CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY

AUSTIN, TEXAS

CONTRACT MODIFICATION

1. CONTRACT NO: 200778 Data Warehouse and Business Intelligence Solution Implementation (DW/BI Implementation)	2. CONTRACT MODIFICATION NO.: 8	3. EFFECTIVE DATE OF C.M. See Block 9	4. CONTRACTOR NAME: California Creative Solutions, dba CCS Global Tech

5. AGREEMENT TO MODIFY CONTRACT:

The parties hereto agree to modify the Contract identified in Block 1, above, as described in Block 10, below, pursuant to the terms and conditions of the Contract. Except as modified herein, all other provisions of the Contract (including, but not limited to, price, delivery, and completion date) remain unchanged.

6. AMOUNT OF THIS CONTRACT MODIFICATION: NO CHANGE

CURRENT CONTRACT AMOUNT: $3,915,935.20

7. TERM OR PERIOD OF PERFORMANCE: NO CHANGE

CURRENT TERM THROUGH: 07/31/2025

8. CONTRACTOR'S EXECUTION:

Name & Title: Raminder Singh, President & CEO
(print or type)

Signature: *RSingh*

Date Executed: November 06, 2024

9. CAPMETRO'S EXECUTION:

Name & Title: Sean Wighaman, Contracts Administrator
(print or type)

Signature: _____

Date Executed: _____

10. DESCRIPTION OF CONTRACT MODIFICATION: This modification is made in accordance with Exhibit E-Revised-3, Section 20, CHANGES, and makes the following change to the Contract for all pertinent purposes:

1. Refer to EXHIBIT F-1-REVISED-2, SCOPE OF SERVICES – COMPLIANCE MATRIX, INSTRUCTIONS, GENERAL REQUIREMENTS & APPENDICES A – F. Exhibit F-1-Revised-1 shall be replaced in its entirety with **Exhibit F-1-Revised-3**, attached hereto and made a part hereof for all pertinent purposes, for changes in Section 18. System Support - System Implementer.

2. Refer to Exhibit E-Revised-3, CONTRACTUAL TERMS AND CONDITIONS. Exhibit E-Revised-3 is hereby replaced in its entirety with **Exhibit E-Revised-4,** attached hereto and made a part hereof for all pertinent purposes, for changes in Section 18. Performance Bond.

The amount stated above is the final contract modification amount agreed to by both parties. Upon receipt of payments totaling this amount, the Contractor, for itself, its successors and assigns will release, acquit and forever discharge Capital Metropolitan Transportation Authority (CapMetro) from and against any claims, debts, demands, or cause of action which the Contractor has or may have had a result of furnishing labor, supplies, or materials for the change order stated above. This modification may be executed in multiple originals, and an executed facsimile or email copy shall have the same force and effect as the original document.

[END OF MODIFICATION #8]

INSTRUCTIONS

🏛 METRO — ITS2009 - Data Warehouse and Business Intelligence Implementation

Exhibit F

Exhibit F contains the following Appendices. Some Appendices require a response, while others are for reference purposes to help proposers prepare a response.
1. General Requirements - For each Compliance Term, select "C-Comply," "N-Cannot Comply," or "A-Will Comply with Alternative." If "N" or "A" are selected, comments are required; however, Capital Metro strongly recommends that comments be added for each item.
2. Appendix A: Technical and Functional Requirements for Required Technology - Please provide a response to each item. Additional instructions are provided within the Appendix.
3. Appendix B: Non-functional requirements for required technology - Please provide a response to each item. Additional instructions are provided within the Appendix.
4. Appendix C: Technical and Functional Requirements for Optional Technology
5. Appendix D: Project Phase Requirements - For reference/informational purposes
6. Appendix E: Statistics - For reference/informational purposes
7. Appendix F: List of systems - For reference/informational purposes
Additional Instructions:
1. The vendor must deliver a complete Data Warehouse and Business Intelligence solution encompassing all hardware, software, license, and service requirements to make the solution fully functional
2. The requirements in the Scope of Services and Compliance Matrix are functional in nature and do not encompass all requirements. The vendor shall determine the design and technical configuration needed based on business requirements. Vendor shall document and discuss said needs with CapMetro and implement the agreed-upon solution accordingly.
3. The vendor must deliver all Compliance Terms unless it is within a section marked "Optional" that is not exercised by CapMetro or CapMetro agrees to an alternative.

🏛 METRO — ITS2009 - Data Warehouse and Business Intelligence Implementation

1. General Requirements

Overview

1.01 CapMetro is seeking System Integrators (SI) who can implement a cloud-based holistic Data Warehouse and Business Intelligence solution (DW/BI) system, with a proven track record in data and analytics and experience in the public transit industry. CapMetro's preference is for a complete set of purpose-built tools that native connect, and has identified required and optional technology for the DW/BI solution. The detailed expected functionality of each of these areas is included in Appendix A and C, with additional technology-vendor focused questions in appendix B. The most important goals and expectations of a new data warehouse and business intelligence solution are to:
— Business Enablement: Enable the business to unlock insights to drive strategic priorities, improve operational efficiency, control, and monitoring
— Centralized Source of Truth: Harmonize and connect CapMetro's disparate data assets and break down data silos and enhance accessibility and availability of data
— Enhanced Analytics Capabilities: Leverage state-of-the-art technology to equip the business with the tools to extract insights
— Cost Reduction and Decreased Time To Insight: through automation of data extraction and transformation improve bottom-line impacts and provide more timely access to data. Minimize time and effort associated with maintenance of the DW/BI solution
— Scalability and Flexibility: Move to a robust and modern cloud-based infrastructure enabling CapMetro to handle new data volumes and requirements as CapMetro grows and expands its services. CapMetro is expected to grow and expand its services, specifically because of Project Connect

#	Compliance Term	Comply	Vendor Comments+D9:D10	CapMetro Response
2	**Project Approach - Project Management**			
2.1	The vendor shall provide a robust project management team and project management plan to support the implementation of the Data Warehouse and Business Intelligence System. The vendor's plan for managing the project shall clearly demonstrate an allocation of qualified project management resources with the ability and experience to ensure that system design and implementation will be coordinated appropriately and managed and completed on schedule and within budget. The vendor shall provide tools to manage tasks, schedule, risk, change, and the other items listed in this section that are required to manage the project.	Yes	The CCS team's project management team not only includes PMI verified project managers but also senior and season's staff who are innovative in their approach and can identify issues or risks as they arise. Project frameworks and tools are only as good as the people using them. We take a collaborative project approach where the project team members as well as the client are actively engaged in the project management process. We will use a Disciplined Agile approach along with EPPM tools to track tasks, schedule, quality/defects, risk, etc. . The benefit of using a EPPM is that project performance metrics can easily be communicated to project members and CapMetro stakeholders. Budget tracking reports will be developed to meet CapMetro's needs.	
2.2	The vendor's proposed Project Manager (PM) must be approved by CapMetro, the PM is required to have a PMP certification with good standing, and CapMetro prefers the PM to have prior experience in the public transportation sector and in implementing a DW/BI solution.	Yes	Stacey Berlow is the selected project manager for this project. She is a PMP and ACP certified PMI project manager and Scrum Master She has been working as a technical project manager over seeing engineering and software development projects for over 25 years. During her tenure, she has run many data centric and DWH projects and understands the complexities of running these kinds of projects.	
2.3	The Contractor shall comply with all requirements of "Appendix D Project Phase Requirements" which define project management requirements	Yes	The DWH project will comply with the software lifecycle outlined in Appendix D. There will be an overarching plan and within that plan we will deliver the DWH components in an agile fashion; as each data source is pulled into the DWH and there are visualizations tested and available for business users, they will be published. This allows CapMetro business users to gain the benefit of the deliverables as early as possible.	
3	**Project Approach - Project Management**			
3.1	The vendor shall assign a project manager who has a PMP certification from the Project Management Institute, who will be responsible for managing the Consultant's project team for the successful development, testing and implementation of the System.	Yes	Stacey Berlow will be the project manager. She is PMP certified in good standing. She is also	
3.2	The vendor should have extensive experience with Agile project management methodologies and should use an agile approach to the development phases of the project. The vendor shall carry out the following activities including, but not limited to: - Conduct daily project stand up meetings - Maintain a project backlog - Conduct sprint planning sessions, prioritization of requirements - Development carried out in sprints - Test each sprint release - Conduct post sprint learning sessions	Yes	The project team uses an agile approach for all its projects. And the team members understand agile software processes. In addition to the activities outlined in 3.2B, The CCS team will work with the CapMetro product manager to prioritize the backlog to optimized business value. We will address risk areas early to reduce overall risk and optimize productivity. We will use tools such as MS Project's sprint planning board and road map tool to visualize and manage sprint activities and plan sprint release horizons. Furthermore, it's important to get customer feedback at each iteration, which we will plan for and solicit.	
3.3	The vendor shall submit a comprehensive Project Management Plan (PMP) following Notice to Proceed (NTP) that details at a minimum project organization; master schedule; and how the vendor will manage project scope, cost, risk, quality, project changes, safety, and other key aspects of the project.	Yes	A comprehensive project plan will be produced shortly after the project kick-off workshop and initial scoping. The plan will include all of the planning exhibits needed to outline a full plan. We will work with CapMetro to optimize the plan and gain consensus. We will address any gaps or questions identified by CapMetro team members.	

3.4	The Project Management Plan (PMP) will include but is not limited to the following elements: • Organization chart identifying key project personnel and contact information. • Master schedule, identifying key project milestones and activities in Microsoft Projects format. • Schedule for all project design and development elements that require CapMetro approval. • Project meetings and schedule for recurring meetings. • Methodology to control project schedule, scope, cost, and risk. • Risk management plan and risk register, including identified project risks and actions required to mitigate them. • Transition and change management processes and procedures. • Quality assurance processes and procedures to confirm that the requirements of the contract are being met. • Subcontractor management and communications. • Document naming conventions and Action Items and Issues List (AIL) control processes and procedures, including version and traceability controls. • Change management plan and procedures for all deliverables and subsequent revisions. • Cost management. • Communication Plan. CapMetro prefers an agile way of working during implementation.	Yes	The plan will cover traditional project controls such as schedule and scope, quality, communications and risk. Quality assurance processes will be planned from an overall project perspective as well as a software development perspective. Change management plan, procedures and templates will be specified. The DWH development will be iterative in nature. The project plan will describe in detail how project activities will be managed in an agile framework; the expected number of sprints; how sprint reviews will be conducted; how adjustments to work load in a sprint will be done/approved. The project management plan will include the tools that will be to help facilitate the project management and communications.
3.5	Review and analyze overall progress during implementation. Update the master schedule regularly, to include current information regarding progress of the project and contracts. Identify areas of concern and provide input on corrective action plans as necessary.	Yes	The master project schedule (programming and testing activities) along with completed deliverables will be updated on a bi-monthly basis. As part of the weekly project reports, we will track project risks and issues. Progress reports will be available through Teams, emailed and/or through the EPPM, as per CapMetro's preferences. Where corrective action requires discussion with CapMetro, we will either raise issues at weekly team meetings or convene a separate meeting.
3.6	Maintain the project budget through project cost loading in Microsoft Project in the EPPM tool. Ensure that the cost loading maintains alignment with the budget, or request transfers if needed during weekly schedule updates. Review and respond to requests for budget reforecasts. Review and report on forecasts and variance information. Provide, implement and follow up on corrective/control measures where required. Incorporate any cost or scope changes in budget, with supporting documentation on reasons for revisions and approvals.	Yes	We will leverage MS Project's budget tracking capabilities, to load budget expenses and compare with actuals. The budget will be followed on a monthly basis and matched with deliverables. The budget tracking reports will be included in monthly project reports.
3.7	Vendor will work together with Oversight partner on all project work related to the DWBI solution implementation. Oversight partner will manage the project on behalf of CapMetro	Yes	The CCS team will include CapMetro's Oversight Partner in all communications. As specified by CapMetro, we will include the Oversight Partner in various approval processes.
3.8	Lead daily standup and weekly project progress review meetings and other related meetings with the project management team. Prepare the meeting agenda, supporting materials and minutes of each meeting for CapMetro review and approval. The meeting minutes will include agreed upon action items, assignments and due dates.	Yes	Daily standup meetings will be done using Teams Meetings and will be convened first thing in the morning, Central Time. Project progress review meetings will be done combined remotely and in person, as per the CapMetro team's requirement. We suggest that meeting agenda will be made available through Teams OneNote before the meeting and meeting notes also documented through teams. However, meeting agenda and notes can be saved to any location that works best for CapMetro.
3.9	Participate in/conduct project presentations, project reports and briefings on a periodic basis and lead other regulatory and stakeholder meetings with CapMetro and contractors.	Yes	We expect that on a quarterly basis and when requested, the CCS team will convene a stakeholder project performance/status meeting. These meetings will also serve to announce planned deliverables and to coordinate any other major IT projects that may be going on at CapMetro.
3.10	Prepare and submit monthly reporting and invoices to CapMetro in the format prescribed by CapMetro. The reports should be comprehensive and include information on deliverables, accomplishments, important meetings, current issues relating to the projects, including interfaces, budgets and schedules, proposed resolutions to mitigate the issues, and other project management issues.	Yes	A standard report template will be developed that covers the activities and deliverables, schedule, meetings, and issues that took place in the prior month. We will use this template to provide consistent documented reporting on a monthly basis along with our invoices.
3.11	Work with the Director of the IT Project Management Office in providing capital budget requests, reports, expenses, and reforecasts (CAPEX). Work with the CIO and IT Executive Assistant to identify and report on monthly operating budget expenses (OPEX). The CIO and Director interface with Finance for budget requirements. Most System expenditures are CAPEX, but training expenses and all travel expenses are OPEX and must be budgeted and tracked accordingly. The Consultant will update Microsoft Project cost loading and process Change Requests through the EPPM tool for any budget transfers that may be required.	Yes	The project manager will work with CapMetro CIO and IT Executive Assistant to update, review and forecast both CAPEX and OPEX expenditures on an as needed and/or scheduled basis.
3.12	Regularly monitor the budget to determine if there are enough funds to allow project completion and assist in identifying and undertaking actions to address any deficiencies.	Yes	The budget will be reviewed on a monthly basis and compared with scheduled deliverables. Any mismatch between funds and deliverables will be highlighted and addressed.
3.13	Assist Oversight partner in updating the Microsoft Project cost loading weekly and report the financial plan as required to address funding, cost and contract administration issues, including change requests and contract modifications.	Yes	The CCS team will assist CapMetro's Oversight Partner in loading costing information on a weekly and monthly basis as well as loading any changes as a result of change requests or contract modifications.
3.14	Provide technical support in establishing and implementing a project cost accounting structure.	Yes	The CCS team will provide a project cost accounting structure for CapMetro to review. We will make adjustments or additions to the structure as per CapMetro's or CapMetro's Oversight Partner's request.
3.15	Provide assistance with regular financial analyses of the project, including tracking encumbrances, allocations and expenditures; and analyzing, preparing and maintaining current and projected cash flow requirements for the project.	Yes	As part of the monthly budget and deliverables review, we anticipate tracking and reviewing all types of expenditures and any issues around procurement or cash flow.
3.16	Assist in developing up-to-date operating and maintenance costs of the project.	Yes	The CCS team will provide information and projected costs for operating and maintenance costs for hosting, software licenses, and human resources as well as for ongoing training and support.
4	**Project Approach - Quality Assurance**		
4.1	The vendor shall assist in the development a QA/QC protocol that will set the minimum standards for all design, development and implementation activities associated with the program. Establish and maintain design control procedures to control and verify the design and design changes and ensure they are in line with the design criteria and project requirements.	Yes	The CCS team takes quality seriously for all activities and deliverables. The QA/QC protocols and processes will be documented as part of the quality plan. Depending on the activity, there will be different quality validations and verification requirements. Furthermore, the quality checks may likely be done by different project stakeholders. An important aspect of QA/QC is tracking project changes. We will follow ITIL's change management process as outlined in the ITIL service management protocol. These changes may be around scope, schedule, business rules, design, etc. We will take care to document changes through well organized documentation and where needed formal change requests with approvals from CapMetro.
4.2	The vendor shall assist the project team in performing reviews of QA/QC programs proposed by the project design teams to ensure these meets or exceed minimum program QA/QC protocols and CapMetro requirements.	Yes	Project deliverables, whether documents, code or software features will be reviewed in an on going basis and tracked as a specific activity. Defects will be tracked through a defect tracking system and open to CapMetro and CapMetro's oversight partner for review.

