

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-003

**APPROVAL OF WORK AUTHORIZATION NO. 6 WITH PARSONS
BRINCKERHOFF, INC. FOR GENERAL ENGINEERING CONSULTANT SERVICES
RELATED TO THE MOKAN PROJECT**

WHEREAS, by Resolution 16-034 dated June 15, 2016, the Board of Directors authorized the Executive Director to negotiate and execute on behalf of the Mobility Authority an agreement with Parsons Brinckerhoff, Inc. for general engineering consultant services; and

WHEREAS, on July 1, 2016 the Mobility Authority entered into an agreement with Parsons Brinckerhoff, Inc. for general consulting civil engineering services; and

WHEREAS, the Executive Director and Parsons Brinckerhoff, Inc. have agreed to proposed Work Authorization No. 6 for general engineering consultant services for the Mokan Project; and

WHEREAS, the Executive Director estimates the reasonable fees associated with the services to be provided under Work Authorization No. 6 to be in an amount not to exceed \$612,890.13, including contingency; and

WHEREAS, the services to be provided under in Work Authorization No. 6 shall be substantially complete by December 31, 2017. However, Work Authorization No. 6 will not expire until all tasks associated with the Scope of Services are completed; and

WHEREAS, the Executive Director recommends that the Board approve proposed Work Authorization No. 6, a copy of which is attached to this resolution as Exhibit A.

NOW THEREFORE, BE IT RESOLVED, that the Board approves an amount not to exceed \$612,890.13 for the services described in Work Authorization No. 6; and

BE IT FURTHER RESOLVED, that the Board authorizes the Executive Director to finalize and execute proposed Work Authorization No. 6 with Parsons Brinckerhoff, Inc., in the form or substantially the same form as Exhibit A.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

APPENDIX D

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 06

This Work Authorization is made as of this 22nd day of February, 2017, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of July 1, 2016 (the “Agreement”), between the Central Texas Regional Mobility Authority (“Authority”) and **Parsons Brinckerhoff, Inc.** (“GEC”). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

MoKan Project – Preliminary Engineering

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Scope of Work

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

N/A

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A – Scope of Work

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein shall expire on December 31st, 2017 or when all tasks associated with the Scope of Services are complete as defined by the Authority.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed **\$510,741.78** based on a Cost Plus fee listed in Attachment B – Fee Estimate. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts contained in Attachment B-Fee Estimate for the GEC are estimates and that these individual figures may be redistributed and/or adjusted as necessary over the duration of this Work Authorization. The GEC may alter the compensation distribution between tasks or work assignments to be consistent with

the Services actually rendered within the total Work Authorization amount. The GEC shall not exceed the maximum amount payable without prior written permission by the Authority.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

Section D. - Authority's Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

N/A

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

N/A

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority:

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

By: _____

Name: Mike Heiligenstein

Title: Executive Director

Date: _____

GEC:

Parsons Brinckerhoff, Inc.

By: _____

Name: Mario Medina, P.E.

Title: Vice President

Date: _____

SERVICES TO BE PROVIDED BY THE ENGINEER

I. INTRODUCTION

The ENGINEER shall perform work generally consisting of alternatives development and evaluation, preliminary engineering, traffic modeling, and hydraulic studies for the Central Texas Regional Mobility Authority's (Mobility Authority) proposed MoKan Project (Project) located in Williamson County, Texas. The limits of the services are from Georgetown Inner Loop south to SH 45 North, approximately 9 miles.

The ENGINEER shall complete the following tasks:

- Project Management and Administration
- Project Development Support
- Environmental and Public Involvement
- Route and Design Studies
- Financial Planning Support
- Traffic Analysis

II. PROJECT MANAGEMENT AND ADMINISTRATION

The ENGINEER shall perform the following project administration and coordination duties:

A. PROJECT MANAGEMENT AND ADMINISTRATION

Task 1: Progress Reports and Invoices

For the Project, prepare monthly invoices and progress reports for the work tasks and provide evidence of work accomplished during the time period since the previous report. Monthly progress reports shall be submitted and shall include: activities completed, initiated, or ongoing during the reporting period; activities planned for the coming period; problems encountered and actions to remedy them; overall status, including a tabulation of percentage complete by task; and updated project schedules.

Deliverables

- Monthly invoices and progress reports

Task 2: Record Keeping and File Management

The ENGINEER shall maintain all records and files related to the project throughout the duration of the services. A document management system specified by the Mobility Authority will be used for all records and files.

Deliverables

- Project records and files in system specified by the Mobility Authority

Task 3: Correspondence

Prepare written materials, letters, survey forms etc. used to solicit information or collect data for the project and submit them to the Mobility Authority for review and approval prior to use or distribution. Copies of relevant outgoing correspondence and incoming correspondence will be provided to the Mobility Authority on a continuing basis.

Deliverables

- List of outgoing and incoming documents
- Copies of relevant correspondence

B. COORDINATION**Task 1: Project Coordination**

Coordinate Project aspects with the team members and the Mobility Authority.

Task 2: Project Coordination Meetings

Schedule and attend meetings to coordinate. The ENGINEER shall attend monthly progress/coordination meetings with the Mobility Authority. In preparation for Project meetings, the ENGINEER shall prepare and distribute a Meeting Agenda which shall include a brief description of the meeting objectives, a list of the topics to be covered and who shall facilitate the discussion of each topic. When action items arise from the meeting discussion, an assignment of responsibility and due date for each action item shall be made immediately and distributed amongst the team. The ENGINEER shall prepare all meeting minutes.

Deliverables

- Meeting agendas and minutes

III. PROJECT DEVELOPMENT SUPPORT

The ENGINEER shall provide project development support to the Mobility Authority as required during the Project Development process, including:

Task 1: Engineering and Technical Support

Provide various engineering and technical tasks as requested by the Mobility Authority including, but not limited to: engineering assistance, environmental assistance, traffic analysis, reports, research, presentations, and meetings.

Task 2: Project Phasing

Support and provide technical advice to the Mobility Authority for scoping or phasing the Project into three to four longitudinal phases. Develop and update a preliminary Project estimate by phase.

Task 3: Agency Coordination

Provide appropriate staff as part of coordination efforts between the Mobility Authority and TxDOT, Capital Metro, FHWA, Williamson County, Travis County, City of Round Rock, City of Georgetown and City of Pflugerville. The ENGINEER will provide coordination efforts on the Mobility Authority's behalf at the direction of the Mobility Authority.

Prepare for, attend and document coordination and status meetings.

Compile and maintain TxDOT Local Government Project Procedures (LGPP) documentation for preliminary engineering activities.

Deliverables

- Meeting agendas and minutes

Task 4: Traffic and Revenue (T&R) Consultant Coordination

Provide coordination and support to the Mobility Authority's T&R Consultant, as directed by the Mobility Authority.

Task 5: Project Scheduling

Develop and maintain a master project schedule that will show critical project development milestones. Schedule update will occur monthly at a minimum.

Deliverables

- Initial and updated project master schedule

IV. SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

The ENGINEER shall provide preliminary environmental and public involvement services for the Project.

Task 1: Environmental Constraints Mapping

The ENGINEER shall provide environmental services necessary to produce a high-level fatal flaw analysis of the study area. The analysis will be performed at a desktop level, with no field work or windshield surveys. Constraints to be identified include but are not limited to:

- a. Cemeteries
- b. Parks, Preserves, Trails & Greenbelts
- c. Soils
- d. Edwards Aquifer Zones
- e. Karst sensitive areas/zones
- f. Farmlands
- g. Oil/gas wells
- h. Hazardous material sites
- i. Historic Properties
- j. Archeological sites
- k. Williamson County Regional Habitat Conservation Plan areas (if needed)
- l. Data from the Texas Parks and Wildlife Department's Natural Diversity Database
- m. United States Fish and Wildlife Service's Critical Habitat Mapper
- n. National Wetland Inventory Data
- o. Floodplains
- p. National Hydrography Dataset
- q. Land uses identified through aerial photo interpretation
- r. Existing and planned development

The above information shall be mapped in Geographic Information System (GIS) and utilized for the evaluation of alternatives.

The ENGINEER shall provide a technical memorandum summarizing the results of the environmental constraints mapping.

Deliverables

- Draft and Final GIS-based Environmental Constraints Map
- Meeting Minutes, if meetings related to this task are held
- Draft and Final Environmental Constraints Mapping Technical Memorandum

Task 2: Public Involvement

The ENGINEER shall perform the following public involvement activities:

1. The ENGINEER shall compile, maintain and update a mailing list of people, agencies and organizations interested in the proposed project. The Mobility Authority shall provide the ENGINEER with relevant data available to the Mobility Authority.
2. The ENGINEER shall provide content for public consumption. Content could include, but not be limited to:
 - Project description information
 - Project reports and documentation
 - Project fact sheets and graphics
3. Project Fact Sheets. The Engineer will:
 - Prepare up to 5 Fact Sheets as requested by the Mobility Authority.
 - Make the facts sheets available as needed.
4. Community Engagement. The Engineer will:
 - Develop and maintain a list of potential community members (neighborhood associations, special interest groups, business associations, etc.) to contact for future informal meetings/discussions.
 - Respond to requests from community members for meetings with project staff.
 - Maintain a correspondence file for major stakeholder meetings.
 - Prepare a meeting summaries for major stakeholder meetings.

Deliverables

- Updated project database/ mailing list
- Up to 5 Fact Sheets
- List of potentially interested community groups
- Stakeholder meeting summaries

V. ROUTE AND DESIGN STUDIES

The ENGINEER shall prepare all work in accordance with the latest version of applicable State procedures, manuals and guidelines. The ENGINEER shall obtain written concurrence from the Mobility Authority prior to proceeding with a design if any questions arise during the design process regarding the applicability of the design criteria.

Task 1: Alternative Development and Analysis

The ENGINEER shall review and refine up to 3 alternative concepts and develop a conceptual layout in plan exhibits for each alternative. Alternative connection types at roadway intersections will be considered and evaluated. The alternative analyses for interchanges will be based on the Mobility Authority established project limits and up to 3 intermediate interchanges within the project limits.

In developing and refining the alternatives, the ENGINEER shall consider impacts to the FEMA floodplains and the Edwards Aquifer. Mitigation for such impacts will be considered and stated in the preliminary engineering summary report for the preferred alternative.

The ENGINEER will consider available utility information in the development of alternative concepts. This information will be based on available data and information received from requests made by the ENGINEER to utility companies.

The ENGINEER shall prepare plan view exhibits (conceptual layouts) for each alternative showing differences in grade separation locations and/or ramp configurations and a typical section.

In assessing various alternatives, the ENGINEER shall evaluate the following design and engineering considerations, as appropriate:

- a. Constructability
- b. Special design considerations
- c. Construction costs
- d. Engineering costs
- e. Utility impacts (if known)
- f. Operation and Maintenance
- g. Level of Service
- h. Environmental and drainage constraints
- i. Bike/Pedestrian considerations
- j. Geometric design and restrictions
- k. Right-of-way costs

The ENGINEER shall evaluate the alternatives based on the design and engineering considerations. The ENGINEER shall develop a decision matrix based on the above design and engineering considerations in order to identify the preferred alternative.

Deliverables

- Plan Exhibits (conceptual layouts) for up to 3 alternative concepts (DGN and PDF formats)
- Engineering summary technical memorandum

Task 2: 30% Design Schematic

For the Preferred Alternative, the ENGINEER shall:

- a. Schematic development will be based on available horizontal and vertical information obtained from online sources or information readily available from agencies. A planimetric or topographic survey will not be performed.
- b. The ENGINEER will develop the geometric design that will include the refinement of the proposed typical sections and a geometric design that includes horizontal and vertical alignments.
- c. The ENGINEER will develop preliminary design cross sections at 200' increments and at other critical intermediate locations as necessary. The cross sections will be used to identify the preliminary ROW requirements and assist in locating proposed retaining walls, bridge locations, etc. Earthwork quantities derived from the cross sections will be used in the development of the preliminary construction cost estimate.
- d. The ENGINEER shall prepare a 30% schematic (conceptual schematic). The conceptual schematic will be prepared on color plan and profile roll plots. The ENGINEER shall deliver 3 copies of the schematic design to the Mobility Authority for approval.
- e. The ENGINEER will perform basic preliminary engineering to determine the general structure length, span length, and bridge depth for new bridges including direct connections.
- f. The ENGINEER will perform basic preliminary engineering to determine the location and general height of retaining wall structures necessary along the roadway sections.
- g. The ENGINEER shall prepare a preliminary engineering summary report to summarize the main project design aspects.

Deliverables

- 30% schematic for preferred alternative (DGN and PDF formats).
- Preliminary engineering summary report

VI. FINANCIAL PLANNING SUPPORT

The ENGINEER shall provide financial planning support to the Mobility Authority as required during the Project Development process, including:

Task 1: Project Cost Estimate Updates

As directed by the Mobility Authority, the ENGINEER shall provide total project cost estimate updates for up to 3 alternative concepts and for the preferred alternative. The construction cost development will be based on measured quantities from the conceptual layout/schematic such as paving and bridges and estimated cost for grading, drainage, retaining walls, other structures, signing and marking, lighting, signalization, and toll collection systems. The estimate of the probable construction costs will be used to estimate other project costs such as preliminary engineering, final engineering, environmental compliance/mitigation, utility relocation and construction engineering and inspection (CEI). The corridor design concept exhibits will be used to estimate the right of way cost.

Deliverables

- Preliminary project estimates for up to 3 alternative concepts
- Preliminary project estimate for the preferred alternative

Task 2: Operations, Maintenance, and Renewal & Replacement Estimate Updates

Develop and/or update ENGINEER'S opinion of probable operations cost estimates using either a Sketch Level approach (i.e. an assumed per transaction cost based on average operations costs of similar toll systems) or a Level 1 approach (i.e. estimate quantities for various elements of the toll operations and applying anticipated unit prices to same to develop an opening year cost which can be escalated over time).

Develop and/or update ENGINEER'S opinion of annual/routine maintenance cost estimates using either a Sketch Level approach (i.e. an estimated per centerline mile cost based on the facility type which considers the number of lanes, pavement material, and location) or a Level 1 approach (i.e. estimate quantities for various elements of the maintenance efforts and applying anticipated unit prices to same to develop an opening year cost which can be escalated over time).

Develop and/or update ENGINEER'S renewal & replacement budget estimates (also known as periodic/non-routine maintenance estimates) using either a Sketch Level approach (i.e. an estimated per mile cost based on renewal & replacement budgets utilized on similar facilities) or a Level 1 approach (i.e. includes the identification of a long-term, periodic maintenance schedule, estimation of

quantities for the associated elements, and inflated prices of same to assess the overall cost requirements of the system in the target years).

Task 3: Toll Feasibility Analysis Updates

The ENGINEER will assist the Mobility Authority in updating toll feasibility analyses which includes the incorporation of traffic and revenue forecast updates (by others); operations, maintenance, and renewal & replacement estimates; and total project cost estimates to determine the financial feasibility of the corridor.

Task 4: Financial Advisor Support

The ENGINEER will provide financial advisor support necessary for the Mobility Authority to conduct financial programming for their system. This will include the development of cash flow analyses which contemplate implementation costs and schedules.

VII. TRAFFIC ANALYSIS

The ENGINEER shall perform work for the Mobility Authority to analyze up to three scenarios using the year 2040 T&R forecasts developed by the T&R consultant. This task will generally include volume development for the AM and PM peak hours, developing corridor models, and compiling and comparing the results.

Task 1: Volume Development

Utilizing area traffic counts and the 24-hour volumes from the T&R study prepared by the T&R Consultant, the ENGINEER will develop a line diagram depicting AM and PM peak hour volumes.

Deliverables

- Line diagram depicting AM and PM peak hour volumes.

Task 2: Traffic Modeling

The ENGINEER will develop traffic models for up to three scenarios as directed by the Mobility Authority. The modeling will include level of service (LOS) and operational analysis. The model will not be calibrated to existing conditions. However, modifications will be made, as needed, to driver behavior based on engineering judgement and the ENGINEER'S experience in the local area. These models will include ramps and cross streets as directed by the Mobility Authority.

Deliverables

- AM and PM traffic model files for each scenario.

Task 3: Compile and Compare Results

The ENGINEER will compile and compare the results. Tables/figures presenting a comparison of the scenarios analyzed will be produced.

Deliverables

- Tables/figures presenting comparison of scenarios.

Task 4: Documentation

The ENGINEER will summarize the assumptions and results for each of the modeled scenarios in a technical memorandum.

Deliverables

- Technical memorandum summarizing the assumptions and results for each scenario.

ATTACHMENT B - Fee Estimate

MoKan - Preliminary Engineering	Sr. Engineering Mgr.	Project Manager	Sr Engineering Mgr.	Sr. Engineering Mgr.	CADD Mgr. II	Sr. Supervising Engineer	Lead Planner	Sr. Engineering Mgr.	Supervising Engineer	Public Involvement	Sr. Engineer	Estimator	Engineer II	Engineer I	Planner I	Admin/Clerical II	TOTAL	TOTAL
TASK / WORK DESCRIPTION																		
II. PROJECT MANAGEMENT AND ADMINISTRATION																		
	20	200														20	240	\$48,221.17
III. PROJECT DEVELOPMENT SUPPORT																		
Task 1: Engineering and Technical Support		8	200	50	200		16						260	100	60	20	914	\$131,112.07
Task 2: Project Phasing		10	100		60											22	192	\$37,911.63
Task 3: Agency Coordination		20				24											44	\$9,365.68
Task 4: Traffic and Revenue (T&R) Consultant Coordination		5							20						20		45	\$5,246.88
Task 5: Project Scheduling	5	5										80					90	\$16,477.22
IV. SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT																		
Task 1: Environmental Constraints Mapping							120								80		200	\$21,299.64
Task 2: Public Involvement										360							360	\$38,667.24
V. ROUTE AND DESIGN STUDIES																		
Task 1: Alternative Development and Analysis	8	20	36	8	80								80	40			272	\$38,559.90
Task 2: 30% Design Schematic	8	20	24	8	50								80	40			230	\$31,448.63
VI. FINANCIAL PLANNING SUPPORT																		
Task 1: Project Cost Estimate Updates	5	16	36	16			8										81	\$17,926.15
Task 2: Operations, Maintenance, and Renewal & Replacement Estimate Updates				8									30				38	\$4,459.76
Task 3: Toll Feasibility Analysis Updates																	0	\$0.00
Task 4: Financial Advisor Support	16	24	24	20									40			20	144	\$24,205.31
VII. TRAFFIC ANALYSIS																		
Task 1: Volume Development	1							4	48		100						153	\$18,706.45
Task 2: Traffic Modeling	2							8	60		200						270	\$32,337.01
Task 3: Compile and Compare Results	3							3	20		40						66	\$8,520.46
Task 4: Documentation	2							2	32		8						44	\$6,307.28
TOTAL DIRECT LABOR	70	328	420	110	390	24	144	17	180	360	348	80	490	180	160	82	3383	
<i>% Total by Classification</i>	<i>2.07%</i>	<i>9.70%</i>	<i>12.42%</i>	<i>3.25%</i>	<i>11.53%</i>	<i>0.71%</i>	<i>4.26%</i>	<i>0.50%</i>	<i>5.32%</i>	<i>10.64%</i>	<i>10.29%</i>	<i>2.36%</i>	<i>14.48%</i>	<i>5.32%</i>	<i>4.73%</i>	<i>2.42%</i>		
Labor Costs	\$ 5,637.10	\$ 23,258.48	\$ 39,228.00	\$ 7,364.50	\$ 18,540.60	\$ 1,845.84	\$ 6,792.48	\$ 1,480.87	\$ 9,090.00	\$ 13,849.20	\$ 13,387.56	\$ 5,200.00	\$ 16,302.30	\$ 4,761.00	\$ 3,700.80	\$ 2,214.00		
Overhead Rate	1.5382	1.7	1.5382	1.5382	1.5382	1.5382	1.5382	1.5382	1.5382	1.5382	1.5382	1.5	1.7	1.7	1.7	1.7		
Overhead Costs	\$ 8,670.99	\$ 39,539.42	\$ 60,340.51	\$ 11,328.07	\$ 28,519.15	\$ 2,839.27	\$ 10,448.19	\$ 2,277.87	\$ 13,982.24	\$ 21,302.84	\$ 20,592.74	\$ 7,800.00	\$ 27,713.91	\$ 8,093.70	\$ 6,291.36	\$ 3,763.80		
Profit	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%		
Profit Costs	\$ 1,430.81	\$ 6,279.79	\$ 9,956.85	\$ 1,869.26	\$ 4,705.98	\$ 468.51	\$ 1,724.07	\$ 375.87	\$ 2,307.22	\$ 3,515.20	\$ 3,398.03	\$ 1,300.00	\$ 4,401.62	\$ 1,285.47	\$ 999.22	\$ 597.78		
Total Loaded Labor	\$ 15,738.90	\$ 69,077.69	\$ 109,525.36	\$ 20,561.83	\$ 51,765.73	\$ 5,153.62	\$ 18,964.74	\$ 4,134.62	\$ 25,379.46	\$ 38,667.24	\$ 37,378.34	\$ 14,300.00	\$ 48,417.83	\$ 14,140.17	\$ 10,991.38	\$ 6,575.58		\$ 490,772.48
<i>% Total by Class</i>	<i>3.21%</i>	<i>14.08%</i>	<i>22.32%</i>	<i>4.19%</i>	<i>10.55%</i>	<i>1.05%</i>	<i>3.86%</i>	<i>0.84%</i>	<i>5.17%</i>	<i>7.88%</i>	<i>7.62%</i>	<i>2.91%</i>	<i>9.87%</i>	<i>2.88%</i>	<i>2.24%</i>	<i>1.34%</i>		
Total Direct Expenses	\$ 7,500.00																	
Total	\$ 498,272.48																	

Additional Subconsultants:

Cox McLain (Environmental)	\$ 3,483.80
Whiddon Group (Utility)	\$ 8,899.50
Total Work Authorization No. 6	\$ 510,741.78

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-004

**APPROVAL OF SUPPLEMENT NO. 1 TO WORK AUTHORIZATION NO. 2
FOR GENERAL ENGINEERING CONSULTANT SERVICES RELATED TO
THE 183 NORTH PROJECT**

WHEREAS, by Resolution 16-034 dated June 15, 2016, the Board of Directors authorized the Executive Director to negotiate and execute on behalf of the Mobility Authority an agreement with Parsons Brinckerhoff, Inc. for general engineering consultant services; and

WHEREAS, on July 1, 2016 the Mobility Authority entered into an agreement with Parsons Brinckerhoff, Inc. for general consulting civil engineering services; and

WHEREAS, by Resolution 16-063 dated September 7, 2016, the Board of Directors approved Work Authorization No. 2 for services related to the 183 North Project; and

WHEREAS, the Executive Director and Parsons Brinckerhoff, Inc. have agreed to proposed Supplement No. 1 to Work Authorization No. 2 for general engineering consultant services for the 183 North Project; and

WHEREAS, the Executive Director estimates the reasonable fees associated with the services to be provided under Supplement No. 1 to Work Authorization No. 2 to be in an amount not to exceed \$4,317,054.95, including contingency; and

WHEREAS, the services to be provided under Supplement No. 1 to Work Authorization No. 2 shall be substantially completed by December 31, 2018. However, Supplement No. 1 to Work Authorization No. 2 will not expire until all tasks associated with the Scope of Services are complete; and


WHEREAS, the Executive Director recommends that the Board approve the proposed Supplement No. 1 to Work Authorization No. 2, a copy of which is attached to this resolution as Exhibit A.

NOW THEREFORE, BE IT RESOLVED, that the Board approves an amount not to exceed \$4,317,054.95 for the services described in Supplement No. 1 to Work Authorization No. 2; and

BE IT FURTHER RESOLVED, that the Board authorizes the Executive Director to finalize and execute the proposed Supplement No. 1 to Work Authorization No. 2 with Parsons Brinckerhoff, Inc., in the form or substantially the same form as Exhibit A.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Willkerson
Chairman, Board of Directors

Exhibit A

APPENDIX D

WORK AUTHORIZATION SUPPLEMENT

WORK AUTHORIZATION NO. 02 SUPPLEMENT NO. 1

This Supplement No. 1 to Work Authorization No. 2 dated September 26, 2016, is made on this ___day of _____, 2017, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of July 1, 2016 (the "Agreement"), between the Central Texas Regional Mobility Authority ("Authority") and **Parsons Brinckerhoff, Inc.** ("GEC"). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

183 North Project Development and Procurement

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Scope of Work

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

N/A

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A – Scope of Work

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein shall expire on December 31st, 2018 or when all tasks associated with the Scope of Services are complete as defined by the Authority.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed **\$3,597,545.79** based on a Cost Plus fee listed in Attachment B – Fee Estimate. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts contained in Attachment B-Fee Estimate for the GEC are estimates and that these individual figures may be redistributed and/or adjusted as necessary over the duration of this Work Authorization. The GEC may alter the compensation distribution between tasks or work assignments to be consistent with

the Services actually rendered within the total Work Authorization amount. The GEC shall not exceed the maximum amount payable without prior written permission by the Authority.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

Section D. - Authority's Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

N/A

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

N/A

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority:

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

By: _____

Name: Mike Heiligenstein

Title: Executive Director

Date: _____

GEC:

Parsons Brinckerhoff, Inc.

By: _____

Name: Mario Medina, P.E.

Title: Vice President

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY
SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO
WORK AUTHORIZATION NO. 2
PARSONS BRINKERHOFF, INC.
ATTACHMENT A
SERVICES TO BE PROVIDED BY GEC

183 NORTH MOBILITY PROJECT

1.0 Environmental Study / Document Services [Code 13210]

1.1 US 183 Re-evaluation

1.1.1 Agency Coordination

1.1.1.1 Perform coordination activities with TxDOT Austin District, Consultants, Resource Agencies, and Texas Department of Transportation (TxDOT)'s Environmental Affairs Division, and the Federal Highway Administration (FHWA), as required; including meeting preparation, public outreach support and attendance at public meetings, hearings, and associated workshops or preparation meetings.

