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

RESOLUTION NO. 23-036

APPROVING AN AGREEMENT WITH DELOITTE CONSULTING LLP FOR TOLL OPERATIONS AND MAINTENANCE SERVICES RELATED TO THE DATA PLATFORM SYSTEM

WHEREAS, Mobility Authority staff has developed a data platform transitioning all toll transaction data processing and data management capabilities after the point of transaction creation from a third-party vendor to the Mobility Authority (the "Data Platform System"); and

WHEREAS, the Data Platform System went live on August 1, 2023 and has been processing all toll transactions since that time; and

WHEREAS, by Resolution No. 22-029, dated June 29, 2022, the Board approved a contract with Deloitte Consulting LLP for a Tolling Operations Management Solution ("TOMS") as a function of the Data Platform System for a term of 12 months; and

WHEREAS, the Mobility Authority desires ongoing support to monitor the Data Platform System and reconciliation processes through a TOMS as a function of the Data Platform System which automates business processes across several functional areas including Application Support & Maintenance, Database Maintenance, Data Exchange Maintenance, Reporting & Analytics Maintenance and Support & Triage Management; and

WHEREAS, the Executive Director has negotiated a scope of work with Deloitte Consulting LLP in an amount not to exceed $2,310,000.00 for a TOMS as a function of the Data Platform System which is attached hereto as Exhibit A; and

WHEREAS, pursuant to Texas Government Code Section 2054.0565 and Mobility Authority Policy Code Section 401.008, the Mobility Authority may utilize procedures established by the Texas Department of Information Resources (DIR) to procure goods and services through DIR cooperative contracts; and

WHEREAS, the Executive Director recommends entering into an agreement with Deloitte Consulting LLP for a TOMS as a function of the Data Platform System in an amount not to exceed $2,310,000.00 through their DIR cooperative contract.

NOW THEREFORE BE IT RESOLVED that the Board of Directors hereby approves the scope of work for a Tolling Operations Management Solution as a function of the Data Platform System which is attached hereto as Exhibit A; and

BE IT FURTHER RESOLVED, that the Executive Director is authorized to enter into an agreement with Deloitte Consulting LLP in an amount not to exceed $2,310,000.00 through their

cooperative contract with the Texas Department of Information Resources for the first phase of the Data Platform System.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 27th day of September 2023.

Submitted and reviewed by: Approved:

James M. Bass   _Robert W. Jenkins, Jr._

James M. Bass   Robert W. Jenkins, Jr.
Executive Director   Chairman, Board of Directors

Exhibit A

Statement of Work

**Tolling Operations Management Solution (TOMS)
Operations and Maintenance**

September 15, 2023

Table of Contents

1.   Definitions and Abbreviations

Term	Definition
CTRMA	Central Texas Regional Mobility Authority
CUSIOP Hub	Central United States Interoperability Hub
TOMS	Tolling Operations Management Solution includes ecosystem components of front end application, toll transaction processing, database, data exchanges, reporting & analytics
DPS	Data Platform System for toll transaction processing. It is part of TOMS ecosystem
ETCS / TCS	Electronic Transaction Collection System / Toll Collection System
PBM	Pay by Mail Back Office System / PBM Provider
SME	Subject Matter Expert
TSI	Toll System Integrator / ETCS Provider
POT	Parallel Operations Testing

1.1.   DEFINITIONS.

"Acceptance" or **"Accepted"** means written confirmation by CTRMA or their Authorized Representative that Vendor has completed a Deliverable according to the Acceptance Criteria and the Deliverable is accepted for purposes of payment.

"CTRMA Data" means information created and information stored by DPS / TOMS through the System and the Services, including Personal Information, and information created and collected by Vendor regarding CTRMA and its clients during the course of providing the Services.

"Authorized Representative" means a person representing a party to this Contract who is authorized to make commitments and decisions on behalf of the party regarding the performance of this Contract. Vendor's Authorized Representative is the person so identified in Exhibit A. CTRMA's Authorized Representative is the person so identified in Exhibit B.

"Baseline System" means the TOMS Ecosystem currently in production and beyond any contracted Warranty Period(s).

"Change Request" means a formal document that defines a proposed change to the Baseline System that will be delivered by Vendor as per the Services with the SOW.

"Contract" means all terms and conditions in this document and all its attachments and exhibits, including as amended.

"Data Error" – means errors in data or failures attributable to a Solution, the System, or Services. Data entry errors are not Data Errors.

