looking Northeast)



Completed westbound frontage road west of Tributary #5 (Looking Northeast)



SMA has been placed east of Springdale Road intersection (Looking Northwest)

PHASE II PROGRESS PHOTOS

Eastbound Frontage Road Work

Since the Quarterly Report in July 2013, CTMC has continued to focus on frontage road construction. The eastbound frontage road has largely been completed. The final asphalt surface course has been placed on the eastbound frontage road from the western terminus of the Project to the Decker Lane intersection.



Curb and gutter has been poured west of Gilleland Creek (Looking West)



Construction of a new driveway at Manor New Tech High School (Looking South)



SMA has been placed at the Springdale Road intersection (Looking Southwest)



HMA has been placed at the Johnny Morris Road intersection (Looking South)



SMA placed west of the Harris Branch Parkway intersection (Looking East)

PHASE II PROGRESS PHOTOS

Mainlane Work

CMTC was focused on frontage road work early in the reporting period; however, this focus shifted to mainlane work when traffic was shifted to the frontage roads. CTMC will continue to focus on mainlane work throughout the next reporting period.



Construction of embankment for the eastbound mainlanes near Harris Branch (Looking East)



Construction of embankment for the westbound mainlanes near Harris Branch (Looking West)



Concrete paving poured on the eastbound mainlanes near SH 130 (Looking East)



Concrete paving poured on the westbound mainlanes near SH 130 (Looking West)



Construction of the westbound mainlane bridge at Arterial "A" (Looking East)

PHASE II PROGRESS

CTMC has submitted their progressed schedule for the period ending September 25, 2013. Based on an assessment of CTMC’s activities and progress, a summary of the construction progress achieved on work tasks through this period is provided in Table 1.

CTMC’s latest schedule indicates Substantial Completion of all remaining Development Work on June 4, 2014, 116 days behind the current contract requirement. However, the construction delays currently projected will not impact the projected date for commencement of toll revenue collection for Phase II of the Manor Expressway Project. As of September 25, 2013, there were 135 days remaining until contractual Substantial Completion for the Project; CTMC has used 85.9% of the days allotted in the contract for the Development Work.

Table 1 - Phase II Development Progress

Development Tasks	% Complete
Development Design	100%
Utility Coordination	98%
Earthwork	96%
Utility Relocation	92%
Pavement	67%
Structures (Bridges and Retaining Walls)	86%
Drainage	67%
Lighting, Signing, Striping, and Signals	48%
Toll Facility Infrastructure	75%
Toll System Integration	20%
Incidental Construction (Barriers, Sidewalks, Landscaping)	37%

The Manor Expressway Project (Phases I & II) milestones are provided in Table 2.

Table 2 - Schedule of Project Milestones

Task	Date (*Projected)
Selection of Phase I Contractor	January 12, 2010
Phase I NTP Issued	April 27, 2010
Phase I Substantial Completion	November 30, 2012
Phase I Final Acceptance	April 12, 2013
Phase II Selection of Developer	February 23, 2011
Phase II NTP Issued	June 29, 2011
Phase II Interim Completion (Open to Traffic)	December 22, 2012
Phase II Substantial Completion (Phase II Open to Traffic)	June 4, 2014**
Phase II Final Acceptance	October 5, 2014**

****Based on CTMC's schedule submitted with Draw Request #28 for September 2013 efforts**

MANOR EXPRESSWAY PROJECT FINANCIAL SUMMARY

Table 3 shows the overall financial status for the Manor Expressway Project through August 2013. The original budget established for the Project and the expenditures to date are provided. An estimated cost remaining and an estimate at completion is also provided. The Manor Expressway Project is currently projected to be under budget.