1.1.1.2 Prepare re-evaluation schedule and provide updates to the Authority on a monthly basis.

1.1.1.3 Prepare for and attend technical working group meetings and TxDOT meetings.

1.1.2 Document Preparation

1.1.2.1 Prepare environmental re-evaluation documents associated with additional right of way required for water quality ponds.

1.2 Vissim Modeling

1.2.1 The ENGINEER shall perform work for the Central Texas Regional Mobility Authority (Authority) to model up to 3 scenarios using the year 2035 future conditions AM and PM Vissim models developed in 2015 by CDM Smith. The 2015 model for US 183 N will be combined with the MoPac South model to provide continuous model of express lanes. This task will generally include updating the models and compiling and comparing the results. The ENGINEER shall complete the following tasks:

1.2.1.1 Develop up to 3 scenarios using the Vissim models developed in 2015.

1.2.1.2 Compile and compare results and prepare a technical memorandum.

1.2.2 Model Update

1.2.2.1 The ENGINEER will update the AM and PM 2035 Vissim models developed in 2015 by CDM Smith to match the latest North MoPac 2016 schematic.

1.2.2.2 All calibration criteria will remain unchanged.

1.2.2.3 This task will not include any volume updates.

1.2.2.4 Deliverables

- a. Updated AM and PM Vissim model files.
- 1.2.3 Model Scenarios
- 1.2.3.1 The ENGINEER will utilize the 2035 Vissim AM and PM models developed in 2015 by CDM Smith for up to 3 scenarios as directed by the Authority.
 - 1.2.3.2 The fee estimate shows the fee for up to three scenarios for AM and PM conditions.
 - 1.2.3.3 All calibration criteria will remain unchanged. Only minor modifications will be made, as needed, to driver behavior at express lane ingress/egress locations.
 - 1.2.3.4 This task will not include any volume forecasting or any updates to the origin-destination (OD) volumes.
 - 1.2.3.5 This model will not include frontage roads or cross streets.
 - 1.2.3.6 Deliverables
 - a. AM and PM Vissim model files for the scenario.
- 1.2.4 Compile And Compare Results
- 1.2.4.1 The ENGINEER will compile and compare the results for the scenarios analyzed.
 - 1.2.4.2 The fee estimate shows the fee for up to three scenarios for AM and PM conditions.
 - 1.2.4.3 Deliverables
 - a. Tables/figures summarizing the scenario.
- 1.2.5 Documentation
- 1.2.5.1 The ENGINEER will summarize the results in a technical memorandum.
 - 1.2.5.2 Deliverables
 - a. Technical memorandum summarizing the assumptions and results for each scenario.

2.0 Preliminary Engineering [Code 13110]

2.1 Schematic Revisions

- 2.1.1 TxDOT Support: Provide engineering support as directed by the CTRMA for the review and updates to the schematic.
- 2.1.2 Design Modifications: Revise the schematic to eliminate the RM 620 Direct Connector and associated wishbone ramps at the north end of the project.

3.0 Project Oversight – Pre Construction [Code 13710]

3.1 Project Management

3.1.1 Project Management

- a. Provide staff to manage the daily activities of the program.
- b. Serve as the primary contact between the Authority, TxDOT, design consultants, third party consultants, utility companies, public agencies, and the general public in coordination with the Authority Communication Team..

3.1.2 FHWA Project Management Plan (PMP)

- a. Update the corridor specific PMP's in accordance with FHWA published Guidance Documents.

1.1.2 FHWA Initial Financial Plan (IFP)

- a. Develop IFP in accordance with FHWA published Guidance Documents.

1.1.3 FHWA Cost Estimate Review (CER) Update

- a. Update the Project CER based on project funding and phasing configuration.

3.1.3 Document Controls

- a. Implement the document control process and procedures established by the Authority
- b. Maintain project files for the length of the project
- c. Transfer project files to the Authority upon completion of the work or as directed by the Authority

3.1.4 Sub-Consultant Coordination, Work Authorization Management and Invoicing.

3.2 Project Reporting

3.2.1 Provide updates to the Authority on key tasks accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.

3.2.2 Provide Project Administrative support staff to track, monitor, and report on contracts and budgets.

3.2.3 Provide Project Administrative support staff to track, monitor, and prepare reports on DBE/HUB utilization by Prime and Subconsultants, and DBE/HUB programs.

3.2.4 Prepare a Quarterly Report with an Executive Summary that provides a comprehensive summary of the monthly reports and the overall program progress.

3.3 Project Scheduling

3.3.1 Maintain a Master Project Schedule (Primavera format) that will show critical milestones for the performance and coordination of services.

3.3.2 Provide updates of schedules at the appropriate stages of the project and shall provide an assessment of schedules provided by applicable third parties for integration into the Master Project Schedule.

3.4 Project Development Support

- 3.4.1 Loan and/or Grant Applications: Assist the Authority in the development of land and/or grant applications.
- 3.4.2 Engineering and Technical Support: Provide various engineering and technical tasks as requested by the Authority including but not limited to engineering assistance, general technology assistance, general environmental coordination reports, research, monthly and quarterly project reports, and presentations.
- 3.4.3 TxDOT Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and TxDOT, as directed by the Authority.
- 3.4.4 Agency Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and Agencies, as directed by the Authority.
- 3.4.5 Market Valuation: Assist in the development of the market valuation by providing industry knowledge and research for market valuation options.
- 3.4.6 Project Development Agreement (PDA): Assist in the development of the PDA, generation of PDA exhibits, review of PDA drafts, and TxDOT coordination support, as directed by the Authority.
- 3.4.7 Stakeholder and Public Outreach support as requested by the Authority. Facilitate and prepare documents for public and stakeholder outreach including but not limited to meeting notes, sign-in sheets, and plan view exhibits (Scroll type). Provide staff to support as needed for each meeting.
- 3.4.8 Interlocal Agreements: Assist in the development of interlocal agreements (ILA) with the City of Austin, generation of ILA exhibits, review of ILA drafts, and City of Austin coordination support, as directed by the Authority.

3.5 Financial Planning Support

- 3.5.1 Operation, Maintenance, and Renewal& Replacement Estimates
 - a. Develop and/or update GEC's opinion of probable operations cost estimates using either a Sketch Level approach (assumed per transaction costs based on average operations cost of similar toll systems) or a Level 1 approach (estimate actual quantities for various elements of toll operations, enforcement and incident management and applying anticipated unit prices to opening year with an escalation over an established periods of time)
 - b. Develop and/or update GEC's opinion of probable annual/routine maintenance cost estimates using either a Level 1 approach (estimated quantities for the various elements of the maintenance efforts and applying anticipated unit prices to opening year cost with escalation over an established period of time). A performance based maintenance approach will be assumed in all estimates.
 - c. Develop and/or update GEC's opinion of probable renewal & replacement budget cost estimates (non-routine estimates) using either a Level 1 approach (identification of long-term, periodic maintenance replacement schedule, estimation of quantities, and apply escalation to the appropriate replacement years.)

- 3.5.2 Project Cost Estimates: Prepare an estimate of probable construction costs which will include quantity/cost for all major components of work. Prepare estimate for total project cost which will include: program management, preliminary engineering, final engineering, right-of-way, environmental compliance/mitigation, construction, toll collection systems, utility relocation, and CE&I, and financing.
- 3.5.3 Financial Advisor Support / Financial Plan Development: Provide financial advisor support necessary for the Authority to conduct financial programming. Including but not limited to cost estimating, financing techniques, shortfall mitigation techniques, and funding contingency plan.

3.6 Conceptual Operations Plan

- 3.6.1 Prepare a preliminary draft Conceptual Operations Plan which will establish the basic framework for operations of the facility including a basic definition of systems architecture for ITS and toll collection, incident management, safety and enforcement, maintenance. The plan will include role and responsibilities of various agencies.

4.0 Pre-Investment Grade Traffic & Revenue Analysis Coordination [Code 13120]

- 4.1 Support the Authority during their coordination efforts with the Traffic & Revenue consultant, as directed by the Authority.
- 4.2 Provide detailed project configuration and scope information to the Traffic & Revenue consultant. Review Draft Traffic & Revenue Analyses to ensure consistency with project information.

5.0 Investment Grade Traffic & Revenue Analysis Coordination [Code 13330]

- 5.1 Support the Authority during their coordination efforts with the Traffic & Revenue consultant, as directed by the Authority.
- 5.2 Provide detailed project configuration and scope information to the Traffic & Revenue consultant. Review Draft Traffic & Revenue Analyses to ensure consistency with project information.

6.0 Project Delivery Support [Code 13730]

6.1 Request for Qualifications (RFQ) Process

- 6.1.1 Conduct a series of Preliminary Risk Allocation Workshops with the Authority staff, GEC staff, legal counsel, financial advisors, and others to develop a policy and methodology to divide and assign the risks associated with the design, construction, operation, maintenance and financing elements of the project. A Preliminary Risk Allocation matrix will be developed which will divide and assign all potential risks associated with the development and implementation of the project.
- 6.1.2 Develop a RFQ for the project, post the RFQ as required by the Authority rules, and provide responses to questions/modifications as may be required during the process. RFQ provisions shall include at a minimum:
 - a. General Understanding of the Project
 - b. Scope of Services to be requested
 - c. Developer team and personnel requirements

- d. Financial statements and requirements
 - e. Bonding and insurance requirements
 - f. General Disclosures
 - g. Qualifications Submittal Requirements
 - h. Evaluation Criteria
- 6.1.3 Evaluate responses to the RFQ for the project based on the qualifying/measurable components posed in the RFQ and the associated evaluation criteria/procedures established by the Authority. Provide summaries of strengths and weaknesses of all proposers for each component.
 - 6.1.4 Plan, organize, and administer a series of oral presentations / briefings / discussions (the “orals”) by and with the proposers if requested by the the Authority. Prepare questions to be asked by the Authority at the orals. Assist and advise the Authority in planning and managing the orals. Assist the Authority in answering questions at the orals. Prepare written answers to respondent questions posed at the orals for consideration by the Authority.
 - 6.1.5 Participate with the Authority in discussions and reviews of the proposers’ comments and answers to the Authority questions post orals. Prepare final written synopses of those responses in a style and format suitable for review and evaluation by the Selection Committee. Document for the record the review and shortlist selection procedure followed.
 - 6.1.6 Assist in preparing for and presenting the recommendations of the Selection Committee to the Authority Board of Directors. Prepare and organize all documents, exhibits, and visual aids helpful to the comprehension and supporting of the presentation to the Board.
 - 6.1.7 Prepare correspondence for consideration of execution by the Authority.
 - 6.1.8 Assist in preparing for and facilitating one Pre-Submittal Conference and DBE networking session prior to issuance of RFQ.

6.2 Draft Request for Detailed Proposals (RFDP)

- 6.2.1 Develop a management plan for the procurement of a developer for the project. This will entail working closely with the Authority in the preparation of a procurement process / protocol and reasonable time schedule to define progress achievement milestones between the issuance of the RFDP and the issuance of Notice(s) to Proceed to the selected Proposer. This schedule will allow sufficient time for all elements of the procurement process, including: development of the RFDP by the Authority and GEC; preparation of Detailed Proposals by the shortlisted Proposers; assessment of the Detailed Proposals by the Authority and GEC; selection of the “Best Value” proposal; and negotiation of the terms and execution of CDA.
- 6.2.2 Develop the main sections of the Preliminary Draft RFDP. These main sections will include:
 - a. Draft Instructions to Proposers – This document will contain relevant information to the shortlisted Proposers regarding the project and their associated submittals, including: an introduction and summary of the project; a procurement schedule defining the major milestone dates to

be adhered to during the CDA procurement process; detailed description of the procurement process which the Authority will utilize during the review and evaluation of the responses to the RFDP; detailed information pertaining to the Proposal delivery, content and format; Proposal evaluation criteria and weighting; alternative technical concept (ATC) evaluation criteria and weighting; CDA award and approval process; and stipend information and amounts (if applicable).

- b. Draft CDA – This document will contain the actual CDA to be executed between the Authority and successful Proposer. This section of the RFDP will be prepared by the Authority legal counsel and the GEC will serve in a coordination / review role in the development of same. The GEC will be responsible for coordinating with the Authority legal counsel on this element of the Draft RFDP deliverable.
 - c. Draft Scope of Work – This document will contain detailed information, specifications, and associated guidance intended to apply specifically to the development and implementation of the project.
 - d. Draft Technical Provisions – This document will contain detailed information, specifications, and associated guidance intended to apply to the development and implementation of all toll facility projects procured by the Authority.
- 6.2.3 Conduct a series of Risk Allocation Workshops with the Authority staff, GEC staff, legal counsel, financial advisors, and others to develop a policy and methodology to further divide and assign the risks identified during the Preliminary Risk Workshop. A Revised Risk Allocation matrix will be developed which will divide and assign all potential risks associated with the development and implementation of the project, including:
- a. Design Process: design defect (damages, third party injury); design defect (Nonconforming Work); system integrator (SI) delays; other cost increases and delays; accuracy of schematics and reference documents; alignment change creating need for additional right-of-way; change in standards, latent defects; and coordination with adjacent projects.
 - b. Right of Way: right-of-way acquisition costs; right-of-way acquisition delays.
 - c. Utility Relocation: delay due to Utility Adjustments, including unidentified utilities; cost of unidentified utilities; failure of Utility Owners to comply with Adjustment Agreements.
 - d. Governmental Approvals: City of Austin approvals, governmental approvals; new environmental approvals and changes to the Authority-Provided Approvals due to changes in Final Design; governmental approvals required due to Force Majeure or the Authority-Directed Change After NTP
 - e. Force Majeure Events: actions of the elements; acts of war; strikes and labor disputes; archaeological, paleontological or cultural resource; threatened or endangered species; changes in law; injunctions against the Project; temporary no-work restrictions resulting from the discovery

within the Site of any karst features; hazardous materials (third party spills after proposal date); hazardous materials (existing).

- f. Construction, Supply and Installation: cost increase due to the Authority-Directed Change or the Authority-Caused Delay; differing site conditions; delay in completion (other than Authority-Caused Delay, Force Majeure and certain uncooperative utility delays); delay in completion due to Authority-Caused Delay, Force Majeure and certain uncooperative utility delays; construction defect (damages, third party injury); construction defect (Nonconforming Work); delays in opening Project for revenue service due to System Integrator work, material and labor shortages.
 - g. Operations and Maintenance: evaluation of allowable system designs and controls, defects, warranties, contracting terms and hand-back requirements.
 - h. Financing: evaluations of allowable contracting terms and options, alternative financial concepts, and payment structures.
- 6.2.4 Prepare a Draft RFDP which incorporates the Risk Allocation assignments, agreed to by the Authority into the Preliminary Draft RFDP. An extensive internal review of this Draft RFDP will be completed by senior level GEC staff having experience in CDA processes to ensure completeness. Comments developed / identified during this internal review process will be discussed with the Authority staff, legal counsel, and financial advisers to obtain their approval prior to modifying the Preliminary Draft RFDP / preparing the Draft RFDP.
- 6.2.5 Organize Reference Documents that will be provided along with the Draft RFDP for reference information only. Status assessments will be prepared for inclusion in the RFDP for those documents which have not been fully completed at the time of Draft RFDP issuance to the shortlisted Proposers.

6.3 Final RFDP

- 6.3.1 Facilitate the industry review of the Draft RFDP. Prepare correspondence for the Authority formally issuing the Draft RFDP to the shortlisted Proposers for their review and comment. Written comments will be requested from each shortlisted Proposer. An Industry Review workshop will be held with all shortlisted Proposers to discuss the general elements of the Draft RFDP. Individual one-on-one meetings will also be held with each of the shortlisted Proposers, as required by the Authority, to discuss specific comments.
- 6.3.2 Working jointly and cooperatively with the Authority, compile industry review comments and meeting documentation. Based on discussions with Authority staff, legal counsel, and financial advisers, a Final RFDP will be prepared by incorporating applicable industry review comments into the Draft RFDP.
- 6.3.3 Coordinate with the TxDOT and FHWA. The GEC will attend meetings with the Authority to present the Final RFDP to TxDOT and FHWA; written comments will be formally requested from both agencies. Comments received from TxDOT and FHWA will be discussed with the Authority staff, legal counsel, and financial advisers to obtain their approval prior to modifying the Final RFDP.

- 6.3.4 Prepare correspondence for execution by the Authority for distributing the Final RFDP to shortlisted Proposers upon FHWA's approval of the Final RFDP (if applicable).

6.4 Proposal Coordination Support

- 6.4.1 Plan, organize, and administer workshops to be attended by the Authority staff, legal counsel, financial advisers, GEC staff, and shortlisted Proposers. These workshops will allow the Authority to brief the shortlisted Proposers on the background and status of the various project elements such as design/geometrics, maintenance of traffic, landscape/aesthetics, environmental, right-of-way, utility coordination/relocations, and tolling.
- 6.4.2 Plan, organize, and administer one round of one-on-one meetings to allow shortlisted Proposers the opportunity to ask specific questions/request clarifications on the Final RFDP; it will also provide the shortlisted Proposers the opportunity to solicit preliminary feedback regarding potential Alternative Technical Concepts and Value-Added Concepts they intend to include in their Technical Proposals. The GEC will solicit information from the shortlisted Proposers such that agendas and related documents / exhibits can be prepared and distributed prior to these one-on-one meetings; minutes of all one-on-one meetings will also be prepared by the GEC. The GEC will evaluate questions (oral and written) posed at these meetings (and submitted later in writing) and draft answers for consideration by the Authority. Upon receipt of the Authority approval, the GEC will assemble and distribute the Authority answers to questions.
- 6.4.3 Prepare and issue all addenda to the Final RFDP, if required, suggested by meetings, discussions, workshops, questions posed by potential Proposers, and clarifications suggested and/or approved by the Authority; addenda will also include status updates on Reference Documents originally included in the Final RFDP, if required.
- 6.4.4 Working with the Authority staff and counselors, conduct a detailed and thorough procedure and methodology for evaluating preliminary Proposal elements to be submitted by the shortlisted Proposers, as follows:
 - a. Initial submittal of conceptual information pertaining to ATCs, Alternative Financial Concepts (AFCs) and Draft Value-Added Concepts (VACs) will be evaluated. The evaluation procedure and methodology for these initial submittals will include a preliminary review by a Technical Subcommittee approved by the Authority and will be completed such that the Authority can provide initial feedback regarding their opinion of each ATC, AFC and VAC. One-on-one meetings will be held, as required by the Authority, to discuss the ATCs, AFCs and VACs with each shortlisted Proposer.
 - b. Alternative Technical Concepts (ATCs) formally submitted by the shortlisted Proposers will be evaluated. These ATCs will include proposed changes to the minimum project requirements set forth in the Final RFDP. The GEC will establish an ATC Review Core Team composed of senior level staff to lead the review of these Concepts. Upon completion of the GEC review, recommendations will be made to the Authority regarding which ATCs should be "Approved",

“Conditionally Approved”, or “Rejected”; recommendations that “Additional Information is Required” or that an “ATC does not qualify as an ATC but may be included in the Proposal” may also be made. Upon acceptance of the GEC’s recommendations by the Authority, the GEC will assist the Authority in obtaining necessary agency approvals, including TxDOT and FHWA, if required. The GEC will attend meetings with the Authority to present and discuss the selected ATCs with TxDOT and FHWA; written comments will be formally requested from both agencies.

- c. Alternative Financial Concepts (AFCs) formally submitted by the shortlisted Proposers will be evaluated. These AFCs will include proposed changes to the minimum project requirements set forth in the Final RFDP. The GEC will support the Authority’s Financial Consultants to establish an AFC Review Core Team composed of senior level staff to lead the review of these Concepts. Upon completion of the GEC review, recommendations will be made to the Authority regarding which AFCs should be “Approved”, “Conditionally Approved”, or “Rejected”; recommendations that “Additional Information is Required” or that an “AFC does not qualify as an AFC but may be included in the Proposal” may also be made. Upon acceptance of the GEC’s recommendations by the Authority, the GEC will assist the Authority in obtaining necessary agency approvals, including TxDOT and FHWA, if required. The GEC will attend meetings with the Authority to present and discuss the selected ATCs with TxDOT and FHWA; written comments will be formally requested from both agencies.

6.4.5 Prepare correspondence for execution by the Authority transmitting the findings of the Authority’s evaluation of the preliminary Proposal elements. This correspondence will be utilized by the shortlisted Proposers during their preparation of their Technical Proposals.

6.4.6 Plan, organize, and administer a series of Final one-on-one meetings to allow shortlisted Proposers the opportunity to ask final specific questions/request final clarifications prior to submittal of their Final Technical Proposal and Price Proposals. The GEC will solicit information from the shortlisted Proposers such that agendas and related documents / exhibits can be prepared and distributed prior to these Final one-on-one meetings; minutes of all Final one-on-one meetings will also be prepared by the GEC. The GEC will evaluate questions (oral and written) posed at these meetings (and submitted later in writing) and draft answers for consideration by the Authority. Upon receipt of the Authority approval, the GEC will assemble and distribute the Authority answers to questions.

6.4.7 Working with the Authority staff and counselors, develop a detailed and thorough procedure and methodology for evaluating final Proposal elements to be submitted by the shortlisted Proposers, as follows:

- a. Technical Proposals, which include detailed information pertaining to the development of the Project as defined in the Final RFDP, innovative financing plans, opening schedule, and overall approach to the project will be evaluated. The evaluation procedure and methodology for the Technical Proposals will utilize the “Best Value Concept” process and

will include detailed reviews by a series of specialized Technical Subcommittees approved by the Authority. The findings of each Technical Subcommittees' review will be documented for presentation to the Detailed Proposal Evaluation Committee (appointed by the Authority) such that an objective evaluation process can be completed by each Committee member for each proposal. Upon completion of the individual Committee member evaluation / scoring, an average of all scores will be prepared for each Proposal.

- b. Price Proposals, which include detailed cost information for the development of the Project as defined in the shortlisted Proposers' Technical Proposals and as defined in the Final RFDP. The evaluation procedure and methodology will be completely independent from the Technical Proposal evaluation and will include review of the Price Proposals for mathematical accuracy and completeness.

Upon receipt of the Authority approval on the evaluation procedures and methodologies, a workshop will be held to convey this information to the Detailed Proposal Evaluation Committee appointed by the Authority.

- 6.4.8 Develop a secure system for receiving, handling, distributing, tracking, storing, and dating all documents, correspondence, facsimile transmissions, and other telecommunications after the date of acceptance of the Final RFDP. Search and locate a secure site acceptable to the Authority to store all documents and correspondence received and created on and after the date of receipt of the Final RFDP. With the assistance of the Authority staff, create and maintain a list of parties who have been authorized access to the secured data by the Authority staff. Create a controlled system in which the evaluators must check out, check in, and be recorded as holding the secured data.

6.5 Proposal Review Support

- 6.5.1 Receive and commence detailed reviews of the Technical Proposals submitted by the shortlisted Proposers, which include detailed information pertaining to the development of the Project as defined in the Final RFDP, innovative financing plans, opening schedule, and overall approach to the project; review of the associated price proposals submitted by the shortlisted Proposers defining their maximum price for the aforementioned minimum interim build scenario of the Project will also be reviewed. The GEC will establish a series of specialized Technical Subcommittees approved by the Authority to evaluate the thoroughness and quality of the Technical Proposal responses to each inquiry item contained in the Final RFDP utilizing the evaluation procedures and formulae adopted by the Authority. There may be other unsolicited technical, contractual or financial proposals in addition to the base guidelines provided by the Authority in the Final RFDP; such alternate responses also shall be evaluated and reported by the GEC. The GEC will prepare documentation of the findings resulting from the Technical Subcommittee evaluations; meetings with the Authority staff, legal counsel, and financial advisors will also be held to discuss same.
- 6.5.2 Assist the Authority in the identification and selection of the "Best Value" Proposal. An evaluation outline will be prepared which documents the procedure followed during the evaluation of the Proposals, indicating what measurable developer performance categories were identified and individually analyzed. Using the outline, a detailed summary report of the review and analysis process

followed by the GEC will be prepared, describing how the evaluators used the analytical work performed by the GEC to rank the responses in a best value order.

- 6.5.3 Serve as a resource participant with the evaluators and the Authority staff in delivering final reports and recommendations for best value developer selections and designations to the Committee and to the Board. GEC will also prepare final reports summarizing the deliberations, actions, and recommendations of the Committee and the Board relative to the review and consideration of the Proposals and their final selection and designation of the developer for the Project based on the “Best Value” evaluations.
- 6.5.4 Update Risk Allocation matrix based on Final RFDP.

6.6 CDA Contracting Support

- 6.6.1 Complete various Contracting phase efforts associated with the CDA procurement, including:
 - a. Assist the Authority in identifying Proposer commitments and negotiating the final agreement language.
 - b. Assist the Authority in reviewing insurance and bond documents for inclusion in the conformed CDA.
 - c. Assist the Authority in preparing the final conformed CDA document for execution.
 - d. Conduct debriefings on behalf of the Authority, under the guidance of general counsel of the Authority, for proposers to the RFDP that were not selected to enter CDA with the Authority.
 - e. Final filing and documentation.

6.7 Bond Sale Support

- 6.7.1 Develop detailed capital cost estimates defining all elements necessary for project implementation.
- 6.7.2 Develop detailed annualized cost estimate for funding of necessary operations, maintenance, and renewal & replacement elements for the duration of the bonds.
- 6.7.3 Develop comprehensive schedules defining all elements of the project, including the critical path tasks that directly affect the opening of the project.
- 6.7.4 Prepare the Consulting Engineer’s Report necessary for the bond sale with a detailed description and history of the bonded project, comprehensive schedules, detailed capital cost estimates, and annualized operations, maintenance, and renewal & replacement cost estimates.
- 6.7.5 Support the Authority in development of the Preliminary Official Statement and the Final Official Statement.
- 6.7.6 Coordinate as necessary with the Authority, Bond Counsels, Financial Advisors, and Underwriters on the bond finance team.
- 6.7.7 Issue such certificates as are required to be delivered by the GEC regarding specific scope of the project; estimated capital costs; estimated operations, maintenance,

and renewal & replacement costs; implementation/open to traffic schedule; and necessity to acquire certain real property for the project.