"Defect" means a reproducible failure of the System or a Solution to operate in accordance with its current Requirements including as elaborated in the current Accepted System Documentation Deliverable(s) or a Service Level Agreement, despite the proper use of the System.

Data Errors are Defects.

Defects fall into the following categories:

Level 1 – Catastrophic means the System or a main subsystem is unavailable, preventing the System or a core function from operating or causing core functions or major functionality to operate with grossly incorrect results, such as material Data Errors. There is no workaround.

Level 2 – Major. Use of the System or a subsystem is interrupted, or a failure otherwise causes major functions to not operate or to operate with significantly incorrect results that cause severe operational impacts to CTRMA e.g. CTRMA staff unable to complete work or significant Data Errors. There is no CTRMA-acceptable workaround. This also includes security / privacy issue where the identifiable information about one or more individuals that is created, processed, or stored by the System is not protected by security and privacy measures that comply with applicable state and federal laws and regulations governing CTRMA Data.

Level 3 – Minor. Does not qualify as a Level 1 Defect, or Level 2 Defect but which nonetheless prevents minor functionality from operating or causes minor functions to operate with incorrect results. There is a clear business need to have the System repaired, but CTRMA-acceptable workarounds exist for business operations.

Level 4 – Cosmetic. Does not affect functionality of the System. Low priority with no direct impact on clients or CTRMA staff. Cosmetic or nonessential in nature.

"Deliverable(s)" means all items that Vendor is required to provide to CTRMA under this Contract and identified in the applicable Statement of Work as a Deliverable.

"Documentation" means all documents, including documents that are Deliverables described in an applicable Statement of Work and which may include operator's and user's manuals, JIRA listings and commentary, user stories and other materials for use in conjunction with and for the operation of the System and its components. Documentation includes documents in electronic form.

"Effective Date" means the date specified in Section 2.1 or the date on which this Contract is fully executed and approved according to applicable laws, rules and regulations, whichever is later.

"Enhancements" means changes made to the Baseline System for the purpose of modifying existing TOMS Ecosystem functionality or adding additional features, and, are not covered by the Services provided within the SOW.

"Go-Live" means the date identified in a Statement of Work or Change Order on which a Solution will be available for CTRMA and its users in a Production Environment for the processing of transactions in accordance with Requirements and Service Level Agreements. A Go-Live date may be associated with

the initial Implementation of the Services, a specific phase or Enhancement under a Statement of Work, a Change Order, or an Enhancement order.

"Implementation" or **"Implement"** means the process of Vendor preparing and deploying a Solution to the stated environment (i.e., testing or Production). Implementation includes all Services required to provide a complete and functioning System inclusive of the Solution, and to prepare CTRMA to use it effectively.

"Incident" means an unplanned interruption to a System or Solution service or a reduction in the quality of a service. Incidents can be caused by a variety of factors, such as hardware failures, software Defects, or human errors.

"Production Environment" means the setting where the System is operational for its intended use by CTRMA and its end users.

"Requirements" are the functions and elements required for the System or Services, as applicable for the Service Bundle.

"Roll-out" means the phased Implementation of a Solution in the Production Environment with CTRMA Data that is accessible to a subset of end users selected by CTRMA.

"Services" means all effort to be expended by Vendor under the Contract, including as applicable for the Service Bundle, maintenance and support of the System, compliance with Service Level Agreements, development and Implementation of Solutions, completion of Tasks, and development and delivery of Deliverables.

"Service Level Agreement" or **"SLA"** means an agreement that defines specific elements of the Services, periods of time for completing the defined Services, measurable conditions for determining successful completion or performance of the System, Services, or both, and consequences for not meeting the SLA. The SLA may contain conditions for starting, stopping, and pausing the measurement of the relevant time period. SLAs are in Section 4.

"Service Order" means a type of Change Order under which CTRMA authorizes Services and Deliverables described in a Statement of Work that are specified as being subject to a Service Order.

"Software" means any computer programs, routines, or subroutines, including operating software, programming aids, application programs, and software products.

"Solution" means the sum total of Services, developments, Work Product, Deliverables, Vendor Intellectual Property, Third Party Intellectual Property, Software, and Documentation that Vendor may configure, develop, implement to effect a change in the System. A Solution may be a System change described in a Change Order or other form of Contract amendment.

"Support Services" means Vendor activities that assist System users to effectively and efficiently use the System, as applicable for the Services.