4.3	The vendor shall work together with CapMetro and implementation oversight partner in design and development activities related to implementation of the adopted QA/QC protocol. Identify areas needing improvement, recommend corrective action plans and provide oversight to ensure compliance.	Yes	The CCS team will work with CapMetro and their Oversight Parter to review and adjust where needed, the QA/QC protocol and testing plan. During the design and development phases, we will share testing results and solicit feeback for areas of improvement.
5	**Project Approach - Design and Development**		
5.1	The vendor shall develop an Installation and Transition Plan that will describe detailed installation and configuration of the data warehouse and business intelligence system, and any required interfaces, and web applications, and their respective schedules.	Yes	The CCS team will provide technical documenation and training for all areas of the data warehouse and business intelligence system. We will work closely with the CapMetro staff to provide a smooth handoff of responsiblities, so that they can oversee the system independently.
5.2	The vendor shall follow a defined quality change control and testing process (e.g. ITIL Service Management) with established baselines, testing and release standards which focus on system availability, confidentiality and integrity of systems and services.	Yes	We will follow ITIL Change Enablement process for work items that require a formal change request, for changes that impact the scope, schedule or deliverables, in a material way. Other, less impactful changes, yet important, will be discussed and approved/not approved and documented at weekly check point meetings with CapMetro. A test plan will be developed that outlines what will be tested, how the work will be tested, when it will able tested and who will test it. Different tests are needed for different kinds of deliverables. DWH testing requires a great level of detail to verify that data coming in from source systems are process correctly and then displayed as per requirements. We will use a set of tools to help with this kind of testing.
5.3	The vendor shall provide a defined change control process and workflow for making configuration or other related changes after Go Live. This includes a process of promotion from Development, to Test, to Production environments.	Yes	The promotion process from Dev to QA to Production will be documented and shared with CapMetro. Importantly, we expect that updates will be made to Production throughout the project. Following ITIL:s Service Request Management process, a Service Request will be will be created and approved by resources managing the production server environment, with a scheduled deployment plan and date. This plan will include how to back out of a deployment, should the deployment be unsuccessful.
5.4	The vendor may need to lead issue resolution analyses to support preliminary design efforts. These "deep dives" will focus on challenging design and/or data extraction issues. In these instances, the vendor may self-perform technical analysis. These resolutions will be incorporated into each project design task.	Yes	If issues arise that are deemed to have a significant impact on design, scope, schedule or deliverables, The CCS team will hold internal meetings to review and propose solutions. These options will be documented and shared with CapMetro at weekly check point meetings. When needed we will include CapMetro and CapMetro's oversight partner to participate and weigh in on any decisions that are made and may impact the project.
5.5	The vendor shall perform preliminary design and configuration efforts and develop a scope of work for each Data Model and associated reporting needs to complete planning, preliminary design, configuration and system documentation requirements.	Yes	As part of the kick off activities, all of the phase A, B and C data sources will be reviewed and an overall multi dimensional design documented. This initial design step will assure that all of the dimensions have been identified and if there are any gaps or issues handling the data. As per a prioritized schedule, each data source will be modeled with a data dictionary, including ETL rules, business rules, data visualization and reporting rules and display design. Scheduled data refresh and other system configuration will be documented.
5.6	Upon finalizing and preliminary approval of specific design task, the vendor shall lead all design efforts. All tasks should be entered and timely updated in EPPM Project Action Items List (AIL).	Yes	The CCS team will lead all design steps and documentation. These tasks will be documented as part of the overall project schedule and entered into the EPPM tool.
5.7	The vendor shall develop procedures to ensure proper design criteria are used which are approved by the right CapMetro stakeholders. Ensure close communication of any changes to project design criteria or details so that any approved changes are implemented consistently.	Yes	As part of the kick off activities and communication planning, we will identify stakeholders that should/must be involved with review and approval and create a RACI chart. Following this guidance, we will ensure that the right CapMetro stakeholders are involved with the review and approval with the different parts of the design, from the source data through to the dashboards and visualizations.
5.8	The vendor shall work with implementation oversight team to provide input into design requirements and concepts as they relate to the anticipated operation and maintenance of the system.	Yes	We will be sure to include the CapMetro oversight partner/team in the review and approval of the system design and for each component.
5.9	The vendor shall conduct design reviews with all applicable data owners at appropriate stages of the preliminary design as determined by Project team. Tabulate review comments in a spreadsheet format and follow up with applicable data owners on any comments requiring clarification. Incorporate each review comment approved by Project team into a final review document to be incorporated into the design plan. Prepare and obtain stakeholder signatures on Acceptance Certificates for Design elements.	Yes	It's critical that all stakeholders review the design to help identify gaps, whether from the data source perspective, through to the DWH multi-dimensional model and the dashboards and visualizations. We will identify who must be part of the design review during the kick off phase and meet with groups or individuals to review the design details. If issues are identified or changes are requested, we will make the appropriate adjustments. Once updates are finalized we will collect signatures on Acceptance Certificates for Design. These acceptance certificates will be shared with the CapMetro core DWH team before development work commences.
5.10	The vendor shall organize independent design reviews of design submittal packages to ensure that design intent is properly implemented, project scope is accurately represented in contracts and QA/QC plans are effective.	Yes	Although the HUB Provider team will do the design, that design and architecture would be independently validated and verified by CCS design team.
5.11	The vendor shall provide support for coordination with other projects to ensure consistency of design efforts and required elements are being undertaken on schedule.	Yes	We understand that the DWH project will not be the only IT project in progress at the organization. Furthermore, coordination with other stakeholders will be required in order to pull data from different source systems. The CCS team will support the coordination with other project.
6	**Project Approach - Testing: General Requirements**		
6.1	The vendor shall provide all labor and materials required for system testing, including but not limited to unit testing, performance testing, security testing, system integration and end to end testing.	Yes	With the exception of acceptance testing, all other testing will be done by the CCS team. Any tools used during the testing process will be covered by the project contract.
6.2	Before starting all formal testing activities that are to be witnessed and approved by CapMetro, the vendor shall conduct "dry-run" testing to identify and resolve any issues and avoid unexpected results during the formal testing.	Yes	CapMetro will not be invited to test any part of the system until it has been fully tested by the CCS team. Full integration testing will be done, tracing data coming from source systems through to data visualizations will be performed by the testing team. However, CapMetro may be given a demonstration at weekly meetings or end of sprint iterations to solicit feedback. CapMetro is welcome to test/review unfinished work, should they wish.
6.3	The vendor shall provide CapMetro with scripts to define test cases for CapMetro to carry out.	Yes	Manual and automated test cases/scripts will be documented and shared with CapMetro.

6.4	The vendor shall provide a methodology for providing the production-like size and variety of test data for the purposes of testing.	Yes	Testing would begin as each component is developed (dimension & fact tables). Testing would be applied to all dimension data and a subset of the fact table data initially followed by a larger historical set of the fact data thereafter. As to a methodology-testing upon the completion of each component via SQL queries, pivot tables, source and target comparisons, and the creation of the required PowerBI reports to ensure data accuracy during the entire development procedure	
7	**Project Approach - Testing: Test Documentation**			
7.1	The vendor shall submit a draft Test Plan for CapMetro review and approval during design review and shall submit a final inspection and test plan to be used in connection with all tests described in this specification before the start of any testing.		A test plan will be developed during the design phase. This will describe the testing approach for all testing activities, the kinds of tests, testing tools, the testing process, defect tracking, etc. This will be submitted for approval by CapMetro. If any adjustments are needed, the plan will be updated at this time. As the data dictionary, business rules, ETL rules and dashboards and visualizations are determined for each data source, an annex to the overall test plan will be added, that is specific to the data source or in integration testing required for comprehensive verification and validation of the new component. Furthermore, components such as the meta data manager and exceptions manager will also be tested and retested as new data sources are added into the system.	
7.2	The Test Plan will include a testing timeline, objectives, and success criteria for functional, system integration, UAT and end to end testing. The Test Plan will also include resource assignments (Vendor and CMTA) and defect resolution processes.	Yes	The test plan will be comprehensive and include test objectives; how each component will be tested; who will test it; testing sequence and overall timeline; as well as UAT test criteria and success criteria.	
7.3	Detailed test procedures will include mapping to the design documents and the requirements in the SOW that are related to the test.	Yes	A traceability mapping from design and data dictionaries will be provided as part of the test procedures. Integration testing will assure that overall objectives of the DWH have met and the system work efficiently and effectively with accurate data.	
8	**Project Approach - Testing: FUT (Functional Unit Test)**			
8.1	The Vendor shall support CapMetro in completing functional tests for the Data Warehouse and Business Intelligence demonstrating and verifying all functions described in these specifications and design documents.	Yes	Functional testing will be preformed, following approved design and specifications document. Functional test check lists will be developed for regression testing. Automated test scripts will be written for ETL and other functional components that will not change substantially so that a regression test harness can be built up over the course of the project.	
8.2	Successful completion of the development of the technical DW/BI solution (such as data pipelines, dashboards) in the test environment are prerequisites for the commencement of FUT.	Yes	As components are developed, they will be unit tested by developers in the QA environment. This gives the developer the opportunity to integrate his/her code and verify that ETL, business rules, exception traps and dashboards are working correctly. Once completed, the feature or component will be handed off to the test team for data accuracy and functional testing.	
9	**Project Approach - Testing: ETE (End to End Testing)**			
9.1	The vendor shall work with CapMetro and the project team to develop end to end test scenarios (ETE). The ETE scenarios shall encompass functionality covered in the FUTs, but should also include novel scenarios focused on holistic business processes. The vendor shall develop scripts to support ETE scenario execution in the test environment, including data reconciliation and reporting.		We will work closely with CapMetro to understand and document business centric test cases. These test cases will form the basis of the user acceptance testing cases. The test team will work to test a wide variety of scenarios and look to edge cases to find issues at system boundaries. The inputs and expected outputs will be documented. Defects will be documented and assigned to the	
9.2	Successful completion of the development of the technical DW/BI solution (such as data pipelines, dashboards) in the test environment and successful completion of the FUT are prerequisites for the commencement of End to End Testing.		As components are built, completed and integrated into the system on QA, they will be tested at the data level and functionally tested. Any defects found at this juncture will be documented and assigned to the appropriate developer for fixing.	
10	**Project Approach - Testing: SIT (System Integration Test)**			
10.1	For SIT, the test system will be provisioned with test data simulating the system's databases under full operational load. Full operational load will be defined in the SIT test procedure, and approved by CapMetro prior to commencement of SIT.	Yes	Where possible, we will use actual data feeds for take snapshots of actual data sources to use for system integration testing. We will fully load the system and run all scheduled data refresh scripts. We will verify that the performance is within specification and all data feeds are running as expected. Traceability testing will be performance to verify that data is coming to the system correctly, processed and displayed correctly. We will leverage the business scenarios to verify user acceptance testing criteria are satisfied.	
10.2	The vendor shall conduct data transmission testing during SIT to demonstrate, exercise, and verify transaction processing and data uploads and interfaces from all modules and outside systems. Vendor shall confirm proper integrations and interfaces between all systems.	Yes	All schedule data feeds and transmissions will be tested, with specific use cases to verify that data has been transformed and moved correctly as well as via adhoc data queries and inspection.	
10.3	SIT will include database accuracy testing, which will demonstrate the accuracy between the AUT (application under test) and the data warehouse in which archived data is stored. The testing should also demonstrate atomicity, consistency, isolation and durability of the database.	Yes	We will perform source data comparisons between source, stage and DWH. We will test for ACID to ensure data transactions are processed reliably; We will check that db commits finish an entire operation successfully or the db will roll back to its prior state; that any change maintains data integrity; that read or write actions do not impact other read/write transactions; and that successful commits survive permanently and are not affected by db failures. Testing for ACID will entail setting up testing and failure scenarios and observing the results.	
10.4	SIT will include a full system audit and settlement test, which will demonstrate the flow of all data through the system with the appropriate reporting, accounting, and calculations demonstrated.	Yes	As part of the requirements verification phase, we will enumerate a deliverables list. This list will be referred to at this full system audit and settlement test. The CCS team may lead this test/demonstration process or CapMetro with their Oversite Partner may run through the system on their own.	
10.5	With successful completion and approval of SIT, all software and configuration files will be "frozen," and Vendor will make no changes without CapMetro authorization.	Yes	All files will be frozen after a successful and approved SIT.	
11	**Project Approach - Testing: ST (Security and Access Testing)**			
11.1	For ST, the vendor shall conduct testing of user access and roles within the data warehouse and business intelligence solution as well as external penetration testing. ST will leverage defined user IDs and criteria approved by CapMetro.	Yes	As part of the requirements phase we will enumerate all of the different user roles and access rights required from administering the systems through to public access. We will test the data available and functional features for all of the different roles to verify access and data availability.	
11.2	Vendor shall conduct ST to a level sufficient enough to confirm user access to modules, screens, transaction codes, reports, and display/edit rights.	Yes	As part of each component test and then as part of the full end to end testing, we will verify that access rights hold for data and features throughout the system. Any issues will be reported and fixed.	
11.3	The vendor shall design and execute a test plan to assess the vulnerability of the Data Warehouse and Business Intelligence system to unauthorized access (internal and external) and system mitigation efforts.		A test plan will be developed during the design phase. Areas to be tested include:
Dependency testing - any custom applications that make use of third party components will have those components assessed against known CVEs. Security and access control modules will be tested and assessed. Client side testing - custom applications will be tested for invalid input such as escape characters, long strings, script injection, error handling, invalid input values. Network design vulnerabilities - All systems to be tested for unsecured ports, insecure accounts. General access control and authorization features including user management, authentication, data confidentiality, audit, encryption of data at rest and in transit, POLP. Automated vulnerability scanner testing will be performed regularly with intruder.io. Test results will be documented including: Features which were tested, vulnerabilities found and remedied, Test cases executed, overall conclusion of the security of the system.	
12	**Project Approach - Testing: UAT (User Acceptance Test)**			