- 6.7.8 Present the accuracy and reliability of project costs and schedules to the bond rating agencies and insurers during bond sales.

7.0 Environmental Permit Support [Code 13220]

- 7.1 Coordination with TxDOT and the U.S. Army Corps of Engineers (USACE) agency review process. Support in the development of documents supporting the use of a Nation Wide Permit (NWP 14) and/or Individual Permit. Respond to any TxDOT Austin District, TxDOT Environmental Affairs, FHWA and USACE comments. Responses to comments and revisions to the PCN would be performed until environmental clearance is obtained from the USACE.

8.0 Final Design Services [Code 13310]

- 8.1 Utility Coordination: (Activities specific to those utilities requiring long lead time and considered high risk under a CDA)

- 8.1.1 Provide technical expertise in the areas of Utility Accommodation Rules (UAR), utility coordination, utility reimbursement procedures and real property interest issues.
- 8.1.2 Review existing utility information for conflicts with preliminary roadway configuration, conduct a utility conflict analysis, and provide a conceptual utility relocation plan.
- 8.1.3 Represent the Authority in coordination efforts related to utility matters; includes coordination with Utility Companies and TxDOT Utility staff.
- 8.1.4 Coordinate directly with Segment Design Consultants as necessary to resolve matters relating to utility conflicts and associated resolutions, relocation and construction schedules, utility identification, design changes, and negotiation with utility owners.
- 8.1.5 Assist the Authority with negotiating the details of utility agreements with the utility companies. Details will include any necessary betterment percentages, indirect costs, plans, estimates and schedules for the utility companies' activities.
- 8.1.6 Review utility plans for compliance with the TxDOT Utility Accommodation Policy, compatibility with roadway features, betterment inclusion and constructability.
- 8.1.7 Prepare draft agreements for Authority's use including the necessary exhibits and information concerning the Project (such as reports, plans and surveys).
- 8.1.8 Prepare and maintain schedules which will identify utility ownership and include milestones and operations and activities pertinent to each assigned project.

- 8.2 Subsurface Utility Engineering (SUE)

- 8.2.1 Conduct Quality Level A and Quality Level B SUE efforts at specific locations as necessary to adequately identify existing utility locations which are potentially in conflict with the proposed roadway configuration.

- 8.2.2 Provide traffic control and utilize traffic control devices in conformance with the MUTCD in the event that the SUE efforts will affect the movement of traffic or traffic/SUE personnel safety.
- 8.2.3 Obtain all necessary permits from TxDOT and/or local jurisdictions as required to work within public rights of way.
- 8.2.4 Obtain written permission from property owners allowing entry onto private property/premises.

9.0 Right-of-Way Acquisition & Relocation Services [Code 13410] (Activities specific to those parcels requiring long lead time and considered high risk under a CDA)

9.1 Appraisals

- 9.1.1 Review completed right-of-way maps and documents to ensure all necessary information is provided prior to initiating acquisition efforts.
- 9.1.2 Obtain title reports for parcels to be acquired; the title reports will be preliminarily reviewed for accuracy, ownership verification, to determination if there are any existing liens or encumbrances which may prohibit the owner from conveying clear title.
- 9.1.3 Conduct appraisals to determine the fair market value of the property to be acquired; appraisals will contain sufficient documentation, including valuation data and the appraiser's analysis of that data, to support his or her opinion of value.
- 9.1.4 Conduct review appraisals to confirm that the appraisal has been completed in accordance with defined specifications/procedures and follows accepted appraisal principles/techniques; contains information and consideration of all compensable items, damages, and benefits; and includes written approval of the fair market value contained in the appraisal.
- 9.1.5 Conduct environmental site assessments, prior to acquisition of real property, on certain parcels to determine the potential of, and extent of liability for hazardous substances or other environmental remediation or injury. This includes a determination of the absence or presence of hazardous substances, as well as conditions that indicate an existing or past release.

9.2 Negotiations / voluntary settlement

- 9.2.1 Provide written notification, consistent with Federal regulations, to effected property owners stating the Authority's intent to acquire right-of-way; this correspondence will also inform the affected property owners of the basic protections provided to them by law.
- 9.2.2 Develop offer letter and participate in a meeting with the affected property owner to present the offer.
- 9.2.3 Participate in negotiations with the affected property owner; documentation of ALL negotiations will be maintained in writing in a negotiators log.
- 9.2.4 In the event that negotiations result in a voluntary settlement acceptable to both parties, assemble a closing package containing all documents necessary to timely process the acquisition and relocations checks necessary for closing.

9.3 Relocation Assistance Services

- 9.3.1 Conduct determination of relocation benefits, consistent with the Uniform Relocation Act, for both residential and business relocations.

9.4 Right of Way status Tracking

- 9.4.1 Track status of Appraisals, Offers, Counter Offers, Condemnation, property management services and relocation assistance in both dollars and schedule.

10.0 Right-of-Way Litigation / Condemnation Services [Code 13450]

10.1 Litigation Support

- 10.1.1 In the event that negotiations do NOT result in a voluntary settlement acceptable to both parties, a condemnation package will be assembled containing all documents necessary to initiate the eminent domain process.

- 10.1.2 Provide Expert testimony and review in preparation for litigation. Includes development of exhibits copies, depositions, etc.

- 10.1.3 Provide support for title and deed acquisition.

10.2 General attorney consultation for issues relating to project.

ATTACHMENT B - Fee Estimate

183North Mobility Project		Sr. Engineering Mgr.	RS&H Senior Advisor	Senior Advisor	Project Manager	Senior Engineer	Tolls Specialist I	PB Senior Engineer	Lead Planner	Sr. Engineering Mgr.	Project Engineer	Senior Engineer	Senior Engineer	Supervising Engineer	Public Involvement	Senior Controls Manager
TASK / WORK DESCRIPTION																
Task 1	Environmental Study / Document Services [Code 13210]	16	0	0	20	40	0	0	160	0	0	0	0	100	80	0
Task 1.1	US 183 Re-Evaluation Oversight	0	0	0	20	40	0	0	160	0	0	0	0	0	80	0
Task 1.2	Vissim Modeling	16	0	0	0	0	0	0	0	0	0	0	0	100	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 2	Preliminary Engineering [13110]	0	0	0	26	52	0	0	156	0	0	0	0	0	0	0
Task 2.1	Schematic Revision	0	0	0	26	52	0	0	156	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 3	Project Oversight - Pre Construction [Code 13710]	390	0	0	1,060	536	72	152	0	0	0	0	0	730	536	528
Task 3.1	Project Management	80	0	0	184	92	0	40	0	0	0	0	0	120	80	80
Task 3.2	Project Reporting	40	0	0	88	44	0	0	0	0	0	0	0	60	44	40
Task 3.3	Project Scheduling	20	0	0	20	28	0	0	0	0	0	0	0	40	28	28
Task 3.4	Project Development Support	200	0	0	600	300	0	100	0	0	0	0	0	400	300	300
Task 3.5	Financial Planning Support	10	0	0	24	12	0	12	0	0	0	0	0	10	12	10
Task 3.6	Conceptual Operations Plan	40	0	0	144	60	72	0	0	0	0	0	0	100	72	70
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 4	Pre-Investment Grade Traffic & Revenue Analysis Coordination [Code 13120]	0	0	0	40	40	0	0	0	0	0	0	0	80	0	0
Task 4.1	Coordination with CTRMA's T&R Consultant	0	0	0	40	40	0	0	0	0	0	0	0	20	0	0
Task 4.2	Provide project information to T&R Consultant	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 5	Investment Grade Traffic & Revenue Analysis Coordination [Code 13330]	0	37	0	40	40	0	0	0	0	0	0	0	120	0	0
Task 5.1	Coordination with CTRMA's T&R Consultant	0	14	0	40	40	0	0	0	0	0	0	0	60	0	0
Task 5.2	Provide project information to T&R Consultant	0	23	0	0	0	0	0	0	0	0	0	0	60	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 6	Project Oversight - CDA [Code 13730]	0	1,035	365	1,009	765	310	250	310	360	207	260	220	310	445	305
Task 6.1	Request for Qualifications (RFQ) Process	0	105	40	105	105	20	20	20	20	21	20	20	20	50	20
Task 6.2	Draft Request for Detailed Proposal (RFDP)	0	310	40	310	200	80	80	80	100	62	80	80	80	120	40
Task 6.3	Final RFDP	0	210	80	210	160	40	60	80	42	80	80	40	80	105	180
Task 6.4	Proposal Coordinator Support	0	106	53	106	80	40	30	40	40	21	40	20	40	50	20
Task 6.5	Proposal Review Support	0	180	90	180	120	80	40	60	80	36	0	40	60	90	20
Task 6.6	Project Delivery Support	0	46	23	20	40	20	0	20	9	20	0	0	0	0	9
Task 6.7	Bond Sale Support	0	78	39	78	60	30	20	30	20	16	20	20	30	30	16
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 7	Environmental Permit Support [Code 13220]	0	0	0	52	40	0	0	0	0	105	0	0	0	0	0
Task 7.1	Preconstruction Notice for (USACE)	0	0	0	52	40	0	0	0	0	105	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 8	Final Design Services [Code 13310]	0	0	0	60	60	0	0	120	0	0	0	0	0	0	0
Task 8.1	Utility Coordination	0	0	0	20	20	0	0	20	0	0	0	0	0	0	0
Task 8.2	Subsurface Utility Engineering (SUE)	0	0	0	40	40	0	0	100	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 9	Right-of-Way Acquisition & Relocation Services [Code 13410]	0	0	0	87	87	0	0	0	157	0	0	0	0	0	0
Task 9.1	Appraisals	0	0	0	48	48	0	0	0	80	0	0	0	0	0	0
Task 9.2	Negotiation / Voluntary Settlement	0	0	0	17	17	0	0	34	0	0	0	0	0	0	0
Task 9.3	Relocation Assistance	0	0	0	2	2	0	0	3	0	0	0	0	0	0	0
Task 9.4	Right of Way Status Tracking	0	0	0	20	20	0	0	40	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 10	Right-of-Way Litigation / Condemnation Services [Code 13450]	0	0	0	90	92	0	0	80	0	0	0	0	0	0	0
Task 10.1	Litigation Support	0	0	0	80	80	0	0	60	0	0	0	0	0	0	0
Task 10.2	General Attorney Consultation	0	0	0	10	12	0	0	20	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DIRECT LABOR		406	1072	365	2484	1752	382	402	470	873	312	260	220	1340	1061	833
% Total by Classification		1.95%	5.15%	1.75%	11.93%	8.41%	1.83%	1.93%	2.26%	4.19%	1.50%	1.25%	1.06%	6.43%	5.09%	4.00%
Labor Costs	\$	32,695.18	\$ 92,770.88	\$ 31,587.10	\$ 177,332.76	\$ 145,416.00	\$ 28,252.72	\$ 24,120.00	\$ 22,169.90	\$ 58,447.35	\$ 14,976.00	\$ 20,800.00	\$ 15,400.00	\$ 67,670.00	\$ 40,816.67	\$ 44,065.70
Overhead Rate		1.5382	1.7	1.7	1.7	1.7	1.7	1.5382	1.5382	1.5382	1.9661	1.5382	1.5382	1.5382	1.5382	1.7
Overhead Costs	\$	50,291.73	\$ 157,710.50	\$ 53,698.07	\$ 301,465.69	\$ 247,207.20	\$ 48,029.62	\$ 37,101.38	\$ 34,101.74	\$ 89,903.71	\$ 29,444.31	\$ 31,994.56	\$ 23,688.28	\$ 104,089.99	\$ 62,784.20	\$ 74,911.69
Profit		10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Profit Costs	\$	8,298.69	\$ 25,048.14	\$ 8,528.52	\$ 47,879.85	\$ 39,262.32	\$ 7,628.23	\$ 6,122.14	\$ 5,627.16	\$ 14,835.11	\$ 4,442.03	\$ 5,279.46	\$ 3,908.83	\$ 17,176.00	\$ 10,360.09	\$ 11,897.74
Total Loaded Labor		\$ 91,285.60	\$ 275,529.51	\$ 93,813.69	\$ 526,678.30	\$ 431,885.52	\$ 83,910.58	\$ 67,343.52	\$ 61,898.80	\$ 163,186.17	\$ 48,862.34	\$ 58,074.02	\$ 42,997.11	\$ 188,935.99	\$ 113,960.96	\$ 130,875.13
% Total by Class		2.57%	7.75%	2.64%	14.81%	12.15%	2.36%	1.89%	1.74%	4.59%	1.37%	1.63%	1.21%	5.31%	3.21%	3.68%
Total Direct Expenses		\$ 42,000.00														
Total		\$ 3,597,545.79														
Contingency		\$ 719,509.16														
Total with Contingency		\$ 4,317,054.95														

ATTACHMENT B - Fee Estimate

183North Mobility Project		Engineer II	Project Engineer	Sr Engineering Mgr.	Landscape Architect V	Sr. Supervising Engineer	Project Manager	ROW Engineer	Admin/Clerical II	TOTAL	TOTAL
TASK / WORK DESCRIPTION											
Task 1	Environmental Study / Document Services [Code 13210]	300	0	0	0	280	0	0	40	1036	\$ 157,994.64
Task 1.1	US 183 Re-Evaluation Oversight	200	0	0	0	280	0	0	40	820	\$ 129,231.25
Task 1.2	Vissim Modeling	100	0	0	0	0	0	0	0	216	\$ 28,763.38
		0	0	0	0	0	0	0	0	0	\$ -
Task 2	Preliminary Engineering [13110]	120	0	0	0	0	0	0	16	370	\$ 62,054.18
Task 2.1	Schematic Revision	120	0	0	0	0	0	0	16	370	\$ 62,054.18
		0	0	0	0	0	0	0	0	0	\$ -
Task 3	Project Oversight - Pre Construction [Code 13710]	372	0	0	0	0	0	0	293	4669	\$ 793,963.04
Task 3.1	Project Management	0	0	0	0	0	0	0	46	722	\$ 128,150.43
Task 3.2	Project Reporting	20	0	0	0	0	0	0	22	358	\$ 61,946.35
Task 3.3	Project Scheduling	28	0	0	0	0	0	0	14	206	\$ 32,907.37
Task 3.4	Project Development Support	240	0	0	0	0	0	0	169	2609	\$ 438,756.82
Task 3.5	Financial Planning Support	12	0	0	0	0	0	0	6	108	\$ 18,384.56
Task 3.6	Conceptual Operations Plan	72	0	0	0	0	0	0	36	666	\$ 113,817.51
		0	0	0	0	0	0	0	0	0	\$ -
Task 4	Pre-Investment Grade Traffic & Revenue Analysis Coordination [Code 13120]	338	0	0	0	0	0	0	52	550	\$ 71,195.00
Task 4.1	Coordination with CTRMA's T&R Consultant	98	0	0	0	0	0	0	14	212	\$ 33,129.03
Task 4.2	Provide project information to T&R Consultant	240	0	0	0	0	0	0	38	338	\$ 38,065.97
		0	0	0	0	0	0	0	0	0	\$ -
Task 5	Investment Grade Traffic & Revenue Analysis Coordination [Code 13330]	170	0	0	0	0	0	0	37	444	\$ 66,550.66
Task 5.1	Coordination with CTRMA's T&R Consultant	70	0	0	0	0	0	0	14	238	\$ 39,268.70
Task 5.2	Provide project information to T&R Consultant	100	0	0	0	0	0	0	23	206	\$ 27,281.96
		0	0	0	0	0	0	0	0	0	\$ -
Task 6	Project Oversight - CDA [Code 13730]	404	0	350	125	145	120	0	518	7813	\$ 1,515,130.02
Task 6.1	Request for Qualifications (RFQ) Process	40	0	20	20	20	20	0	53	759	\$ 149,382.44
Task 6.2	Draft Request for Detailed Proposal (RFDP)	120	0	80	40	40	40	0	155	2137	\$ 411,354.03
Task 6.3	Final RFDP	100	0	80	20	20	20	0	105	1792	\$ 339,244.33
Task 6.4	Proposal Coordinator Support	40	0	40	20	20	20	0	53	879	\$ 171,973.66
Task 6.5	Proposal Review Support	80	0	80	0	20	20	0	90	1366	\$ 264,435.80
Task 6.6	Project Delivery Support	0	0	20	9	9	0	0	23	268	\$ 58,255.31
Task 6.7	Bond Sale Support	24	0	30	16	16	0	0	39	612	\$ 120,484.46
		0	0	0	0	0	0	0	0	0	\$ -
Task 7	Environmental Permit Support [Code 13220]	400	0	0	0	200	0	0	52	849	\$ 128,711.54
Task 7.1	Preconstruction Notice for (USACE)	400	0	0	0	200	0	0	52	849	\$ 128,711.54
		0	0	0	0	0	0	0	0	0	\$ -
Task 8	Final Design Services [Code 13310]	0	2,800	0	0	0	0	0	267	3307	\$ 444,034.12
Task 8.1	Utility Coordination	0	800	0	0	0	0	0	55	915	\$ 123,799.73
Task 8.2	Subsurface Utility Engineering (SUE)	0	2000	0	0	0	0	0	212	2392	\$ 320,234.39
		0	0	0	0	0	0	0	0	0	\$ -
Task 9	Right-of-Way Acquisition & Relocation Services [Code 13410]	0	0	0	0	0	0	478	44	853	\$ 151,638.53
Task 9.1	Appraisals	0	0	0	0	0	0	264	24	464	\$ 82,448.46
Task 9.2	Negotiation / Voluntary Settlement	0	0	0	0	0	0	95	9	172	\$ 30,547.34
Task 9.3	Relocation Assistance	0	0	0	0	0	0	9	1	17	\$ 3,043.04
Task 9.4	Right of Way Status Tracking	0	0	0	0	0	0	110	10	200	\$ 35,599.70
		0	0	0	0	0	0	0	0	0	\$ -
Task 10	Right-of-Way Litigation / Condemnation Services [Code 13450]	0	0	0	0	0	0	630	45	937	\$ 164,274.08
Task 10.1	Litigation Support	0	0	0	0	0	0	462	33	715	\$ 126,774.88
Task 10.2	General Attorney Consultation	0	0	0	0	0	0	168	12	222	\$ 37,499.20
		0	0	0	0	0	0	0	0	0	\$ -
TOTAL DIRECT LABOR		2104	2800	350	125	625	120	1108	1364	20828	
	<i>% Total by Classification</i>	10.10%	13.44%	1.68%	0.60%	3.00%	0.58%	5.32%	6.55%		
	Labor Costs	\$ 78,395.04	\$ 154,000.00	\$ 32,690.00	\$ 9,375.00	\$ 48,068.75	\$ 8,509.20	\$ 66,480.00	\$ 36,828.00		
	Overhead Rate	1.7	1.2	1.5382	1.7	1.5382	1.7	1.5	1.7		
	Overhead Costs	\$ 133,271.57	\$ 184,800.00	\$ 50,283.76	\$ 15,937.50	\$ 73,939.35	\$ 14,465.64	\$ 99,720.00	\$ 62,607.60		
	Profit	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%		
	Profit Costs	\$ 21,166.66	\$ 33,880.00	\$ 8,297.38	\$ 2,531.25	\$ 12,200.81	\$ 2,297.48	\$ 16,620.00	\$ 9,943.56		
	Total Loaded Labor	\$ 232,833.27	\$ 372,680.00	\$ 91,271.13	\$ 27,843.75	\$ 134,208.91	\$ 25,272.32	\$ 182,820.00	\$ 109,379.16	\$	3,555,545.79
	<i>% Total by Class</i>	6.55%	10.48%	2.57%	0.78%	3.77%	0.71%	5.14%	3.08%		
	Total Direct Expenses	\$	42,000.00								
	Total	\$	3,597,545.79								
	Contingency	\$	719,509.16								
	Total with Contingency	\$	4,317,054.95								

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-005

**APPROVING SUPPLEMENT NO. 2 TO THE WORK AUTHORIZATION NO. 7 WITH
ATKINS NORTH AMERICA, INC. FOR GENERAL ENGINEERING SERVICES
RELATED TO THE OAK HILL PARKWAY PROJECT**

WHEREAS, by Resolution No. 11-076 dated June 29, 2011, the Board of Directors entered into a master contract with Atkins, Inc. for oversight and community outreach related to the Oak Hill Parkway Project ("Project"); and

WHEREAS, by Resolution No. 11-081, dated June 29, 2011, the Board of Directors approved Work Authorization No. 7 for services related to the Project; and

WHEREAS, by Resolution No. 14-068, dated September 24, 2014, the Board of Directors approved Supplement No. 1 to Work Authorization No. 7; and

WHEREAS, the Texas Department of Transportation ("TxDOT") is projecting the NEPA ("National Environmental Policy Act") phase of the Project to extend into 2018; and

WHEREAS, the Executive Director and Atkins, Inc. have agreed to proposed Supplement No. 2 to Work Authorization No. 7 for general engineering consultant services for the Oak Hill Parkway Project in an amount not to exceed \$1,398,460; and

WHEREAS, Supplement No. 2 to Work Authorization No. 7 would allow Atkins, Inc. to continue providing consultant engineering services through 2018; and

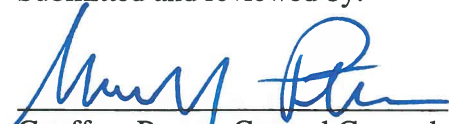
WHEREAS, the Executive Director recommends the approval of proposed Supplement No. 2 to Work Authorization No. 7, a copy of which is attached to this resolution as Exhibit A.

NOW THEREFORE, BE IT RESOLVED that the Board approves an amount not to exceed \$1,398,460 for the services described in Supplement No. 2 to Work Authorization No. 7; and

BE IT FURTHER RESOLVED that the Executive Director is authorized to finalize and execute Supplement No. 2 to Work Authorization No. 7 on behalf of the Mobility Authority in the form or substantially the same form as Exhibit A.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:


Geoffrey Petrov, General Counsel

Approved:


Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

EXHIBIT D
WORK AUTHORIZATION

Supplement No. 2 to Work Authorization No.7

This Work Authorization is made as of this 22th day of February, 2017, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of January 4th, 2010 (the “Agreement”), between the **Central Texas Regional Mobility Authority** (“Authority”) and **Atkins North America, Inc.** (“GEC”). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

***Oak Hill Parkway
Oversight Services***

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Services to be Provided by the GEC

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

Not applicable

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A – Services to be Provided by the GEC

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein shall expire on December 31st, 2018 or when all tasks associated with the Scope of Services are complete as defined by the Authority.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed \$1,398,460, based on a Cost Plus fee listed in Attachment B - Fee Estimate. This will increase the not to exceed amount for Work Authorization No. 7 from \$2,561,692 to \$3,960,152. Compensation for Direct Expenses under this Supplement which are incurred as part of normal business operations (i.e., internal document reproduction, internal plotting, travel and parking associated with local meetings, etc.) will be reimbursed on a Lump-Sum basis in the

amount of: \$24,000 (with \$1,000 to be invoiced monthly). Profit will be 10% for all services. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts contained in Attachment B – Fee Estimate for the GEC are estimates and that these individual figures may be redistributed and/or adjusted as necessary over the duration of this Work Authorization. The GEC may alter the compensation distribution between tasks or work assignments to be consistent with the Services actually rendered within the Work Authorization amount. The GEC shall not exceed the maximum amount payable without prior written permission by the Authority.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

Section D. - Authority’s Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

Not applicable

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

Not applicable

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority: Central Texas Regional Mobility
Authority

GEC: Atkins North America, Inc.

By: Mike Heiligenstein

By: _____

Signature: _____

Signature: _____

Title: Executive Director

Title: _____

Date: _____

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

**SUPPLEMENT NO. 2 TO
WORK AUTHORIZATION NO. 7
ATKINS**

**ATTACHMENT A
SERVICES TO BE PROVIDED BY THE GEC**

OAK HILL PARKWAY (US290 WEST/SH 71 WEST) PROJECT

Introduction

The GEC shall perform work generally consisting of environmental support, preliminary engineering, project coordination and community outreach for the U.S. 290 (or Oak Hill Parkway) project from west of Scenic Brook to Joe Tanner Lane. The Oak Hill Parkway project team is taking measured steps and employing best practices to ensure all evaluations and studies are carefully and sensitively conducted. With that in mind, some of the technical studies are being revised to reflect additional input received from stakeholders and new information contained in the Capital Area Metropolitan Planning Organization's (CAMPO) 2040 plan. The following outlines the scope of services to be provided by the GEC that will incorporate the community's input that includes a number of positive changes.

1.0 Oversight Preconstruction – Ledger Code 13720 (Project Management)

1.1 Project Management

- 1.1.1 Provide staff to manage the daily activities of the project.
- 1.1.2 Serve as the primary contact between the Mobility Authority, TxDOT, design consultants, third party consultants, utility companies, public agencies, and the general public.

1.2 Document Control

- 1.2.1 Maintain document control plan.
- 1.2.2 Maintain project files for the length of the project.
- 1.2.3 Transfer project files to the Mobility Authority upon completion of the work or as directed by the Mobility Authority.

1.3 Sub-Consultant Management

- 1.3.1 Manage sub-consultants which includes coordination, Work Authorization Management and Invoicing.

1.4 Project Reporting

- 1.4.1 Provide updates to the Mobility Authority on key tasks accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.
- 1.4.2 Provide Project Administrative support staff to track, monitor, evaluate and report on contracts and budgets.

1.5 Project Scheduling

- 1.5.1 Maintain a Master Project Schedule (Primavera format) that will show critical milestones for the performance and coordination of services.
- 1.5.2 Monitor, evaluate, validate, and periodically update all schedules produced by others (Segment Designers, Utility Companies, etc.) that are a subset of the Master Project Schedule.