"Statement of Work" or **"SOW"** means the document(s) that describe the Services to be provided by Vendor, including the Tasks, Deliverables, the attributes (including requirements and specifications) of each Deliverable, identification of the Deliverables and Services that are associated with each Task, and a completion date for each Deliverable, and any other items as agreed by the parties and attached hereto as a Statement of Work, including as amended.

"Task" means a segment of the Services to be provided by Vendor under this Contract.

"TOMS Ecosystem" includes components and its features as available in the Baseline System and identified by the architectural diagram in Appendix A.

"Warranty Period" means a contracted period of time after the Go-Live date for services or deliverables provided by a SOW or Change Request in which the contracted service provider shall use reasonable efforts to correct Defects or non-conformities identified after the Go-Live date and prior to an end date defined within the Warranty Period.

2.   Statement of Work Purpose and Overview

The Tolling Operations Management Solution ("TOMS") is an aggregate of multiple integrated solutions that support the CTRMA transaction to cash lifecycle. TOMS fully or partially automates business processes across several operational domains including Transaction Management, Product Management, Payment Path Management, Discount Management, Billing Management, Data Exchange Management, and Reporting & Analytics Management.

The purpose of this Statement of Work ("SOW") is to define a suite of services necessary to support and maintain the successful daily availability, capacity, and functionality of the integrated TOMS architecture. This SOW is intended to serve as a basis of understanding between CTRMA and a 3rd party service provider ("Vendor") of the services and their respective performance levels ("SLAs").

The Operations & Maintenance Scope of Services is defined Section 3.

2.1.   TERM

The Effective Date of this Contract is October 1, 2023, or the date on which this Contract is fully executed and approved according to applicable laws, rules, and regulations, whichever is later. This Contract terminates on September 30, 2024, unless otherwise terminated or extended in accordance with its terms. The contract allows for optional 10 one-year extension terms based on CTRMA's discretion.

2.2.   General Assumptions

2.2.1.   Support, as referenced in this SOW, does not include Call Center Services.

2.2.2.   Vendor is only responsible for operating systems that are managed by Vendor for TOMS Ecosystem (see Appendix A).

2.2.3.   Vendor technical support for regulatory or compliance audits is limited to providing access to TOMS Ecosystem which may include standing up staging environments and loading instances of current or archived TOMS application, TOMS data schemas, TOMS reporting architecture, and/or historical transaction data. Any additional environment creation requests shall be handled as an Enhancement SOW or Change Request to the TOMS Ecosystem.

2.2.4.   Virus protection is limited to the specific TOMS Ecosystem referenced in this SOW. Vendor is not responsible for end-user system virus protection.

3.   TOMS Support & Maintenance Scope of Services

3.1.   TOMS Ecosystem

Vendor will maintain and operate the TOMS Ecosystem for the period of performance as specified in Section 2.1 - Term.

3.1.1.   Application with its user interfaces, codebase, and above operating systems application components

3.1.2.   Database with its data architecture, data storage, and above operating systems database components

3.1.3.   Data Exchanges (DEXs) with its exchange code, and 3rd party integration points

3.1.4.   Reporting & Analytics architecture with its reporting cache databases, master record integrations, data use governance compliance, reporting data, and related components

3.2.   Maintenance and Operations Services

The maintenance and operations will consist of the following services across all TOMS Ecosystem, unless otherwise specified.

3.2.1.   Manage component administration, availability, performance and if applicable, capacity

3.2.2.   Assist in incident triage as a representative of the TOMS ecosystem per details provided below

3.2.3.   Manage and track component inventory

3.2.4.   Install, maintain, monitor, and provide for the ongoing operation of production, development, and test environment instances

3.2.5.   Manage break/fix services for TOMS ecosystem components Defects

3.2.6.   Maintain, create, and delete user roles that depend on CTRMA IT security processes and tools in accordance with Security Policies and Procedures

3.2.7.   Refresh TOMS components, as required

3.2.8.   Support the development, maintenance, and audit of disaster recovery procedures

3.2.9.   Provide technical support for regulatory and compliance audits

3.2.10.   Manage and maintain virus protection

3.3.   Incident Support & Triage Management

Vendor will provide support for the TOMS Ecosystem. This service covers all break-fix defects for TOMS where SLAs are affected. Typical delivery of these services involves the problem diagnosis, resolution determination and implementation of the solution covering TOMS Ecosystem These include following services –

3.3.1.   Perform 24 * 7 * 365 semi-automated monitoring of all critical TOMS architecture elements that drive availability, capacity, and throughput.