12.1	UAT will be conducted for each functional component of the DW/BI solution and comprises a period of time where prospective users can validate solutions developed (such as a Dashboard). User findings will be documented, scheduled for resolution and communicated back for user confirmation		For each deliverable and during weekly check points and monthly review meetings, there will demonstrations and informal opportunities for CapMetro to provide feedback. Defects and changes will be documented and may be acted upon or put into the backlog. Furthermore, there will formal UAT sessions conducted where feedback and acceptance testing will be documented. If there are defects, they will be fixed and resolution communicated. If changes outside of the agreed upon scope is requested, the request will go into the backlog for future prioritization.	
13	**Project Approach - Testing: Final System Acceptance**			
13.1	The vendor shall submit a request for Final System Acceptance upon successful completion of testing and the determination that all work has been completed per this Scope of Work and final design.		When the system has been fully tested; stakeholders have reviewed and provided feedback; defects have been addressed; and the system is working to requirements, we will then submit a formal request for Final System Acceptance.	
13.2	CapMetro may grant Final System Acceptance only when: • The UAT has been successfully completed and approved by CapMetro. • All system modules, interfaces, and integrations are delivered, installed, and operational. • All data imports and software, including all required reports, are installed and fully functional. • All requisite contract deliverables have been delivered to CapMetro and accepted. • All required training has been provided and accepted by CapMetro. • All required intellectual property has been delivered to CapMetro or the escrow agent. • Final resolutions to all identified critical issues (as classified by the Test Failure Log Review Board) are fully implemented and accepted by CapMetro. CapMetro will issue written certification upon approval of Vendor's request for Final System Acceptance.		A check list will be provided enumerating all deliverables, documentation generated, testing completed, acceptance testing, defect fixing completed and budget tracking, stakeholder sign-offs, and any other project documentation that CapMetro requires to demonstrate that the system has been delivered to specification. Using this checklist, CapMetro may perform a final sign off.	
14	**Project Approach - Training**			
14.1	Vendor shall provide a comprehensive program to educate and train personnel in all details of the System, enabling them to properly operate, service, and maintain the system and each of its components throughout its useful life. Training will include, but is not limited to formal 'classroom' training, tailored training to people's roles, and knowledge transfer)	Yes	The CCS team will work with CapMetro to understand the most effective way to deliver classroom training and ongoing knowledge transfer, tailored to their roles. We envision technical training for the IT team, system administration training for designated business users who will oversee meta data and data exceptions and end user training for business users.	
14.2	Vendor shall develop and submit to the project team for review and approval a Training Plan that documents the design of the program for training personnel and each course to be delivered.		A training plan outlining the type of training and knowledge transfer, the type delivery format, the frequency of training and timing and training documentation/leave-behinds.	
14.4	The Training Plan will include a schedule for delivery of the training courses. The schedule will consider the sequence of training, hours of instruction, system readiness and proximity to startup, trainee availability, and venue for the training. This will be done together with an internal resource.	Yes	The CCS team will work with CapMetro to determine the most appropriate training and coordination.	
14.5	The vendor shall provide all necessary training materials and equipment for the delivery of each course discussed in the Training Plan. Training documentation will be separate from the operation and maintenance manuals but may reference them. Recordings of the training shall be provided by The vendor.	Yes	The CCS team will deliver a set of re-usable course materials. We will work with CapMetro to determine the best location to save/host the documents for easy access by CapMetro staff.	
15	**System Design & Architecture - Common Design Requirements and Guidelines**			
15.1	The vendor shall provide a cloud based Software as a Service (SaaS) system that is scalable to meet the growing needs of CapMetro. The Data Warehouse and Business Intelligence system should be designed such that it can handle future increases in transactional volume and increased service.	Yes	Ed / Foden to help here. The CCS team will build a system that can be accessed via the web and hosted in the cloud. Scalability, performance and reliability will be a key design requirement for the host hardware and the multi-dimension DWH design. Foden comment-scaling up as required is big benefit to Azure (I see scalability was mentioned already)	
15.2	The vendor shall provide a cloud based system meeting CapMetro's requirement to accommodate future system upgrades, patches, and fixes that are rolled out centrally by the Data Warehouse and Business Intelligence software provider.	Yes	The overall solution proposed is cloud native, highly flexible and interoperable and built primarily from popular, tried and tested PaaS / SaaS components from reputable vendors. There will be very little custom code or scripting other than workload specific code and a data exceptions management application. All custom scripts and code will be well documented and stored in an online repository accessible by Capital Metro staff. Capital Metro will be the owner of any bespoke components developed, able to upgrade and migrate these components at will..	
15.3	The vendor shall present solution design documents for all discrete components of the Data Warehouse and Business Intelligence system for review and approval by CapMetro		All design documents will be shared for approval as they are generated and per the schedule. The schedule includes time for CapMetro to review, request updates and approval design documentation.	
16	**System Design & Architecture - Accessibility and ADA Compliance**			
16.1	Vendor shall design the System to be compliant with current accessibility standards, laws, and regulations to ensure that the System meets or exceeds the Americans with Disabilities Act (ADA) and accessibility requirements of federal, Texas State and Austin regional governments. Vendor shall ensure compliance of all equipment and system interfaces and create an Accessibility Compliance Plan to document compliance. This plan will be used throughout design and implementation to ascertain that all accessibility and ADA requirements will be met and to track compliance.		The CCS team will be working with accessibility experts from the Texas School for the Blind and Visually Impaired community and the American Foundation for the Blind to identify individuals in Austin or other organization to be part of testing team. These individuals are knowledgeable about user interface design to meet the needs of the visually impaired and blind and to be WCAG 2.0 compliant.	
16.2	COMPLIES WITH WCAG 2.0 AA ACCESSIBILITY STANDARDS AND MEETS ALL FOUR SUCCESS CRITERIA.: - All screens are compatible with assistive technologies including screen readers and screen magnification - Screens make proper use of forms mode, include alt tags on all data collection boxes and image fields, and metadata read back is strictly limited. - Properly labelled images and proper use of alt tags is required. - The ability to navigate pages, utilize functionality and traverse layouts without a mouse is required. - Users of assistive technology shall have ways to skip redundant navigation. - Correct headings and labelling structures for pages, forms and data tables. - Readable content with sufficient contrast ratios and font sizing. - Contractor shall provide information about user testing with people with disabilities and the results of such testing. - Software solution shall be compatible will all applicable standards and/regulations regarding accessible information technology resources and (IRIT). In cases where there is conflict between standards the most stringent standard shall be applicable. - Any proposed mobile solution shall likewise comply with WCAG 2.0 AA standards		The CCS team has prior experience designing user interfaces with accessibility standards in mind. For this project, we will take special care with the dashboards and visualizations to include comprehensive tagging and to select a color palette that works for color blind and visually impaired individuals. We will have accessibly testing specialists on the team who will test with assistive technologies, and verify that minimum standards are met.	
17	**System Design & Architecture - Code and Regulation Compliance**			

17.1	Vendor shall design the System to be compliant with relevant standards, laws, and regulations to ensure that the System: • Presents no safety hazards for customers and CapMetro employees. • Will withstand the rigors of the environments in which the equipment will be installed, and the public use to which it will be subjected. • Provides for the secure storage and transmittal of data. • Is designed using state-of-the-art methods to maximize quality. • Satisfies federal, state, and other requirements for ergonomics and usability. Applicable codes, laws, ordinances, statutes, standards, rules, and regulations include, but are not limited to the list below (in 3.1.4-2). The latest revisions in effect at the time of Final System Acceptance will apply.	Yes	The system will be designed and built with the most modern/up-to-date security protocols. We will work with CapMetro to review relevant laws so that the team does not miss any that we are not aware of.	
17.2	• Americans with Disabilities Act (ADA) • Advanced Encryption Standard • ANSI X9.24, Financial Services Retail Key Management • ISO/IEC 8583 – Financial transaction card originated messages • Payment Card Industry Data Security Standards (PCI-DSS) • Payment Card Industry Payment Application Data Security Standards (PA-DSS) • World Wide Web Consortium, Mobile Web Application Best Practices • Web Content Accessibility Guidelines WCAG 2.0	Yes	The CCSI team is familiar with many of the laws and guidelines called out in 17.2. We will review documentation for any we are not familiar with and make sure they have been taken into account. Where required, we will document compliance.	
17.3	In the case of conflict between the provisions of codes, laws, ordinances, statutes, standards, rules, and regulations, the more stringent requirement will apply.	Yes	If conflict in codes, laws, guideline etc. are detected, the CCS team will discuss with CapMetro and agree on which guideline/standard should be followed.	
18	**System Support - System Implementer**			
18.1	Provide Post ongoing development Support, upon implementation, to CapMetro staff by phone and email for the software system components the system implementer developed, configured or installed as part of this project. Contractor agrees that onsite field engineering support and onsite presence may be required by CapMetro at any time during the term of the contract. 24x7x365 - Tech support within 15 minutes of contact **Support Model :** 12 x 5 x 52. 12 hours a day, 5 days a week (M-F). Additonal 12 consulting hours per week are availble. The definitaion and scope of the "consulting" is covered in section 18.2 Severity Level and associated times are provided in column E Severity Level and Examples of Issues impacting the system **1 – Blocker** • Issues that prohibit significant percentage (more than 50%) of end users, from logging on to the system. • System failure that prevents all users from completing their tasks in the system because they cannot access all or most functionalities in the system • Failure of any software component that is part of the system If a "1 - Blocker" event occurs outside of the 12x5x52 established hours then the vendor will provide a "hotline" number to be used to engage the appropriate technical resources for resolution. **2 - Major** • Issues that prohibit the multiple end users – greater than 15% of end users, from logging on to the system. • Significant dashboard and reporting inaccuracies due to new errors or the system behaving differently to the way in which it normally behaves at the start of this support contract. • Failure of integration. **3 - Medium** • Non-financial or non-operational reporting inaccuracies • Existing data export process fails to execute • Inability to use certain feature which doesn't prohibit the user from using the tool in general **4 – Minor**	Yes	During these uncertain Covid times, we strongly recommend the use of off-site support. CCS has the necessary experience and resourcing capabilities to meet this requirement. During the project phase some members of the team can be onsite, provided that the members of the CapMetro team are on-site.	Severity Level and associated times 1 – Blocker Acknowledgement Time:1 Business Hour Target Workaround Time: 8 Business Hours Target Resolution Time: 48 Business Hours 2 – Major Acknowledgement Time: 2 Business Hours Target Workaround Time: 24 Business Hours Target Resolution Time: 4 Business Days 3 – Medium Acknowledgement Time: 4 Business Hours Target Workaround Time: 3 Business Days Target Resolution Time: 6 Business Days 4 – Minor Acknowledgement Time: 1 Business Days Target Workaround Time: 5 Days Target Resolution Time: 14 Business Days Acknowledgement Time: The time period in which Contractor is required to respond to Client Point of Contact with an acknowledgement of receipt and a ticket number for the reported issue and for a Severity 1-Blocker issue that they are starting to investigate issue. Target Workaround Time: The amount of time in which
	• Minor calculations errors, cosmetic defects • Feature functions but fails on data variation. For Blocker severity level issues, Contractor shall provide Client regular updates every three business hour until a Workaround has been provided. All issues are handled during normal business hours. 8 a.m. to 5 p.m. 6:00 AM to 6:00 PM Central Time, Monday-Friday, excluding U.S. National Holidays.	Yes	During these uncertain Covid times, we strongly recommend the use of off-site support. CCS has the necessary experience and resourcing capabilities to meet this requirement. During the project phase some members of the team can be onsite, provided that the members of the CapMetro team are on-site.	Contractor will use commercially reasonable efforts to provide a workaround starting from the time the issue was reported. If a workaround is not available, Contractor will create a plan with Client input to minimize impact to business. Target Resolution Time: The amount of time in which Contractor will use commercially reasonable efforts to provide a resolution ready to be validated in test by client starting from the time the issue was reported

18.2 **Product Support**
The system implementor will act as the liaison between CapMetro and technology vendors including, but not limited to, the software and hosting service/product suppliers for the technology used in the solution.

Consulting Definition
Consulting is defined as providing technical guidance and insight for CapMetro personnel as they continue to evolve the design of the EDAP. Guidance will be provided to CapMetro personnel to develop and implement ETL (Extract, Transform, Load) processes for integrating data from current and future data sources. In addition, CCS will provide feedback on documents developed by CapMetro personnel including detailed technical and functional requirements, warehouse architecture, including data models, schemas, and storage solutions, provide oversite on appropriate technologies and tools for the data warehouse (e.g., databases, ETL tools, BI tools) and review detailed design documents for the data warehouse and ETL processes. CCS will also provide guidance on test plan documents and procedures. Data warehouse optimization is included although is limited to existing EDAP workloads which were developed and deployed as part of work done/deliverd during Base period.

Development work is included in the consulting definitions assuming that development work is performed on known data sources and workloads from work done/deliverd during Base period, including work as follows:
1)Developing or executing ETL pipelines, Self-Service Models, Dashboards, etc,,
2)Developing or executing test plans,

Consulting does not include any of the following nature of work directly carried over by CCS : However, CCS will provide review and oversight services for the following nature of work:
1)Architecture design,
2)Gathering requirements,
3)Developing design documents,
4)Optimizing the data warehouse beyond workloads developed and deployed as part of work done/deliverd during Base period.

Consulting hours are not to exceed per week and are the cumulative total hours for all identified consulting roles. Identified consulting Roles included are: Executive Sponsor, Director – Cloud and Data Solutions, Program Manager, Enterprise Architect, Data Warehouse Architect, Data Engineer, Business Analyst.

If hours are unused in a specific week, they will be carried over to a future period, with a maximum of 300 accrued hours. However, if the total available hours fall below 300 hours, then support hours start to accumulate again until the total available accrued is 300 hours. In the event CapMetro has accrued more than 12 hours and has a need for hours beyond 12 hours in a given week, then no single CCS team member shall expend more than 10% of their time against the accrued hours.

If CapMetro requires support that is a consulting definition exception, then CapMetro and CCS will use commercially reasonable efforts to review the exception and the parties may agree to execute the exception assuming the path forward is mutually beneficial.

18.3 RACI Matrix

S. No	MIM Measures	CCS Support Team	CapMetro Team	Source Systems	Product Support	
1	Monitoring Production Pipelines	R A	C I			
2	Fix Issues Pipeline issues within EDAP Control	R A	C I			
3	Resolving Source Issues in Pipeline	R	C I	A		R = Responsible: executes the task
4	Updating the KnowledgeBase based on New Issues	R A C	I			
5	Circulate Information regarding any Planned / scheduled maintenance which may Impact the Overall EDAP Support In any means	I C	R A			
6	Establish Internal Bridge and engage relevant parties for initial triage for any Major Issue	R A	C I			A = Accountable: accountable for final result
7	Issue Resolution caused by Product Team (MS/SnowFlake etc.)	C	I		R A	
8	Depending on incident activity, participate in appropriate incident service restoration activities	R A	C I			
9	Utilize CapMetro Service Management tools for Incident Management tracking	R A	C I			C = Consulted: consulted about the task to provide additional information
10	Implement service request	R A	C I			
11	Develop Service Request documentation steps	R A	C I			
12	Change Management Process Approval	C I	R A			I = Informed: needs to be kept up-to-date on activities/tasks.
13	Provide change and release management documentation as required for in-scope Service Areas	R A	C I			
14	Develop Execution/deployment plans with concerned teams for all in-scope Service Area releases	R A	C I			
15	Implement Execution/deployment plans	R A	C I			
16	Ensure change and release management Services processes are consistent across all environments (e.g., development, test and production)	R A	C I			
17	Modify and update systems and documentation impacted by implemented changes	R A	C I			
18	Verify that the change met objectives and required Validation after the change implementation	R A	C I			
1	Open Incident Tickets	List of open Incident Tickets by priority and aging.		Weekly	Report on SharePoint Portal	
2	Monthly Ticket Report	A monthly report of all tickets (SRs,		Monthly	Report in excel format	
3	Architectural Consulting	Need if Architecture consulting and High		Monthly	Power Point Presentations	
4	Service Review	Operations performance, Key metrices		Weekly	Power Point Presentations	