1.6 Project Development Support

- 1.6.1 Loan and/or Grant Applications: Assist the Authority in the development of loan and/or grant applications.
- 1.6.2 Engineering and Technical Support: Provide various engineering and technical tasks as requested by the Authority including but not limited to engineering assistance, general technology assistance, general environmental coordination reports, research, and presentations.
- 1.6.3 Conduct peer review of the CORSIM and/or VISSIM Traffic Models and provide summary of suggestions.
- 1.6.4 Provide the appropriate staff as part of the coordination efforts between the Authority and TxDOT, as directed by the Authority.
- 1.6.5 Provide the appropriate staff as part of the coordination efforts between the Authority and Agencies, as directed by the Authority.
- 1.6.6 Assist in the development and review of various agreements necessary such as the Project Development Agreement (PDA), Advance Funding Agreement (AFA), Financial Assistance Agreement (FAA), etc.; generation of agreement exhibits; review of agreement drafts; and TxDOT coordination support, as directed by the Authority.
- 1.6.7 DBE Outreach support as requested by the Authority.
- 1.6.8 Identification and development of options to continue progressing the project beyond the NEPA process as requested by the Authority. Development opportunities could include:
 - 1.6.8.1 Assisting the Mobility Authority in the solicitation and procurement of a design consultant to complete the final design.
 - 1.6.8.2 Identification of and supporting the Mobility Authority with the completion of long lead utility relocations
 - 1.6.8.3 Assisting the Mobility Authority in the acquisition of key ROW parcels

2.0 Preliminary Engineering – Ledger Code 13110 (Schematics, Exhibits, and Procurement)

2.1 TxDOT Support

- 2.1.1 Provide engineering support as directed by the Mobility Authority for the review and updates to the corridor exhibits and schematic.

2.2 Design Verification

- 2.2.1 Provide a cursory review of the current TxDOT Design to ensure that all elements of the schematic conform to current standards. Develop a list of non-conformance elements and provide recommendations to the Mobility Authority. Develop a design notebook which notes the results of the design.

2.3 Design Modifications

2.3.1 Address all non-conformance elements as directed by the Mobility Authority.

2.4 Shared Use Path

2.4.1 Provide a cursory review of the current TxDOT Design to ensure that a Shared Use Path can be incorporated into the Design. Provide recommendations to the locations of the Shared Use Path. Incorporate the proposed design as directed by the Mobility Authority.

2.5 Tree Alternative Design

2.5.1 Evaluate designs that lessen the impacts to specific trees within the corridor.

2.6 Mobility Improvements associated with Logical Termini

2.6.1 Evaluate and update the design of the TxDOT proposed Mobility improvement at the west end of the Project (near Circle Drive).

2.7 Preliminary Cross-sections

2.7.1 Verify cross-sections including limits of construction in order to evaluate the ROW footprint. Provide comments and recommendations to the Mobility Authority.

2.8 Conceptual Operations Plan

2.8.1 Prepare a preliminary Conceptual Operations Plan which will establish the basic framework for operations of the facility including a basic definition of systems architecture for ITS and toll collection, incident management, safety and enforcement, maintenance. The plan will include roles and responsibilities of the various agencies.

3.0 Environmental Studies – Ledger Code 13210

3.1 Project Status Meetings

- 3.1.1 Facilitate EIS project status meetings with TxDOT and other Agencies as needed.
- 3.1.2 Prepare meeting agendas, action items and meeting summaries.

3.2 EIS Document Reviews

- 3.2.1 Complete EIS document reviews including Technical Reports prior to submittal to Environmental Affairs Divisions (ENV), Federal Highway Administration (FHWA) and other Resources Agencies.
- 3.2.2 Prepare and submit recommendations/comments to the Austin District prior to ENV submittal.
- 3.2.3 Prepare and submit recommendations/comments to the Austin District prior to FHWA submittal.

3.3 Traffic and Data Reviews

- 3.3.1 Review updates to the traffic information and data for specific elements of the EIS.
- 3.3.2 Review the updates to the traffic information and data and the associated impacts to the Level of Service for the Environmental Justice Analysis.

- 3.3.3 Review incorporation of the updated traffic information and data into the Noise Analysis, Air Quality CO Analysis and the MSAT.

3.4 Exhibit Development

- 3.4.1 Develop Exhibits related to the EIS process.
- 3.4.2 Prepare progress exhibits and other figures as needed.

4.0 Public Involvement – Ledger Code 13750

4.1 Stakeholder Meetings and Community Presentations

- 4.1.1 The team will be available for meetings or presentations on request, and will solicit meetings from those included in the targeted audiences.
- 4.1.2 Elected official briefings will be strategically held as needed, and the Mobility Authority Board of Directors will be informed of the project's progress at key milestones.

4.2 Public Workshop

- 4.2.1 Facilitate, prepare documents and provide supporting staff as needed for one (1) Workshop.
- 4.2.2 Invitational e-blasts will be sent to the stakeholder database and follow up calls will be made to select stakeholders.
- 4.2.3 Following the workshop, an e-blast will be sent with a recap of what was said and what was heard.
- 4.2.4 Provide supporting documentation and materials as directed by the Mobility Authority.

4.3 Public Hearing

- 4.3.1 Assist TxDOT with preparation of a comprehensive mailing list of adjacent property owners which may include additional property owners defined by the Mobility Authority.
- 4.3.2 Publish the formal Notice of Availability as well as various public hearing advertisements in sufficient time for the public to review and comment on the project and project documents.
- 4.3.3 Within the 45 day period of the Draft EIS review, the team will provide project information for public review and discussion with the goal of increased outreach and receiving comments. Further fleshing out of these preview events will occur in a future plan update.
- 4.3.4 All outreach methods will culminate in the public hearing, which will also have a virtual experience component for those unable to attend in person.
- 4.3.5 Distribute invitations to the all property owners.
- 4.3.6 Provide supporting staff as needed for the Public Hearing.
- 4.3.7 Provide supporting documentation as directed by the Mobility Authority.

4.4 Context Sensitive Solutions

- 4.4.1 Provide supporting staff as needed for meetings and workshops.

4.4.2 Provide supporting documentation as directed by the Mobility Authority.

4.5 Miscellaneous Public Involvement Materials

4.5.1 Support the Mobility Authority in the development of miscellaneous public involvement materials including but not limited to fact sheets, stake holder lists, advertisements, and newsletters.

4.5.2 Develop 3D roadway animation incorporating schematic and context sensitive designs as directed by the Mobility Authority.

4.6 Project Website

4.6.1 Support the Mobility Authority in the development and maintenance of the Project Website.

4.6.2 Content will continue to be added to the project website, www.OakHillParkway.com, to ensure that it's a one stop shop for project information.

4.7 Quarterly E-Newsletters

4.7.1 A quarterly e-newsletter will be drafted and emailed to the stakeholder contact list. It will also be available on the project website.

4.7.2 It will provide updates about the environmental study's progress, input received by the public, and include project contact information.

4.8 Social Media

4.8.1 The team will utilize the project's twitter account, @oakhillparkway, as a tool of communicating with the public with multiple tweets per week.

5.0 Traffic & Revenue Analyses Pre-Investment Grade – Ledger Code 13120

5.1 Traffic & Revenue Consultant Coordination

5.1.1 Support the Mobility Authority during their coordination efforts with the Traffic & Revenue consultant, as directed by the Authority.

5.1.2 Provide detailed project configuration and scope information to the Traffic & Revenue consultant. Review Draft Traffic & Revenue Analyses to ensure consistency with project information.

5.2 Operation, Maintenance, and Renewal & Replacement Estimates

5.2.1 Develop and/or update GEC's opinion of probable operations cost estimates using either a Sketch Level approach (assumed per transaction costs based on average operations cost of similar toll systems) or a Level 1 approach (estimate actual quantities for various elements of toll operations, enforcement and incident management and applying anticipated unit prices to opening year with an escalation over an established periods of time).

5.2.2 Develop and/or update GEC's opinion of probable annual/routine maintenance cost estimates using either a Sketch level approach (an estimated per centerline mile cost based on facility type which considers the number of lanes, pavement material and location) on a Level 1 approach (estimated quantities for the various elements of the maintenance efforts and applying anticipated unit prices to opening year cost with escalation over an established period of time).

- 5.2.3 Develop and/or update GEC's opinion of probable renewal & replacement budget cost estimates (non-routine estimates) using either a Sketch Level approach (an estimated per mile cost based on renewal & replacement budgets utilized on similar facilities) or a Level 1 approach (identification of long-term, periodic maintenance replacement schedule, estimation of quantities, and apply escalation to the appropriate replacement years).

5.3 Project Cost Estimates

- 5.3.1 Prepare an estimate of probable construction costs which will include quantity/costs for all major components of work. Prepare estimate for total project cost which will include: program management, preliminary engineering, final engineering, right-of-way, environmental compliance/mitigation, construction, toll collection systems, utility relocation, and CE&I, and financing.

5.4 Financial Advisor Support / Financial Plan Development

- 5.4.1 Provide financial advisor support necessary for the Authority to conduct financial programming including but not limited to cost estimating, financing techniques, shortfall mitigation techniques, and funding contingency plan.

Attachment B - Fee Estimate Summary

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_SH 71 West Project (Oak Hill Parkway)

ATKINS - Supplemental Work Authorization #2 to Work Authorization #7

290 West_SH 71 West Project (Oak Hill Parkway)

	<u>SUBTOTAL</u>	<u>SUBTOTAL</u>	<u>TOTAL</u>
TASK	Labor + Overhead + Profit	Direct Expenses	
290 West_ 71 West Project (Oak Hill Parkway)			
1.0 Oversight Preconstruction – Ledger Code 13720 (Project Managemen	\$ 442,433	\$ 10,250	\$ 452,683
2.0 Preliminary Engineering – Ledger Code 13110 (Schematics and Exhi	\$ 110,676	\$ 1,000	\$ 111,676
3.0 Environmental Studies – Ledger Code 13210	\$ 112,857	\$ 3,250	\$ 116,107
4.0 Public Involvement – Ledger Code 13750	\$ 638,706	\$ 9,000	\$ 647,706
5.0 Traffic & Revenue Analyses Pre-Investment Grade – Ledger Code 1.	\$ 69,786	\$ 500	\$ 70,286
Subtotals	\$ 1,374,459	\$ 24,000	\$ 1,398,459
		TOTAL (rounded)	\$ 1,398,460

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A \$ 90.00	B \$ 80.00	C \$ 70.00	D \$ 50.00	E \$ 35.00	F \$ 25.00	
1.0 Oversight Preconstruction – Ledger Code 13720 (Project Management)							
1.1 Project Management	40	960			40	240	1280
1.2 Document Control	40	40	20		120	300	520
1.3 Sub-Consultant Management	40	20			40	120	220
1.4 Project Reporting	40	60	20	120	120	120	480
1.5 Project Scheduling	30	20	10		40		100
1.6 Project Development Support	20	60		120		120	320

TOTAL DIRECT LABOR	210	1160	50	240	360	900	2920
% Total by Classification	7.19%	39.73%	1.71%	8.22%	12.33%	30.82%	
Labor Costs	\$ 18,900	\$ 92,800	\$ 3,500	\$ 12,000	\$ 12,600	\$ 22,500	\$ 162,300
Overhead Costs	1.4782 \$ 27,938	\$ 137,177	\$ 5,174	\$ 17,738	\$ 18,625	\$ 33,260	\$ 239,912
Profit	10.0% \$ 4,684	\$ 22,998	\$ 867	\$ 2,974	\$ 3,123	\$ 5,576	\$ 40,221
Total Loaded Labor	\$ 51,522	\$ 252,975	\$ 9,541	\$ 32,712	\$ 34,348	\$ 61,336	\$442,433

Direct Expenses	
Plotting and Reproduction	\$ 2,000
Mail and Deliveries	\$ 250
Misc Expenses	\$ 3,000
Travel and Field Expenses	\$ 5,000
Total Direct Expenses	\$ 10,250

Total \$ 452,683

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A	B	C	D	E	F	
	\$ 90.00	\$ 80.00	\$ 70.00	\$ 50.00	\$ 35.00	\$ 25.00	
2.0 Preliminary Engineering – Ledger Code 13110 (Schematics and Exhibits)							0
2.1 TxDOT Support	10	20		60	40		130
2.2 Design Verification		40			40	20	100
2.3 Design Modifications		40			40	60	140
2.4 Shared Use Path		20			40	20	80
2.5 Tree Design Alternative		30	10		20	20	80
2.6 Mobility Improvements associated with logical termini		20	10		20	20	70
2.7 Preliminary Cross-sections		20			20	20	60
2.8 Conceptual Operations Plan			120				120

TOTAL DIRECT LABOR	10	190	140	60	220	160	780
% Total by Classification	1.28%	24.36%	17.95%	7.69%	28.21%	20.51%	
Labor Costs	\$ 900	\$ 15,200	\$ 9,800	\$ 3,000	\$ 7,700	\$ 4,000	\$ 40,600
Overhead Costs	1.4782 \$ 1,330	\$ 22,469	\$ 14,486	\$ 4,435	\$ 11,382	\$ 5,913	\$ 60,015
Profit	10.0% \$ 223	\$ 3,767	\$ 2,429	\$ 743	\$ 1,908	\$ 991	\$ 10,061
Total Loaded Labor	\$ 2,453	\$ 41,436	\$ 26,715	\$ 8,178	\$ 20,991	\$ 10,904	\$110,676

Direct Expenses	
Plotting and Reproduction	\$ 500
Mail and Deliveries	\$ -
Misc Expenses	\$ 250
Travel and Field Expenses	\$ 250
Total Direct Expenses	\$ 1,000

Total \$ 111,676

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	TOTAL
(Estimated Average Labor Rates)		\$ 90.00	\$ 80.00	\$ 70.00	\$ 50.00	\$ 35.00	\$ 25.00	HRS
TASK / WORK DESCRIPTION								
3.0	Environmental Studies – Ledger Code 13210							
3.1	Project Status Meetings		80	20	20			120
3.2	EIS Document Reviews		20	100				120
3.3	Traffic and Data Reviews		40	40				80
3.4	Exhibit Development		40	40	100	200		380
								0
								0
								0
								0
								0
TOTAL DIRECT LABOR		0	180	200	120	200	0	700
<i>% Total by Classification</i>		<i>0.00%</i>	<i>25.71%</i>	<i>28.57%</i>	<i>17.14%</i>	<i>28.57%</i>	<i>0.00%</i>	
Labor Costs		\$ -	\$ 14,400	\$ 14,000	\$ 6,000	\$ 7,000	\$ -	\$ 41,400
Overhead Costs	1.4782	\$ -	\$ 21,286	\$ 20,695	\$ 8,869	\$ 10,347	\$ -	\$ 61,197
Profit	10.0%	\$ -	\$ 3,569	\$ 3,469	\$ 1,487	\$ 1,735	\$ -	\$ 10,260
Total Loaded Labor		\$ -	\$ 39,255	\$ 38,164	\$ 16,356	\$ 19,082	\$ -	\$112,857
Direct Expenses								
Plotting and Reproduction		\$	1,000					
Mail and Deliveries		\$	250					
Misc Expenses		\$	1,000					
Travel and Field Expenses		\$	1,000					
Total Direct Expenses		\$	3,250					
Total		\$	116,107					

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)							TOTAL HRS
	A	B	C	D	E	F		
	\$ 90.00	\$ 80.00	\$ 70.00	\$ 50.00	\$ 35.00	\$ 25.00		
4.0 Public Involvement – Ledger Code 13750								
4.1 Stakeholder Meetings and Community Presentations	20	80	80	80	300	40	600	
4.2 Public Workshop	20	80	80	240	320	80	820	
4.3 Public Hearing	20	80	80	240	320	80	820	
4.4 Context Sensitive Solutions		80	80	160	160	40	520	
4.5 Miscellaneous Public Involvement Materials		80	80	160	240	240	800	
4.6 Project Website		40		160	240	240	680	
4.7 Quarterly E-Newsletters		20		120	240	160	540	
4.8 Social Media				160	240	160	560	

TOTAL DIRECT LABOR	60	460	400	1320	2060	1040	5340
% Total by Classification	1.12%	8.61%	7.49%	24.72%	38.58%	19.48%	
Labor Costs	\$ 5,400	\$ 36,800	\$ 28,000	\$ 66,000	\$ 72,100	\$ 26,000	\$ 234,300
Overhead Costs	1.4782 \$ 7,982	\$ 54,398	\$ 41,390	\$ 97,561	\$ 106,578	\$ 38,433	\$ 346,342
Profit	10.0% \$ 1,338	\$ 9,120	\$ 6,939	\$ 16,356	\$ 17,868	\$ 6,443	\$ 58,064
Total Loaded Labor	\$ 14,721	\$ 100,318	\$ 76,329	\$ 179,917	\$ 196,546	\$ 70,877	\$638,706

Direct Expenses	
Plotting and Reproduction	\$ 3,000
Mail and Deliveries	\$ 200
Misc Expenses	\$ 3,000
Travel and Field Expenses	\$ 2,800
Total Direct Expenses	\$ 9,000

Total \$ 647,706

Attachment B - Fee Estimate

CTRMA General Engineering Consultant
 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A	B	C	D	E	F	
	\$ 90.00	\$ 80.00	\$ 70.00	\$ 50.00	\$ 35.00	\$ 25.00	
5.0 Traffic & Revenue Analyses Pre-Investment Grade – Ledger Code 13120							
5.1 Traffic & Revenue Consultant Coordination	10	40					50
5.2 Operation, Maintenance, and Renewal & Replacement Estimates		80					80
5.3 Project Cost Estimates		80	20				100
5.4 Financial Advisor Support / Financial Plan Development	10	80					90
							0
							0
							0
							0

TOTAL DIRECT LABOR	20	280	20	0	0	0	320
% Total by Classification	6.25%	87.50%	6.25%	0.00%	0.00%	0.00%	
Labor Costs	\$ 1,800	\$ 22,400	\$ 1,400	\$ -	\$ -	\$ -	\$ 25,600
Overhead Costs	1.4782 \$ 2,661	\$ 33,112	\$ 2,069	\$ -	\$ -	\$ -	\$ 37,842
Profit	10.0% \$ 446	\$ 5,551	\$ 347	\$ -	\$ -	\$ -	\$ 6,344
Total Loaded Labor	\$ 4,907	\$ 61,063	\$ 3,816	\$ -	\$ -	\$ -	\$69,786

Direct Expenses	
Plotting and Reproduction	\$ 200
Mail and Deliveries	\$ 100
Misc Expenses	\$ 200
Travel and Field Expenses	
Total Direct Expenses	\$ 500

Total \$ 70,286

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-006

**AMENDING THE POLICY CODE RELATED TO THE
PUBLICATION OF TOLL RATES**

WHEREAS, the Mobility Authority currently publishes toll rates directly in the Mobility Authority Policy Code; and

WHEREAS, the toll rates that are published in the Mobility Authority Policy Code are duplicative of the detailed tolling information that is published on the Mobility Authority website; and

WHEREAS, the Executive Director has determined that users of Mobility Authority facilities regularly access toll rate information on the Mobility Authority website; and


WHEREAS, the Executive Director has determined that publishing the toll rates in a single location would be beneficial to avoid discrepancies, improve consistency, enhance transparency, eliminate unnecessary administrative tasks and most efficiently and effectively provide toll rate information to users of Mobility Authority facilities; and

WHEREAS, the Executive Director recommends amending the Mobility Authority Toll Policy to direct the publication of toll rates on to the Mobility Authority website;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby amends Sections 301.001-301.002 of the Mobility Authority Policy Code as shown on the attached Exhibit A to this resolution to direct the publication of toll rates on the Mobility Authority website.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey S. Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

Chapter 3: OPERATIONS

Article 1. TOLL POLICIES

Subchapter A. TOLL RATES

301.001 Priority of Bond Documents

Notwithstanding any conflicting provision in this subchapter or in a prior resolution adopting the Toll Policies, the toll rates and schedules promulgated by the authority set forth in this subchapter shall always be sufficient to meet or exceed all covenants and requirements set forth in all applicable bond documents and obligations of the authority. If any conflict arises between the bond documents and this subchapter or a prior resolution adopting the Toll Policies, the covenants and requirements of the bond documents shall control to the extent of such conflict.

301.002 Toll Rates

- a) The authority shall establish toll rates for each tolled facility operated by the authority. Each toll established by this section is subject to an adjustment on January 1 of each year under the procedure set forth in Sec. 301.003 (Annual Toll Rate Escalation). The executive director is authorized and directed to edit a toll established by this section to update and certify any change to a toll made pursuant to Sec. 301.003.
- b) The toll charge for each tolled facility operated by the authority shall be published on the authority website ~~at each 183A Turnpike toll gantry is as follows:~~

Toll Gantry	2-axle Vehicles		3-axle Vehicles	4-axle Vehicles		5-axle Vehicles		6-axle Vehicles		
	TxTag	Pay-By-Mail		TxTag	Pay-By-Mail	TxTag	Pay-By-Mail	TxTag	Pay-By-Mail	
183A										
Lakeline Mainline	\$ 0.54	\$ 0.72	\$ 1.08	\$ 1.44	\$ 1.62	\$ 2.16	\$ 2.16	\$ 2.88	\$ 2.70	\$ 3.60
Brushy Creek	\$ 0.58	\$ 0.77	\$ 1.16	\$ 1.54	\$ 1.74	\$ 2.31	\$ 2.33	\$ 3.08	\$ 2.94	\$ 3.85
Park Street	\$ 1.46	\$ 1.94	\$ 2.92	\$ 3.88	\$ 4.38	\$ 5.82	\$ 5.84	\$ 7.76	\$ 7.30	\$ 9.70
Scottsdale Drive Ramps	\$ 0.58	\$ 0.77	\$ 1.16	\$ 1.54	\$ 1.74	\$ 2.31	\$ 2.33	\$ 3.08	\$ 2.94	\$ 3.85
Crystal Falls	\$ 1.03	\$ 1.37	\$ 2.06	\$ 2.74	\$ 3.08	\$ 4.11	\$ 4.11	\$ 5.48	\$ 5.14	\$ 6.85
Crystal Falls	\$ 0.40	\$ 0.53	\$ 0.80	\$ 1.06	\$ 1.20	\$ 1.59	\$ 1.60	\$ 2.12	\$ 2.00	\$ 2.65

The toll charged at each 290 Toll gantry is as follows:

Toll Gantry	2-axle Vehicles		3-axle Vehicles		4-axle Vehicles		5-axle Vehicles		6-axle Vehicles	
	TxTag	Pay By Mail	TxTag	Pay By Mail	TxTag	Pay By Mail	TxTag	Pay By Mail	TxTag	Pay By Mail
290 Toll										
US-183 Ramps	\$ 0.55	\$ 0.73	\$ 1.10	\$ 1.46	\$ 1.65	\$ 2.19	\$ 2.20	\$ 2.92	\$ 2.75	\$ 3.65
Springdale Road Ramps	\$ 0.55	\$ 0.73	\$ 1.10	\$ 1.46	\$ 1.65	\$ 2.19	\$ 2.20	\$ 2.92	\$ 2.75	\$ 3.65
Giles Lane Ramps	\$ 0.55	\$ 0.73	\$ 1.10	\$ 1.46	\$ 1.65	\$ 2.19	\$ 2.20	\$ 2.92	\$ 2.75	\$ 3.65
Giles Lane Mainline	\$ 1.10	\$ 1.46	\$ 2.20	\$ 2.92	\$ 3.30	\$ 4.38	\$ 4.40	\$ 5.84	\$ 5.50	\$ 7.30
Harris Branch	\$ 0.55	\$ 0.73	\$ 1.10	\$ 1.46	\$ 1.65	\$ 2.19	\$ 2.20	\$ 2.92	\$ 2.75	\$ 3.65
Parmer Lane Mainline	\$ 0.55	\$ 0.73	\$ 1.10	\$ 1.46	\$ 1.65	\$ 2.19	\$ 2.20	\$ 2.92	\$ 2.75	\$ 3.65

c) The toll charged for use of the MoPac Express Lanes shall be variable in nature. The minimum toll rate will be \$0.25 per Express Lane segment, in 2016 dollars. The minimum toll rate per segment will be adjusted annually in accordance with the methodology for toll rate escalation provided in Section 301.003. There shall be no maximum toll rate. To maximize throughput and maintain free flowing conditions, the toll rate for each MoPac Express Lane segment shall change on a real-time basis based on traffic volumes. When traffic volumes increase, the minimum toll rate shall be increased as much as necessary to prevent the MoPac Express Lane(s) from becoming congested. When traffic volumes decrease, the toll rate shall be reduced to encourage use of the MoPac Express Lane(s). The primary goal of the variable toll rate is to minimize congestion on the MoPac Express Lanes and to encourage more people to ride public transit or join a registered vanpool. Changeable message signs shall be located prior to the entrance of each MoPac Express Lane segment to notify customers of the current toll rate. A customer shall never pay more than the toll rate information shown on the sign located near the vehicle's entry point, but may be charged less. The Mobility Authority may reduce tolls if it determines that operational issues warrant such an adjustment.