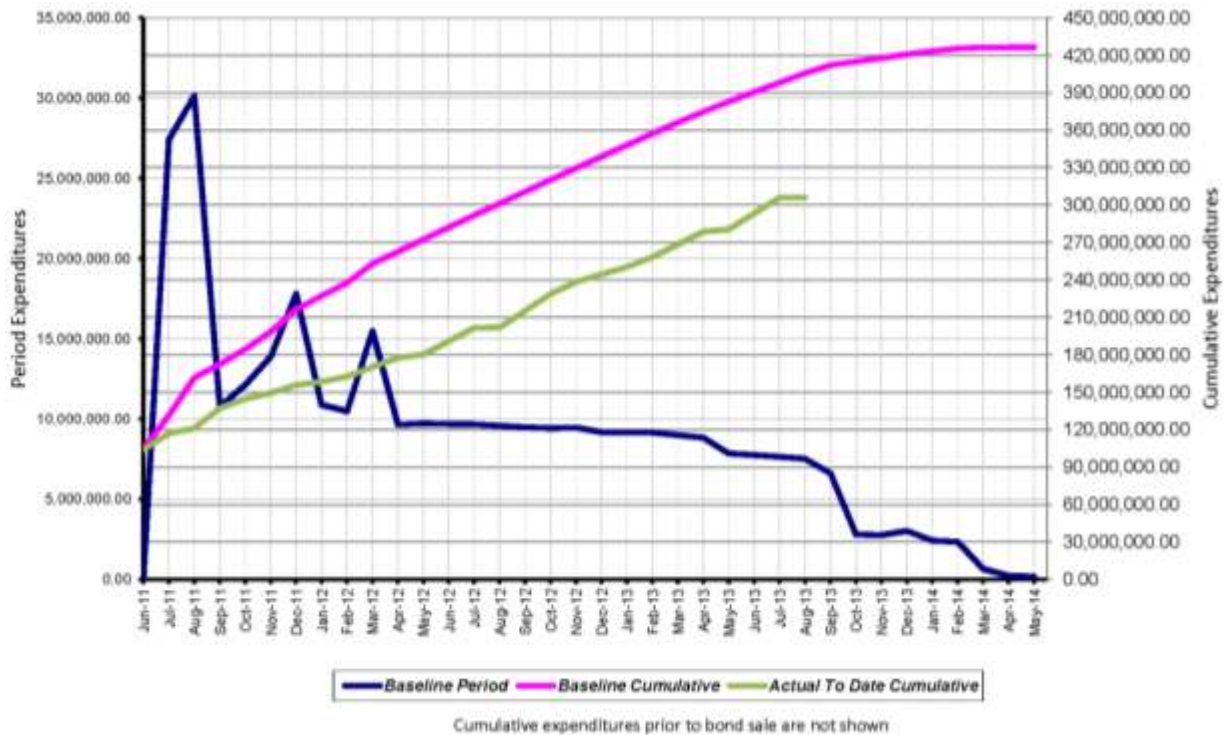
Table 3 - Project Financial Status Summary

Project Description	Original Cost Estimate (\$)	Expenditures to Date (\$)	Estimated Remaining Cost (\$)	Estimate at Completion (\$)
Total Project Cost (Phases I and II)	426,434,773	305,943,679	90,753,987	396,697,666

Note: These costs include Traffic & Revenue analyses costs, Final Engineering costs, Utility Adjustment costs, Construction costs, Toll & ITS costs, GEC costs, Legal costs, and contingencies.

Project Cash Flow Curve - Baseline

Figure 2 - Project Cash Flow Curve (Phase I & Phase II Total Project Costs)



PHASE II CONSTRUCTION FINANCIAL STATUS

The following summary provides the financial status of design-build CDA contract for the Phase II Project.

Original CTMC Contract Amount:	\$ 207,297,859.00
<i>Authorized Changes (Change Order and/or Amendments):</i>	
Allowable Dispute Resolution Board Expenses ⁽¹⁾	\$ 24,346.91
Liquidated Damages Assessed ⁽²⁾	\$ (550,000.00)
Change Order #1	\$ 1,480,445.71
Change Order #2	\$ 9010.88
Change Order #3	<u>\$ 41,339.71</u>
Current Authorized Contract Amount:	\$ 208,303,002.21
Previous Total of CTMC Payments:	\$ 137,827,163.35
Amount of CTMC Draw Request #25 for June 2013 efforts	\$ 7,450,655.27
Amount of CTMC Draw Request #26 for July 2013 efforts	\$ 6,776,332.86
Amount of CTMC Draw Request #27 for August 2013 efforts	\$ 8,170,524.75
Liquidated Damages Assessed	<u>\$ (550,000)</u>
Total Amount Paid To-Date: ⁽³⁾	\$ 159,674,676.23
Retainage withheld: ⁽⁴⁾	<u>\$ 0.00</u>
Approved Amount for work completed (through Draw #27):	\$ 159,674,676.23
Amount remaining for work to be completed:	\$ 48,628,325.98
Total Percent of Budget Expended through August 2013:	76.66%

Footnotes:

- (1) The Dispute Resolution Board ("DRB") was convened to introduce the board to the project; the CDA allows CTMC to invoice half of the expenses associated with the DRB to the Mobility Authority.
- (2) Liquidated Damages were assessed for CTMC's failure to meet the contractual Interim Completion Date.
- (3) Draw Request #28 for CTMC's September 2013 efforts is currently being reviewed by the General Engineering Consultant.
- (4) Retainage to be withheld only after 95% of the adjusted contract price has been paid.