METRO — ITS2009 - Data Warehouse and Business Intelligence Implementation

2. Appendix A - Required Technical and Functional Requirements

#	Category	Requirement	Comply	Vendor Comments	CapMetro Notes
1	**Instructions**				
1.01		CapMetro is looking for a set of technology recommendations for the requested Data Warehouse and Business Intelligence solution. This appendix contains technical and functional requirements and/or questions for the required technology in scope of this RFP (see below for details). CapMetro has collected a high-level set of functional and technical requirements, which it has grouped together. CapMetro encourages responses that do not solely describe whether the solution addresses a requirement, but also how your solution does so. Either through expanding on the functionality and/or providing an example.			
1.02		The required technologies in this RFP are:			
2	**Reporting and Analytics**				
2.01	Reporting and Analytics	Provides basic, intermediate, and advanced visualization capabilities for dashboards, canned reports and ad-hoc analysis, charts and similar functionalities (e.g., table, bar charts, heatmaps, boxplots, time series, forecasting)	Yes	The proposed dimensional model will require no additional modelling within Power BI and should satisfy all required business questions by incorporating the necessary dimensions and measures. Querying can be performed ad-hoc from within the Snowflake interface and PowerBI.	
2.02	Reporting and Analytics	Supports various Geospatial data formats and transformation as well as advanced map visualizations and supports map-based functionalities	Yes	BridgePoint and GroupPoint (see dimensional model) will allow spatial analysis of collected GPS points and various intervals. These points are tied to a particular trip. Native support for geospatial data types is embedded in Snowflake. Esri ArcGIS Maps for PowerBI supports geospatial analysis within PowerBI.	
2.03	Reporting and Analytics	Natively Support Geospatial Data Formats and Map-based Visualization: - Natively support Geospatial data storage types - Support the ability to display Geospatial data on an interactive map - Desired but not required, support the ability to integrate with Esri ArcGIS Enterprise	Yes	Native support for geospatial data types is embedded in Snowflake. Esri ArcGIS Maps for PowerBI supports geospatial analysis within PowerBI.	
2.04	Reporting and Analytics	Provides ability for users to filter and drill-down and interact with dashboards and reports developed in a user-friendly manner (e.g., excluding data, cascading filters, drilldown, zoom/pan, etc.)	Yes	Drill down functionality can be specified within PowerBI or a MDX cube in order to supply row level detail. PowerBI provides interactive graphics with click to filter / drill down.	
2.05	Reporting and Analytics	Supports self-service within a user-friendly environment. Solution allows users to analyze with code-free "drag and drop" visual tools to enable non-technical personnel to analyze data	Yes	A dimensional model is easy to utilize and understand while being well described within a data dictionary. PowerBI incorporates user-friendly, self-service, drag-and-drop visualizations	
2.06	Reporting and Analytics	Provide a semantic layer for modeling	Yes	This dimensional schema is simplistic which benefits business users in understanding and navigating the data. Attributes are so named in order to remove any ambiguity that may have possibly arisen from a source table	
2.07	Reporting and Analytics	Supports public or embedded reporting – embedding visual components and functionality within public web pages and applications	Yes	PowerBI allows embedding output components into public pages, exporting to images or sharing via email.	
2.08	Reporting and Analytics	Provides functionality to improve and tweak reporting performance (e.g., in-memory/caching/extracts for improved performance)	Yes	Snowflake was designed for simplicity, separating query workloads using Elastic Parallel Processing, allowing complex query workloads and data science operations to be run against the same data without contention for resources. Cache optimization techniques, ability to scale up the warehouse size temporarily for large workloads, ability to scale out temporarily and tune using data clustering. See here for more: https://dzone.com/articles/snowflake-performance-tuning-top-5-best-practices	
2.09	Reporting and Analytics	Provides the ability to access reports and dashboards through mobile application (e.g., Tablet, Smartphone). Please specify which OS are supported (e.g., Windows, Apple iOS)	Yes	iOS, Android, and Windows are supported for PowerBI output with native apps for iOS and Android and browser support for Windows.	
2.10	Reporting and Analytics	Supports real-time reporting for specific use-cases	Yes	Realtime and batch ingestion is supported (Realtime: Snowpipe, Event Hubs / Kafka. Batch: Data factory)	
2.11	Reporting and Analytics	Supports customization of look-and-feel of reports by changing charts, colors, fonts and font sizes, etc.	Yes	PowerBI reports will be branded and with Capital Metro color themes and images and can be customized to support disabled users.	
2.12	Reporting and Analytics	Supports option to function as source for CapMetro's monthly board presentations	Yes	From a high level dashboard and report point of view this is possible. If further operational reports are required then additional reports not specified will need to be created.	
2.13	Reporting and Analytics	Supports all common browsers (IE, Edge, Google Chrome, Firefox, Safari, etc.)	Yes	The latest version of IE, Edge, Google Chrome, Firefox and Safari will be supported.	
2.14	Reporting and Analytics	Describe key differentiators for recommended business intelligence solution when compared to most important competitors	Yes	A correctly modelled solution is easily understood, maintained and used for reporting & analytical purposes. Any source system complexities are removed in the dimensional model design with measures being denormalized for analytical application consumption. Microsoft PowerBI features custom visualizations, Interactive dashboards, Caching for quick retrieval of output, Power Pivot - a flexible pivot table with ability to perform complex calculations and combine different data sets, Power Query allows ad-hoc data integration from external sources for querying and visualization, Esri ArcGIS integration for complex spatial analysis, Active Directory integration for secure access control, Easy integration to external software via API.	
3	**Advanced and Spatial Analytics**				
3.01	Advanced and Spatial Analytics	Provides advanced analytics capabilities (descriptive, predictive, prescriptive, data mining, text mining, machine learning, etc.) Please describe functions available out-of-the-box and skillsets required to work with recommended technology	Yes	Snowflake incorporates a native Azure Databricks interface for advanced analytics. Azure Databricks offers three environments for developing data intensive applications: Databricks SQL, Databricks Data Science & Engineering, and Databricks Machine Learning. An understanding of SQL, advanced analytics techniques, machine learning algorithms and framework(s) such as Pytorch, TensorFlow and sci-kit is required to implement solutions using Databricks Azure Machine Learning Studio is a drag-and-drop machine learning model development tool (web based Software as a Service). An understanding machine learning algorithms and their application is a requirement (Scalable boosted decision trees, Bayesian Recommendation systems, Deep Neural Networks and Decision Jungles, etc.).	
3.02	Advanced and Spatial Analytics	Supports complex long-range financial planning capability complex, such as: Planned service increase, long-term forecast effect against project revenue, cost modeling, forecasting, what-if analysis.	Yes	This can be achieved using Azure databricks or Azure Machine learning studio.	
3.03	Advanced and Spatial Analytics	Supports various Geospatial data formats and transformations, diverse map-based analyses and functionality.	Yes	Snowflake natively supports storage, retrieval and transformation of spatial data. Esri ArcGIS for Power BI enables advanced spatial visualizations and analysis within Power BI.	
3.04	Advanced and Spatial Analytics	Describe key differentiators for recommended advanced and spatial analytics solution when compared to most important competitors	Yes	A vast variety of map styles available for visualizations. Geocoding capabilities (converting addresses to geographic locations) are built in. Heat maps, cluster aggregation, determine drive time, access to data such as demographics and content curated by Esri and partners (income, population, weather and more). Embedded into Power BI. Support for multiple layers.	
4	**Data Integration and Management**				
4.01	Data Integration and Management	Provides enterprise-level orchestration and management capabilities (manage process sequencing, dependencies, triggers, failures, etc.)	Yes	Azure Data factory allows for correct process sequencing and dependency evaluation. Failure alerts will be set up at various points in the ETL chain. Various triggers can be setup in order to sense specific source events which then trigger required ETL events thereafter	
4.02	Data Integration and Management	Provides logging, monitoring, alerting, DQA (data quality assurance)	Yes	Additional audit exception processes to be created specifically to monitor DWH vs source data counts and data matches	
4.03	Data Integration and Management	Provides graphical UI to support development and maintenance activities of data processing	Yes	Azure Data factory has an intuitive GUI.	
4.04	Data Integration and Management	Supports batch and real-time data ingestion	Yes	Via Snowpipe (blob / file ingestion) or Azure Event Hub (multiple data types and sources).	
4.05	Data Integration and Management	Supports ETL and ELT data processing	Yes	Azure Data factory is designed for this purpose	
4.06	Data Integration and Management	Supports complex data transformations and functions	Yes	Azure Data factory is designed for this purpose	
4.07	Data Integration and Management	Supports connection to various source types and internal and external data sources (DBs, files, Web APIs, Data Lake, FTP, Webhooks, etc.)	Yes	Azure Data factory and Azure Event Hub are designed for this purpose	
4.08	Data Integration and Management	Supports processing of various data formats (Flat Files, Excel, XML, JSON, Geospatial, Parquet, etc.) including within Data Lake.	Yes	Using Snowpipe, Azure Event Hub and Azure Data factory, all these formats are supported.	
4.09	Data Integration and Management	Provides ability to purge or destroy specific data after a set amount of time or based on a specific request	Yes	Snowflake and Azure data factory incorporate scheduling or on-demand execution of SQL instructions for data destruction	
4.10	Data Integration and Management	Describe key differentiators for recommended data integration/ETL/ELT solution when compared to most important competitors	Yes	Azure Data Factory is a highly scalable, increased agility and cloud based solution which caters for a large set of source data required for ingestion. Utilizing Azure Data factory allows for resource scalability and uptime	
5	**Data Warehouse/Lake**				
5.01	Data Warehouse/Lake	Solution is scalable in storage and computing power for supporting CapMetro's growing data volumes, processing need, # of users, and other business needs	Yes	Snowflake allows for resource scaling. Scaling can be applied at specific times such as pipeline execution times allowing for DTU's to be increased and then decreased upon completion.	
5.02	Data Warehouse/Lake	Supports of various data types (Structured, Semi-Structured; Numeric, String, Binary, Json, Geospatial)	Yes	Snowflake supports all those formats.	
5.03	Data Warehouse/Lake	Provides ANSI-SQL capabilities including advanced analytical functions (Window functions, Geospatial functions)	Yes	Supported by Snowflake. Snowflake provides over 40 geospatial functions to analyze geography spatial data. Window functions are also supported by Snowflake	
5.04	Data Warehouse/Lake	Provides advanced permission and access models	Yes	Snowflake is highly flexible for permissions and access: https://docs.snowflake.com/en/user-guide/security-access-control-privileges.html	
5.05	Data Warehouse/Lake	Requires low maintenance and management (software upgrades, DBA tasks, data backups, etc.)	Yes	Snowflake SaaS requires no server maintenance. Performance tuning comprises the majority of maintenance and can be automated if required. Automated backups (Time travel) are included.	
5.06	Data Warehouse/Lake	Supports easy and secure data sharing with CapMetro's service providers (contractors, vendors), city and state partnerships, and federal authorities.	Yes	Snowflake and Data Factory allow various methods for sharing data securely including automated exports and a Rest API.	
5.07	Data Warehouse/Lake	Supports (near) real-time data processing as part of an overall reporting or advanced analytics use-case	Yes	Yes, workloads run on independent clustered computing resources, accelerating performance significantly.	
5.08	Data Warehouse/Lake	Provides pay-for-what-you-use option	Yes	Snowflake costing is based on a pay-per-use model: https://www.snowflake.com/pricing/	
5.09	Data Warehouse/Lake	Describe the solution's ability to track and monitor usage of resources	Yes	Snowflake offers granular usage monitoring and tracking with this data being available via the SQL interface. An interesting blog article on this feature is available here: https://medium.com/@jryan999/monitoring-snowflake-usage-f47da3a41a2d	
5.10	Data Warehouse/Lake	Describe the hosting options available	Yes	Snowflake can be hosted on Microsoft Azure, Amazon AWS and Google Cloud	
5.11	Data Warehouse/Lake	Provides ability to support long-term storage and archival of data without impacting solution performance	Yes	Snowflake is designed for managing petabyte sized tables in a high-performance clustered warehouse.	
5.12	Data Warehouse/Lake	Describe key differentiators for recommended Data Warehouse/Lake solution when compared to most important competitors	Yes	Snowflake is an easy to implement, scalable data warehouse as a service solution. There is no infrastructure or operating system to manage. Snowflake supports structured and semi-structured data types as well as spatial data types. Semi-structured and structured data can be queried together using SQL. Snowflake's unique architecture allows semi-structured data to be queried without sacrificing performance. Ability to clone data is built in, very useful for testing, without incurring additional costs. Ability to scale is virtually unlimited. Decoupled storage and compute functions mean each can be scaled independently rather than together to meet specific client requirements. Cloud services include query parsing and optimization, metadata management, infrastructure management and authentication / access control. Distribution across availability zones means continuous operation in the event of data center outages.	
6	**Hosting**				

6.01	Hosting	Describe solution's hosting capabilities in broad terms including redundancy/failover, disaster recovery, networking and physical security controls.	Yes	Georedundancy is available across Azure applications to guarantee uptime in the event of any data center being offline. Storage is replicated across redundancy zones. Snowflake offers failover / failback in Business Critical or higher editions. Azure virtual networks provide segmented access to resources. Network security groups, application security groups and managed firewall are available to control access to applications and resources. Azure employs a multi-layered approach to physical security including perimeter fencing, security officers, locked server racks, integrated alarm systems, around-the-clock video surveillance by the operations center, and multi-factor access control. Only required personnel are authorized to access Microsoft datacenters. Logical access to Microsoft 365 infrastructure, including customer data, is prohibited from within Microsoft datacenters.	
6.02	Hosting	Describe solution's hosting options with respect to geographic location of data	Yes	Snowflake on Azure is available in the US in Washington, Iowa and Virginia. The Virginia region is located in Microsoft Azure Government - a dedicated cloud for US government agencies and their partners, operated only by screened US citizens.	
6.03	Hosting	Describe the solution's ability to track and monitor usage of resources	Yes	Azure Monitor provides comprehensive monitoring services to assist with maximizing resource use. It collects and presents telemetry from various services for analysis and action. Detect and diagnose issues across applications and dependencies with Application Insights. Correlate infrastructure issues with VM insights and Container insights. Drill into your monitoring data with Log Analytics for troubleshooting and deep diagnostics. Support operations at scale with smart alerts and automated actions. Create visualizations with Azure dashboards and workbooks. Collect data from monitored resources using Azure Monitor Metrics.	
7	**Accessibility**				
7.01	Accessibility	Reporting and the entire data warehouse needs to be accessible and if it is web-based, comply with WCAG 2.0 AA standards for web accessibility. Any proposed mobile solution shall likewise comply with WCAG 2.0 AA standards	Yes	The CCS team will be working with experts at the Texas Schools for the Blind and Visually Impaired to engage experts who will be on our testing throughout the development of the data warehouse and visualizations to ensure that the user interface complies with the WCAG 2.0 standards. There will be special focus on the dashboards for CapMetro and the public and the data management application that handles data exceptions.	
7.02	Accessibility	Technical assistance resources and training shall be part of the functional requirements. Accessibility features are not likely to be native to the solution. Development shall include accessibility at the beginning of the process and throughout the life cycle of the system to ensure accessibility is maintained and can continues to comply with future WCAG/508 standards over time.	Yes	The CCS team expects to be trained by individuals who are highly knowledgeable about accessibility standards and who will show us how to use the tools that are used by blind and visually impaired people as well as user interface accessibility evaluation tools, such as WAVE. Accessibility will e baked into the UI from the start of the project. This approach will reduce rework of the user interface later in the project.	
8	**Security and Infrastructure**				
8.01	Security and Infrastructure	Solution provides single sign on (SSO) capabilities through integration with AD/LDAP or other authentication options	Yes	Active Directory SSO is integrated into Snowflake and Microsoft Azure.	
8.02	Security and Infrastructure	Solution provides capability to provision users and restrict access by roles and responsibility and/or through AD groups	Yes	Granular control for Active Directory resource access is integrated into Snowflake and Microsoft Azure.	
8.03	Security and Infrastructure	Describe solution stack's audit trail functionality	Yes	Azure provides multiple logs for resource access: https://docs.microsoft.com/en-us/azure/security/fundamentals/log-audit. Snowflake provides query history for 7 days by default which can be written to a log table to be kept indefinitely (see this blog post: https://docs.microsoft.com/en-us/azure/security/fundamentals/log-audit). The same can be achieved for session history based on the login history functions (see here: https://docs.snowflake.com/en/sql-reference/functions/login_history.html) Azure data factory natively supports pipeline monitoring and logging with many metrics to choose from, see here: https://www.youtube.com/watch?v=UC__LOyuf8M Azure Event Hubs natively supports monitoring and logging, see: https://docs.microsoft.com/en-us/azure/event-hubs/monitor-event-hubs-reference The proposed data management application will support audit trails including record creation timestamp and user, record deletion timestamp and user, record update timestamp and user. Audit logging is a native feature of Azure Databricks, see here: https://docs.databricks.com/administration-guide/account-settings/audit-logs.html Azure Machine Learning Studio includes native audit trail capabilities, more details here: https://towardsdatascience.com/how-to-troubleshoot-your-azure-data-science-project-in-production-5382b66cbaf9 Power BI has audit log facilities: https://docs.microsoft.com/en-us/power-bi/admin/service-admin-auditing	
8.04	Security and Infrastructure	Describe ability to perform actions such as data masking to ensure data privacy policies are properly administered	Yes	Data masking is a feature of Snowflake where granular access to sensitive data can be assigned to authorized staff only. Data can be encrypted prior to storage in Snowflake.	
8.05	Security and Infrastructure	Describe your proposed solution stack's functionality and procedures for backup and recovery	Yes	Snowflake incorporates automated continuous data protection in the form of fail-safe (historic backups) and Time Travel which allows accessing historic data at any point within a defined period. Both are included as standard with up to 90 days Time Travel backups being available in the Enterprise Edition of Snowflake. Retention periods can be specified for objects. Restoring deleted objects using time travel is as easy as using the UNDROP statement for any table, schema or database. Restoring a table at any point in time involves using the AT or BEFORE clause to specify the time to restore the table at (or before) along with the CLONE statement to create a clone of the table at a point in time supported by time travel. In addition, Snowflake provides SQL extensions to create snapshots of system objects (tables, etc.) - this can be used to create your own on-demand backups of objects. See more on time travel here: https://docs.snowflake.com/en/user-guide/data-time-travel.html See more on fail-safe here: https://docs.snowflake.com/en/user-guide/data-failsafe.html See more on cloning tables here: https://docs.snowflake.com/en/user-guide/tables-storage-considerations.html#label-cloning-tables Data factory supports use of Github or Azure devops for keeping copies of workflows and associated scripts. It also supports export of workflows for backup.	
8.06	Security and Infrastructure	Describe how your architecture supports high availability and failover as well as the expected system availability (uptime) and if scheduled maintenance impacts uptime detail what the expected impact this is and how (promptly) this is communicated	Yes	Snowflake: Snowflake provides standard failover protection across three availability zones (including the primary active zone). Data is replicated across availability zones automatically. See here: https://www.snowflake.com/blog/how-to-make-data-protection-and-high-availability-for-analytics-fast-and-easy/ For data factory, data is stored and replicated in a paired region to protect against metadata loss. During regional datacenter failures, Microsoft may initiate a regional failover of your Azure Data Factory instance. In most cases, no action is required on your part. When the Microsoft-managed failover has completed, you will be able to access your Azure Data Factory in the failover region. Source control ensures that projects are stored independently of their deployments, either using Github or Azure devops in case of corruption for any reason. For Power BI (SaaS), Microsoft offers 99.9% SLA. Power BI offers availability zones to protect from data center failures. Failed over Power BI instances support read-only access in general until the primary data center issue is resolved. More details on Power BI high availability here: https://docs.microsoft.com/en-us/power-bi/admin/service-admin-failover	
8.07	Security and Infrastructure	Describe any other relevant overall solution security functionality not mentioned above	Yes	Principles of least privilege (POLP) will be applied wherever applicable where accounts are only given privileges required to complete their tasks. By limiting access to resources, POLP mitigates risks in a cyber event. Project staff will use dedicated virtual machine environments to sandbox all interactions with sensitive client systems and mitigate risk when using our own equipment. Project staff will have 2 factor authentication enabled for Azure portal access.	
8.08	Security and Infrastructure	Provides automatic provisioning for users (for all tools)	Yes	We will leverage the features in Active Directory for Automatic provisioning to identify the roles in the cloud applications that user have access to.	
8.09	Security and Infrastructure	Provides integration version control (such as pre-built GIT integration)	Yes	Databricks, Data factory, Event Hubs, Machine Learning Studio and Snowflake all support Azure Devops for integrated version control (Git).	
8.10	Security and Infrastructure	Describe solution's ability to provide user based permissions to data access	Yes	Snowflake implements granular role based access control. More details here: https://docs.snowflake.com/en/user-guide/security-access-control-overview.html All azure products (Data factory, Databricks, Event Hubs, Machine Learning studio, Power BI all support granular access via Active Directory.	
9	**Manual Data Entry/Intervention**				
9.01	Manual Data Entry/Intervention	Solution provides a mechanism to manually upload data (which cannot be automatically collected from sources)	Yes	Azure Data factory allows for manual uploads from over 90 sources with the option to execute a Built-in copy task or a Meta-driven copy task. Snowflake uses Snowpipe to automatically ingest files via Azure blob storage. Azure storage explorer can be used to upload files for integration.	
9.02	Manual Data Entry/Intervention	Solution provides a mechanism to manually intervene in processes and datasets (cataloging, adding comments, flagging, approval for publication).	Yes	The data/exceptions manager will apply data quality business rules for uploaded data and reject data that does not meet specification data entered through webforms will have field level data validation rules and the use of select and multi select lists, will be provided to aid the user in entering quality data.	
10	**Compatibility**				
10.01	Compatibility	The entire solution stack should connect natively	Yes	The tools offered cover an large number of data sources and methods of integration. We don't foresee any compatibility issues whatsoever. The Azure platform was chosen primarily for compatibility of solution components.	
10.02	Compatibility	Describe solution stack's compatibility with common analytics tools and open-source technologies such as Excel, Python/R, etc.	Yes	Data Factory has native connectors for Excel as well as Python (using Azure Batch). Azure Machine Learning Studio supports open machine learning frameworks including MLflow, Kubeflow, ONNX, PyTorch, TensorFlow, Python, and R. Snowflake has a native connector for Python, .Net, Kafka, Spark, Node.js, JDBC, ODBC, PHP PDO. Power BI desktop supports python and R scripting, excel data sources. Databricks supports Excel, Python, Scala, R, Java, and SQL, as well as data science frameworks and libraries including TensorFlow, PyTorch, and scikit-learn.	
10.03	Compatibility	All technology solutions should be available and supported within major cloud platforms to prevent lock-in to single cloud vendor over time	Yes	Snowflake and Databricks can be hosted on Microsoft Azure, Amazon AWS and Google Cloud. Power BI, Azure Data Factory, Azure Machine Learning Studio are Microsoft SaaS offerings can interact with solutions deployed on Amazon AWS, Google Cloud and Azure but are themselves hosted on Azure.	
11	**Pricing**				
11.01	Pricing	For all technologies, please describe the solution's cost model, license options, pricing tiers and other relevant factors	Yes	It is a cloud hosted model based on annual subscriptions and extent of use. Azure - approx. between $20,000- $40,000 per year. Snowflake - $10000- $30000 per year. Power BI, development and testing tools - $15000-$30000 per year. Denodo Data Virtualization - $ 20000 - $40000 per year.	