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-007

ELECTION OF THE MOBILITY AUTHORITY BOARD VICE CHAIR

WHEREAS, pursuant to Section 101.22 of the Mobility Authority Policy Code, officers of the Authority shall consist of a chair, vice chair, treasurer, and secretary; and

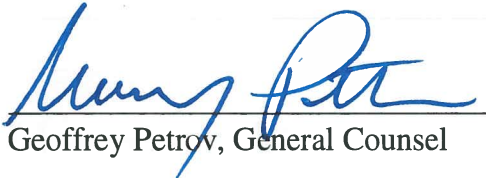
WHEREAS, former Board Member and Vice Chairman, Jim Mills has retired, leaving the Mobility Authority vice chair position vacant; and

WHEREAS, it is the desire of the Board of Directors to elect from among its members a Vice Chair who shall perform the duties described in Section 101.24 of the Mobility Authority Policy Code.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the CTRMA elects Nikelle Meade to serve as Vice Chair of the Board for a two-year term or until such time as their successor is elected by the Board.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Willkerson
Chairman, Board of Directors

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-008

ELECTION OF THE MOBILITY AUTHORITY BOARD TREASURER

WHEREAS, pursuant to Section 101.22, Mobility Authority Policy Code, officers of the Authority shall consist of a chair, vice chair, treasurer, and secretary; and

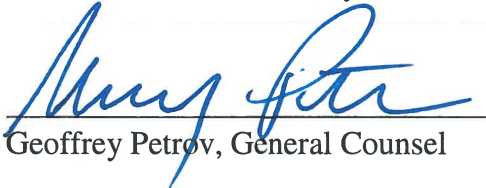
WHEREAS, former Board Member and Treasurer, Bob Bennet has retired, leaving the Mobility Authority treasurer position vacant; and

WHEREAS, it is the desire of the Board of Directors to elect from among its members a Treasurer who shall perform the duties described in Section 101.26 of the Mobility Authority Policy Code.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors of the CTRMA elects David Singleton to serve as Treasurer of the Board for a two-year term or until such time as their successor is elected by the Board.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-009

ACCEPT THE FINANCIAL STATEMENTS FOR JANUARY 2017

WHEREAS, the Central Texas Regional Mobility Authority (“Mobility Authority”) is empowered to procure such goods and services as it deems necessary to assist with its operations and to study and develop potential transportation projects, and is responsible to insure accurate financial records are maintained using sound and acceptable financial practices; and

WHEREAS, close scrutiny of the Mobility Authority’s expenditures for goods and services, including those related to project development, as well as close scrutiny of the Mobility Authority’s financial condition and records is the responsibility of the Board and its designees through procedures the Board may implement from time to time; and

WHEREAS, the Board has adopted policies and procedures intended to provide strong fiscal oversight and which authorize the Executive Director, working with the Mobility Authority’s Chief Financial Officer, to review invoices, approve disbursements, and prepare and maintain accurate financial records and reports; and

WHEREAS, the Executive Director, working with the Chief Financial Officer, has reviewed and authorized the disbursements necessary for the month of January 2017, and has caused Financial Statements to be prepared and attached to this resolution as Exhibit A.

NOW THEREFORE, BE IT RESOLVED, that the Board of Directors accept the Financial Statements for January 2017, attached as Exhibit A.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount FY 2017	Actual Year to Date	Percent of Budget	Actual Prior Year to Date
REVENUE				
Operating Revenue				
Toll Revenue-TxTag-183A	26,352,946	17,488,573	66.36%	15,995,290
Toll Revenue-HCTRA-183A	2,306,626	1,978,174	85.76%	1,405,829
Toll Revenue-NTTA-183A	3,869,188	2,832,088	73.20%	2,277,000
Toll Revenue-TxTag-MoPac ML	1,724,750	54,603	3.17%	-
Toll Revenue-HCTRA MoPac ML	-	2,724	-	-
Toll Revenue-NTTA-Mopac ML	-	2,821	-	-
Toll Revenue-TxTag-Manor	9,013,151	6,067,434	67.32%	5,324,699
Toll Revenue-HCTRA Manor	1,685,258	1,404,601	83.35%	1,060,524
Toll Revenue-NTTA-Manor	599,367	445,590	74.34%	337,052
Toll Revenue-TxTag-71E	1,003,750	-	-	-
Video Tolls 183A	11,476,562	5,901,194	51.42%	4,683,374
Video Tolls Manor Expressway	4,553,481	2,358,092	51.79%	1,864,504
Video Tolls MoPac ML	-	8,415	-	-
Fee Revenue 183A	4,581,141	2,168,142	47.33%	1,831,487
Fee Revenue Manor Expressway	2,295,839	1,084,788	47.25%	912,942
Total Operating Revenue	69,462,060	41,797,239	60.17%	35,692,700
Other Revenue				
Interest Income	250,000	498,219	199.29%	200,267
Grant Revenue	700,000	15,020,751	2145.82%	33,398,383
Reimbursed Expenditures	1,555,396	155,493	10.00%	2,849
Misc Revenue	-	5,910	-	48,322
Total Other Revenue	2,505,396	15,680,373	625.86%	33,649,821
TOTAL REVENUE	\$71,967,456	\$57,477,612	79.87%	69,342,521

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount	Actual Year to	Percent of	Actual Prior Year
	FY 2017	Date	Budget	to Date
EXPENSES				
Salaries and Benefits				
Salary Expense-Regular	2,967,036	1,842,109	62.09%	1,650,165
Salary Reserve	80,000	-	-	-
TCDRS	415,385	252,830	60.87%	224,612
FICA	128,873	68,983	53.53%	65,045
FICA MED	45,627	27,182	59.57%	23,959
Health Insurance Expense	332,091	203,418	61.25%	148,131
Life Insurance Expense	14,167	5,866	41.40%	2,515
Auto Allowance Expense	10,200	5,950	58.33%	5,950
Other Benefits	269,785	143,603	53.23%	131,606
Unemployment Taxes	15,463	3,516	22.74%	244
Total Salaries and Benefits	4,278,627	2,553,455	59.68%	2,252,227
Administrative				
Administrative and Office Expenses				
Accounting	20,000	4,924	24.62%	13,374
Auditing	74,000	53,880	72.81%	36,247
Human Resources	30,000	10,542	35.14%	3,108
IT Services	88,000	40,591	46.13%	20,428
Internet	1,700	1,385	81.47%	3,551
Software Licenses	55,725	51,221	91.92%	21,520
Cell Phones	14,542	8,892	61.15%	6,528
Local Telephone Service	12,000	8,912	74.26%	6,302
Overnight Delivery Services	850	63	7.39%	97
Local Delivery Services	1,050	-	-	217
Copy Machine	12,000	9,340	77.83%	8,523
Repair & Maintenance-General	1,000	1,882	188.25%	1,997
Meeting Facilities	1,000	-	-	-
Community Meeting/ Events	2,000	-	-	616
Meeting Expense	15,250	4,181	27.41%	4,056
Public Notices	2,000	-	-	-
Toll Tag Expense	1,900	874	45.98%	414
Parking	3,600	847	23.54%	1,833
Mileage Reimbursement	11,200	2,167	19.35%	3,092
Insurance Expense	150,000	84,928	56.62%	71,860
Rent Expense	558,000	256,092	45.89%	261,810
Legal Services	525,000	41,872	7.98%	92,730
Total Administrative and Office Expenses	1,580,817	582,591	36.85%	558,304

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount FY 2017	Actual Year to Date	Percent of Budget	Actual Prior Year to Date
Office Supplies				
Books & Publications	6,150	690	11.21%	297
Office Supplies	21,000	12,047	57.37%	12,112
Computer Supplies	17,000	11,152	65.60%	10,020
Copy Supplies	2,500	178	7.10%	1,279
Other Reports-Printing	10,000	584	5.84%	5,088
Office Supplies-Printed	2,700	611	22.63%	2,743
Misc Materials & Supplies	3,750	1,015	27.07%	387
Postage Expense	5,850	258	4.41%	315
Total Office Supplies	68,950	26,535	38.48%	32,242
Communications and Public Relations				
Graphic Design Services	75,000	6,625	8.83%	18,008
Website Maintenance	140,000	64,535	46.10%	12,403
Research Services	105,000	79,059	75.29%	-
Communications and Marketing	469,900	168,608	35.88%	124,768
Advertising Expense	336,500	58,059	17.25%	105,193
Direct Mail	10,000	-	-	380
Video Production	35,000	8,820	25.20%	34,229
Photography	10,000	1,077	10.77%	8,950
Radio	10,000	-	-	-
Other Public Relations	125,000	5,000	4.00%	3,500
Promotional Items	10,000	972	9.72%	8,322
Displays	5,000	-	-	-
Annual Report printing	5,000	-	-	-
Direct Mail Printing	11,300	-	-	-
Other Communication Expenses	1,000	1,861	186.11%	646
Total Communications and Public Relations	1,348,700	394,616	29.26%	316,397
Employee Development				
Subscriptions	3,300	1,336	40.49%	538
Memberships	50,750	33,505	66.02%	35,447
Continuing Education	11,750	135	1.15%	-
Professional Development	6,700	-	-	303
Other Licenses	1,250	257	20.52%	430
Seminars and Conferences	44,000	17,259	39.23%	11,636
Travel	88,000	34,050	38.69%	38,549
Total Employee Development	205,750	86,541	42.06%	86,903

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount FY 2017	Actual Year to Date	Percent of Budget	Actual Prior Year to Date
Financing and Banking Fees				
Trustee Fees	15,000	17,500	116.67%	3,225
Bank Fee Expense	8,000	3,395	42.44%	3,379
Continuing Disclosure	10,000	-	-	-
Arbitrage Rebate Calculation	8,000	6,455	80.69%	3,685
Rating Agency Expense	30,000	15,000	50.00%	14,000
Total Financing and Banking Fees	71,000	42,350	59.65%	24,289
Total Administrative	3,275,217	1,132,634	34.58%	1,018,134
Operations and Maintenance				
Operations and Maintenance Consulting				
GEC-Trust Indenture Support	165,000	63,278	38.35%	34,604
GEC-Financial Planning Support	10,500	47	0.45%	-
GEC-Toll Ops Support	45,000	14,384	31.97%	3,180
GEC-Roadway Ops Support	331,667	215,378	64.94%	244,989
GEC-Technology Support	40,000	19,026	47.56%	35,542
GEC-Public Information Support	30,000	19,134	63.78%	11,035
GEC-General Support	1,176,000	389,308	33.10%	168,724
General System Consultant	70,000	3,288	4.70%	100,424
Traffic and Revenue Consultant	80,000	42,680	53.35%	56,590
Total Operations and Maintenance Consulting	1,948,167	766,524	39.35%	655,087
Roadway Operations and Maintenance				
Roadway Maintenance	4,871,600	1,706,542	35.03%	204,629
Landscape Maintenance	5,000	-	-	97,326
Signal & Illumination Maint	20,000	23,677	118.39%	48,204
Maintenance Supplies-Roadway	45,000	396	0.88%	68,470
Tools & Equipment Expense	750	15	2.00%	475
Gasoline	6,000	3,278	54.64%	1,185
Repair & Maintenance-Vehicles	1,500	1,420	94.67%	7,150
Roadway Operations	-	-	-	521
Electricity - Roadways	180,000	84,066	46.70%	83,923
Total Roadway Operations and Maintenance	5,129,850	1,819,395	35.47%	511,884

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount FY 2017	Actual Year to Date	Percent of Budget	Actual Prior Year to Date
Toll Processing and Collection Expense				
Image Processing	2,300,000	810,190	35.23%	1,114,527
Tag Collection Fees	3,240,000	1,987,643	61.35%	1,701,113
Court Enforcement Costs	40,000	8,800	22.00%	6,100
DMV Lookup Fees	5,000	290	5.79%	1,177
Total Processing and Collection Expense	5,585,000	2,806,923	50.26%	2,822,917
Toll Operations Expense				
Facility maintenance	-	14	-	787
Generator Maintenance	-	-	-	3,662
Generator Fuel	6,000	58	0.96%	1,291
Fire and Burglar Alarm	500	153	30.60%	247
Elevator Maintenance	3,000	-	-	-
Refuse	1,200	910	75.85%	467
Pest Control	1,600	-	-	1,835
Custodial	2,500	-	-	1,313
Telecommunications	90,000	36,466	40.52%	42,359
Water	10,500	9,440	89.91%	3,879
Electricity	1,200	1,304	108.64%	-
ETC spare parts expense	1,600	-	-	-
Repair & Maintenance Toll Equip	275,000	11,940	4.34%	299,375
Law Enforcement	273,182	114,285	41.83%	63,948
ETC Maintenance Contract	1,755,098	512,132	29.18%	796,425
ETC Toll Management Center System Operation	49,098	-	-	-
ETC Testing	10,000	-	-	-
Total Toll Operations Expense	2,480,478	686,702	27.68%	1,215,587
Total Operations and Maintenance	15,143,495	6,079,544	40.15%	5,205,475
Other Expenses				
Special Projects and Contingencies				
HERO	700,000	572,352	81.76%	681,940
Special Projects	125,000	151,088	120.87%	487,047
Other Contractual Svcs	105,000	31,744	30.23%	24,169
Contingency	300,000	578	0.19%	12,195
Total Special Projects and Contingencies	1,230,000	755,761	61.44%	1,205,351

Central Texas Regional Mobility Authority
Income Statement
For the Period Ending January 31, 2017

	Budget Amount FY 2017	Actual Year to Date	Percent of Budget	Actual Prior Year to Date
Non Cash Expenses				
Amortization Expense	383,230	223,824	58.40%	223,551
Amort Expense - Refund Savings	1,027,860	602,244	58.59%	599,585
Dep Exp- Furniture & Fixtures	2,207	1,389	62.94%	552
Dep Expense - Equipment	9,692	8,822	91.02%	5,364
Dep Expense - Autos & Trucks	6,406	3,737	58.34%	2,710
Dep Expense-Buildng & Toll Fac	177,115	103,317	58.33%	103,317
Dep Expense-Highways & Bridges	22,012,091	10,211,033	46.39%	9,830,255
Dep Expense-Communic Equip	196,115	114,401	58.33%	114,401
Dep Expense-Toll Equipment	2,756,238	1,607,805	58.33%	1,605,793
Dep Expense - Signs	325,893	190,104	58.33%	190,104
Dep Expense-Land Improvemts	884,934	516,212	58.33%	516,212
Depreciation Expense-Computers	16,203	8,203	50.63%	9,559
Total Non Cash Expenses	27,797,984	13,591,091	48.89%	13,201,403
Total Other Expenses	29,027,984	14,346,852	49.42%	14,406,754
Non Operating Expenses				
Bond issuance expense	200,000	1,072,081	536.04%	124,546
Interest Expense	42,813,675	18,350,752	42.86%	24,369,248
Community Initiatives	100,000	28,500	28.50%	35,000
Total Non Operating Expenses	43,113,675	19,451,333	45.12%	24,528,795
TOTAL EXPENSES	\$94,838,998	\$43,563,819	45.93%	\$47,411,385
Net Income	(\$22,871,542)	\$13,913,793		21,931,136

Central Texas Regional Mobility Authority
Balance Sheet
as of January 31, 2017

	as of 01/31/2017	as of 01/31/2016
ASSETS		
Current Assets		
Cash		
Regions Operating Account	\$ 518,449	\$ 622,371
Cash in TexStar	454,305	581,716
Regions Payroll Account	189,051	151,661
Restricted Cash		
Goldman Sachs FSGF 465	252,162,884	534,239,504
Restricted Cash - TexSTAR	133,162,426	7,224,443
Overpayments account	153,244	125,680
Total Cash and Cash Equivalents	<u>386,640,360</u>	<u>542,945,374</u>
Accounts Receivable		
Accounts Receivable	14,485	14,485
Due From TTA	437,123	608,906
Due From NTTA	475,641	390,036
Due From HCTRA	1,077,297	342,604
Due From TxDOT	7,306,987	1,383,857
Interest Receivable	474,833	66,208
Total Receivables	<u>9,786,366</u>	<u>2,806,095</u>
Short Term Investments		
Agencies	184,211,965	42,419,346
Total Short Term Investments	<u>184,211,965</u>	<u>42,419,346</u>
Total Current Assets	<u>580,638,692</u>	<u>588,170,815</u>
Total Construction in Progress	417,914,055	224,144,262
Fixed Assets (Net of Depreciation)		
Computer	32,068	47,022
Computer Software	931,939	1,297,068
Furniture and Fixtures	16,335	16,003
Equipment	4,157	(1,992)
Autos and Trucks	53,699	23,490
Buildings and Toll Facilities	5,364,336	5,541,451
Highways and Bridges	606,424,139	615,361,730
Communication Equipment	104,021	300,136
Toll Equipment	15,648,890	18,405,127
Signs	11,066,251	11,392,144
Land Improvements	10,992,661	11,877,596
Right of way	87,960,004	86,849,829
Leasehold Improvements	156,759	169,334
Total Fixed Assets	<u>738,755,261</u>	<u>751,278,939</u>
Other Assets		
Intangible Assets-Net	102,750,932	12,300,838
2005 Bond Insurance Costs	4,590,427	4,803,935
Prepaid Insurance	98,565	94,789
Deferred Outflows (pension related)	780,064	-
Pension Asset	202,023	-
Total Other Assets	<u>108,422,011</u>	<u>17,199,563</u>
Total Assets	<u><u>\$ 1,845,730,019</u></u>	<u><u>\$ 1,580,793,580</u></u>

Central Texas Regional Mobility Authority
Balance Sheet
as of January 31, 2017

	as of 01/31/2017	as of 01/31/2016
LIABILITIES		
Current Liabilities		
Accounts Payable	\$ 1,248,127	\$ 1,131,089
Construction Payable	415,577	3,199,597
Overpayments	155,687	127,819
Interest Payable	4,344,248	4,754,789
Due to other Funds	-	113,194
Deferred Compensation Payable	4	-
TCDRS Payable	52,725	57,062
Medical Reimbursement Payable	(1,902)	2,160
Due to Other Entities	7,099,751	713,490
Other	-	650,000
Total Current Liabilities	13,314,217	10,749,200
Long Term Liabilities		
Compensated Absences	138,927	189,089
Deferred Inflows (pension related)	172,017	-
Long Term Payables	310,944	189,089
Bonds Payable		
Senior Lien Revenue Bonds:		
Senior Lien Revenue Bonds 2010	67,049,751	114,036,940
Senior Lien Revenue Bonds 2011	14,067,180	309,157,840
Senior Refunding Bonds 2013	144,183,000	147,880,000
Senior Lien Revenue Bonds 2015	298,790,000	298,790,000
Senior Lien Put Bnd 2015	68,785,000	68,785,000
Senior Lien Refunding Revenue Bonds 2016	358,030,000	-
Sn Lien Rev Bnd Prem/Disc 2010	-	29,387
Sn Lien Rev Bnd Prem/Disc 2011	-	(3,315,401)
Sn Lien Rev Bnd Prem/Disc 2013	10,846,595	12,909,612
Sn Lien Revenue Bnd Prem 2015	22,472,397	23,668,902
Sn Lien Put Bnd Prem 2015	6,365,838	8,229,591
Senior lien premium 2016 revenue bonds	57,817,987	-
Total Senior Lien Revenue Bonds	1,048,407,748	980,171,871
Sub Lien Revenue Bonds:		
Subordinated Lien Bond 2011	-	70,000,000
Sub Refunding Bnds 2013	101,530,000	102,030,000
Sub Debt Refunding Bonds 2016	74,690,000	-
Sub Lien Bond 2011 Prem/Disc	-	(1,731,885)
Sub Refunding 2013 Prem/Disc	2,527,956	3,016,155
Sub Refunding 2016 Prem/Disc	10,389,288	-
Total Sub Lien Revenue Bonds	189,137,244	173,314,270
Other Obligations		
TIFIA note 2015	52,053	50,236
SIB loan 2015	30,122,022	25,034
State Highway Fund Loan 2015	30,122,022	25,034
2013 American Bank Loan	3,570,000	5,300,000
Total Other Obligations	63,866,096	5,400,304
Total Long Term Liabilities	1,301,722,033	1,159,075,534
Total Liabilities	1,315,036,250	1,169,824,734
NET ASSETS		
Contributed Capital	40,347,060	35,847,060
Net Assets Beginning	476,432,916	353,190,651
Current Year Operations	13,913,793	21,931,136
Total Net Assets	530,693,769	410,968,846
Total Liabilities and Net Assets	\$ 1,845,730,019	\$ 1,580,793,580

Central Texas Regional Mobility Authority
Statement of Cash Flows
as of January 31, 2017

Cash flows from operating activities:

Receipts from toll fees	\$ 40,966,336
Receipts from other fees	161,403
Payments to vendors	(2,895,427)
Payments to employees	(2,553,468)
Net cash flows provided by (used in) operating activities	<u>35,678,845</u>

Cash flows from capital and related financing activities:

Proceeds from notes payable	48,842,009
Refunding of bonds	(11,465,479)
Receipts from Department of Transportation	90,303,779
Receipt from Hays County	4,500,000
Payments on interest	(34,085,436)
Acquisition of capital assets	(125,962)
Acquisitions of construction in progress	(109,109,575)
Net cash flows provided by (used in) capital and related financing activities	<u>(13,370,663)</u>

Cash flows from investing activities:

Interest income	1,961,885
Purchase of investments	(177,411,943)
Proceeds from sale or maturity of investments	83,014,952
Net cash flows provided by (used in) investing activities	<u>(92,435,107)</u>

Net increase (decrease) in cash and cash equivalents (70,126,925)

Cash and cash equivalents at beginning of period	<u>323,150,553</u>
Cash and cash equivalents at end of November	<u>\$ 253,023,628</u>

Reconciliation of change in net assets to net cash provided by operating activities:

Operating income	<u>\$ 18,439,034</u>
Adjustments to reconcile change in net assets to net cash provided by operating activities:	
Depreciation and amortization	12,988,847
Changes in assets and liabilities:	
Decrease in accounts receivable	(830,902)
(Increase) decrease in prepaid expenses and other assets	9,036
(Decrease) increase in accounts payable	(1,280,541)
Increase (decrease) in accrued expenses	6,353,371
Total adjustments	<u>17,239,811</u>
Net cash flows provided by (used in) operating activities	<u>\$ 35,678,845</u>

Reconciliation of cash and cash equivalents:

Unrestricted cash and cash equivalents	\$ 860,744
Restricted cash and cash equivalents	252,162,884
Total	<u>\$ 253,023,628</u>

INVESTMENTS by FUND

		Balance January 31, 2017		
Renewal & Replacement Fund				
TexSTAR	504,704.46		TexSTAR	133,609,816.80
Goldman Sachs	188,487.72		Goldman Sachs	251,890,612.77
Agencies		693,192.18	Agencies & Treasury Notes	<u>184,211,577.28</u>
TxDOT Grant Fund				\$ 569,712,006.85
TexSTAR	4,091,280.95			
Goldman Sachs	5,465,458.53			
Agencies		9,556,739.48		
Senior Debt Service Reserve Fund				
TexSTAR	10,614,786.89			
Goldman Sachs	26,809,193.43			
Agencies	42,482,744.84	79,906,725.16		
2010 Senior Lien DSF				
Goldman Sachs	389,563.28			
TexSTAR	-	389,563.28		
2011 Debt Service Acct				
Goldman Sachs	750,754.39	750,754.39		
2013 Sr Debt Service Acct				
Goldman Sachs	922,619.61	922,619.61		
2013 Sub Debt Service Account				
Goldman Sachs	507,112.41	5,517,925.78		
TexSTAR	5,010,813.37			
2015 Sr Capitalized Interest				
Goldman Sachs	10,586,522.83	60,674,284.96		
TexSTAR	50,087,762.13			
2015A Debt Service Account				
Goldman Sachs	3.30	3.30		
2015B Debt Service Account				
Goldman Sachs	287,671.88	287,671.88		
2016 Sr Lien Rev Refunding Cost of Issuance				
Goldman Sachs	-	-		
2016 Sr Lien Rev Refunding Debt Service Account				
Goldman Sachs	8,479,844.10	8,479,844.10		
2016 Sub Lien Rev Refunding Cost of Issuance				
Goldman Sachs	-	-		
2016 Sub Lien Rev Refunding Bond Proceeds Clearing Fund				
Goldman Sachs	-	-		
2016 Sub Lien Rev Refunding Debt Service Account				
Goldman Sachs	316,170.40	316,170.40		
2016 Sub Lein Rev Refunding DSR				
Goldman Sachs	6,633,316.01	6,633,316.01		
Operating Fund				
TexSTAR	454,305.25			
TexSTAR-Trustee	2,447,755.79			
Goldman Sachs	-	2,902,061.04		
Revenue Fund				
Goldman Sachs	2,887,296.72	2,887,296.72		
General Fund				
TexSTAR	25,054,988.08			
Goldman Sachs	16,942,367.08			
Agencies	4,409,528.75	46,406,883.91		
2013 Sub Debt Service Reserve Fund				
Goldman Sachs	3,471,322.05			
Agencies		3,471,322.05		
MoPac Revenue Fund				
Goldman Sachs	31,459.03	31,459.03		
MoPac Construction Fund				
Goldman Sachs	40,165,114.18	40,165,114.18		
2011 Sub Debt Project fund				
TexSTAR	-			
Agencies				
Goldman Sachs	0.00	0.00		
2015B Project Account				
Goldman Sachs	4,889,798.17			
Agencies	20,210,309.63	40,119,521.83		
TexSTAR	15,019,414.03			
2015A Project Account				
TexSTAR	5,291,565.67			
Goldman Sachs	50,495,238.16			
Agencies	87,223,436.77			
Treasury Notes	29,885,557.29	172,895,797.89		
2015 TIFIA Project Account				
Goldman Sachs	50,251.96	50,251.96		
2015 State Highway Fund Project Account				
Goldman Sachs	29,570,554.92	29,570,554.92		
2015 SIB Project Account				
Goldman Sachs	19,715,865.90	19,715,865.90		
2011 Sr Financial Assistance Fund				
Goldman Sachs	11,443,627.43	26,476,067.61		
TexSTAR	15,032,440.18			
Develper Deposits				
Goldman Sachs	100,310.93	100,310.93		
183S Utility Custody Deposit				
Goldman Sachs	6,337,132.18			
45SW Trust Account Hays County				
Goldman Sachs	1,441,847.51	1,441,847.51		
45SW Trust Account Travis County				
Goldman Sachs	3,011,708.66	3,011,708.66		
		<u>\$ 563,374,874.67</u>		