Summary of Phase II Change Orders This Reporting Period

Change Order #3 was approved by the Mobility Authority during the reporting period. The scope of work for this change order included broadcast seeding and watering to establish the required vegetation at the US 183 interchange. The amount approved in Change Order #3 was \$41,339.71.

DBE STATUS

Phase II DBE Status

CTMC is required to meet the Disadvantaged Business Enterprise (“DBE”) goal of 12.2% for Phase II of the Manor Expressway Project. The total DBE amount subcontracted to date is \$26,367,356.74 which is 12.72% of the authorized contract total. This represents executed DBE subcontracts with the following firms: Aviles Engineering Corporation [geotechnical design], RJ Rivera Associates, Inc. [sign and pavement marking design], SE3, LLC [retaining wall design], PE Structural Consultants [bridge design], Lina T. Ramey & Associates [design surveying], United States R.O.W. [right-of-way acquisition], Solar Ray [utility design], Hayden Consultants [TDLR Review], Breda Company [furnish and tie reinforcing steel], N-Line Traffic Maintenance, L.P. [traffic barricades], Office Authority [furnishes office supplies], Panther Creek Transportation, Inc. [trucking], Roadway Specialties [cable barrier & small signs], Texas Trucking [trucking], S&R Investments [furnish fuel], Transtec [pavement design], and ID Guerra [wet utilities].

As of September 25, 2013, Webber has submitted costs associated with DBE development work in the amount of \$29,465,956.79 which equals 14.2% to date of the original contract value. CTMC has exceeded the contractual DBE goal of 12.2%.

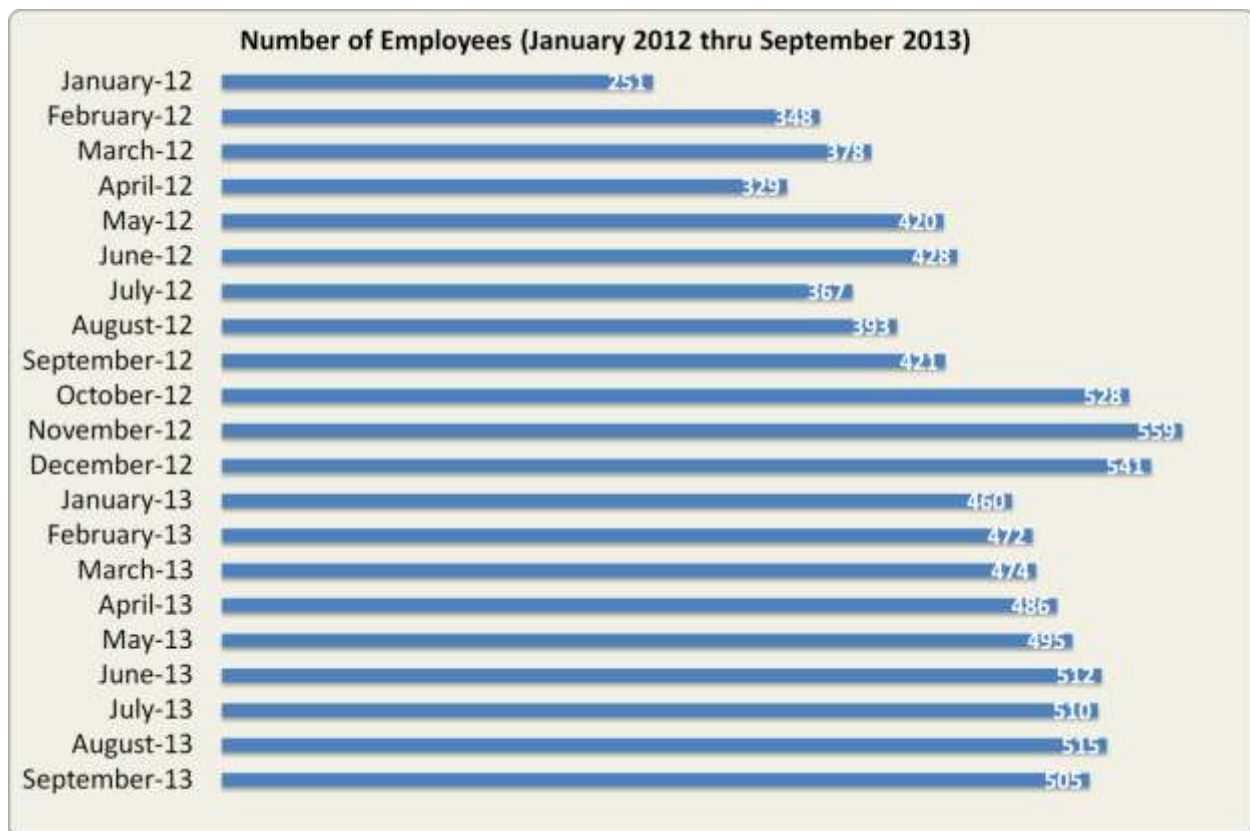
Figure 3 - Phase II DBE Design & Construction Commitment for Period Ending September 2013