Exhibit F-1-Revised-3, SCOPE OF SERVICES - COMPLIANCE MATRIX, INSTRUCTIONS, GENERAL REQUIREMENTS & APPENDICES A - F

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	3. Appendix B – Required Technology Questions
1	**Instructions**
1.01	This appendix is intended to understand the Vendor proposed technologies beyond purely technical and functional requirements, focusing on the technologies from a strategic and long-term partnership perspective. - For each of the questions provide an indication whether it is applicable or not and a short description - Please provide a separate answer to questions for each **required** technology solution proposed
2	**Support/Customer Success**	**Answer**
2.01	Please describe the support options available by the technology vendor - how is it organized, what are support options/tiers available and what are the costs (if any)?	Team CCS provides a variety of technology and end user support services which make up the customer success approach. Some of these services are included as part of this bid; other options require additional effort and cost. Before preparing training materials, we will perform a skills gap analysis and needs assessment with CapMetro's technical and end user communities. This information will help us to focus training materials and exercises to fill any identified gaps or expressed training needs for the most effective outcomes. We find that after implementation and training, self-service/as needed 'how-to' videos and one-on-one mentorships work very well to help people continue to learn how to use the tools and dashboards for their work over time. All of our on-site training courses are participatory and will include group and individual exercises. The following options are a starting point for further conversations about the needs of CapMetro and how we can best support you. Included in bid: *Skills assessment survey and analysis Technical: *Step-by-step installation and configuration documentation for hosting and software *Remote technical training with CapMetro IT End-user *Two 2-day On-site training for business administrators (meta data management; exceptions management); recorded for review -in year 1 and in year 2 *Two 2-day On-site end user training with business scenarios; recorded for review - in year 1 and year 2 *User guides describing all of the different dashboards, visualizations and data sources *At least 10 how-to videos (served on CapMeto's environment or a CapMetro Youtube channel) * 24-hour level 1 support; business hour level 2 and 3 support Additional to bid: *Monthly "open office" user group meeting (on-site and remote) highlighting new features and answering questions, possibly in a lunch and learn format *One-on-one mentorships, where a CapMetro business staff works with a Project Balance/CCS Global team member, to guide them on specific needs or to transition system administration tasks. *Ongoing build out of a video clip library and business case examples of how data is used in the organization. *Additional on-site formal training for technical or business users
2.02	Please describe the customer success function of the technology vendor - how is it organized, what are customer success support options/tiers and what are the costs (if any)?	Team CCS has identified a specific client success role with transportation subject matter expertise, to ensure that the CapMetro users and the public are realizing value from data available in the system. Our Client Success resource will work closely with the Project Manager and CapMetro to design a success plan, including initial and ongoing training, onboarding of new employees, account management, monitoring issues raised via the help desk, resolving end-user issues, gathering informal and formal feedback, and the like. We will also work to organized any materials in an easy-to-access format. If CapMetro has a knowledge management system, we suggest including information about the DWH and BI system there. Otherwise, we can discuss setting up a secure knowledge management website, which is out the current scope of this project. This individual will have oversight of the 24-hour support desk. The customer success manager will provide monthly support reports that will enumerate the number and type of calls and make recommendations for defect fixes, user interface changes and/or training needs.
3	**Resources, Documentation and Community**	**Answer**

Exhibit F-1-Revised-3, SCOPE OF SERVICES - COMPLIANCE MATRIX, INSTRUCTIONS, GENERAL REQUIREMENTS & APPENDICES A - F

3.01	Please describe any (publicly) available documentation on technologies provided. This can include but is not limited to source documentation, manuals, best practice guidelines, whitepapers.	The proposed technology stack of Azure, Snowflake, Power BI are all well established technologies and widely used technologies and tools. Microsoft and Snowflake provide certifications for these tools and provide documentation in many different formats and at different levels of details. Below are just a few links to online documentation, manuals, books about best practices, etc. Azure *Microsoft resources (online, videos, webinars, white papers, blog, support - found in their documentation site https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/overview) *Books - Fundamentals (certification study guide https://amzn.to/3AqUf3Q) *Books - Architecture (certification study guide https://amzn.to/3s2VDXz) *Books - best practices (See many books in Amazon https://amzn.to/3jGLFrk) Power BI *Microsoft resources (Resources site has blog, developers documentation, eBooks, FAQs: https://bit.ly/3iCkNcJ) *Guy in a Cube YouTube channel (https://bit.ly/3xwpsB3) *Books (https://amzn.to/3xu7OxH) Power BI for ArcGIS *Various online resources: https://www.esri.com/en-us/arcgis/products/arcgis-for-power-bi/resources Snowflake *Snowflake resources/documentation (https://docs.snowflake.com/en/) *Books on best practices and certifications (https://amzn.to/37sfKF7)
3.02	Please describe publicly available training material	There is wide variety of publicly available training materials, provided by the technology vendors and provided by adjunct consulting firms. See 3.01. This includes books, manuals, blogs, MOOCs and webinars, all freely available to the public.
3.03	Please describe paid training options, tiers and certification options	Azure - Fundamentals Azure - Advanced Power BI - Fundamentals Power BI - Advanced analytics Snowflake - Fundamentals CCS has a dedicated training team which has completed over 200 trainings and trained over 3000 people in all of the above technologies.

3.04	Please describe the community that uses the technology (does a community exist, how active is it, number of people actively engaging with the community, what type of knowledge is shared, etc.)	The selected tools have large user communities and large companies relying on the technology. This article by Contino outlines user statistics for 2020 - https://www.contino.io/insights/whos-using-microsoft-azure-2020 as well Gartner's Cloud DBMS platform analysis puts Microsoft in the top right quadrant. https://bit.ly/3s9eJLJ
		Gartner names Power BI a leader for business intelligence tools id 2021 - https://bit.ly/3jzE6m0
		Gartner names Snowflake as data management solution for analytics in the top right quadrant - https://bit.ly/3CnIf5f
		
		Azure, Power BI and Snowflake have active user communities..These communities are available online (globally) and here in Austin and Texas.
		*Microsoft has a fairly large presence in Austin and Austin has an active Microsoft user community. Here are some links to active *User communities in Austin and Texas.
		    https://www.meetup.com/Austin-Power-BI-User-Group/
		    https://www.meetup.com/azure-dallas
		*Snowflake summit 2021 - https://www.snowflake.com/about/events/
		*Online user community - https://community.snowflake.com/s/
		*Online meetup group - https://www.meetup.com/carolinas-snowflake-meetup-group/events/279152506

4	**Technology Roadmap**	**Answer**
4.01	Please describe any major functionality or changes that can be expected in the coming year that will significantly change the functionality or nature of the technology	Microsoft and Snowflake publish their roadmap. https://www.snowflake.com/blog/snowflakes-product-innovations-for-2020/ Azure DevOps https://devblogs.microsoft.com/devops/azure-devops-roadmap-update-for-2020-q4/ Data factory https://azure.microsoft.com/en-us/updates/new-capabilities-in-azure-data-factory/ Power BI https://powerbi.microsoft.com/en-us/roadmap/ Azure Machine Learning https://docs.microsoft.com/en-us/azure/machine-learning/azure-machine-learning-release-notes
4.02	Please describe any long-term strategic changes to the technology that can be expected in 1 to 3 years' time	All of the technologies that we propose are stable and mature technologies and we don't expect to see any changes in the foreseeable future. The only change we expect are product improvements.
5	**Sustainability**	**Answer**

Exhibit F-1-Revised-3, SCOPE OF SERVICES - COMPLIANCE MATRIX, INSTRUCTIONS, GENERAL REQUIREMENTS & APPENDICES A - F

5.01	Describe the technology's sustainability-related activities and targets (i.e., environmental, social, and corporate governance) at a corporate level	low maintenance approach; using hosted services
5.02	Describe the technology's ecological footprint (i.e., if solution is cloud hosted - is solution powered by renewable energy, is that an option, etc.)	Microsoft has a sustainability calculator https://appsource.microsoft.com/en-US/product/power-bi/coi-sustainability.sustainability_dashboard?tab=reviews Project Natik: https://news.microsoft.com/innovation-stories/project-natick-underwater-datacenter

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4. Appendix C - Optional Functional Requirements					
1	**Instructions**				
1.01	CapMetro has identified optional technologies that will become relevant over time to support CapMetro in its transition towards a data-driven organization. These technologies are classified as optional, which means that these are optional for CapMetro. CapMetro still expects a recommendation. For those technologies, CapMetro has outlined the main functionalities it is interested in, and is seeking to understand Vendor's recommended technologies and the main features of these technologies. - For each main Requirement, select "C-Comply", "P-Partially Comply", "N-Does Not Comply", "A-Will Comply with Alternative". CapMetro strongly recommends that comments with descriptions be added for each item. - In some cases a requirement is not given, but a description is requested, where this is the case please select the appropriate response and provide additional details in the "Vendor Comments" field				
1.02	The Optional technologies in this RFP are:				
#	**Category**	**Capability/Requirement**	**Comply**	**Vendor Comments**	**CapMetro Notes**
2	**Data Virtualization**	**Data Visualization**			
2.01	Data Virtualization	Describe the main data virtualization functionalities of your proposed technology. This includes, but is not limited to how it handles virtualization of data, data access options, transformation, etc.	Yes	We are not sure if this is a request for Data Virtualization or Visualization. For Data Visualization we propose PowerBI and Denodo for Data Virtualization. CCS is a priemere partner of the industry leading data virtualization platform, Denodo. CCS is therefore very well positioned to meet the Data Virtualization needs of CapMetro, having successfully completed multiple Denodo projects Data Virtualization features offered by Denodo: •Easy access to all types of data •Full data integration and data modeling capabilities •Active Data Catalog and self•service capabilities for data & metadata discovery and data preparation •Full data security and data governance capabilities •Fast intelligent execution of data queries •Real•time data delivery in any format •Ability to create data marketplaces •Decoupling of business applications from data systems to facilitate data•driven strategies •On premises, cloud and multi•cloud interoperability •Encapsulation of legacy systems	
2.02	Data Virtualization	Describe the solution's cost model, license options, pricing tiers and other relevant factors	Yes	Subscription based on the cloud.	
2.03	Data Virtualization	Describe the key differentiators for proposed technology when compared to its main competitors			
3	**Data Catalog**				
3.01	Data Catalog	Please describe the main data catalog functionalities of your proposed technology. This includes, but is not limited to automatic discovery and taxonomy generation, semantic discovery, data lineage, search function, collaborative features, (metadata) curation and integration with data governance function			
3.02	Data Catalog	Describe the solution's cost model, license options, pricing tiers and other relevant factors			
3.03	Data Catalog	Describe the key differentiators for proposed technology when compared to its main competitors			
4	**Master Data Management**				
4.01	Master Data Management	Please describe the main master data management functionalities of your proposed technology. This includes, but is not limited to data discovery, data model development, match and merge, duplicates management, data validation, data quality management and data cleansing, enrichment, integration options, multi-domain capabilities, the GUI, integration with data governance function			
4.02	Master Data Management	Describe the solution's cost model, license options, pricing tiers and other relevant factors			
4.03	Master Data Management	Describe the key differentiators for proposed technology when compared to its main competitors			

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5. Appendix D - Project Phase Requirements	
Project Phase Tasks and Deliverables.	