3.3.2.   Serve as a first point of contact and primary stakeholder for incidents identified within the TOMS application, TOMS database, TOMS data exchange, and TOMS reporting & analytics architectures.

3.3.3.   Participate in service request logging, categorization, escalation, and closure of incidents in the CTRMA IT incident management system.

3.3.4.   Conduct triage and analysis for incidents dependent upon, or directly impacting the TOMS application, TOMS database, TOMS data exchange, and TOMS reporting & analytics architectures.

3.3.5.   Identify, communicate, and resolve defects within the TOMS application, TOMS database, TOMS data exchange, and TOMS reporting & analytics architectures, per SLAs.

3.3.6.   Provide notification of problems and service outages to appropriate CTRMA stakeholders, per SLAs.

3.3.7.   Provide and maintain defects analysis and resolution documentation for defects identified within the TOMS application, TOMS database, TOMS data exchange, and TOMS reporting & analytics architectures.

3.3.8.   Administrate TOMS application, TOMS database, TOMS data exchange, TOMS reporting & analytics, and TOMS data backups using CTRMA-defined backup schedule, tools, and approaches.

3.3.9.   Assist CTRMA with TOMS application, TOMS database, TOMS data exchange, TOMS reporting & analytics, and TOMS data recovery from available backups.

3.3.10.   Coordinate with the Cloud Service Provider (CSP) for any TOMS Ecosystem components failures that are attributed to CSP service outages or network issues

3.4.   Out of Scope Services

As such, any services not included in the above list will be considered out of scope. Any system changes or Enhancements to the Accepted Deliverables will need to go through Change Request process based on the cost and schedule impact analysis.

4.   Service Level Agreement (SLA)

4.1.   General Provisions

The vendor shall meet defined levels of performance in the execution of the Scope of Work. The vendor is responsible for demonstrating that the service measurement is met consistently.

4.2.   Service Measurement

Service Measurements are specified in the below Service Measurement tables and includes measurement mechanism. The monthly deliverable fee shall be subject to the monthly assessment of service measurement, as well as other criteria as outlined in the Performance Level tables, and applicable damages for failure to meet such criteria.

    i.   Vendor will not be liable for any non-conformance or failure to meet SLAs or for associated liquidated damages resulting in whole or in part from events, causes, or responsibilities that are outside of Contractor's direct control, including, but not limited to Client's (or its personnel, other Agencies, or other third party contractors) actions or inactions, failure by Client to meet its responsibilities, or as a result of events of force majeure as described in the Contract.

    ii.   In furtherance and not in limitation of paragraph (i) above, planned downtime during maintenance window or unscheduled downtime or delayed responses time resulting from infrastructure **beyond Vendor's control including cloud component service breakdown from Cloud Service Provider** will not be considered as a measured SLA event. Vendor is not accountable for the availability of hardware and software licensed and managed by CTRMA employees or CTRMA Authorized Representatives.

    iii.   For each incident of non-conformance or failure to meet SLA requirements, only one of the applicable SLAs shall be utilized to calculate penalties. The SLA that results in the largest total performance credit shall apply.

    iv.   The maximum aggregate annual amount of any liquidated damages and penalties or performance credits that may be assessed under this Contract is **$175,000 per year.**

4.3.   Service Failures

Service failures include any erroneous behavior of TOMS Ecosystem within the Baseline System. These failures will be logged as Incidents and triaged to determine whether it is a Defect or a new System Requirement or an Enhancement. If it is not a Defect, a Change Request or SOW process will be followed. The Services Failures will be quantified using Service Measurement Requirements defined in Section 4.4.

4.4.   Service Measurement Requirements

Service measurement requirements are specified in the tables for the following:

- Availability
- Maximum Outage
- Average Outage
- Time to Recover

Service Component / Scope	Service Measurement	Performance Credits

TOMS Application Availability
  TOMS Application Code
  TOMS Application User Interfaces (Uis)
  TOMS Application Integration with
    TOMS Data
	Available 24x7x365, >=99% of available time
	Source: Host monitoring systems, Service Center
	  reports and Outage Calculator Output
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

TOMS Application Backup
  TOMS Application Code
  TOMS Application User Interfaces (Uis)
  TOMS Application Integration with
    TOMS Data
	Daily, weekly, monthly, quarterly, and annual backups
	Recovery available 24x7x365, >=99% of available time
	Time to recover < 24 hours
	Scheduled recovery audits
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