EMPLOYMENT REPORTING STATUS

The Phase II Developer began providing employment data in January 2012. Construction of Phase II of the Manor Expressway Project supported **505 jobs** during the reporting month of September 2013. This number of jobs supported by the construction includes: the construction personnel and their subcontractors; design staff; design and construction management staff, including inspectors and subconsultants; and the general engineering consultant staff and their subconsultants. The total payroll figures are not being provided by the Phase II Developer. The employment history from January 2012 through September 2013 for Phase II of the Manor Expressway Project is provided in Figure 4.

Figure 4 - Phase II Employment History



SUSTAINABILITY

Phase II Sustainability Initiatives

In accordance with the terms of the Comprehensive Development Agreement (“CDA”), CTMC is required to incorporate sustainable practices into the Project. The Mobility Authority, through provisions in the CDA, has implemented a “Green Credits” program that requires CTMC to attain a minimum number of credits for implementing sustainable practices into the Project; CTMC is required to attain 30 credits for the Project. CTMC is required to submit a quarterly report identifying the sustainable practices being implemented on the Project. CTMC submitted their Sustainability Initiatives Report for the second quarter of 2013 in September. The following sustainable initiatives were reported:

➤ Sustainability Plans:

CTMC has prepared and implemented a series of required sustainability plans on the Project. These plans include a Noise Mitigation Plan, a Dust/Emission and Odor Control Plan, a Waste Management Plan, a Site Recycling Plan, and a Water Quality Maintenance/Enhancement Plan.

➤ Solar-Powered Traffic Control Devices/Flashing Beacons:

During the second quarter of 2013, CTMC continued using three solar-powered flashing beacons and six solar-powered traffic control devices on the Project.

➤ Pavement Reuse:

During the second quarter of 2013, asphalt millings and unbound base were incorporated into Type C3 embankment, and millings were used as Type C1 embankment beneath the shared-use path. To date, 67% of the paving structure which has been removed, has been reused.

➤ Reuse of Topsoil:

During the second quarter of 2013, CTMC reused 9,670 cubic yards of topsoil. To date, 59% of stockpiled topsoil has been reused.

➤ Recycled Fill/Embankment Materials:

During the second quarter of 2013, CTMC reused approximately 180,792 cubic yards of material for fill or embankment. All of this material was from the Project site or from overburden from a local sand reserve quarry.

➤ Wood Recycling:

During the second quarter of 2013, 47.5 tons of wood waste was generated for recycling.

➤ Steel Recycling:

During the second quarter of 2013, 2.7 tons of steel were recycled from the Project.

➤ Utilization of Reclaimed or Non-Treated Water:

During the second quarter of 2013, CTMC continued using non-treated water from Gilleland Creek for dust suppression on the Manor Expressway Project.

➤ Separating Waste for Landfills Recyclable Waste:

Recyclable materials are separated at the IESI waste recycling and disposal facility.

➤ Equipment Emission Reduction:

19% of CTMC's equipment fleet is Tier 4 equipment.

CTMC is on track to earn thirty three (32) green credits for the sustainable practices currently being implemented on the Project.

PUBLIC INVOLVEMENT

The Mobility Authority's Public Involvement Team manages the Manor Expressway hotline (512-684-3252) and the Project website (manorexpressway.com). Lane closures and construction alerts are regularly posted on the Project website as well as posted on the Project twitter account (@ManorExpressway). Additionally, stakeholders can sign up on the Project website for lane closure information to be sent directly to their cell phone via SMS text.

With Phase II of the Manor Expressway Project in active construction, public involvement continues to play a crucial role in the Manor Expressway Project. Following are the outreach activities for this quarter:

✓ Hotline:

24 calls were received over the project's hotline (512-684-3252) and 11 emails/website contacts were made regarding the Manor Expressway Project. The calls and messages included project information requests, questions regarding when the new turnaround at the Arterial "A" intersection would be open, signal timing Giles/Johnny Morris intersection, congestion and signal timing at the Harris Branch intersection, and a noise complaint.