#	Details	
1.0	**Plan. Meet with project managers and business area stakeholders for project planning, including review of proposed schedule, roles and responsibilities, as well as conduct a complete review of functionality to be delivered, and other project activities. Plan Deliverables from Vendor:**	
	1. Project organization chart 2. Project schedule and Project Management Plan – (draft) 3. Action Items and Issues log (AIL) 4. Project Decisions Log	5. Initial Risk Register 6. System Implementation Plan (draft) 7. Scope and Compliance Matrix Review and Update
2.0	**Design. Vendor's configuration and implementation approach based on CMTA's previously gathered requirements and approved vendor recommended changes to requirements. This phase will determine how the system will be installed, and how it will be managed in the back end. Vendor will work with CMTA to develop materials that will provide a basis to help instruct CMTA stakeholders in the easiest and most efficient way to use the system to their utmost advantage. Design Deliverables:**	
	1. Solution Design Documents / MVP Lists (If Hybrid Agile Approach) 2. Application Landscape Design Document 3. System Implementation Plan (Final) / Sprint Plan (If Hybrid Agile Approach) 4. Quality Assurance Plan (Draft) 5. Risk Management Plan (Final) 6. Data dictionary and Entity Relationship Diagram (ERD)	7. Project Schedule (Baseline) with Resource Loading 8. Network architecture diagram (Draft) 9. Perform Preliminary Design Review (PDR) Design and System Implementation Plan with Stakeholders 10. Create Final Design based on review and perform Final Design Review (FDR) 11. Review and Acceptance of Final Design and Project Management Plan 12. Scope and Compliance Matrix Review and Update
3.0	**Develop. Development, configuration and installation of the solution and integration as well as installation within a development cycle and a test environment so configuration and testing of the required functionality can be started. This task will include setting the initial configuration values by Vendor so they can be tested and changed if needed. During this phase, the rollout of the system must be worked on to include training all IT and Operational staff who will use or have on-going support roles. Develop Deliverables:**	
	1. Quality Assurance Plan Including QA/QC Checklist (Final) 2. Development of modules, application and interfaces 3. Develop and Design Review Sessions per Sprint (If Hybrid Agile) 4. Retrospective sessions on prior development (If Hybrid Agile) 5. Test Environment Installation that provides CMTA full access throughout the project and the life of the system 6. Supporting Infrastructure Implemented as applicable 7. Test Procedure/Plan including test Scripts, use cases, acceptance test criteria demonstrating each Compliance Matrix term is developed and meets requirement (Draft) 8. Update Compliance Matrix with Test Number(s) 9. High-level Training of CMTA Staff to Prepare for Test Phase 10. Vendor Warranty and Maintenance Plan Review 11. Review and Feedback of CMTA Support Responsibility Matrix	12. Role-based, On-site Training Plan for all User Types (Draft): •Training schedule and course outlines for review a minimum of three weeks prior to the scheduled classes •Separate training sessions based on functional and technical area •Provide all materials necessary to train participants (CMTA will provide space and laptops) •Schedule the training staff to be on site timely to ensure equipment, materials, student accounts and classroom are fully ready for when class begins •Arrange for an instructor(s) with thorough knowledge of the material covered in the course(s) and the ability to effectively lead the knowledge transfer •Provide customized training manuals specific to CMTA's environment in Microsoft Word and PDF. Vendor shall provide the agreed-to number of hard copies

4.0	**Test. Vendor shall develop and implement a comprehensive program to test all components and applications that comprise the integrated Vendor Data Warehouse and Business Intelligence solution. Testing is to be performed in five distinct and separate phases:** **1. Functional Unit Test (FUT)** **2. System Integration Test (SIT)** **3. End to End Test (EET)** **4. Pilot Test (Day in the Life)** **5. User Acceptance Test (UAT)** **The testing phase shall not be deemed completed until all functional requirements have been fully tested and approved by CapMetro. Vendor shall develop an Data Warehouse and Business Intelligence Test Plan that includes the number and range of tests, detailed schedule indicating the sequence of each test, and when and where each test will take place. Vendor shall not perform any test until the corresponding test plan and procedures have been approved by CapMetro. Vendor shall develop Test Procedure documents with test scripts, all anticipated use cases and acceptance criteria for review and approval by CapMetro for each phase of testing. Test deliverables:**

1. Test Plan (including automated testing processes) 2. Test Procedures (including automated testing processes) 3. System Acceptance Test Plan and Execution 4. Execution of FUT, SIT, EET, Day in the Life and System Acceptance Testing 5. Volume and Stress Tests 6. Regression Testing of the entire Test Plan for any Class 1 and Class 2 Failures 7 Test Results and Reports (including results for failed tests) 8. Installation Plan (if applicable) 13. Test Failure Log & Remediation Plan. Vendor shall lead testing of the solution including integrations and resolve all Severe (Class 1) and Significant (Class 2) Test Failure Results (TFRs). Vendor shall endeavor to resolve Minor (Class 3) TFRs during this phase; however, the requirement for Class 3 resolution is during the Closeout phase. Definition for each class are as follows: •Severe - A Class 1 test failure is a severe defect that prevents, inhibits, or significantly impairs further testing or operation of the system. •Significant - A Class 2 test failure is a significant defect that does not prevent further testing or has a minimal effect on normal operations of the system. •Minor – A Class 3 test failure is a minor or isolated defect that does not impact or invalidate the	14. Compliance Matrix Review and Update 15. Training Plan (Final) 16. User, Admin, Maint., Installation, and Training Manuals

5.0	**Deploy/Go Live: Deploy: once all the test failures have been corrected, the Vendor shall install and configure the software and incorporate it into the live environment. Go Live: the system shall go live and be monitored for the first 30 days of operation. If Severe (Class 1) or Significant (Class 2) issues arise, the Go-Live period may be cancelled, extended or restarted. The Vendor shall be required to participate in the monitoring of the system and respond to issues so they are quickly resolved. Deploy/Go Live Deliverables:**

1. Conduct Training for all User Types 2. Document Procedures and Migrate Environment from Test to Production 3. QA/QC checklist Sign off 4. Delivery of all Documentation including User, System Admin, Maintenance, Installation and Training Manuals, (Revise Draft) 5. Deployment, Implementation, Configuration and Integration of the Vendor solution with all environments 6. User Acceptance Test (UAT) 7. Resolution of UAT Findings	8. Go Live Schedule and Transition Plan 9. System Go Live 10. Technical Lead On-site During First Week of Go Live, or Longer if System Issues are Experienced 11. Revised (final) Copies of all Required Documentation including User and Training Manuals 12. Compliance Matrix Review and Update

6.0	**Close. Obtain acceptance by CMTA to formally close the project. Apply appropriate updates to project documents. Close out all procurement activities ensuring termination of all relevant**

1. Follow-up training on areas identified during Go Live and Training Documentation (Final) 2. Data dictionary and Entity Relationship Diagram (Final) 3. Network architecture diagram (Final) 4. All AIL items closed 5. Resolution of all Minor (Class 3) Findings	6. Final Documentation for Environment Refresh (Develop-Test-Stage-Production) 7. Configuration Management Documents (CMD – Final) 8. APIs and all documentation related to all integrations (Final) 9. Warranty and Maintenance Procedure Review and Forms 10. As-builts: updates to any documentation including design document changes 11. Participation in Lessons Learned

Project Management. Vendor shall manage the project continuously beginning with the Notice to Proceed through Close, and shall lead the project and is expected to drive and manage all aspects of the project. CMTA shall manage and coordinate all its resources. A full-time Project Manager or technical lead is required to be onsite at least two weeks per month during each phase of the project. A PMP is preferred and shall be approved by CMTA. Project Management Tasks:	

7.0	1. Active Partnership with CMTA and project team in assuring Project Success 2. Onsite as needed (May Be Performed by Technical Lead Depending Upon Scheduled Activities By Agreement with CMTA); Technical Lead will be onsite during pilot testing and resolution of any TFRs 3. Separate Lead Project Manager and Technical Lead for All Communication Regarding Work Under This Contract 4. Task Coordination with The Designated CMTA project managers 5. Regular Communication with The Project Manager and any other staff designated to discuss progress, critical risk factors, schedule, or unique issues that may surface. 6. Specification of CMTA's staff resources needed for project success with at least two weeks' notice in advance within the project schedule. 7. Support Responsibility Matrix Review and Updates as Needed

| 7.0 (cont.) | 8. Daily stand up meetings as necessary
9. Weekly Status Meetings with Updated Schedule and AIL
10. Review and Feedback of Change Requests as Needed
11. Monthly Risk Registry Updates
12. Monthly leadership management team review Meetings
12. Weekly Project Status Report
13. Monthly attendance and Status Presentation at Steering Committee Meetings, as necessary
14. Responsible for ensuring all project documentation, including meeting minutes, AIL updates, project schedule and plans are kept updated in the CMTA SharePoint site |

🏛 METRO	ITS2009 - Data Warehouse and Business Intelligence Implementation

6. Appendix E - Statistics

The below are statistics deemed relevant for the costing of the technical and project components of the DW/BI solution.

Topics and Subtopics	Statistic	Notes
Users		
Business Users	30	Business users will consume most of the insights through dashboards and self-service analytics; regularly interface with power users and technical users on changing needs and requirements
Power Users	10	Power users will perform advanced analyses using specific tools or Python/R using raw data and create basic reports on an as-needed basis
Technical Users	5	Technical users take on maintenance and architecture design of the DW/BI solution, in a variety of ways
Public Users	Unlimited	These are CapMetro constituents that can access dashboards through the CapMetro website
Data Volumes		
Storage - Production (after compression)	10 TB	Estimate, expected to grow over time
Storage - QA (after compression)	10 TB	Estimate, expected to grow over time
Storage - Development (after compression)	5 TB	Estimate, expected to grow over time
Source Systems		
Expected number of data sources in scope for year 1	8 to 12	Dependent on prioritization and speed of implementation
Expected number of data sources in scope for phase	8 to 12	Dependent on prioritization and speed of implementation

EXHBIT F-1, COMPLIANCE MATRIX
DW/BI - IMPLEMENTATION
APPENDIX F - LIST OF SYSTEMS

🏛 **METRO**	ITS2009 - Data Warehouse and Business Intelligence Implementation

7. Appendix F - List of Systems

The below overview provides a breakdown of CapMetro's most critical operational and source systems.

If Vendor requires additional information for costing of the technical solution please ask for clarification if it is deemed CapMetro can provide said clarification, in any case: clearly specify the assumptions made in the costing of your solution.

System Name	Description
Trapeze	Scheduling and yard management software, contains multiple modules (OPS, FX, PASS, etc.). Information contained: Route, timepoints, stop definition and On-demand scheduling
OrbCAD/Conduent	CAD/AVL system (Computer Aided Dispatch / Automatic Vehicle Location). Primary tool to dispatch the vehicles. Defined as the formal source for OTP information – system of record for contract and formal reporting purposes (although Swiftly is more accurate).
Swiftly	Swiftly is a transit reliability platform, providing real-time passenger information – vehicle locations, bus ETA and crowding (to CapMetro App, third-party applications and internal tools). It provides CapMetro live monitoring and management tools for operations (including service adjustment capabilities), historical analysis and recommendation tools for research and performance improvement (for example, recommended changes in run-time/frequency to improve OTP).
Bytemark	Provides web traveler tools, mobile application and fare collection system – front-end for customers and back-office for management. Contains a number of functionalities including fare purchase and activation and real-time trip planner and tracking
Infor	Enterprise Asset Management (EAM) system. Interfaces with OrbCAD (vehicle catalog, available vehicles, incidents)
Dynamics AX (System will be replaced by new ERP)	ERP system. Contains Budget, Revenues, Expenses, Purchase Orders. Microsoft SQL Server DB. Access is available through direct connection to the DB.
ServiceOne	CRM system. CCRs – Customer Comment Reports (complaints, compliments, requests). Access is available through direct connection to the DB.
Avaya	Phone system. Manages all desktop and digital-only phone lines, inbound and outbound, whether for office workers or call center. Includes call/computer screen recording, pop up of caller ID/IVR activities data. Access is available through direct connection to the DB.

RiskMaster	Hosted (cloud-based) claim processing and risk management system, used to capture all accidents, National Transit Database (NTD) reporting to the Federal Transit Administrator (FTA) and for internal CapMetro safety reporting. Direct connection to Risk Master DB is not available.
Via	Pickup's scheduling and dispatch solution. Client info, location info, trip reservations, cancellation patterns, vehicles and movement, event logs, system settings.
Ultipro	Human Resources Information System (HRIS).
MetroAlert	Customer notifications and service alerts – routes that are delayed more than 15 minutes, routes put on detour, inclement weather alerts and other service-related messages. Holds customer phones and emails, together with routes and topics that interest them (chosen routes, Project Connect, general CapMetro news).
BCycle	Bike rental software. Used for MetroBike, partnering with Austin's bikeshare program. So far received a one-time data dump.
EPPM	System that manages the Capital Projects from ideation, SMT/VP review, prioritization, budget approval, and manage the project from initiation to close.
Unified Dispatch	MetroAccess IVR, inbound call directory, automated trip booking/cancellation, outbound messaging including floodgate.
Everbridge	Emergency notification cloud-based system.
GFI FareBox	System for passenger fare collection on the bus. HW is maintained by BPS/QA and VM partners, IT supports firmware, software and integration. On-premise DB.
TVM	Ticket Vending Machines. Software for processing ticket vending data and defining tickets.
RDS (Rail Data Services)	System for rail to extract vehicle diagnostic information from the trains.
ServiceNow	IT Service Desk Application for all IT Incidents, moves, adds, changes, etc.
SolarWinds	Network and application monitoring. Does not include information about hosted systems.
ESS	Payroll system
Publicinput.com	CRM for community engagement
Social Media/Marketing	Includes systems such as Hootsuite, Mailchimp, ConstantContact
Camera/Radio Systems	There are several camera systems that also provide data (on-vehicle, security cameras, recorded radio channels, vehicle wi-fi download and upload systems). We have not listed these out here.

Exhibit F-1-Revised-3, SCOPE OF SERVICES – COMPLIANCE MATRIX INSTRUCTIONS, GENERAL REQUIREMENTS & APPENDICES A – F
EXHBIT F-1, COMPLIANCE MATRIX

DW/BI - IMPLEMENTATION
APPENDIX F - LIST OF SYSTEMS

SharePoint	CapMetro also uses SharePoint to document a variety of data inputs. It is reasonable to expect that SharePoint is used as an input for the DW/BI solution.
Databases	Several databases exist that contain relevant data (either extracts from other systems, or an Access DB to capture information), we have not listed those out. But included are things like a GIS DB, Utilities DB (in Access) and numerous Excel-files that track data for operational purposes).

CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY

<mark>EXHIBIT E-REVISED-4</mark>
CONTRACTUAL TERMS AND CONDITIONS
(SERVICES CONTRACT)

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1.   DEFINITIONS

As used throughout this Contract, the following terms shall have the meaning set forth below:

(a)   "Applicable Anti-Corruption and Bribery Laws" means international, federal, state, provincial and local laws, rules, regulations, directives and governmental requirements currently in effect and as they become effective relating in any way to the Contractor's provision of goods and/or services to Authority, including without limitation "FCPA" or any applicable laws and regulations, including in the jurisdiction in which the Contractor operates and/or manufactures goods for the Authority, relating to anti-corruption and bribery.

(b)   "Authority", "Capital Metro", "Cap Metro", "CMTA" means Capital Metropolitan Transportation Authority.

(c)   "Authority Data" means all data, content and information (i) submitted by or on behalf of the Authority or its customers to the Contractor or loaded into the System, (ii) obtained, developed, produced or processed by the Contractor or by the Application or System in connection with the Contract, or (iii) to which the Contractor has access in connection with the Contract, and all derivative versions of such data, content and information, and any derivative versions thereof, in any form or format.

(d)   "Authority Electronic Property" means (i) any websites controlled by the Authority, (ii) any Authority mobile device apps, (iii) any application programming interfaces (API) to the Authority's information technology systems, (iv) any other kiosks, devices or properties for consumer interaction that are created, owned, or controlled by the Authority, and (v) versions and successors of the foregoing, any form or format now known or later developed, that may be used by customers obtaining products or services from the Authority.

(e)   "Change Order" means a written order to the Contractor signed by the Contracting Officer, issued after execution of the Contract, authorizing a change in the term or scope of the Contract.

(f)   "Contract" or "Contract Documents" means this written agreement between the parties comprised of all the documents listed in the Table of Contents, Change Orders and/or Contract Modifications that may be entered into by the parties.

(g)   "Contract Award Date" means the date of the Contract award notice, which may take the form of a purchase order, signed Contract or Notice of Award, issued by the Authority.