TOMS Database Availability
  TOMS Database Tables, Relationships,
    and Schema
  TOMS Database Code
TOMS Data
	Available 24x7x365, >=99% of available time
	Source: Host monitoring systems, Service Center
	  reports and Outage Calculator Output
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

TOMS Database Backup
  TOMS Database Tables, Relationships,
    and Schema
  TOMS Database Code
TOMS Data
	Daily, weekly, monthly, quarterly, and annual backups
	Recovery available 24x7x365, >=99% of available time
	Time to recover < 24 hours
	Scheduled recovery audits
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

TOMS Application Transaction Processing
  TOMS Database Tables, Relationships,
    and Schema
  TOMS Database Code
  TOMS Data
	100% of all transactions must be processed within 4 days of their transaction timestamp subject to a daily maximum of 1,000,000 inbound transactions through RTRAN files or APIs.
	
	A transaction qualifies as "processed "if the transaction has reached its final destination within the DPS Transaction processing workflow.
	
	The transaction processing workflow will be measured independently (not cumulative) based on stages of the workflow within DPS control.
	
	This will not apply in the following cases:
	
	1. Transactions placed on Hold due to an ACTIVE HOLD
	
	2. Transactions whose workflow is manually moved to a different workflow state, particularly to one of the prior statuses
	
	3. Automatic retry of image download which could potentially move transactions from Do not pursue queue back to pricing
	
	4. Transaction stuck in processing state because of cloud service provider incidents
	
	5. Transactions stuck in transient state because of any non-DPS incident
		1. Damages for Lost or uncollectable Transactions: Actual toll revenue
		
		2. Damages for Transactions processed > 4 days and <= 30 days, AND result in revenue generation for CTRMA: 10% of actual toll revenue
		
		3. Damages for transactions older than 30 calendar days: Actual toll revenue
		
		Actual toll revenue will be calculated by considering 100% of AVI and i-Toll transactions, and PBM transactions will be considered using the liquidation rate (to be validated every new fiscal year).
		
		The sum of these damages shall not exceed the monthly maintenance fee amount.

TOMS Data Exchange Availability
  TOMS Data Exchange Architecture
  TOMS Data Exchange Code
	Available 24x7x365, >=99% of available time	Every 1% below the SLA, the vendor shall be subject to liquidated damages in the

Service Component / Scope	Service Measurement	Performance Credits
TOMS Data Exchange Integrations	Source: Host monitoring system, Service Center reports and Outage Calculator Output	amount of 1% of the monthly maintenance fee

TOMS Data Exchange Backup
   TOMS Data Exchange Architecture
   TOMS Data Exchange Code
TOMS Data Exchange Integrations
	Daily, weekly, monthly, quarterly, and annual backups
	Recovery available 24x7x365, >=99% of available time
	Time to recover < 24 hours
	Scheduled recovery audits
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of 1% of the monthly maintenance fee

TOMS Reporting & Analytics Availability
   TOMS Reporting Cache Tables, Relationships, and Schema
   TOMS Reporting Cache Code
TOMS Reporting Cache Reports
	Available 24x7x365, >=99% of available time
	Source: Host monitoring systems, Service Center reports and Outage Calculator Output
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

TOMS Reporting & Analytics Backup
   TOMS Reporting Cache Tables, Relationships, and Schema
   TOMS Reporting Cache Code
   TOMS Reporting Cache Reports
TOMS Reporting Cache Data (TBD)
	Daily, weekly, monthly, quarterly, and annual backups
	Recovery available 24x7x365, >=99% of available time
	Time to recover < 24 hours
	Scheduled recovery audits
		Every 1% below the SLA, the vendor shall be subject to liquidated damages in the amount of $100 of the monthly maintenance fee

Weekly Standup Meeting	Weekly meeting at a mutually agreeable time with documentation and topics to be determined. Suggested topics include: • recap accomplishments and incidences from previous week Plans for the coming week	Weekly Standup Meeting
Monthly Report	Monthly report and meeting at a mutually agreeable time with documentation and topics to be determined. Suggested topics include: • SLA Reporting by Area • Availability, Capacity, Throughput Measures • Count of incidents reported • Count and duration of outages • Estimated hours consumed Past and Planned Maintenance Outages	Monthly Report
Quarterly Performance Retrospective	Quarterly retrospective meeting at a mutually agreeable time with documentation and topics to be determined. Suggested topics include: • Performance to Date Enhancements suggested or planned	Quarterly Performance Retrospective

4.5.   Calculation of Damages

To calculate liquidated damages, details in the Performance Credits column of the following charts shall be calculated and assessed. For example, and without limitation, if availability for TOMS Data Exchange Availability results in a score of 96%, failing to meet the 99% required availability, then the liquidated damages assessed for failure to meet this SLA will be 1% + 1% + 1% (3%) of the monthly maintenance fee. The example below assumes a monthly maintenance fee of $100,000 for illustration purposes.