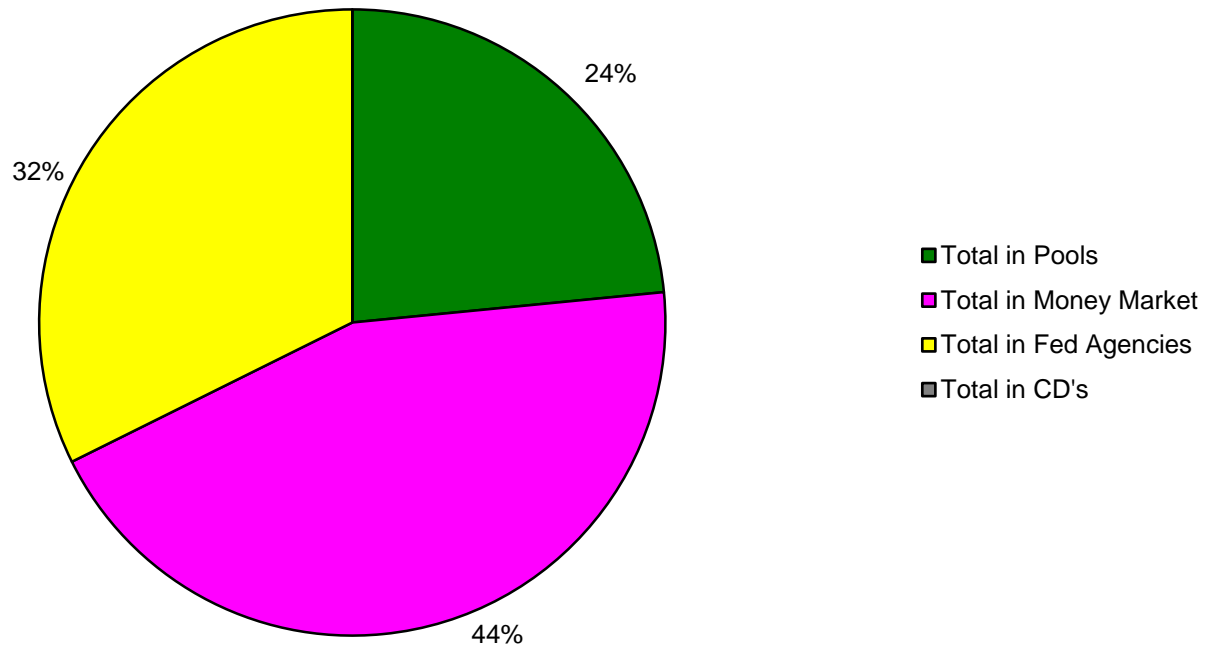
CTRMA INVESTMENT REPORT

	Month Ending 1/31/17					Rate January
	Balance 1/1/2017	Additions	Discount Amortization	Accrued Interest	Withdrawals	
Amount in Trustee TexStar						
2011 Sub Lien Construction Fund	4,191,090.64			1,504.60	4,192,595.24	0.00
2011 Sr Lien Financial Assist Fund	15,025,482.64			6,957.54		15,032,440.18
2013 Sub Lien Debt Service Reserve	5,008,494.20			2,319.17		5,010,813.37
General Fund	25,043,391.74			11,596.34		25,054,988.08
Trustee Operating Fund	797,514.40	1,649,500.00		741.39		2,447,755.79
Renewal and Replacement	504,470.90			233.56		504,704.46
TxDOT Grant Fund	4,089,387.35			1,893.60		4,091,280.95
Senior Lien Debt Service Reserve Fund	10,609,873.99			4,912.90		10,614,786.89
2015A Sr Ln Project Subaccount	5,289,116.56			2,449.11		5,291,565.67
2015A Sr Ln Project Cap Interest	50,064,579.73			23,182.40		50,087,762.13
2015B Sr Ln Project	15,019,374.03			40.00		15,019,414.03
	135,642,776.18	1,649,500.00		55,830.61	4,192,595.24	133,155,511.55
Amount in TexStar Operating Fund	454,094.97			210.28		454,305.25
Goldman Sach						
Operating Fund	0.00	1,649,500.00			1,649,500.00	0.00
45SW Trust Account Travis County	4,702,573.63			1,634.70	1,692,499.67	3,011,708.66
45SW Trust Account Hays County	4,458,406.15			1,526.77	3,018,085.41	1,441,847.51
2015A Project Account	13,636,224.14	46,947,772.31		12,620.99	10,101,379.28	50,495,238.16
2015B Project Account	4,888,159.50			1,638.67		4,889,798.17
2015D State Highway Fund Project Acct	28,167,160.19	1,393,952.20		9,442.53		29,570,554.92
2015C TIFIA Project Account	50,235.12			16.84		50,251.96
2015E SIB Project Account	14,072,048.05	5,639,100.45		4,717.40		19,715,865.90
2011 Sub Lien Project Acct	67,663.07	4,192,595.24		23.27	4,260,281.58	0.00
Developer Deposits	100,255.92			55.01		100,310.93
183S Utility Custody Deposit	6,721,609.05			2,253.30	386,730.17	6,337,132.18
2011 Sr Financial Assistance Fund	14,939,619.19			5,008.24	3,501,000.00	11,443,627.43
2010 Senior DSF	635,162.85			212.93	245,812.50	389,563.28
2011 Senior Lien Debt Service Acct	750,502.80			251.59		750,754.39
2013 Senior Lien Debt Service Acct	7,898,116.10	913,901.25		2,602.26	7,892,000.00	922,619.61
2013 Subordinate Debt Service Acct	2,802,057.37	754,920.15		884.89	3,050,750.00	507,112.41
2015 Sr Capitalized Interest	18,050,221.82			6,051.01	7,469,750.00	10,586,522.83
2015 Sr Capitalized Interest pmt acct	0.00	7,469,750.00			7,469,750.00	0.00
2015A Debt Service Acct	3.30					3.30
2015B Debt Service Acct	1,720,366.25	286,390.62		540.01	1,719,625.00	287,671.88
2016 Sr Lien Rev Refunding Debt Service Account	8,729,901.38	8,469,534.93		2,926.54	8,722,518.75	8,479,844.10
2016 Sub Lien Rev Refunding Debt Service Account	1,333,960.94	312,682.17		446.96	1,330,919.67	316,170.40
2016 Sub Lein Rev Refunding DSR	6,631,093.06			2,222.95		6,633,316.01
TxDOT Grant Fund	5,463,626.95			1,831.58		5,465,458.53
Renewal and Replacement	188,424.55			63.17		188,487.72
Revenue Fund	3,548,222.79	6,106,482.90		915.38	6,768,324.35	2,887,296.72
General Fund	17,010,961.24	1,189,034.50		6,051.69	1,263,680.35	16,942,367.08
Senior Lien Debt Service Reserve Fund	17,676,151.61	9,127,125.00		5,916.82		26,809,193.43
MoPac Revenue Fund	25,114.92	6,339.02		5.09		31,459.03
2013 Sub Debt Service Reserve Fund	3,470,158.74			1,163.31		3,471,322.05
MoPac Managed Lane Construction Fund	41,688,606.76			14,131.10	1,537,623.68	40,165,114.18
	229,426,607.44	94,459,080.74	0.00	85,155.00	72,080,230.41	251,890,612.77
Amount in Fed Agencies and Treasuries						
Amortized Principal	201,255,834.52		(44,257.24)		17,000,000.00	184,211,577.28
	201,255,834.52	0.00	(44,257.24)	0.00	17,000,000.00	184,211,577.28
Certificates of Deposit						0.00
Total in Pools	136,096,871.15	1,649,500.00		56,040.89	4,192,595.24	133,609,816.80
Total in GS FSGF	229,426,607.44	94,459,080.74		85,155.00	72,080,230.41	251,890,612.77
Total in Fed Agencies	201,255,834.52	0.00	(44,257.24)		17,000,000.00	184,211,577.28
Total Invested	566,779,313.11	96,108,580.74	(44,257.24)	141,195.89	93,272,825.65	569,712,006.85

All Investments in the portfolio are in compliance with the CTRMA's Investment policy.

William Chapman, CFO

Allocation of Funds



Amount of investments As of January 31, 2017

Agency	CUSIP #	COST	Book Value	Market Value	Yield to Maturity	Purchased	Matures	FUND
Farmer Mac	31315PV55	2,501,200.00	2,500,050.00	2,500,800.00	0.7751%	3/11/2015	2/23/2017	Senior DSRF
Federal Farm Credit	3133ECA79	4,959,250.00	4,984,152.78	4,979,600.00	1.2155%	3/11/2015	3/19/2018	Senior DSRF
Federal Farm Credit	3133EE4K3	24,928,346.00	24,976,885.81	25,010,000.00	0.7200%	1/13/2016	7/21/2017	Senior DSRF
Federal Farm Credit	3133EFSG3	10,057,749.23	10,031,913.95	10,008,400.00	0.8421%	2/8/2016	3/14/2018	2015B Sr Project
Federal Home loan Bank	313378QK0	10,253,642.07	10,178,395.68	10,116,200.00	1.0369%	2/8/2016	3/8/2019	2015B Sr Project
Freddie Mac	3137EADF3	16,124,658.17	16,030,342.76	16,031,360.00	0.6259%	2/9/2016	5/12/2017	2015A Sr Project
Freddie Mac	3134G4Z84	9,850,343.91	9,821,853.49	9,826,362.00	0.8097%	2/18/2016	10/10/2017	2015A Sr Project
Federal Farm Credit	3133ECKC7	8,000,866.72	8,000,131.32	8,001,920.00	0.6400%	2/23/2016	3/28/2017	2015A Sr Project
Federal Home loan Bank	3030A62S5	6,984,310.89	6,993,712.37	7,004,410.00	0.9053%	3/14/2016	8/28/2017	2015A Sr Project
Fannie MAE	3035G0GY3	MATURED	MATURED	MATURED	0.7122%	3/14/2016	1/30/2017	2015A Sr Project
Fannie MAE	3135G0JA2	8,031,624.00	8,007,062.43	8,011,280.00	0.9023%	3/14/2016	4/27/2017	2015A Sr Project
Federal Home loan Bank	303370S22	14,536,023.18	14,361,231.24	14,389,507.50	0.9023%	3/7/2016	9/8/2017	2015A Sr Project
Federal Home loan Bank	3030A5QL6	8,000,900.56	8,000,281.43	8,004,960.00	0.7913%	3/4/2016	6/30/2017	2015A Sr Project
Freddie Mac	3137EADT3	8,013,462.84	8,001,135.10	8,001,760.00	0.6999%	3/4/2016	2/22/2017	2015A Sr Project
Federal Home loan Bank	313379FW4	8,027,415.64	8,007,686.63	8,012,160.00	0.7098%	3/30/2016	6/9/2017	2015A Sr Project
Federal Home loan Bank	3030A6SW8	10,039,900.00	10,021,656.25	10,013,800.00	0.7616%	4/11/2016	12/19/2017	Senior DSRF
Federal Home loan Bank	3030A6SW8	4,417,556.00	4,409,528.75	4,406,072.00	0.7616%	4/11/2016	12/19/2017	General
Federal Home loan Bank	3130A7T62	MATURED	MATURED	MATURED	0.5501%	4/18/2016	1/18/2017	Senior DSRF
US Treasury Note	912828TB6	29,888,668.75	29,885,557.29	29,886,129.80	0.6266%	12/28/2016	6/30/2017	2015A Sr Project
		184,615,917.96	184,211,577.28	184,204,721.30				

Agency	CUSIP #	COST	Cumulative Amortization	1/31/2017 Book Value	Maturity Value	Interest Income January 31, 2017		
						Accrued Interest	Amortization	Interest Earned
Farmer Mac	31315PV55	2,501,200.00	1,150.00	2,500,050.00	2,500,000.00	1,666.67	(50.00)	1,616.67
Federal Farm Credit	3133ECA79	4,959,250.00	(24,902.78)	4,984,152.78	5,000,000.00	3,916.67	1,131.94	5,048.61
Federal Farm Credit	3133EE4K3	24,928,346.00	(48,539.81)	24,976,885.81	25,000,000.00	15,000.00	3,852.37	18,852.37
Federal Farm Credit	3133EFSG3	10,057,749.23	25,835.28	10,031,913.95	10,000,000.00	9,166.67	(2,279.58)	6,887.09
Federal Home loan Bank	313378QK0	10,253,642.07	75,246.39	10,178,395.68	10,000,000.00	15,625.00	(6,861.37)	8,763.63
Freddie Mac	3137EADF3	16,124,658.17	94,315.41	16,030,342.76	16,000,000.00	16,666.67	(7,585.69)	9,080.98
Freddie Mac	3134G4Z84	9,850,343.91	28,490.42	9,821,853.49	9,800,000.00	9,187.50	(2,428.16)	6,759.34
Federal Farm Credit	3133ECKC7	8,000,866.72	735.40	8,000,131.32	8,000,000.00	4,333.33	(65.66)	4,267.67
Federal Home loan Bank	3030A62S5	6,984,310.89	(9,401.48)	6,993,712.37	7,000,000.00	4,375.00	898.23	5,273.23
Fannie MAE	3035G0GY3	MATURED	MATURED	MATURED	8,000,000.00	8,333.33	(3,566.13)	4,767.20
Fannie MAE	3135G0JA2	8,031,624.00	24,561.57	8,007,062.43	8,000,000.00	7,500.00	(2,354.14)	5,145.86
Federal Home loan Bank	303370S22	14,536,023.18	174,791.94	14,361,231.24	14,250,000.00	26,718.75	(15,890.18)	10,828.57
Federal Home loan Bank	3030A5QL6	8,000,900.56	619.13	8,000,281.43	8,000,000.00	5,333.33	(56.28)	5,277.05
Freddie Mac	3137EADT3	8,013,462.84	12,327.74	8,001,135.10	8,000,000.00	5,833.33	(1,135.10)	4,698.23
Federal Home loan Bank	313379FW4	8,027,415.64	19,729.01	8,007,686.63	8,000,000.00	6,666.67	(1,921.66)	4,745.01
Federal Home loan Bank	3030A6SW8	10,039,900.00	18,243.75	10,021,656.25	10,000,000.00	8,333.33	(1,968.75)	6,364.58
Federal Home loan Bank	3030A6SW8	4,417,556.00	8,027.25	4,409,528.75	4,400,000.00	3,666.67	(866.25)	2,800.42
Federal Home loan Bank	3130A7T62	MATURED	MATURED	MATURED	9,000,000.00	4,125.00	0.64	4,125.64
US Treasury Note	912828TB6	29,888,668.75	3,111.46	29,885,557.29	29,870,000.00	18,688.75	(3,111.46)	15,577.29
		184,615,917.96	404,340.68	184,211,577.28	200,820,000.00	175,136.67	(44,257.24)	130,879.44

January 31, 2017

Certificates of Deposit Outstanding

Bank	CUSIP #	COST	Yield to Maturity	Purchased	Matures	January 31, 2017 Interest	FUND
		- <u> </u>				\$ - <u> </u>	

Travis County Escrow account				
Balance		Accrued		Balance
1/1/2017	Additions	Interest	Withdrawals	1/31/2017
\$ 272,178.69		\$ 92.61		\$ 272,271.30



Monthly Newsletter - January 2017

Performance

As of January 31, 2017

Current Invested Balance	\$7,011,113,225.83
Weighted Average Maturity (1)	47 Days
Weighted Average Maturity (2)	98 Days
Net Asset Value	1.000225
Total Number of Participants	823
Management Fee on Invested Balance	0.06%*
Interest Distributed	\$3,295,657.76
Management Fee Collected	\$326,648.56
% of Portfolio Invested Beyond 1 Year	6.31%
Standard & Poor's Current Rating	AAAm

January Averages

Average Invested Balance	\$6,410,340,061.63
Average Monthly Yield, on a simple basis	0.5452%
Average Weighted Average Maturity (1)*	44 Days
Average Weighted Average Maturity (2)*	96 Days

Definition of Weighted Average Maturity (1) & (2)

- (1) This weighted average maturity calculation uses the SEC Rule 2a-7 definition for stated maturity for any floating rate instrument held in the portfolio to determine the weighted average maturity for the pool. This Rule specifies that a variable rate instrument to be paid in 397 calendar days or less shall be deemed to have a maturity equal to the period remaining until the next readjustment of the interest rate.
- (2) This weighted average maturity calculation uses the final maturity of any floating rate instruments held in the portfolio to calculate the weighted average maturity for the pool.

* The maximum management fee authorized for the TexSTAR Cash Reserve Fund is 12 basis points. This fee may be waived in full or in part in the discretion of the TexSTAR co-administrators at any time as provided for in the TexSTAR Information Statement.

Rates reflect historical information and are not an indication of future performance.

New Participants

We would like to welcome the following entity who joined the TexSTAR program in January:

★ Crane County Water District

Holiday Reminder

In observance of Presidents' Day, **TexSTAR will be closed Monday, February 20, 2017**. All ACH transactions initiated on Friday, February 17th will settle on Tuesday, February 21st.

Economic Commentary

The month of January was dominated by political headlines as President Donald Trump was inaugurated and immediately started to take action by issuing executive orders. Several agenda items proposed during the campaign were addressed, yet potential policies regarding infrastructure spending, tax breaks and deregulation, which are pro growth and inflationary and had led to the pre-emptive bond sell off in Q4 2016, continue to remain unclear. Investors have now paused as they have become concerned about the timing and extent of potential future fiscal stimulus. In contrast, equity investors pushed indices to all time highs as they remained optimistic as to what the new administration will deliver. Fourth quarter earnings releases showed positive growth led by energy, which benefited from higher oil prices, and financials, which were buoyed by increased trading revenues, a steeper yield curve, and benefits from potential deregulation. The Federal Open Market Committee (FOMC) voted unanimously to leave the Fed Fund rate unchanged at their latest meeting. The Fed communication continues to be optimistic given continued strong employment and improving inflation and growth, domestically and abroad, but they provided little insight as to the timing of future rate hikes although they are expected to be gradual.

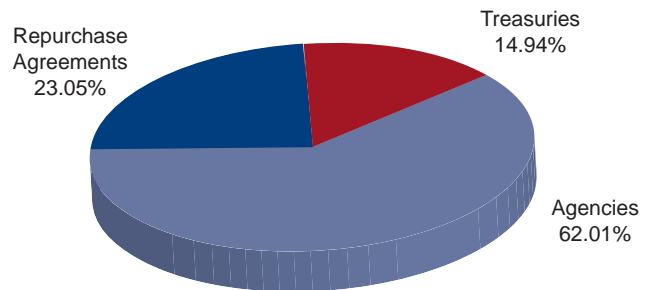
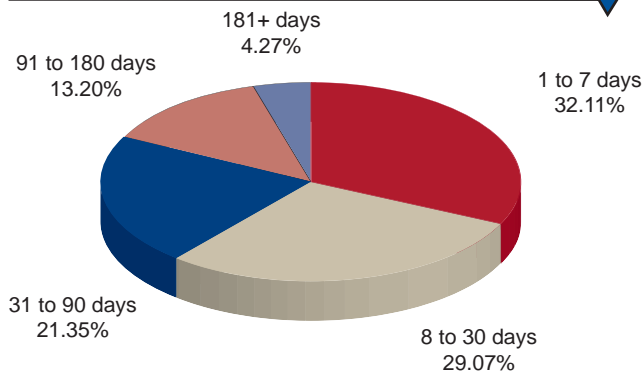
The momentum exiting 2016 should provide a positive backdrop for growth in 2017. First half of 2017 growth may moderate somewhat as residual seasonality often negatively impacts Q1 but the second half of 2017 should experience more acceleration in growth as fiscal policy initiatives become clearer. With business and consumer confidence at cycle highs, in addition to some form of fiscal stimulus, the outlook for growth has significant upside from consumption and investment. In terms of the timing for the next federal funds rate increase, the committee has indicated that their objective is to continue to keep the pace of rate hikes "gradual" however during the December meeting, the median projections from the committee shifted from 2 to 3 rate hikes in 2017. This suggests that if better growth prospects come to fruition along with potential fiscal stimulus, the committee may become more anxious too quickly. The market expectations are for 3 to 4 rate hikes in 2017 with the first coming in June. Moderate economic growth and rising headline inflation should allow them to raise rates further in the second half of 2017, barring a sharp tightening of financial conditions or another exogenous shock.

This information is an excerpt from an economic report dated January 2017 provided to TexSTAR by JP Morgan Asset Management, Inc., the investment manager of the TexSTAR pool.

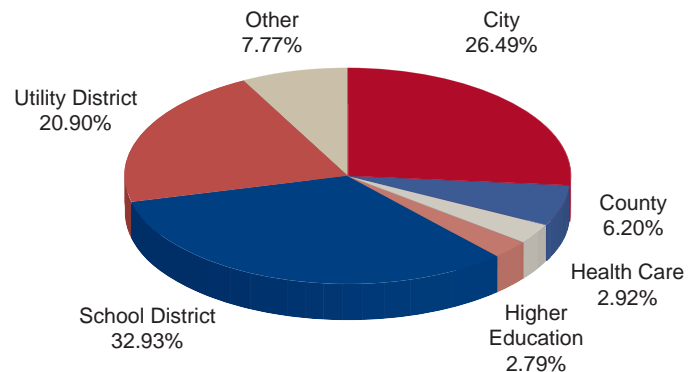
For more information about TexSTAR, please visit our web site at www.texstar.org.

Information at a Glance

Portfolio by Type of Investment As of January 31, 2017



Portfolio by Maturity As of January 31, 2017



Distribution of Participants by Type As of January 31, 2017

Historical Program Information

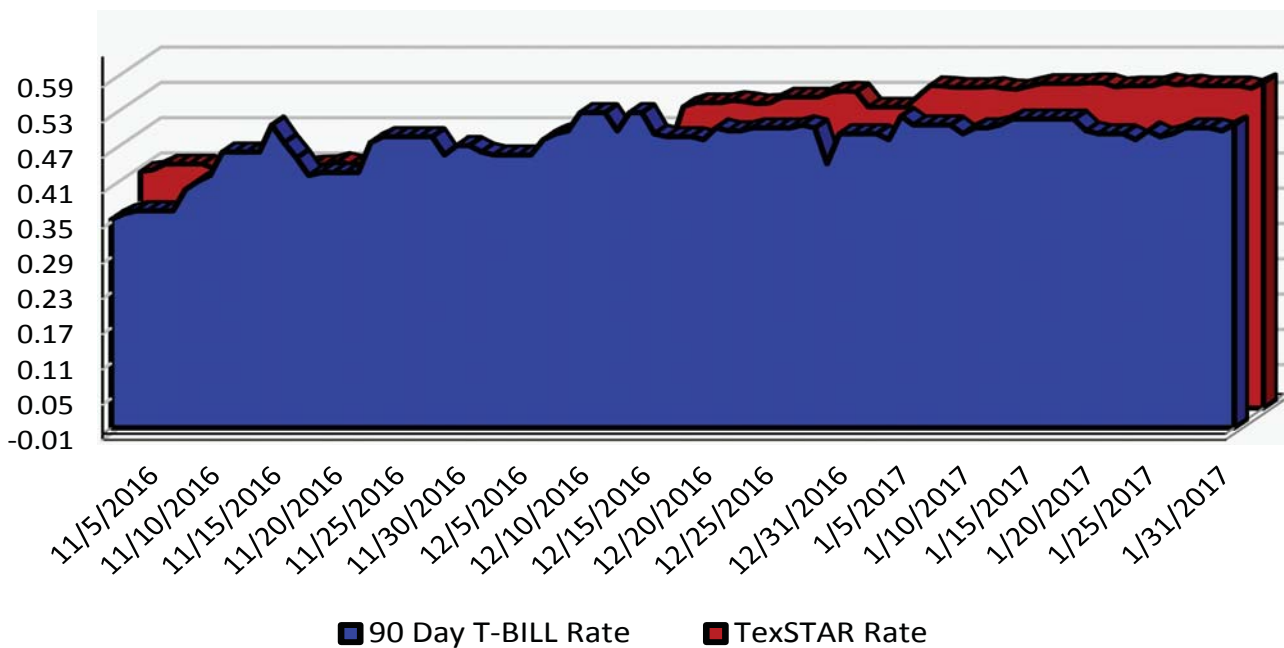
Month	Average Rate	Book Value	Market Value	Net Asset Value	WAM (1)*	WAM (2)*	Number of Participants
Jan 17	0.5452%	\$7,011,113,225.83	\$7,012,695,761.41	1.000225	44	96	823
Dec 16	0.4815%	6,128,094,216.46	6,129,417,408.96	1.000215	49	100	822
Nov 16	0.4144%	5,250,402,124.93	5,251,596,034.74	1.000227	47	109	821
Oct 16	0.4202%	5,155,508,603.07	5,157,927,996.01	1.000469	39	105	820
Sep 16	0.4123%	5,253,367,191.87	5,255,503,092.88	1.000412	43	115	818
Aug 16	0.3990%	5,436,604,745.94	5,438,039,955.56	1.000263	39	114	817
Jul 16	0.3861%	5,602,432,939.56	5,603,475,110.87	1.000186	46	113	813
Jun 16	0.3927%	5,286,667,625.92	5,287,554,140.45	1.000167	47	111	810
May 16	0.3664%	5,716,887,504.32	5,717,379,585.85	1.000086	48	111	807
Apr 16	0.3696%	5,540,251,067.80	5,541,072,494.98	1.000144	46	106	805
Mar 16	0.3450%	5,594,793,523.15	5,595,290,113.49	1.000088	45	86	803
Feb 16	0.3147%	6,329,887,983.78	6,330,019,653.99	1.000020	46	85	797

Portfolio Asset Summary as of January 31, 2017

	Book Value	Market Value
Uninvested Balance	\$ 391,403.90	\$ 391,403.90
Accrual of Interest Income	5,170,648.91	5,170,648.91
Interest and Management Fees Payable	(3,362,342.99)	(3,362,342.99)
Payable for Investment Purchased	(299,733,533.34)	(299,733,533.34)
Repurchase Agreement	1,684,436,999.69	1,684,436,999.69
Government Securities	5,624,210,049.66	5,625,792,585.24
Total	\$ 7,011,113,225.83	\$ 7,012,695,761.41

Market value of collateral supporting the Repurchase Agreements is at least 102% of the Book Value. The portfolio is managed by J.P. Morgan Chase & Co. and the assets are safekept in a separate custodial account at the Federal Reserve Bank in the name of TexSTAR. The only source of payment to the Participants are the assets of TexSTAR. There is no secondary source of payment for the pool such as insurance or guarantee. Should you require a copy of the portfolio, please contact TexSTAR Participant Services.

TexSTAR versus 90-Day Treasury Bill



This material is for information purposes only. This information does not represent an offer to buy or sell a security. The above rate information is obtained from sources that are believed to be reliable; however, its accuracy or completeness may be subject to change. The TexSTAR management fee may be waived in full or in part at the discretion of the TexSTAR co-administrators and the TexSTAR rate for the period shown reflects waiver of fees. This table represents historical investment performance/return to the customer, net of fees, and is not an indication of future performance. An investment in the security is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the issuer seeks to preserve the value of an investment at \$1.00 per share, it is possible to lose money by investing in the security. Information about these and other program details are in the fund's Information Statement which should be read carefully before investing. The yield on the 90-Day Treasury Bill ("T-Bill Yield") is shown for comparative purposes only. When comparing the investment returns of the TexSTAR pool to the T-Bill Yield, you should know that the TexSTAR pool consist of allocations of specific diversified securities as detailed in the respective Information Statements. The T-Bill Yield is taken from Bloomberg Finance L.P. and represents the daily closing yield on the then current 90-day T-Bill.