✓ Twitter:

38 updates have been posted to the Manor Expressway's Twitter account (@ManorExpressway) and email this quarter to inform followers of closures and detours.

✓ Website:

All project updates have continued to be posted on the website in an effort to help keep the public informed on lane closures and construction activities.

✓ Emails:

28 construction alerts were sent out by email to US 290 stakeholders via Constant Contact email.

✓ Outreach/Visits:

The Manor Expressway Project hosted two neighborhood appreciation events and sponsored back-to-school supplies for 100 children living at the Rosemont at Hidden Creek Apartments. Groups Solutions conducted outreach with businesses and neighbors regarding the closure of the Giles Road/Johnny Morris Road intersection.

Attachment A

Manor Expressway Phase II Project
Aerial Photographs
September 2013



US 290 East looking west from Gilleland Creek
(Taken 9/25/2013)



US 290 East looking west at Parmer Lane
(Taken 9/25/2013)



US 290 East at SH 130 Interchange looking west
(Taken 9/25/2013)



US 290 East at Decker Lane Intersection looking west
(Taken 9/25/2013)



US 290 East at Harris Branch Intersection looking west
(Taken 9/25/2013)



US 290 East at Crofford Lane Intersection looking west
(Taken 9/25/2013)



US 290 East at Giles Road Intersection looking west
(Taken 9/25/2013)



US 290 East near Old Manor Road looking west
(Taken 9/25/2013)



US 290 East looking west at Mokan Crossing
(Taken 9/25/2013)



US 290 East at Chimney Hill Blvd looking west
(Taken 9/25/2013)



US 290 East at Springdale Road looking west
(Taken 9/25/2013)



US 290 East at Tuscany Way looking west
(Taken 9/25/2013)

Attachment B

Manor Expressway Project
Contingency Tracking
October 2013

Manor Expressway Phase II | Contingency Balance Sheet

10/09/13

PROJECT CONSTRUCTION CONTINGENCY (from the bond sale)		\$17,200,000
APPROVED ITEMS		
Executed Change Orders		
CO#1	Revision to the mainline and frontage road pavement sections	\$1,480,446
CO#2	Archival research of discovered cistern (force majeure event)	\$9,011
CO#3	Broadcast seeding at the US 183 interchange	\$41,340
		Subtotal Executed Change Orders
		\$1,530,797
Approved Other Items		
	Dispute Resolution Board expenses	\$24,347
		Subtotal Other Items
		\$24,347
		Subtotal Approved Items
		\$1,555,144
ITEMS UNDER NEGOTIATION or ESTIMATED		
CO under negotiation		
CO#4	Design and construct column protection at SH 130 interchange	\$200,000
CO#5	Erosion repair at Bent 7 of NE direct connector at US 183	\$25,000
		Subtotal CO under negotiation
		\$225,000
Potential Change Orders or pending more information		
PCO#6	Revision to aesthetic scope on frontage roads ¹	-\$300,000
PCO#7	Design and construction costs associated with ADA compliant Shared Use Path ¹	\$600,000
PCO#8	Re-design and construction costs associated with minimization of impacts to Harris Branch wetland ¹	\$400,000
PCO#9	Revision to Shared Use Path at US 183 and deletion of sidewalk from Blue Goose Road to SH 130 ¹	\$200,000
PCO#10	Install LED lighting and remove an overhead sign bridge ¹	\$200,000
PCO#11	Revise pavement widening section near US 183 interchange ¹	\$200,000
PCO#12	Revise metal beam guardrail height from 27" to 31" ¹	\$100,000
PCO#13	Incorporate certain elements of the 2011 TMUTCD into the Development Work	\$50,000
		Subtotal Potential Change Orders
		\$1,450,000
Other Items		
Incentive	Early Completion Incentives (Max Amount Achievable)	\$2,700,000
		Subtotal Other Items
		\$2,700,000
¹ <i>Estimated cost</i>		
		Subtotal Items Under Negotiation or Estimated
		\$4,375,000
		Total Costs
		\$5,930,144
		Budgeted Construction Contingency
		\$17,200,000
		TOTAL REMAINING AVAILABLE CONSTRUCTION CONTINGENCY
		\$11,269,856

RIGHT OF WAY COST (from the bond sale)		\$65,400,000
Estimated Right of Way Costs		
	Schematic ROW ²	\$49,300,000
		Subtotal Right of Way Costs
		\$49,300,000
Additional Right of Way Costs		
	Wetland Mitigation	\$48,000
		Subtotal - Additional Right of Way
		\$48,000
² <i>Estimated Cost</i>		
		Available Right of Way Contingency
		\$16,052,000