SLA	Result	Difference	Penalty	Example
99.00%	96%	3% below required SLA	Every 1% below the SLA, damages of 1% of the monthly maintenance fee.	Monthly Maintenance Fee X 3% or $100,000 X 3% = $3,000

4.5.1.   Single Event Causing Cumulative Liquidated Damages
If the vendor can provide to the reasonable satisfaction of CTRMA that a single event causes the vendor to fail to meet more than one SLA, cumulative liquidated damages shall not be imposed. Instead, the highest applicable liquidated damages relative to such occurrence shall apply.

4.5.2.   Calculation of Damages for Consecutive Failures
Recurring and consecutive failure to comply with the SLAs provided in this agreement will result in substantial harm to CTRMA, but damages from such harm are difficult to quantify. Damages will increase for prolonged periods, and therefore for any SLA that is missed for three consecutive months, the liquidated damages for that SLA will be doubled based on the current monthly penalty for each subsequent month where the SLA is missed. The liquidated damages will revert to the original value upon the SLA being met for one month.

For example, for an SLA of 99% with a penalty calculation of "every 1% below the SLA, damages of 1% of the monthly maintenance fee", the following would be the monthly progression. The example below assumes a monthly maintenance fee of $100,000 for illustration purposes.

Month	Result	Difference	Example Calculation	Penalty
Month 1	96%	3% below required SLA	$100,000 X 3% = $3,000	$3,000
Month 2	96%	3% below required SLA	$100,000 X 3% = $3,000	$3,000
Month 3	95%	4% below required SLA	$100,000 X 4% = $4,000	$4,000
Month 4	96%	3% below required SLA	$100,000 X 3% = $3,000 x 2 = $6,000	$6,000
Month 5	95%	4% below required SLA	$100,000 X 4% = $4,000 x 2 = $8,000	$8,000
Month 6	99%	Meets SLA	No Penalty incurred	$0
Month 7	96%	3% below required SLA	$100,000 X 3% = $3,000	$3,000

5.   Enhancements & Change Requests

Enhancements to the Baseline System shall be defined and incorporated into a separate SOW by CTRMA. Vendor shall be responsible for identifying, defining, and conducting any regression testing necessary to transition staged Enhancements into the production environment. This regression testing is in addition to any unit, system, UAT, and/or other testing performed by the contracted enhancement provider. Vendor shall also be responsible for providing the estimate for completing the additional regression testing /certification process for each Enhancement as part of enhancement/release prioritization process. The necessary effort and costs for the testing and certification activities will either be included in the Enhancement SOW or a separate Change Request to O&M SOW.

Once the contracted enhancement Warranty Period has passed, the enhancement features shall become part of the Baseline System and will be supported by Vendor as per the scope of services defined within this agreement. Any changes to the TOMS ecosystem functionality/ scope or any additional performance considerations due to these Enhancements will be documented and SLA agreement will be amended, as required.

For Defects or non-conformities attributed to an Enhancement or Change Order that are identified in the Baseline System after the Warranty Period has expired, Vendor shall work with CTRMA to determine whether an additional Enhancement SOW or Change Request is needed to resolve the concern.

6.   Tolling Operations Support Staff Augmentation

Vendor will provide two optional Tolling Operations Support Staff to assist with the facilitation of the end-to-end business processes managed within the TOMS. These staff will be in addition to the Maintenance and Support Staff Vendor will leverage to provide Services defined in the SOW to conform with the required SLAs.

This role will manage and control all automated transaction pricing, discounting, and billing workflow activities and address incidents that occur within the end-to-end transaction processing lifecycle. This includes the monitoring and support of all inbound and outbound data exchanges between the CTRMA cloud, the Central US Interoperability Hub (CUSIOP), Pay by Mail vendor (PBM), Department of Motor Vehicles (DMV), Public Reporting solutions, and other data and information exchanges with 3rd-party partners or clients.