Daily Summary for January 2017

Date	Mny Mkt Fund Equiv. [SEC Std.]	Daily Allocation Factor	TexSTAR Invested Balance	Market Value Per Share	WAM Days (1)*	WAM Days (2)*
1/1/2017	0.5115%	0.000014015	\$6,128,094,216.46	1.000215	42	96
1/2/2017	0.5115%	0.000014015	\$6,128,094,216.46	1.000215	42	96
1/3/2017	0.5299%	0.000014518	\$6,308,287,306.75	1.000178	42	92
1/4/2017	0.5480%	0.000015014	\$6,364,578,137.24	1.000229	46	97
1/5/2017	0.5471%	0.000014989	\$6,301,872,099.58	1.000240	47	99
1/6/2017	0.5450%	0.000014932	\$6,283,572,945.65	1.000231	45	97
1/7/2017	0.5450%	0.000014932	\$6,283,572,945.65	1.000231	45	97
1/8/2017	0.5450%	0.000014932	\$6,283,572,945.65	1.000231	45	97
1/9/2017	0.5466%	0.000014974	\$6,268,789,265.36	1.000242	45	96
1/10/2017	0.5430%	0.000014876	\$6,329,087,557.63	1.000252	44	94
1/11/2017	0.5418%	0.000014845	\$6,290,635,951.20	1.000230	43	94
1/12/2017	0.5468%	0.000014980	\$6,261,925,068.13	1.000236	43	94
1/13/2017	0.5516%	0.000015112	\$6,284,595,367.79	1.000218	40	90
1/14/2017	0.5516%	0.000015112	\$6,284,595,367.79	1.000218	40	90
1/15/2017	0.5516%	0.000015112	\$6,284,595,367.79	1.000218	40	90
1/16/2017	0.5516%	0.000015112	\$6,284,595,367.79	1.000218	40	90
1/17/2017	0.5529%	0.000015149	\$6,306,511,433.43	1.000232	39	87
1/18/2017	0.5524%	0.000015134	\$6,439,375,156.75	1.000217	41	89
1/19/2017	0.5458%	0.000014953	\$6,424,975,735.83	1.000269	46	94
1/20/2017	0.5476%	0.000015002	\$6,377,302,837.55	1.000277	45	100
1/21/2017	0.5476%	0.000015002	\$6,377,302,837.55	1.000277	45	100
1/22/2017	0.5476%	0.000015002	\$6,377,302,837.55	1.000277	45	100
1/23/2017	0.5531%	0.000015153	\$6,423,773,480.62	1.000267	44	98
1/24/2017	0.5491%	0.000015045	\$6,481,504,078.11	1.000245	44	97
1/25/2017	0.5510%	0.000015096	\$6,346,377,066.15	1.000262	46	104
1/26/2017	0.5478%	0.000015009	\$6,465,461,396.28	1.000251	45	103
1/27/2017	0.5477%	0.000015006	\$6,816,658,589.12	1.000230	44	98
1/28/2017	0.5477%	0.000015006	\$6,816,658,589.12	1.000230	44	98
1/29/2017	0.5477%	0.000015006	\$6,816,658,589.12	1.000230	44	98
1/30/2017	0.5433%	0.000014884	\$6,869,101,930.68	1.000233	43	97
1/31/2017	0.5528%	0.000015145	\$7,011,113,225.83	1.000225	47	98
Average	0.5452%	0.000014937	\$6,410,340,061.63		44	96

TexSTAR Participant Services
FirstSouthwest, A Division of Hilltop Securities
1201 Elm Street, Suite 3500
Dallas, Texas 75270



TexSTAR Board Members

<i>William Chapman</i>	<i>Central Texas Regional Mobility Authority</i>	<i>Governing Board President</i>
<i>Nell Lange</i>	<i>City of Frisco</i>	<i>Governing Board Vice President</i>
<i>Kenneth Huewitt</i>	<i>Houston ISD</i>	<i>Governing Board Treasurer</i>
<i>David Medanich</i>	<i>FirstSouthwest / Hilltop Securities</i>	<i>Governing Board Secretary</i>
<i>Jennifer Novak</i>	<i>J.P. Morgan Asset Management</i>	<i>Governing Board Asst. Sec./Treas.</i>
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<i>Monte Mercer</i>	<i>North Central TX Council of Government</i>	<i>Advisory Board</i>
<i>Stephen Fortenberry</i>	<i>Plano ISD</i>	<i>Advisory Board</i>
<i>Becky Brooks</i>	<i>Government Resource Associates, LLC</i>	<i>Advisory Board</i>

For more information contact TexSTAR Participant Services ★ 1-800-TEX-STAR ★ www.texstar.org



**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-010

**ADDING THE SH 71 EXPRESS PROJECT
TO THE MOBILITY AUTHORITY TURNPIKE SYSTEM.**

WHEREAS, pursuant to Section 370.034 of the Texas Transportation Code, the Board established the CTRMA Turnpike System (the "Mobility Authority Turnpike System", or "System") to include the Mobility Authority transportation projects commonly known as the 183A Turnpike Project, the 183A Phase II Project, the Manor Expressway (290 East) Project, the Bergstrom Expressway (183 South Project), and the 290E Phase III Project as one operational and financial enterprise of the Mobility Authority; and

WHEREAS, the Executive Director has determined and recommends that the SH 71 Express Project could be most efficiently and economically acquired if it were a part of the System, and that the addition of the SH 71 Express Project will benefit the System; and

WHEREAS, the Executive Director has further determined and recommends that the traffic needs of Williamson County, Travis County, and the surrounding region could be most efficiently and economically met by adding the SH 71 Express Project and operating the expanded System as one operational and financial enterprise.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby determines that the SH 71 Express Project could be most efficiently and economically constructed if it were a part of the Mobility Authority Turnpike System, and that the addition of the SH 71 Express Project will benefit the System; and

BE IT FURTHER RESOLVED that the Board hereby determines that the traffic needs of Williamson County, Travis County, and the surrounding region could be most efficiently and economically met by adding the SH 71 Express Project to the System and operating the expanded System as one operational and financial enterprise; and

BE IT FURTHER RESOLVED that the SH 71 Express Project is hereby added to the Mobility Authority Turnpike System.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 17-011

**APPROVAL TO EXECUTE AN INTERLOCAL AGREEMENT
WITH THE TEXAS A&M TRANSPORTATION INSTITUTE FOR A
BEHAVIOURAL STUDY OF ROAD USERS IN THE CENTRAL TEXAS REGION**

WHEREAS, the Mobility Authority has a need for technical and research services for a behavioral study to aid in developing initiatives to improve customer service and, ultimately, enhance the road user experience; and

WHEREAS, the Texas A&M Transportation Institute ("TTI") has the resources and expertise to provide these services to the Mobility Authority; and

WHEREAS, the Executive Director and TTI have agreed to Work Authorization No. 1 in an amount not to exceed \$112,714 to conduct the contemplated behavioral studies; and

WHEREAS, the Executive Director and TxDOT have agreed to an Interlocal Agreement whereby TxDOT would reimburse the Mobility Authority for fifty percent (50%) of the cost of the services to be provided under Work Authorization No. 1; and

WHEREAS, the Executive Director recommends that the Board approve the proposed Work Authorization No. 1 with TTI in the form or substantially in the same form as Exhibit A attached hereto and authorize the Executive Director to negotiate and finalize the terms of an Interlocal Agreement with TTI to implement Work Authorization No. 1; and

WHEREAS, the Executive Director recommends that the Board approve the proposed Interlocal Agreement with TxDOT in the form or substantially in the same form as Exhibit B attached hereto.

NOW THEREFORE, BE IT RESOLVED, that the Board approves an amount not to exceed \$112,714.00 for the services described in Work Authorization No. 1; and

BE IT FURTHER RESOLVED, that the Board authorizes the Executive Director to negotiate and execute an Interlocal Agreement with TTI to implement Work Authorization No. 1 with TTI in the form or substantially the same form as Exhibit A; and

BE IT FURTHER RESOLVED, that the Board authorizes the Executive Director to finalize and execute the proposed Interlocal Agreement with TxDOT in the form or substantially the same form as Exhibit B.

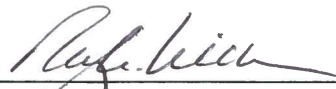
Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 22nd day of February 2017.

Submitted and reviewed by:



Geoffrey S. Petrov, General Counsel

Approved:



Ray A. Wilkerson
Chairman, Board of Directors

Exhibit A

MASTER RESEARCH INTERLOCAL AGREEMENT
Between
TEXAS A&M TRANSPORTATION INSTITUTE
And
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

WORK AUTHORIZATION NO. 1

This Work Authorization No.1 (WA 1) is entered into by and between Central Texas Regional Mobility Authority, a political subdivision of the State of Texas having its principal place of business at 3300 N IH-35, Suite 300, Austin, Texas 78705 ("Authority"), and the **Texas A&M Transportation Institute**, a member of The Texas A&M University System ("System") and an agency of the State of Texas, having its principal place of business at 400 Harvey Mitchell Parkway South, Suite 300, College Station, Texas 77845 (hereinafter referred to as "TTI") referred to individually as "Party" and collectively the "Parties".

WHEREAS, the Authority and TTI entered into a Master Research Interlocal Agreement (the "ILA") effective as of February 22, 2017 whereby except as otherwise specified herein, the terms and conditions of the ILA are incorporated by reference into this Work Authorization.

NOW, THEREFORE, the Parties hereto agree as follows:

1. Statement of Work. TTI agrees to use its reasonable efforts to perform the work of the project as set forth in **Exhibit A** (the "Project"). Any change to this Project will be made effective only by a mutual written agreement.
2. Principal Investigator. The Project will be supervised by (PI name, phone, email), the Principal Investigator who will manage the Project on behalf of TTI.
3. Authority Technical Point of Contact. The Authority designates Ms. Jori Steck, Communications Manager, 512-450-6279, Jsteck@ctrma.org, as the primary point of contact to provide data and information as needed by the TTI project team consistent with the statement of work for this Work Authorization.
4. Period of Performance. The research shall be conducted during the period March 1, 2017 through December 31, 2017 and will be subject to extension only by mutual written agreement of both parties.
5. Price and Payment.
 - a. As consideration and compensation for TTI's performance of this Work

Authorization, the Authority agrees to pay TTI the fixed price amount of \$112,714.00 (the "Fixed Price"). Payments will be prorated to reflect project production, based on pre-established milestone objectives as agreed upon by both parties prior to the issuance of a Notice to Proceed (NTP).

b. The Fixed Price is based on the budget of the Project set forth in **Exhibit A**. Changes that affect costs such as Authority requested revisions to **Exhibit A** or marked differences that affect the initial price must be approved in advance by the Authority. The revisions to **Exhibit A** and the additional funds may only be added to this Work Authorization by an amendment signed by both parties.

6. Reports. TTI shall submit the following reports to the Authority:
A comprehensive summary memo at the completion of each Task 1 through Task 4 and a complete report of findings as Task 5 with due dates indicated in Exhibit A, 3.5 "Project Tasks, Activities, Due Dates and Schedule".
7. This Work Authorization does not waive the parties' responsibilities and obligations provided under the ILA.

IN WITNESS WHEREOF, the parties have caused this Work Authorization No. 1 to be executed by their authorized representative.

**TEXAS A&M TRANSPORTATION
INSTITUTE**

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

By: _____

By: _____

Title: _____

Title: _____

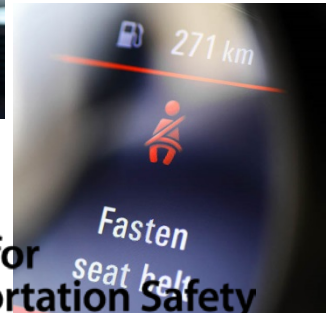
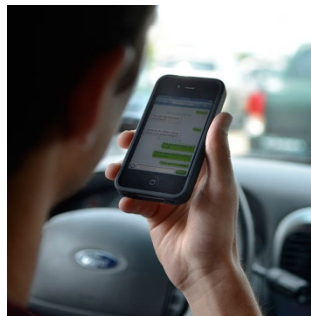
Date: _____

Date: _____

EXHIBIT "A"

Improving the User Experience with Toll System Interfaces

Preliminary Proposal
February 2017



Center for
Transportation Safety

Texas A&M Transportation Institute

Improving the User Experience with Toll System Interfaces

Preliminary Proposal

to

Tim Reilly, Director of Operations
Jori Steck, Communications Manager

Central Texas Regional Mobility Authority
Austin, Texas

Linda Sexton, Deputy Division Director

Texas Department of Transportation Toll Operations
Austin, Texas

by

Michael Manser
Senior Research Scientist

Johanna Zmud
Senior Research Scientist

Center for Transportation Safety
Texas A&M Transportation Institute
College Station, Texas

February 10, 2017

1 Introduction

Toll roads in Central Texas use an electronic tolling system that eliminates the need for a cash-based system while also increasing efficiency. Electronic tolling systems are significantly more complex than cash-based systems from a technological and a user's perspectives. Adding to the complexity is the fact that there are two toll system operators (CTRMA and TxDOT) in the region and one toll tag, TxTag, that is administered by TxDOT but accepted by both operators. Customer interfaces for both front and back office operations have received considerable attention locally from the public and the media. For the purposes of this proposal, the interfaces do not include marketing and/or informational interfaces or operations. This has related primarily to the perceived challenges that users experienced while interacting with the various "touchpoints" which included websites, phone-based customer support, and billing statements.

A human factors approach to improving these user experiences would suggest that the problem is the gap between the way in which the "touchpoints" operate and the users' "mental models" (i.e., understanding) of the way these "touchpoints" should operate. Users' mental models are based on a combination of known facts about the touchpoint along with beliefs about what users know (or think they know) about a touchpoint's operation. When the actual operation of the touchpoint does not meet the users' mental model of the touchpoint, a significant amount of mistakes, confusion, frustration, and animosity can be evoked within the user because they find it difficult to use. This often leads to negative impressions of the touchpoint or agency responsible for the touchpoint.

A mismatch between models can also occur if the touchpoint is not designed to accommodate basic human limitations and capabilities. These limitations and capabilities can relate to how users understand simple and complex information, their ability to remember information, and physical interactions with touchpoints. Addressing human limitations and capabilities can significantly improve users' capacity to understand easily and interact with a touchpoint. Addressing mental models and human limitations and capabilities can be quite challenging for touchpoint designers because of their overfamiliarity with their systems and their belief that if they can easily use the touchpoint then everyone should be able to use the touchpoint with the same ease of use.

There are two general approaches to facilitate an alignment between user and touchpoint models. First, present to users a touchpoint that conforms to their mental models and is designed to address human limitations and capabilities (e.g., explaining things better and

making instructions or labels clearer). Second, improve users' mental models. The greatest gains can be made by addressing both approaches to the greatest extent possible.

Unless both approaches are addressed, users will continue to experience significant frustration and confusion, which will negatively impact users' perceptions of system acceptance, satisfaction, and trust. Identification and understanding of user frustration and confusion can serve as the basis for making touchpoint improvements that will subsequently increase system use and revenue.

The goals of the proposed project are to:

- Identify the main causes of negative user experience with the front and back office customer toll system touchpoints, and how the underlying customer user mental models contribute to negative experiences, and
- Identify solutions, that when implemented, will improve the user experience for front and back office system touchpoints.

2 Project Tasks

The Texas A&M Transportation Institute research team will successfully accomplish the proposed goals through the execution of several project tasks, identified in the following subsections.

2.1 Task 1 - Produce Process Maps for “Touchpoints”

Customers of CTRMA and TxDOT¹ toll roads interact with the tolling systems at various touchpoints including websites, phone-based customer support, printed mailings such as billing statements, “brick and mortar” storefronts², etc. A system user interacts with one or more of these touchpoints to perform goal orientated tasks, such as paying a bill, updating a license

¹ The proposed work will focus on CTRMA and TxDOT touchpoints only. Interfaces and touchpoints outside the CTRMA and TxDOT domains (e.g., North Texas Tollway Authority) will not be considered.

² Note, the project will not interview or otherwise examine storefront operations. However, TTI will attempt to query customers about relative frequency of use of storefronts versus other touchpoints within the customer survey.

plate number on file, or opening a TxTag account. Within Task 1, TTI project staff will interview three (3) CTRMA and three (3) TxDOT staff to identify the “tasks” that a user is expected to perform with each touchpoint. For each of the three touchpoints (i.e., web, phone support, billing statements), TTI will generate a list of 5-10 primary core tasks and process map each. This will be accomplished through interviews with CTRMA and TxDOT staff. This task will not include interviews with either CTRMA or TxTag (TxDOT) customers. Information gathered will include high-level information requirements of each touchpoint and possible points of “process breakdown”, that is, those areas where the process maps indicate a potential conflict with users’ mental models or human limitations or capabilities. Using this information, the team will generate specific performance targets for users (i.e., user experience goals) that should be met for each primary core task when users interact with each “touchpoint. The performance targets will be defined and documented and then used in subsequent tasks.

2.2 Task 2 - Gather User Perspectives in Online Survey

An online survey of TxDOT and CTRMA customers will be conducted to assess significant points of process breakdown and associated primary core tasks. These would be the points that contribute most to a negative user experiences. It is expected that addressing the issues relative to the primary core tasks would greatly improve user experience. This survey is not a customer satisfaction survey. Instead, it is a survey to identify those tasks and elements of tasks that lead to the greatest positive and negative user experiences when interacting with the websites, phone support, and billing statements.

The online survey content will include the list of primary core tasks organized by touchpoint category (i.e., website, phone support, and billing statement) identified in Task 1. We anticipate identifying and addressing no more than 30 tasks (e.g., do customers try to pay their bill at MSB, CTRMA, TxDOT, or TxTAG). Survey respondents will be asked to select the five tasks for which they have experienced the most confusion or frustration in performing over the past year. Then the list will be presented again with the first five selected tasks removed, and users will be asked the question again. This will be done iteratively until a small group of tasks remain. When aggregated across all respondents, this method will result in a prioritized list of tasks that cause confusion and frustration. The survey will ask users about system use information that will further facilitate interpretation of results. The online survey program would conform to good principles of web survey interface to ensure a positive user experience. Data would be analyzed and priority lists developed in the aggregate and by operator (CTRMA/TxDOT).

We propose to send a survey link to CTRMA and TxDOT customer emails for the survey sample. We will provide a random method to each operator for selecting survey respondent emails from their customer databases. With the incentive and a motivating invitation to participate in the survey, we expect a response rate of 20% (1200 survey responses). Given this expectation, we would want to email the survey invitation to 3000 CTRMA and 3000 TxDOT customers. Note, TTI will request a total of 9000 customer emails (4500 CTRMA and 4500 TxDOT). The additional 3000 emails beyond the initial 6000 will be used to replace any duplicate records between CTRMA and TxDOT and will also be used if the overall response rate falls below 20% (1200 responses). The additional emails will negate the need for a second email request to both CTRMA and TxDOT. Note, a maximum of 9000 surveys (4500 for CTRMA and 4500 for TxDOT) will be sent out to customers regardless of survey response rates (i.e., if survey response rate is below 20% we will not request additional emails). The final format of email addresses will be specified by TTI and provided to CTRMA and TxDOT. Although, at this time we request that the fields of first name, last name, and email address be provided in an excel file with each field represented in a different column. The same data could also be provided in a comma delineated txt file. TxDOT will provide the customer information to TTI following receipt of signed nondisclosure agreements from TTI project staff members that will have access to the information. Prior to sending the survey invitation, we would match the lists to discard any duplicates. CTRMA and TxDOT will review and approve the survey before distribution to customers. We would like to offer an incentive of \$10 added to the existing TxTag account (or a new account) for completing the survey. The incentive will be paid to all participants (CTRMA and TxTAG customers who participate in the survey) by CTRMA (but not paid in by TTI). The estimated overall incentive costs for 6000 surveys would be \$60,000 (6000 x \$10). It is estimated that the overall incentive costs could be as high as \$90,000 (9000 customers x \$10 each) if all 9000 surveys are required.

2.3 Task 3 - Design and Execute Performance Target Tests

At a meeting with CTRMA and TxDOT, the prioritized lists of problematic tasks will be evaluated, along with the other contextual information³ gathered in the survey, to determine

³ Contextual information refers to factors that may influence task completion that TTI should be aware of and consider when designing and conducting the tests. Contextual information does not include any confidential customer account information

which primary core tasks should be addressed further. Performance target tests would be designed to identify specific process breakdown points for website or billing statements⁴. Together with CTRMA and TxDOT, TTI would identify appropriate metrics, such as the time or ease with which a user “should” be able to accomplish a task, which can be used as the criteria for successful or unsuccessful task performance. We expect to conduct the tests with no more than 10 tasks.

The tests would examine performance in two ways. First, user impressions as they perform the tasks will be analyzed. This will be accomplished through the use of a one-on-one “think out loud” testing protocol. In this protocol users are asked to complete each primary core task while continuously talking to the experimenter about their experience, how they are completing the task, what is confusing, etc. - that is, simply verbalizing their thoughts as they move through the user interface. This method has been used successfully in previous system evaluations to determine what users really think and feel about the interface design as they try to perform the task in question and the process areas associated with negative experiences. In particular, we would identify directly *why* users’ interactions and subsequent perceptions are incorrect and negative relative to specific touchpoint process map points. Second, in the case of the web interface, we would also be able to record actual keystrokes for additional insight and may consider analyzing that data. For example, while attempting to complete a goal users may select interface options that do not help them complete the primary core task or may dwell on a particular area of an interface. Both findings would suggest a degree of user misunderstanding.

A sample of 6 to 10 users at most would be employed for the performance target tests who are naïve to the touchpoints. These respondents would be randomly selected individuals from the public who are not CTRMA or TxDOT staff, are not CTRMA or TxDOT customers, and who have not participated in the survey. This is an important consideration because these individuals would not come into the performance target test with preconceived biases, enabling us to distinguish perceptions from facts. After the tests, we would have empirical information on the problematic touchpoints, process maps points, and user experiences. TTI will recruit these individuals from the general public or from the TTI participant pool. All performance target test materials will be provided to CTRMA and TxDOT for approval. The final set of materials will

⁴ TTI is unable to replicate phone-based support for performance target testing.

then receive Texas A&M Institutional Review Board approval and the project staff will then follow all IRB approved protocol.

2.4 Task 4 - Touchpoint Modification Recommendations

TTI will hold a 1/2 day workshop with CTRMA and TxDOT staff to review the results of Tasks 1, 2 and 3 and will provide a list of recommended touchpoint modifications to improve users' experience. The advantages and disadvantages of the recommended fixes will be discussed and prioritized. TTI will document the discussion and consensus.

2.5 Task 5 - Report of Findings

The project will culminate in a depiction of the weaknesses of the current user interface, along with recommendations for improvements that will most improve the ability of users to meet their goals with high acceptance and satisfaction. The report will document the methods used to gather this information and present the agreed upon findings.

3 Project Information

3.1 Assumptions

- 3.1.1 Institutional Review Board - According to the Code of Federal Regulations (45 CFR 46) all University-based research involving human participants must be reviewed and approved by an Institutional Review Board panel before any data collection can begin. This affects the Task 2 online survey and the Task 3 performance target tests. TTI has received approval for numerous tasks similar to the online survey and the performance target tests from the Texas A&M IRB panel and will seek approval from them for the current work. This approval will require participants in both tasks to fill out an informed consent document which requires minimal effort and will not interfere with each task. No customer confidential information is required for either IRB approval or for the informed consent document.
- 3.1.2 The work proposed here recommends that each of the 6000 tolling customers (3000 CTRMA and 3000 TxDOT), but potentially up to 9000 customers, who complete the Task 2 online survey be provided with \$10 tolling credit. The cost of this credit is not included in the proposed budget.

3.1.3 The Task 2 online survey will be facilitated by CTRMA and TxDOT support in terms of providing a random sample of toll users.

3.2 Project Management

3.2.1 Overview

The work proposed here will receive the full attention of the TTI staff. This will include 1) direct management and participation in the project by senior staff that have direct and extensive previous experience developing process maps for touchpoints, conducting online surveys, conducting performance target tests, and providing documentation to project sponsors. The project will use TTI's nationally recognized resources, will be managed by experienced project personnel to ensure deliverables and timeframes are met, and will include financial oversight to ensure budget constraints are met. A successful project is also achieved through productive communications between the project sponsor and project team. To ensure productive communications TTI staff will maintain regular contact with CTRMA and TxDOT at the request of CTRMA staff regarding primary project activities such as project task status and budget expenditures.

3.2.2 Reporting and Communications

This contract and workplan represent an agreement between the CTRMA and TTI and that funding for the work will be provided directly by CTRMA. It is recognized TxDOT is a partner in this work and that TxDOT will support CTRMA in several ways (e.g., partial project funding, feedback on deliverables, etc). to provide a clear and manageable reporting structure and because the contract is between CTRMA and TTI, TTI will report directly to CTRMA. All deliverables will be provided to CTRMA and communications will occur between CTRMA and TTI. TTI will, at the request of CTRMA, copy and include TxDOT staff; however, it is the responsibility of CTRMA to interact with TxDOT (e.g., share project materials with TxDOT, obtain TxDOT feedback on deliverable in a timely fashion, etc).

3.2.3 Information Exchange

TTI will not disclose the results or information related to the current work to third parties without the consent of CTRMA and TxDOT. TTI understands and agrees that CTRMA has no authority over customer account information provided by TxDOT to TTI for purposes of performing the current work and cannot consent to any release of such information. Likewise, TxDOT has no authority over customer account information provided by CTRMA to TTI for purposes of performing the current work and cannot consent to any release of such

information. Furthermore, TTI will not disclose any TxDOT customer account information to CTRMA. All contact/email lists will be kept confidential until the end of the project at which time they will be destroyed.