(h)   "Contract Modification" means any changes in the terms or provisions of the Contract which are reduced to writing and fully executed by both parties.

(i)   "Contract Sum" means the total compensation payable to the Contractor for performing the Services as originally contracted for or as subsequently adjusted by Contract Modification.

(j)   "Contract Term" means period of performance set forth in the paragraph entitled "Term" contained in **Exhibit E-Revised-3<mark>4</mark>**.

(k)   "Contracting Officer" means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and finding on behalf of the Authority. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(l)   "Contractor" means the entity that has assumed the legal obligation to perform the Services as identified in the Contract.

CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY
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(m) "Days" means calendar days. In computing any period of time established under this Contract, the day of the event from which the designated period of time begins to run shall not be included, but the last day shall be included unless it is a Saturday, Sunday, or Federal or State of Texas holiday, in which event the period shall run to the end of the next business day.

(n) "Deliverables" means (i) any deliverables or other work product that will be generated, prepared, created, or developed by the Contractor (or such third parties as the Contractor may be permitted to engage) at any time following the effective date of the Contract for the use by the Authority under the Contract or (ii) the meaning set forth Exhibit IT to the extent such exhibit is incorporated by reference in the Contract, as applicable.

(o) "FAR" means the Federal Acquisition Regulations codified in 48 C.F.R. Title 48.

(p) "FCPA" means the United States Foreign Corrupt Practices Act, 15 U.S.C. §§ 78dd-1, et seq., as amended.

(q) "Force Majeure Event" means strikes, lockouts, or other industrial disputes; explosions, epidemics, civil disturbances, acts of domestic or foreign terrorism, wars within the continental United States, riots or insurrections; embargos, natural disasters, including but not limited to landslides, earthquakes, floods or washouts; interruptions by government or court orders; declarations of emergencies by applicable federal, state or local authorities; and present or future orders of any regulatory body having proper jurisdiction.

(r) "FTA" means the Federal Transit Administration.

(s) "Fully Burdened Hourly Labor Rate" means an hourly rate that includes all salary, overhead costs, general and administrative expenses, and profit.

(t) "Intellectual Property Rights" means the worldwide legal rights or interests evidenced by or embodied in: (i) any software, design, method, process, technique, apparatus, invention, discovery, or improvement, including any patents, trade secrets, and know-how; (ii) any work of authorship, including any copyrights, and any derivative works thereto; (iii) any trademark, service mark, trade dress, trade name, or other indicia of source or origin; (iv) domain name registrations; and (v) any other proprietary or similar rights. The Intellectual Property Rights of a party include all worldwide legal rights or interests that the party may have acquired by assignment or license with the right to grant sublicenses.

(u) "Manufacturing Materials" mean any completed or partially completed supplies and materials, parts, dies, jigs, fixtures, plans, drawings, information, and contract rights specifically produced or specially acquired by the Contractor for the performance of the Contract.

(v) "Notice of Award" means formal notice of award of the Contract to the Contractor issued by the Contracting Officer.

(w) "Notice to Proceed" means written authorization for the Contractor to start the Services.

(x) "Project Manager" means the designated individual to act on behalf of the Authority, to monitor and certify the technical progress of the Contractor's Services under the terms of this Contract.

(y) "Proposal" means the offer of the proposer, submitted on the prescribed form, stating prices for performing the work described in the Scope of Services.

(z) "Services" means the services to be performed by the Contractor under this Contract, and includes services performed, workmanship, and supplies furnished or utilized in the performance of the Services.

(aa) "Subcontract" means the Contract between the Contractor and its Subcontractors.

(bb) "Subcontractor" means subcontractors of any tier.

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(cc)   "Works" means any tangible or intangible items or things that have been or will be specifically, generated, prepared, created, or developed by the Contractor (or such third parties as the Contractor may be permitted to engage) at any time following the effective date of the Contract, for the exclusive use of, and ownership by, Authority under the Contract, including but not limited to any (i) works of authorship (such as literary works, musical works, dramatic works, choreographic works, pictorial, graphic and sculptural works, motion pictures and other audiovisual works, sound recordings and architectural works, which includes but is not limited to manuals, instructions, printed material, graphics, artwork, images, illustrations, photographs, computer software, scripts, object code, source code or other programming code, HTML code, data, information, multimedia files, text web pages or web sites, other written or machine readable expression of such works fixed in any tangible media, and all other copyrightable works), (ii) trademarks, service marks, trade dress, trade names, logos, or other indicia of source or origin, (iii) ideas, designs, concepts, personality rights, methods, processes, techniques, apparatuses, inventions, formulas, discoveries, or improvements, including any patents, trade secrets and know-how, (iv) domain names, (v) any copies, and similar or derivative works to any of the foregoing, and (vi) all documentation and materials related to any of the foregoing.

2.   FIXED PRICE CONTRACT

(a)   This is a fixed price Contract for the Services specified and stated elsewhere in the Contract.

3.   TERM

The term of the Contract shall be two (2) years from the Contract notice to proceed. No Services shall be performed under this Contract prior to issuance of a Notice to Proceed.

4.   OPTION TO EXTEND CONTRACT TERM

The Authority shall have the unilateral right and option to extend the Contract for up to eight (8) option periods for a twelve (12) month duration each at the option prices set forth in **Amendment 4 – FPR - Exhibit A - Revised-1 - Pricing Schedule and Exhibit A-1.1 Revised through Exhibit A-1.4 Revised**, upon written notice to the Contractor.

5.   ADDITIONAL OPTION TO EXTEND CONTRACT PERFORMANCE

If the options granted in Paragraph 4 have been exercised in their entirety, the Authority shall have the unilateral right and option to require continued performance of any services within the limits and rates specified in the Contract. This option may be exercised more than once, but the extension of performance hereunder shall not exceed a total of 6 months. The Authority may exercise the option by written notice to the Contractor.

6.   INVOICING AND PAYMENT

(a)   Invoices may be submitted once per month for work completed and accepted by the Authority, and marked "Original" to:

Accounts Payable
Capital Metropolitan Transportation Authority
P.O. Box 6308
Austin, Texas 78762-6308

Or via e-mail to: ap_invoices@capmetro.org

and shall conform to policies or regulations adopted from time to time by the Authority. Invoices shall be legible and shall contain, as a minimum, the following information:

(1)   the Contract and order number (if any);

(2)   a complete itemization of all costs including quantities ordered and delivery order numbers (if any);

(3)   any discounts offered to the Authority under the terms of the Contract;

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(4)   evidence of the acceptance of the supplies or Services by the Authority; and

(5)   any other information necessary to demonstrate entitlement to payment under the terms of the Contract.

(b)   Subject to the withholding regarding retainage as provided herein, all undisputed invoices shall be paid within the time period allowed by law through the Texas Prompt Payment Act, Tex. Gov't Code § 2251.021(b).

(c)   The Contractor shall be responsible for all costs/expenses not otherwise specified in this Contract, including by way of example, all costs of equipment provided by the Contractor or Subcontractor(s), all fees, fines, licenses, bonds, or taxes required or imposed against the Contractor and Subcontractor(s), travel related expenses, and all other Contractor's costs of doing business.

(d)   In the event an overpayment is made to the Contractor under this Contract or the Authority discovers that the Authority has paid any invoices or charges not authorized under this Contract, the Authority may offset the amount of such overpayment or unauthorized charges against any indebtedness owed by the Authority to the Contractor, whether arising under this Contract or otherwise, including withholding payment of an invoice, in whole or in part, or the Authority may deduct such amounts from future invoices. If an overpayment is made to the Contractor under this Contract which cannot be offset under this Contract, the Contractor shall remit the full overpayment amount to the Authority within thirty (30) calendar days of the date of the written notice of such overpayment or such other period as the Authority may agree. The Authority reserves the right to withhold payment of an invoice, in whole or in part, or deduct the overpayment from future invoices to recoup the overpayment.

7.   **PERFORMANCE BOND**

(a)   If the contract amount exceeds $100,000.00, the Contractor shall provide a Performance Bond in an amount equal to twenty percent ~~(20%)~~ **(1.28%)** of the contract amount. The Contractor shall be required to submit the required bond to the Contracting Officer within ten (10) days from the date of Contract Award Date. The surety company providing the bond must be listed in the latest United States Treasury Department Circular 570, be authorized to do business in Texas and have an underwriting limitation equal to or greater than the penal sum of the bond. If any surety upon any bond furnished in connection with the Contract becomes insolvent, or otherwise not authorized to do business in the State, the Contractor shall promptly furnish equivalent security to protect the interest of the Authority and of persons supplying labor, materials and/or equipment in the prosecution of the Work.

(b)   The bond shall be accompanied by a valid Power-of-Attorney, issued by the surety company and attached, signed and sealed, with the corporate embossed seal, to the bond, authorizing the agent who signs the bond to commit the surety company to the terms of the bond, and stating on the face of the Power-of-Attorney the limit, if any, in the total amount for which he/she is empowered to issue a single bond.

(c)   A surety bond rider increasing the dollar amount of any payment and performance bond will be required for any Change Order that increases the contract amount.

(d)   In addition, the Authority may request a surety bond increasing the dollar amount if:

(1)   any surety upon any bond furnished with this Contract becomes unacceptable to the Authority; or

(2)   any surety fails to furnish reports on its financial condition as required by the Authority.

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8.   **PAYMENT MILESTONES**

Payment for each of the sprint shall be paid in the following percentages of the total contract amount. Payment shall be made per milestone upon final completion and acceptance of milestone.

Milestones	Payments %
Project kick-off and Planning	5.00%
Phase - A - Environment set-up - Sprint1	10.00%
Phase - A - Design, Build and Test - Sprint 2	5.00%
Phase - A - Design, Build and Test - Sprint 3	5.00%
Phase - A - Design, Build and Test - Sprint 4	5.00%
Phase - A - Design, Build and Test - Sprint 5	5.00%
Phase - A - Design, Build and Test - Sprint 6	5.00%
Phase - A - Design, Build and Test - Sprint 7	2.60%
Phase - A - 10% retainage	3.40%
Phase - B - Design, Build and Test - Sprint 8	5.00%
Phase - B - Design, Build and Test - Sprint 9	5.00%
Phase - B - Design, Build and Test - Sprint 10	5.00%
Phase - B - Design, Build and Test - Sprint 11	5.00%
Phase - B - Design, Build and Test - Sprint 12	3.80%
Phase - B - 10% retainage	2.20%
Phase - C - Design, Build and Test - Sprint 13	5.00%
Phase - C - Design, Build and Test - Sprint 14	5.00%
Phase - C - Design, Build and Test - Sprint 15	5.00%
Phase - C - Design, Build and Test - Sprint 16	5.00%
Phase - C - Design, Build and Test - Sprint 17	5.80%
Phase - C - 10% retainage	2.20%
Completion of all Phases	100.00%

Deliverables that exist within each payment milestone will be detailed within the project schedule with amount and due date and mutually agreed upon by both parties.

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9. PERFORMANCE DEFICIENCY CREDITS (PDC)

The foundation of a successful project is the adherence to scope, schedule, and budget with the quality expected. The project schedule as agreed between the parties and incorporated into the Contract will be used to manage Contractor performance. At the discretion of the Authority and for reasons caused solely by Contractor, the Contractor will be assessed a PDC when a Phase End Milestone due date is missed. When that occurs, the Contractor is expected to provide additional resources or other measures in order to get back on schedule. The Contractor will not be assessed a PDC for any delays caused by the Authority.

Payment Milestone	Payment Value (% of Contract)	Performance Deficiency Credits (PDCs)			
		Disincentive	Payment Received	Payment Withheld	Payment Lost
Plan	5%	> 30 days	50%	50%	0%
Design	10%				
Develop	15%				
Test	15%				
Deploy/Go Live	45%				
Closeout	10% + Any payments withheld	> 30 days	90%	0%	10%
		31 – 90 days	80%	0%	20%
		> 90 days	70%	0%	30%

10. INSURANCE

(a)   The Contractor shall furnish proof of Capital Metro-stipulated insurance requirements specified below. All insurance policies shall be primary and non-contributing with any other valid and collectible insurance or self-insurance available to the Authority and shall contain a contract waiver of subrogation in favor of the Authority. The Contractor shall furnish to the Authority certificate(s) of insurance evidencing the required coverage and endorsement(s) and, upon request, a certified duplicate original of any of those policies. Prior to the expiration of a certificate of insurance, a new certificate of insurance shall be furnished to the Authority showing continued coverage. Each policy shall be endorsed to provide thirty (30) days written notice of cancellation or non-renewal to the Authority and the Authority shall be named as an Additional Insured under each policy except Professional Liability insurance if required by this Contract. All insurance policies shall be written by reputable insurance company or companies acceptable to the Authority with a current Best's Insurance Guide Rating of A+ and Class XIII or better. All insurance companies shall be authorized to transact business in the State of Texas. The Contractor shall notify the Authority in writing of any material alteration of such policies, including any change in the retroactive date in any "claims-made" policy or substantial reduction of aggregate limits, if such limits apply or cancellation thereof at least thirty (30) days prior thereto. The below requirements only represent the minimum coverage acceptable to the Authority and these requirements are not intended to represent the maximum risk or the maximum liability of the Contractor. The Contractor shall be responsible for setting its own insurance requirements, if any, for the kind and amounts of insurance to be carried by its Subcontractors in excess of the insurance required by the Authority.

The Contractor shall carry and pay the premiums for insurance of the types and in the amounts stated below.

CAPITAL METRO MINIMUM COVERAGE REQUIREMENTS

(1)   **Commercial General Liability Insurance** Coverage with limits of not less than One Million Dollars and No/100 Dollars ($1,000,000) with an aggregate of Two Million Dollars and No/100 Dollars ($2,000,000) with coverage that includes:

      (i)   Products and Completed Operations Liability
      (ii)   Independent Contractors
      (iii) Personal Injury Liability extended to claims arising from employees of the Contractor and the Authority.

CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY

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       (iv)   Contractual Liability pertaining to the liabilities assumed in the agreement.

      (2)   **Automobile Liability Insurance** covering all owned, hired and non-owned automobiles used in connection with limits of not less than One Million Dollars and No/100 Dollars ($1,000,000) Combined Single Limit of Liability for Bodily Injury and Property Damage.

      (3)   **Statutory Workers' Compensation** coverage in the State of Texas. Employers Liability Insurance with minimum limits of liability of One Million Dollars and No/100 dollars ($1,000,000).

      (4)   **Technology Errors & Omissions Insurance**: Combined Technology & Omissions Policy with a minimum Five Million and No/100 Dollars ($5,000,000) claim limit, including:

       (i)   **Professional Liability Insurance** covering negligent acts, errors and omissions arising from the Contractor's work to pay damages for which the Contractor may become legally obligated (such coverage to be maintained for at least two (2) years after termination of this Contract, which obligation shall expressly survive termination of this Contract; and

       (ii)   **Privacy, Security and Media Liability Insurance** providing liability for unauthorized access or disclosure, security breaches or system attacks, as well as infringement of copyright and trademark that might result from this Contract.

      (iii)   **All Policies shall include Terrorism Coverage.**

(b)   The limits of liability as required above may be provided by a single policy of insurance or by a combination of primary, excess or umbrella policies but in no event shall the total limits of liability available for any one occurrence or accident be less than the amount required above.

(c)   The Contractor, and all of its insurers shall, in regard to the above stated insurance, agree to waive all rights of recovery or subrogation against the Authority, its directors, officers, employees, agents, successors and assigns, and the Authority's insurance companies arising out of any claims for injury(ies) or damages resulting from the Services performed by or on behalf of the Contractor under this Contract and/or use of any Authority premises or equipment under this Contract.

(d)   Each insurance policy shall contain the following endorsements: PRIMARY AND NON-CONTIBUTORY IN-SURANCE and WAIVER OF TRANFER OF RIGHTS OF RECOVERY AGAINST OTHERS, which shall be evidenced on the Certificate of Insurance. The General Liability insurance shall include contractual endorsement(s) which acknowledge all indemnification requirements under the Agreement. All required endorsements shall be evidenced on the Certificate of Insurance, which shall be evidenced on the Certificate of Insurance. Proof that insurance coverage exists shall be furnished to the Authority by way of a Certificate of Insurance before any part of the Contract work is started.

(e)   If any insurance coverage required to be provided by the Contractor is canceled, terminated, or modified so that the required insurance coverages are no longer in full force and effect, the Authority may terminate this Contract or obtain insurance coverages equal to the required coverage, the full cost of which will be the responsibility of the Contractor and shall be deducted from any payment due the Contractor.