6.1.   Staffing Process

Vendor will provide qualified candidates for CTRMA consideration. Qualified candidates will be interviewed by CTRMA IT leadership and the CTRMA TOMS Support Lead. Accepted candidates will be required to complete training on the TOMS system and the related CTRMA end-to-end business processes.

Candidates will report directly to CTRMA and will be managed by the CTRMA Transaction Operations Support Lead.

6.2.   Job Responsibilities

- Transaction Processing Operations Support
  - Transaction Processing Workflow

- - - Assigning holds to transactions
    - Assigning "Do Not Process" to transactions
  - Product Management Workflow
  - Discount Management Workflow
    - Veterans Discounts
    - Exempt Vehicle Discounts
  - Billing Management Workflow
  - Product Pricing Management Workflow
  - User Role Management
    - Adding / editing / removing access
    - Password Management
  - Incident Management & Tracking
- Data Exchange Operations Support
  - Central US Interoperability Hub (CUSIOP)
    - File management
    - Processing Stop / Start intervention
    - Reconciliation
  - Pay by Mail Vendor (PBM)
    - File management
    - Processing Stop / Start intervention
    - Reconciliation
  - Roadside Vendor
    - Image processing monitoring
    - File management
    - Processing Stop / Start intervention
    - Reconciliation
  - Public Reporting
    - Administrating access to Public Reporting Cache
    - API Monitoring
  - Coordination with partner agencies
    - Support of enhancements changes / defects related to CUSIOP Hub, PBM, DMV, RMA, and Roadside processing
    - Troubleshooting transaction processing incidents
    - Stop / start processing
- TOMS Performance Monitoring
  - KPI / SLA verification
  - Trend analysis / identifying processing anomalies
  - Coordination with infrastructure group
  - Coordination with application / database support group
- Reporting & Analytics Support
  - Troubleshooting system incidents (ad-hoc queries)
  - Static reports
    - Operations

- Revenue
- System performance / throughput
- Traffic analysis / trends
  - o Researching customer incidents
    - Performing adjustments / dismissals
  - o Public Information Requests
    - Large data extracts / queries
  - o Reconciliation between systems (CUSIOP, Roadside, DMV, and PBM to the Host)
    - Transactions
    - Revenue
  - o Ad-hoc queries / data analysis
    - Business analysis / trends / reports
    - Cost analysis
    - Traffic and revenue data (e.g., large data extracts for T&R consultants)
- Other Responsibilities
  - o Communication
    - Information and Incident notification and escalation
  - o Data Governance
    - Ensuring Policies and Procedures adherence
  - o Compliance
    - SOC II Audit Support
  - o Training & Knowledge Management Support
    - For new TOMS users (expect it to be minimal for CTRMA staff)

6.3.   Education & Experience

Candidates provided by the Vendor must meet the following skills and experience criteria:

- Bachelor's degree (Business Management, Information Systems or equivalent)
- Previous experience in business analysis, transaction processing, workflow management, and/or Tolling
- Familiarity with Google Cloud services, Looker, Postgres DB, and/or Python preferred, but not required
- Strong collaboration and communication skills
- Demonstrated analytical and problem-solving skill

7.   Roles and Responsibilities

The Scope of Work assumes that one vendor will be supporting and maintaining the TOMS / DPS environment. In the event that additional vendors are engaged to support, the Scope of Work may be amended to clarify the roles and responsibilities of the Operations and Management vendor, including but not limited to potential changes to SLAs and penalties.

8.   Deliverables and Pricing

The Monthly Report will be the formal deliverable delivered tentatively at the end of 1st week after completion of a calendar month within the contract Term. The format and content of the Monthly Report will be mutually agreed and will be governed by the Service Measurement Requirements as described in Section 4.4. This deliverable will be tied to the Monthly Payment Milestones.

The below table provides monthly pricing for the 1-Year of O&M services within the contract Term.

Sr. No.	Service Area	Monthly Price
1	Core O&M Services per Scope in Section 3 and SLAs in Section 4	$175,000
2	Optional Staff Augmentation Services per Section 6*	$20,000 - $32,000*

* - Price to vary depending on the experience, skills, and seniority of the Staff Augmentation team member

The payment amount of $175,000 will be invoiced every month based on the defined schedule. This amount will be adjusted for any Performance Credits, Liquidated Damages or Staff Augmentation Services, as needed.