3.2.4 Project Schedule

Completing all project activities and deliverables by the scheduled due dates identified in Section 3.5 is imperative to achieve the overall project objectives and to achieve them in a timeframe anticipated by CTRMA.

3.3 Cost

Cost = \$112,714

3.4 Biographies

The proposed evaluation will employ senior and experienced project staff members who have extensive experience developing process maps for touchpoints, conducting online surveys, conducting performance target tests, and providing documentation to project sponsors.

3.4.1 Michael P. Manser

Michael Manser, Ph.D., is a Senior Research Scientist and the Human Factors Program Manager in the Center for Transportation Safety (CTS) at the Texas A&M Transportation Institute. The Human Factors Program examines the behavioral, cognitive, and perceptual related factors that contribute to transportation safety, mobility, and efficiency. A focus area of the Program includes the evaluation and design of web and machine-based user interfaces. He has more than 20 years of professional experience in the area of transportation research including extensive user interface evaluation and design. In his role as Program Manager Dr. Manser is responsible for managing program finances, managing programmatic resources such as the driving environment simulator, and providing a strategic research direction for the Program staff. He has also held positions at the University of Minnesota Intelligent Transportation Systems Institute and Center for Transportation Safety. He received his Ph.D. in Human Factors

and Ergonomics at the University of Minnesota and received has received User Interface Designer Certification.

3.4.2 Johanna Zmud

Dr. Zmud is a Senior Research Scientist at the Texas A&M Transportation Institute (TTI) and director of its Washington, D.C., office. She has nearly 30 years of transportation research and consulting experience, with clients at the federal, state, and metropolitan levels as well as international clients. She is an internationally acknowledged innovator in bridging transportation research, data, information, and technology. Throughout her professional career, her major research areas have been mobility analysis, technology applications for travel-data collection, emerging data management issues (e.g., data governance, ownership, and privacy), and the impacts of new technologies on travel demand. Two current policy studies at TTI pertain to autonomous vehicle-deployment scenarios and the impact of autonomous vehicles on travel mode choice and distance. Prior to her current position, she directed the transportation, space and technology program at the RAND Corporation.

3.5 Project Tasks, Activities, Due Dates, and Schedule

Task 1	Resp	Due Data ACA*	Week After Contract Award																																															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40								
CTRMA and TxDOT identify staff to be interviewed.	CTRMA	3	■	■	■																																													
Conduct Touchpoint interviews with CTRMA staff.	TTI	7			■	■	■	■	■	■																																								
Conduct Touchpoint interviews with TxDOT staff.	TTI	7			■	■	■	■	■	■																																								
Submit task summary memo	TTI	8								■	■																																							
Task 2																																																		
Develop online survey	TTI	4		■	■																																													
Submit online survey for approval	TTI	4		■	■																																													
CTRMA/TxDOT approves survey or request modifications	CTRMA	6				■	■	■																																										
Submit final online survey	TTI	8																																																
Provide CTRMA/TxDOT with sampling method	TTI	4		■	■																																													
List of emails submitted to TTI	CTRMA	6					■																																											
Email survey to customers	TTI	12								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Submit memo of methods, results, and priority lists	TTI	20																																																
Task 3																																																		
Develop performance target test methodology	TTI	13																																																
Submit methodology to CTRMA/TxDOT for approval	TTI	14																																																
CTRMA/TxDOT approves or requests modifications	CTRMA	16																																																
Submit final methodology	TTI	18																																																
Conduct performance target test	TTI	26																																																
Submit task summary memo	TTI	27																																																
Task 4																																																		
Identify workshop date	TTI	24																																																
Conduct workshop	TTI	30																																																
Submit task summary memo	TTI	32																																																
Task 5																																																		
Develop a report of project findings.	TTI	39																																																
Submit report	TTI	40																																																

Exhibit B

Interlocal Agreement

Contract Services Transmittal Form

From: Toll Operations Division - 87 (District/Division)	Contact Person: Linda Sexton Phone No.: 512-874-9177
Subject: Improving the User Experience Survey	
Other Entity Central Texas Regional Mobility Authority	Contract Maximum Amount Payable \$56,357.00
Are any federal funds used in this contract? No If yes, what kind of federal funds.	
Was the standard interlocal or amendment format modified? Yes _____ No <u>X</u> If modified, date of Contract Services approval: _____ Modifications made are as follows:	

THE STATE OF TEXAS §
THE COUNTY OF TRAVIS §

INTERLOCAL AGREEMENT

THIS CONTRACT is entered into by the Contracting Parties under Government Code, Chapter 791.

I. CONTRACTING PARTIES:

The Texas Department of Transportation TxDOT
Central Texas Regional Mobility Authority (CTRMA) Local Government

II. PURPOSE: This Contract is intended to allow TxDOT to participate in a User Experience Survey with the CTRMA.

III. STATEMENT OF SERVICES TO BE PERFORMED: The Local Government will undertake and carry out services described in **Attachment A**, Scope of Services.

IV. CONTRACT PAYMENT: The total amount of this contract shall not exceed \$ 56,357.00 and shall conform to the provisions of **Attachment B**, Budget. Payments shall be billed monthly.

V. TERM OF CONTRACT: Payment under this contract beyond the end of the current fiscal biennium is subject to availability of appropriated funds. If funds are not appropriated, this contract shall be terminated immediately with no liability to either party. This contract begins when fully executed by both parties and terminates on December 31, 2017 or when otherwise terminated as provided in this Agreement.

VI. LEGAL AUTHORITY:

THE PARTIES certify that the services provided under this contract are services that are properly within the legal authority of the Contracting Parties

The governing body, by resolution or ordinance, dated _____, has authorized the Local Government to provide the scope of services.

This contract incorporates the provisions of **Attachment A**, Scope of Services, **Attachment B**, Budget, **Attachment C**, General Terms and Conditions, and **Attachment D**, Resolution or Ordinance.

Central Texas Regional Mobility Authority

By _____ Date _____
Mike Heiligenstein
Title Executive Director

FOR THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____
Kenneth Stewart
Director of Contract Services

ATTACHMENT A

Scope of Services

TxDOT, in collaboration with the CTRMA, will participate jointly in a User Experience Survey to better align users and customer service touchpoints by understanding and addressing the users most common gaps as it relates to toll system interfaces. The Center for Transportation Safety, Texas A&M Transportation Institute (TTI) will perform the survey through an existing contract with CTRMA.

Toll roads in Central Texas use an electronic tolling system that eliminates the need for a cash-based system while also increasing efficiency. Electronic tolling systems are significantly more complex than cash-based systems from both a technological and user perspective. There are two toll system operators (CTRMA and TxDOT) in the region and one toll tag, TxTag, which is administered by TxDOT but accepted by both operators. Customer interfaces for both front and back office operations are critical in providing a good customer service experience while interacting with the various “touchpoints,” which include websites, phone-based customer support, and billing statements.

A human factors approach to improving these user experiences would suggest that the problem is the gap between the way in which the “touchpoints” operate and the users’ “mental models” (i.e., understanding) of the way these “touchpoints” should operate. A mismatch between models can also occur if the touchpoint is not designed to accommodate basic human limitations and capabilities. Addressing human limitations and capabilities can significantly improve users’ capacity to understand easily and interact with a touchpoint.

1. SURVEY: The survey will focus on two general approaches to facilitate an alignment between user and touchpoint models. The goals of the survey are to:
 - 1.1. Identify the main causes of negative user experience with the front and back office customer toll system touchpoints and how the underlying customer user mental models contribute to negative experiences, and
 - 1.2. Identify solutions, that when implemented, will improve the user experience for front and back office system touchpoints.
2. TASKS: Goals will be accomplished through the execution of several tasks identified below.

2.1. Task 1 – Produce Process Maps for “Touchpoints”

Customers of CTRMA and TxDOT toll roads interact with the tolling systems at various touchpoints including websites, phone-based customer support, printed mailings such as billing statements, etc. A system user interacts with these touchpoints to perform goal orientated tasks, such as paying a bill, updating a license plate number on file, or opening a TxTag account. Within Task 1, TTI project staff will interview three (3) CTRMA and three (3) TxDOT staff to identify the “tasks” that a user is expected to perform with each touchpoint. For each of the three touchpoints (i.e., web, phone support, billing statements), TTI will generate a list of 5-10 primary core tasks and process map each. Information gathered will include high-level information requirements of each touchpoint and possible points of “process breakdown”,

that is, those areas where the process maps indicate a potential conflict with users' mental models or human limitations or capabilities. Using this information, the TTI team will generate specific performance targets for users (i.e., user experience goals) that should be met for each primary core task when users interact with each "touchpoint. The performance targets will be defined and documented and then used in subsequent tasks.

2.2. Task 2 - Gather User Perspectives in Online Survey

An online survey of TxDOT and CTRMA customers will be conducted to assess significant points of process breakdown and associated primary core tasks. The survey will identify those tasks and elements of tasks that lead to the greatest positive and negative user experiences when interacting with the websites, phone support, and billing statements.

The online survey content will include the list of primary core tasks organized by touchpoint category (i.e., website, phone support, and billing statement) identified in Task 1. It is anticipated that no more than 30 tasks will be identified and addressed (e.g., do customers try to pay their bill at MSB, CTRMA, TxDOT, or TxTAG). Survey respondents will be asked to select the five tasks for which they have experienced the most confusion or frustration in performing over the past year. Then the list will be presented again with the first five selected tasks removed, and users will be asked the question again. This will be done iteratively until a small group of tasks remain. When aggregated across all respondents, this method will result in a prioritized list of tasks. The survey will query about system use information and limited demographic information that will further facilitate interpretation of results. The online survey program would conform to good principles of web survey interface to ensure a positive user experience. Data would be analyzed and priority lists developed in the aggregate and by operator (CTRMA/TxDOT).

A survey link will be provided to CTRMA and TxDOT customer emails for the survey sample. A response rate of 20% (1200 survey responses) is expected. The survey invitation will be emailed to 3000 CTRMA and 3000 TxDOT customers. A total of 9000 customer emails (4500 CTRMA and 4500 TxDOT) will be requested. The additional 3000 emails beyond the initial 6000 will be used to replace any duplicate records between CTRMA and TxDOT and will also be used if the overall response rate falls below 20% (1200 responses). TxDOT will provide the customer information to TTI following receipt of signed nondisclosure agreements from TTI project staff members that will have access to the information. Prior to sending the survey invitation, any duplicates emails/customers will be discarded. CTRMA and TxDOT will review and approve the survey before distribution to customers.

2.3. Task 3 - Design and Execute Performance Target Tests

2.3.1. Design

CTRMA and TxDOT will approve the prioritized lists of tasks to be evaluated, along with the other contextual information gathered in the survey, to determine which primary core tasks should be addressed further. Performance target tests would be designed to identify specific process breakdown points for website or billing statements. Metrics, such as the time or ease

with which a user “should” be able to accomplish a task, which can be used as the criteria for successful or unsuccessful task performance, will be identified. No more than 10 tasks are expected to conduct the tests.

2.3.2. Execute Performance Target Tests

The tests will examine performance in two ways:

2.3.2.1. First, user impressions as they perform the tasks will be analyzed. This will be accomplished through the use of a one-on-one “think out loud” testing protocol. In this protocol users are asked to complete each primary core task while continuously talking to the experimenter about their experience, how they are completing the task, what is confusing, etc. - that is, simply verbalizing their thoughts as they move through the user interface.

2.3.2.2. Second, in the case of the web interface, actual keystrokes will be recorded for additional insight and may consider analyzing that data. For example, while attempting to complete a goal users may select interface options that do not help them complete the primary core task or may dwell on a particular area of an interface.

2.3.2.3. Random Naïve Sample

A sample of 6 - 10 users at most would be employed for the performance target tests who are naïve to the touchpoints. These respondents would be randomly selected individuals from the public who are not CTRMA or TxDOT staff, are not CTRMA or TxDOT customers, and who have not participated in the survey. This is an important consideration because these individuals would not come into the performance target test with preconceived biases, which enables staff to distinguish perceptions from facts.

2.3.3. Results

The test results will provide empirical information on the problematic touchpoints, process maps points, and user experiences. All performance target test materials will be provided to TxDOT for approval.

2.4. Task 4 - Touchpoint Modification Recommendations

A half- day workshop to review the results of Tasks 1, 2 and 3 will be scheduled to provide a list of recommended touchpoint modifications to improve users’ experience. The advantages and disadvantages of the recommended fixes will be discussed and prioritized.

2.5. Task 5 - Report of Findings

A report of the list of weaknesses of the current user interfaces, along with recommendations for improvements that will most improve the ability of users to meet their goals with high acceptance and satisfaction will be provided. The report will document the methods used to gather this information and present the agreed upon findings.

ATTACHMENT B**Budget**

The table below provides general guidance for the cost of the survey. The particulars shall be determined and agreed upon prior to the start of specific tasks.

Task	Description	Deliverable	Amount Payable
2.1	Process Maps	Approved Process Maps	9392.00
2.2	Online Survey	Approved Online Survey	9392.00
2.3.1	Design Performance Target Tests	Approved Performance Target Tests	9392.00
2.3.3	Performance Test Results	Provide Test Results	9392.00
2.4	Touchpoint Mod Recommendations	Provide and Agree on Recommendations	9392.00
2.5	Report of Findings	Approved report	9397.00

ATTACHMENT C

General Terms and Conditions

Article 1. Additional Work

- A. If the Local Government is of the opinion that any assigned work is beyond the scope of this contract and constitutes additional work, it shall promptly notify TxDOT in writing. The written notice shall present the relevant facts and show how the work constitutes additional work.
- B. If TxDOT in its sole discretion finds that the work does constitute additional work, TxDOT shall so advise the Local Government and a written amendment will be executed. The Local Government shall not perform any proposed additional work or incur any additional costs before the execution of an amendment.
- C. TxDOT shall not be responsible for actions by the Local Government or for any costs incurred by the Local Government relating to additional work that is performed before an amendment is executed or that is outside the scope of the contract, as amended.

Article 2. Amendments

This contract may only be amended by written agreement executed by both parties before the contract is terminated.

Article 3. Notice to Proceed

If Attachment A requires a notice to proceed, the Local Government shall not proceed with any work or incur any costs until TxDOT issues a written notice to the Local Government authorizing work to begin. Any costs incurred by the Local Government before receiving the notice are not eligible for reimbursement.

Article 4. Conflicts Between Agreements

If the terms of this contract conflict with the terms of any other contract between the parties, the most recent contract shall prevail.

Article 5. Nonconforming Work

If the Local Government submits work that does not comply with the terms of this contract, TxDOT shall instruct the Local Government to make any revisions that are necessary to bring the work into compliance with the contract. No additional compensation shall be paid for this work.

Article 6. Termination

This contract terminates at the end of the contract term, when all services and obligations contained in this contract have been satisfactorily completed, by mutual written agreement, or 30 days after either party gives notice to the other party, whichever occurs first. TxDOT shall compensate the Local Government only for those eligible expenses that are incurred during this contract and that are directly attributable to the completed portion of the work covered by this contract and only if the work has been completed in a manner satisfactory and acceptable to TxDOT. The Local Government shall neither incur nor be reimbursed for any new obligations after the date of termination.

Article 7. Funding

TxDOT shall pay for services from appropriation items or accounts from which like expenditures would normally be paid. Payments received by the Local Government shall be credited to the current appropriation items or accounts from which expenditures of that character were originally made. If for

any reason subcontractors and suppliers, if any, are not paid before TxDOT reimburses the Local Government for their services, the Local Government shall pay the subcontractors and suppliers all undisputed amounts due for work no more than 10 days after the Local Government receives payment for the work unless a different time is specified by law. This requirement also applies to all lower-tier subcontractors and suppliers and must be incorporated in all subcontracts. If the Local Government fails to comply with this Article, TxDOT may withhold payments and suspend work until the subcontractors and suppliers are paid. The Local Government is authorized to submit requests for reimbursement no more frequently than monthly and no later than ninety (90) days after costs are incurred.

Article 8. Basis for Calculating Reimbursement Costs

TxDOT will reimburse the Local Government for actual costs incurred in carrying out the services authorized in Attachment A, Scope of Services, subject to the cost categories and estimated costs set forth in Attachment B, Budget. TxDOT shall compensate the Local Government for only those eligible expenses incurred during this contract that are directly attributable to the completed portion of the work covered by this contract, provided that the work has been completed in a manner satisfactory and acceptable to TxDOT. The Local Government shall not incur or be reimbursed for any new obligations after the effective date of termination. The Local Government shall bill TxDOT for actual travel expenses, not to exceed the limits reimbursable under state law. Out-of-state or out-of-country travel by the Local Government requires prior approval by TxDOT.

Article 9. Gratuities

Any person who is doing business with or who reasonably speaking may do business with TxDOT under this contract may not make any offer of benefits, gifts, or favors to employees of TxDOT. The only exceptions allowed are ordinary business lunches and items that have received the advanced written approval of the Executive Director of the Texas Department of Transportation.

Article 10. Conflict of Interest

The Local Government shall not assign an employee to a project if the employee:

- A. owns an interest in or is an officer or employee of a business entity that has or may have a contract with the state relating to the project;
- B. has a direct or indirect financial interest in the outcome of the project;
- C. has performed services regarding the subject matter of the project for an entity that has a direct or indirect financial interest in the outcome of the project or that has or may have a contract with TxDOT; or
- D. is a current part-time or full-time employee of TxDOT.

Article 11. Local Government Resources

All employees of the Local Government shall have adequate knowledge and experience to enable them to perform the duties assigned to them. The Local Government certifies that it currently has adequate qualified personnel in its employment to perform the work required under this contract or will be able to obtain adequate qualified personnel from sources other than TxDOT. On receipt of written notice from TxDOT detailing supporting factors and evidence, the Local Government shall remove from the project any employee of the Local Government who is incompetent or whose conduct becomes detrimental to the work. Unless otherwise specified, the Local Government shall furnish all equipment, materials, supplies, and other resources required to perform the work.

Article 12. Assignment Subcontracts

A subcontract may not be executed by the Local Government without prior written authorization by TxDOT. Subcontracts in excess of \$25,000 shall contain all applicable terms and conditions of this contract. No subcontract will relieve the Local Government of its responsibility under this contract. Neither party shall assign any interest in this agreement.

Article 13. Responsibilities of the Parties

Each party acknowledges that it is not an agent, servant, or employee of the other party. Each party is responsible for its own acts and deeds and for those of its agents, servants, or employees.

Article 14. Disputes

The Local Government shall be responsible for the settlement of all contractual and administrative issues arising out of procurements entered in support of contract services. TxDOT shall be responsible for the settlement of any dispute concerning this contract unless the dispute involves a subcontract.

Article 15. No Assignment

Neither party shall assign, sublet, or transfer any interest in this agreement.

Article 16. Remedies

This agreement shall not be considered as specifying the exclusive remedy for any default, but either party may avail itself of any remedy existing at law or in equity, and all remedies shall be cumulative.

Article 17. License for TxDOT Logo Use

- A. Grant of License; Limitations: The Local Government is granted a limited revocable non-exclusive license to use the registered TxDOT trademark logo (TxDOT Flying "T") on any deliverables prepared under this contract that are the property of the State. The Local Government may not make any use of the registered TxDOT trademark logo on any other materials or documents unless it first submits that request in writing to the State and receives approval for the proposed use. The Local Government agrees that it shall not alter, modify, dilute, or otherwise misuse the registered TxDOT trademark logo or bring it into disrepute.
- B. Notice of Registration Required: The Local Government's use of the Flying "T" under this article shall be followed by the capital letter R enclosed within a circle (®) that gives notice that the Flying "T" is registered in the United States Patent and Trademark Office (USPTO).
- C. No Assignment or Sublicense: The Local Government may not assign or sublicense the rights granted by this article without the prior written consent of the State.
- D. Term of License: The license granted to the Local Government by this article shall terminate at the end of the term specified by this contract.

Article 18. Records and Ownership

- A. The Local Government agrees to maintain all books, documents, papers, accounting records, and other evidence pertaining to costs at its office during the contract period and for four years from the date of final payment under the contract. These materials shall be made available for inspection and copying by TxDOT, by the State Auditor's Office, and by their authorized representatives. If the contract is federally funded, these materials shall also be made available for inspection and copying by the U.S. Department of Transportation and by the Office of the Inspector General.

- B. After completion or termination of this contract, all documents prepared by the Local Government or furnished to the Local Government by TxDOT shall be delivered to and become the property of TxDOT. All sketches, photographs, calculations, and other data prepared under this contract shall be made available, on request, to TxDOT without restriction or limitation of further use.
- C. TxDOT shall own all title to, all interests in, all rights to, and all intellectual property (including copyrights, trade and service marks, trade secrets, and patentable devices or methods) arising from or developed under this contract.
- D. Except to the extent that a specific provision of this contract states to the contrary, all equipment purchased by the Local Government or its subcontractors under this contract shall be owned by TxDOT and will be delivered to TxDOT at the time the contract is completed or terminated.
- E. The State Auditor may conduct an audit or investigation of any entity receiving funds from TxDOT directly under the contract or indirectly through a subcontract under the contract. Acceptance of funds directly under the contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the State Auditor with access to any information the State Auditor considers relevant to the investigation or audit.

Article 19. Reference to Costs Principles and Circulars

Reimbursement with state or federal funds will be limited to costs determined to be reasonable and allowable under cost principles established in OMB Circular A-21, "Cost Principles for Educational Institutions," or 2 CFR 200. The parties shall comply with the requirements of the Single Audit Act of 1984, P.L. 98-502, ensuring that the single audit report includes the coverage stipulated in 2 CFR 200.

Article 20. Equal Employment Opportunity

The Local Government agrees to comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 and as supplemented by Department of Labor regulations, 41 CFR Part 60. The Local Government agrees to consider minority universities for subcontracts when the opportunity exists. The Local Government warrants that it has developed and has on file appropriate affirmative action programs as required by applicable rules and regulations of the Secretary of Labor.

Article 21. Civil Rights Compliance

- A. Compliance with Regulations: The Local Government will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made part of this agreement.
- B. Nondiscrimination: The Local Government, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Local Government will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- C. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Local Government for work to be performed under a subcontract, including procurement of materials or leases of

equipment, each potential subcontractor or supplier will be notified by the Local Government of the Local Government's obligations under this contract and the Acts and Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

- D. Information and Reports: The Local Government will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and facilities as may be determined by the State or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations or directives. Where any information required of the Local Government is in the exclusive possession of another who fails or refuses to furnish this information, the Local Government will so certify to the State or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- E. Sanctions for Noncompliance: In the event of the Local Government's noncompliance with the Nondiscrimination provisions of this contract, the State will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to the Local Government under the contract until the Local Government complies and/or
 - b. cancelling, terminating, or suspending of the contract, in whole or in part.
- F. Incorporation of Provisions: The Local Government will include the provisions of paragraphs (A) through (F) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Local Government will take such action with respect to any subcontract or procurement as the State or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Local Government becomes involved in, or is threatened with, litigation with a subcontractor or supplier because of such direction, the Local Government may request the State to enter into such litigation to protect the interests of the State. In addition, the Local Government may request the United States to enter into such litigation to protect the interests of the United States.

Article 22. Noncollusion

The Local Government warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Local Government, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon or resulting from the award or making of this Agreement. If the Local Government breaches or violates this warranty, the Texas Department of Transportation shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover the full amount of such fee, commission, brokerage fee, contingent fee, or gift.

Article 23. Lobbying Certification

In executing this agreement, each signatory certifies that:

- A. No federal appropriated funds have been paid or will be paid by or on behalf of the parties to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

- B. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with federal contracts, grants, loans, or cooperative agreements, the signatory for the Local Government shall complete and submit the federal Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- C. The parties shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This statement is a material representation of fact upon which reliance was placed when this agreement was made or entered into. Submission of this statement is a prerequisite for making or entering into this agreement imposed by Title 31 U.S.C. §1352. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

By executing this agreement, the parties affirm this lobbying certification with respect to the Project and affirm this certification of the material representation of facts upon which reliance will be made.

Article 24. Compliance with Laws

The parties shall comply with all federal, state, and local laws, statutes, ordinances, rules, and regulations and with the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of this agreement. After receiving a written request from TxDOT, the Local Government shall furnish TxDOT with satisfactory proof of its compliance with this Article.

Article 25. Signatory Warranty

Each signatory warrants that the signatory has necessary authority to execute this agreement on behalf of the entity represented.

Article 26. Notices

All notices to either party shall be delivered personally or sent by certified U.S. mail, postage prepaid, addressed to that party at the following address:

Local Government:	Director of Operations Central Texas Regional Mobility Authority 3300 N. IH-35, Suite 300 Austin, Tx 78705
TxDOT:	TxDOT Division Director TxDOT, Toll Operations Division 12719 Burnet Road Austin, Texas 78727

All notices shall be deemed given on the date delivered in person or deposited in the mail. Either party may change the above address by sending written notice of the change to the other party.

Either party may request in writing that notices shall be delivered personally or by certified U.S. mail, and that request shall be carried out by the other party.

Article 27. Pertinent Non-Discrimination Authorities

During the performance of this contract, the Local Government, for itself, its assignees, and successors in interest agree to comply with the following nondiscrimination statutes and authorities; including but not limited to:

- A. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- B. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects).
- C. Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), as amended, (prohibits discrimination on the basis of sex).
- D. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.) as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27.
- E. The Age Discrimination Act of 1975, as amended, (49 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age).
- F. Airport and Airway Improvement Act of 1982, (49 U.S.C. Chapter 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex).
- G. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, subrecipients and contractors, whether such programs or activities are Federally funded or not).
- H. Titles II and III of the Americans with Disabilities Act, which prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38.
- I. The Federal Aviation Administration’s Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex).
- J. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations.
- K. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, the parties must take reasonable steps to ensure that LEP persons have meaningful access to the programs (70 Fed. Reg. at 74087 to 74100).
- L. Title IX of the Education Amendments of 1972, as amended, which prohibits the parties from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq.).

Contract No _____

ATTACHMENT D
Resolution or Ordinance