This pricing is subject to and governed by the DBITS terms and conditions as set forth in DBITS # DIR-CPO-4919. CTRMA will purchase any additional required software, hardware, and hosting in support of the agreed upon Scope of Work. All Google Cloud Platform services are available on Texas DIR contract # DIR-TSO-4162, via Google Cloud's exclusive government distributor, Carahsoft Technology Corporation.

APPENDIX A

Supporting References

The following architectural diagrams outline TOMS Ecosystem components that are involved in end-to-end toll transaction processing. It further categorizes components that are covered by the Scope of Services in this SOW and the ones that are outside the control of the Vendor.

Data Exchanges

Kapsch Roadside Vendor
(XML - Toll Transaction)

ETC Roadside Vendor
(API - Toll Transaction)

CUSIOP
(XML/CSV - Toll Transaction & LVL/TVL)

Pay By Mail
(XML - Toll Transaction)

Data Management & Storage

Ingestion

Batch

Real-time

Event Management & Scheduler

Apigee API Platform   Partner Interconnect   Cloud VPN

Cloud Storage   Cloud Functions   Cloud Run   Data Fusion

Processing

Data Quality & Validation

Data Transformation

Data Exchange & Scheduler

Cloud Storage   Cloud Functions   Cloud Run   Data Fusion

Storage

Transaction Data

Reference Data

Data, Log & Images Files

Analytical Data

Deidentified Data cache

Cloud SQL   Cloud Storage   Big Query

Data Consumption

App Engine

Application User Interface

Internal Reporting

Reports

Dashboards

Self-service Analytics

Looker

Public Access

Audit Balance Control and Monitoring

Cloud SQL   Cloud Console   Logging

External Systems managed / controlled by 3rd parties and outside of Vendor Scope of Services

Underlying DPS / TOMS Infrastructure including Operating System as managed / controlled by Google Cloud Provider

DPS / TOMS Components including related system interfaces and codebase across environments are managed by Deloitte

DIR Vendor Agreement

This is to signify that the Central Texas Regional Mobility Authority and Deloitte Consulting LLP Corporation have entered into an Agreement **in an amount not to exceed $2,100,000** pursuant to Texas Government Code Section 2054.0565 utilizing Texas Department of Information Resources Contract No. #DIR-CPO-4919 for the deliverable-based information technology services described in this proposal. All terms and conditions of Texas Department of Information Resources Contract No. #DIR-CPO-4919 are applicable to and made part of this agreement.

DELOITTE CONSULTING LLP

**CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY**

Uday Katira, Managing Director
Deloitte Consulting LLP

James Bass
Executive Director

Date

Date

Public Records Act Agreement

Contractor acknowledges and agrees that all records, documents, drawings, plans, specifications and other materials in the Authority's possession, including materials submitted by Contractor, are subject to the provisions of the Texas Public Information Act (see Texas Government Code § 552.001). Contractor shall be solely responsible for all determinations made by it under such law, and for clearly and prominently marking each and every page or sheet of materials with "Trade Secret" or "Confidential", as it determines to be appropriate. Contractor is advised to contact legal counsel concerning such law and its application to Contractor.

If any of the materials submitted by the Contractor to the Authority are clearly and prominently labeled "Trade Secret" or "Confidential" by Contractor, the Authority will endeavor to advise Contractor of any request for the disclosure of such materials prior to making any such disclosure. Under no circumstances, however, will the Authority be responsible or liable to Contractor or any other person for the disclosure of any such labeled materials, whether the disclosure is required by law, or court order, or occurs through inadvertence, mistake or negligence on the part of the Authority or its officers, employees, contractors or consultants.

In the event of litigation concerning the disclosure of any material marked by Contractor as "Trade Secret" or "Confidential," the Authority's sole obligation will be as a stakeholder retaining the material until otherwise ordered by a court, and Contractor shall be fully responsible for otherwise prosecuting or defending any action concerning the materials at its sole cost and risk; provided, however, that the Authority reserves the right, in its sole discretion, to intervene or participate in the litigation in such manner as it deems necessary or desirable. All costs and fees, including reasonable attorneys' fees and costs, incurred by the Authority in connection with any litigation, proceeding or request for disclosure shall be reimbursed and paid by Contractor.

DELOITTE CONSULTING LLP
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

_____
Uday Katira, Managing Director
Deloitte Consulting LLP

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James Bass
Executive Director

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Date

_____
Date