(f)   If any part of the Contract is sublet, the Contractor shall be liable for its Subcontractor's insurance coverages of the types and in the amounts stated above and shall furnish the Authority with copies of such Certificates of Insurance. No delay in the Services caused by the Contractor's enforcement of its Subcontractor's insurance requirements shall be excusable delay in the Contract. In the event a Subcontractor is unable to furnish insurance in the limits required under the Contract, the Contractor shall endorse the Subcontractor as an ADDITIONAL INSURED on the Contractor's policies.

(g)   All insurance required to be maintained or provided by the Contractor shall be with companies and through policies approved by The Authority. The Authority reserves the right to inspect in person, prior to the commencement of the Services, all of the Contractor's insurance policy required under this Contract.

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(h)   The Contractor must furnish proof of the required insurance within five (5) days of the award of the Contract. Certificate of Insurance must indicate the Contract number and description. The insurance certificate should be furnished to the attention of the Contracting Officer.

(i)   The Contractor and its lower tier Subcontractors are required to cooperate with the Authority and report all potential claims (workers' compensation, general liability and automobile liability) pertaining to this Contract to the Authority's Risk Management Department at (512) 389-7549 within two (2) days of the incident.

11.   PERFORMANCE OF SERVICES BY THE CONTRACTOR

Except as otherwise provided herein, the Contractor shall perform no less than thirty percent (30%) of the Services with its own organization. If, during the progress of Services hereunder, the Contractor requests a reduction in such performance percentage and the Authority determines that it would be to the Authority's advantage, the percentage of the Services required to be performed by the Contractor may be reduced; provided, written approval of such reduction is obtained by the Contractor from the Authority.

12.   REMOVAL OF ASSIGNED PERSONNEL

The Authority may require, in writing, that the Contractor remove from the Services any employee or Subcontractor of the Contractor that the Authority deems inappropriate for the assignment.

13.   REPRESENTATIONS AND WARRANTIES

The Contractor represents and warrants to the Authority, that the Services shall be performed in conformity with the descriptions and other data set forth in this Contract and with sound professional principles and practices in accordance with accepted industry standards, and that work performed by the Contractor's personnel shall reflect sound professional knowledge, skill and judgment. If any breach of the representations and warranties is discovered by the Authority during the process of the work or within one (1) year after acceptance of the work by the Authority, the Contractor shall again cause the nonconforming or inadequate work to be properly performed at the Contractor's sole expense and shall reimburse for costs directly incurred by the Authority as a result of reliance by the Authority on services failing to comply with the representations and warranties.

14.   INDEPENDENT CONTRACTOR

The Contractor's relationship to the Authority in the performance of this Contract is that of an independent contractor. The personnel performing Services under this Contract shall at all times be under the Contractor's exclusive direction and control and shall be employees of the Contractor and not employees of the Authority. The Contractor shall be fully liable for all acts and omissions of its employees, Subcontractors, and their suppliers and shall be specifically responsible for sufficient supervision and inspection to assure compliance in every respect with Contract requirements. There shall be no contractual relationship between any Subcontractor or supplier of the Contractor and the Authority by virtue of this Contract. The Contractor shall pay wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as Social Security, income tax withholding, unemployment compensation, workers' compensation and similar matters.

15.   COMPOSITION OF CONTRACTOR

If the Contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

16.   SUBCONTRACTORS AND OUTSIDE CONSULTANTS

Any Subcontractors and outside associates or consultants required by the Contractor in connection with the Services covered by the Contract will be limited to such individuals or firms as were specifically identified and agreed to by the Authority in connection with the award of this Contract. Any substitution in such Subcontractors, associates, or consultants will be subject to the prior approval of the Authority.

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17.   EQUITABLE ADJUSTMENTS

(a)   Any requests for equitable adjustments under any provision shall be governed by the following provisions:

(1)   Upon written request, the Contractor shall submit a proposal, in accordance with the requirements and limitations set forth in this paragraph, for Services involving contemplated changes covered by the request. The proposal shall be submitted within the time limit indicated in the request for any extension of such time limit as may be subsequently granted. The Contractor's written statement of the monetary extent of a claim for equitable adjust-ment shall be submitted in the following form:

(i)   Proposals totaling $5,000 or less shall be submitted in the form of a lump sum proposal with sup-porting information to clearly relate elements of cost with specific items of Services involved to the satisfaction of the Contracting Officer, or his/her authorized representative.

(ii)   For proposals in excess of $5,000, the claim for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the Contract.

(b)   No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.

18.   PERSONNEL ASSIGNMENTS

(a)   The Contractor shall perform the Services in an orderly and workmanlike manner, and shall utilize persons skilled and qualified for the performance of the Services. The Authority will have the right to review the experience of each person assigned to perform the Services and approve personnel assignments, including those to be performed by Subcontractors,

(b)   The Contractor certifies that the Contractor, and each Subcontractor, have established a criminal history back-ground policy that complies with guidance issued by the U.S. Equal Employment Opportunity Commission and that the Contractor and each Subcontractor conducts criminal history checks on its assigned personnel in accordance with such policy to identify, hire and assign personnel to work on this Contract whose criminal backgrounds are appropriate for the Services being performed, considering the risk and liability to the Contractor and the Authority. The Authority reserves the right to require the Contractor and any Subcontractor to disclose any criminal or military criminal convictions of assigned personnel and the right to disapprove the use of assigned personnel with criminal or military convictions.

(c)   At the commencement of the Contract, the Contractor shall provide a list of candidates to be used to provide the Services and shall certify that a criminal history background check has been completed on each candidate within the preceding 6-month period Thereafter during the Term, the Contractor shall submit quarterly report containing a list of all persons (including Subcontractors) assigned to perform Services under the Contract and a certification that each named person has undergone a criminal background check as required by this Contract.   The Authority shall have the right to audit the Contractor's records for compliance with the provisions of this Section.   Criminal back-ground checks shall include the following:

(1)   State Criminal History: The Contractor shall research criminal history, including driving records (where applicable), covering all jurisdictions within the state, including local counties and municipalities.

(2)   Out of State Criminal History: The Contractor shall research criminal history, including state driving rec-ords (where applicable), for all 50 states.

(3)   National Sex Offender Registry

(4)   Military Discharge: For any candidates that have served in the military, the Contractor shall review the DD Form 214 "Certificate of Release or Discharge from Active Duty" (Long Form).

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*Matters identified on the Long Form as military discipline will be considered in accordance with the corresponding crime listed below with respect to classification, severity and time elapsed.

The Contractor shall disclose to the Authority the type of arrests with pending dispositions and convictions for crimes according to the classification of offense and the timetable below:

Offense Type	Action Required
Crimes Against the Person (other than sex crimes)	
Felony	Submit to Capital Metro for review if less than 10 years from date of **release from confinement**
Class A or B Misdemeanor	Submit to Capital Metro for review if less than 7 years from date of **conviction**
Class C Misdemeanor	Submit to Capital Metro for review if less than 5 years from date of **conviction**
Crimes Against the Person - Sex Crimes/Registered Sex Offenders	
ALL	Submit to Capital Metro for review
Crimes Against Property	
Felony	Submit to Capital Metro for review if less than 10 years from date of **release from confinement**
Moral Crimes, including, but not limited to: Drug Crimes, Prostitution, Bigamy, Illegal Gambling, Child Pornography	
Felony	Submit to Capital Metro for review if less than 10 years from date of **release from confinement**
Class A or B Misdemeanor	Submit to Capital Metro for review if less than 7 years from date of **conviction**
Class C Misdemeanor	Submit to Capital Metro for review if less than 5 years from date of **conviction**
Driving Offenses	
Class A or B Misdemeanor, DWI/DUI or other "serious driving offense"	Disqualified if less than 7 years from date of conviction or deferred adjudication. Submit to Capital Metro for review if between 7-10 years since conviction or deferred adjudication or more than 2 convictions in a lifetime
Class C Misdemeanor Moving Violations	Disqualified from driving if more than 2 moving violations in the past 5 years (Any more than one driving safety course taken for a moving violation that appears on a five (5) year record will be treated as a moving violation and will count against the employee)

The Contractor may not assign an employee to provide Services if the employee has any conviction in the applicable categories listed above, unless an exception is granted by the Authority in accordance with subparagraph (d).

(d)   The Contractor may request the Authority perform an individual assessment of a candidate with a criminal conviction meeting one of the above categories. In conducting an individual assessment, the Authority's review will include, but not be limited to, the following factors:

   (1)   The nature and gravity of the offense or conduct;

   (2)   The degree of harm caused by the offense or conduct;

   (3)   The time that has elapsed since the conviction or completion of probation or jail time;

   (4)   The nature of the job sought, including the job duties, environment and level of supervision;

(5)   Any incorrect criminal history;

(6)   Wrongful identification of the person;

(7)   The facts and circumstances surrounding the offense or conduct;

(8)   The number of offenses for which the candidate was convicted;

(9)   The subsequent conviction for another relevant offense;

(10)   The age of the person at the time of conviction or completion of probation or jail time;

(11)   Evidence that the person performed the same type of work, post-conviction, with the same or different employer, with no known incidents of criminal conduct;

(12)   The length and consistency of employment history before and after the conviction in a similar field as the current position sought;

(13)   Rehabilitation efforts, e.g., education, treatment, training;

(14)   Employment or character references and any other information regarding fitness for the particular position;

(15)   Whether the person is bonded or licensed under any federal, state or local program or any licensing authority;

(16)   The person's statement of the circumstances surrounding the offense and conviction and relevant factors is consistent with publicly available record related to the crime and conviction; and

(17)   Any other factors deemed relevant in the consideration of a particular assessment.

At the time a request is made for an individual assessment, the Contractor must include the following documentation:

- the candidate's application/resume;

- a copy of the criminal conviction history, including those tried in a military tribunal;

- available court information related to the conviction;

- any publicly available information related to the offense and conviction;

- a statement from the candidate addressing any/all factors set forth above and explaining why the person is qualified for the assignment notwithstanding the conviction; and

- a statement from the candidate explaining why the person is an acceptable risk for the work to be performed by the candidate.

The Authority will provide a written decision to the Contractor within five (5) working days of receipt of all required documentation from the Contractor.

(e) The Contractor will conduct new criminal history background checks on all assigned personnel every two (2) years during the Contract to ensure the preceding criterion are still met by the assigned personnel and notify the Authority if an employee has a subsequent arrest with pending disposition or conviction (or change in driving record, as applicable) that requires further review by the Authority using the criterion set forth above. The Authority reserves the right to request that the assigned individual be removed from performing work under this Contract.

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19. BADGES AND ACCESS CONTROL DEVICES

(a)   The Contractor and each of the Contractor's employees, as well as each Subcontractor of any tier and any workers working on behalf of Subcontractor, shall be required to wear a Capital Metro Contractor Photo Identification Badge ("badge") at all times while on the Authority's premises. The badge will be provided by Capital Metro. If any badge holder loses or misplaces his or her badge, the Contractor shall immediately notify the Project Manager upon discovery. The Contractor will be charged a $50.00 replacement fee for each lost or misplaced badge, which fee shall be deducted any amounts due and owing to the Contractor or if the Contract is terminated upon demand by the Authority. The Contractor shall return all badges provided when any badge holder is no longer working on the Contract, and all badges shall be returned upon completion of the Contract. In the event the Contractor fails to do so, the Contractor will pay a $50.00 per badge fee deducted from any amounts due and owing to the Contractor or if the Contract is terminated upon demand by the Authority. All badges should be returned to the Project Manager. All requests for new and replacement badges must be submitted in writing to the Project Manager. The misuse of a badge may result in termination of the Contract.

(b)   Access Control Devices will be issued to employees of the Contractor and to each Subcontractor of any tier and any worker working on behalf of Subcontractor as necessary to perform the Contract. Access Control Devices are not transferable between the Contractor employees or workers working on behalf of the Subcontractor. The Contractor employees and workers on behalf of the Subcontractor are prohibited from loaning Access Control Devices or providing access to an unauthorized person into restricted areas without prior arrangements with the Project Manager. All requests for new and replacement Access Control Devices must be submitted in writing to the Project Manager. Lost Access Control Devices must be reported to the Project Manager immediately upon discovery. All Access Control Devices should be returned to the Project Manager. The misuse of an Access Control Device(s) may result in termination of the Contract. The Contractor shall return all Access Control Devices once an assigned employee or worker is no longer working on the Contract or upon termination of the Contract. In the event the Contractor fails to do so, then the Contractor shall be responsible for the replacement cost of an Access Control Device which shall be deducted from any amounts due and owing to the Contractor or payable on demand if the Contract has terminated. The replacement cost will be calculated at current market value to include labor and materials.

(c)   The provisions of this paragraph survive termination of the Contract.

20. CHANGES

(a)   The Authority may, at any time, by written order, make changes within the general scope of the Contract in the Services to be performed. If such changes cause an increase or decrease in the Contractor's cost of, or time required for, performance of any Services under this Contract, whether or not changed by any order, an equitable adjustment shall be made and the Contract shall be modified in writing accordingly. Any claim of the Contractor for adjustment under this paragraph must be asserted in writing within thirty (30) days from the date of receipt by the Contractor of the notification of change unless the Contracting Officer grants a further period of time before the date of final payment under the Contract.

(b)   No Services for which an additional cost or fee will be charged by the Contractor shall be furnished without the prior written authorization of the Authority.

(c)   Any other written order (which, as used in this paragraph (c), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change in the Contractor's obligations shall be treated as a Change Order under this paragraph; provided that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances, and source of the order and (2) that the Contractor regards the order as a Change Order.

(d)   Except as provided in this paragraph, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this paragraph or entitle the Contractor to an equitable adjustment.

(e)   If any change under this paragraph causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the Services under this Contract, whether or not changed by any such

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order, the Contracting Officer may make an equitable adjustment and modify the Contract in writing in accordance with the provisions in paragraph entitled "Equitable Adjustments" contained in **Exhibit E-Revised-34**.

21.   TERMINATION FOR DEFAULT

(a)   The Authority may, subject to the provisions of subparagraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this Contract in either one of the following circumstances:

     (1)   if the Contractor fails to perform the Services within the time specified herein or any extension thereof; or

     (2)   if the Contractor fails to perform any of the other provisions of this Contract and does not cure such failure within a period of ten (10) days (or such longer period as the Authority may authorize in writing) after receipt of notice from the Authority specifying such failure.

(b)   In the event the Authority terminates this Contract in whole or in part as provided in subparagraph (a) of this paragraph, the Authority may procure, upon such terms and in such manner as the Authority may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the Authority for any excess costs for such similar supplies or services; provided, that the Contractor shall continue the performance of this Contract to the extent, if any, it has not been terminated under the provisions of this subparagraph.

(c)   Except with respect to the defaults of Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to Force Majeure Events; provided, however, in every case the failure to must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a Subcontractor and if such default arises out of causes beyond the control of both the Contractor and Subcontractor and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or Services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

(d)   If this Contract is terminated as provided in subparagraph (a), the Authority, in addition to any other rights provided in this subparagraph, may require the Contractor to transfer title and deliver to the Authority in the manner and to the extent directed by the Authority any Manufacturing Materials as the Contractor has specifically produced or specifically acquired for the performance of such part of this Contract as has been terminated; and the Contractor shall, upon direction of the Authority, protect and preserve property in possession of the Contractor in which the Authority has an interest. Payment for completed Manufacturing Materials delivered to and accepted by the Authority shall be at the Contract price. The Authority may withhold from amounts otherwise due the Contractor for such completed Manufacturing Materials such sum as the Authority determines to be necessary to protect the Authority against loss because of outstanding liens or claims of former lien holders.

(e)   If, after notice of termination of this Contract under the provisions of this paragraph, it is determined by the Authority that the Contractor was not in default or that the default was excusable under the provisions of this paragraph, the rights and obligations of the parties shall be those provided in the paragraph entitled "Termination for Convenience" contained in this **Exhibit E-Revised-34**.

(f)   The rights and remedies of the Authority provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

22.   TERMINATION FOR CONVENIENCE

(a)   The Authority may, whenever the interests of the Authority so require, terminate this Contract, in whole or in part, for the convenience of the Authority. The Authority shall give written notice of the termination to the Contractor specifying the part of the Contract terminated and when termination becomes effective.

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(b)   The Contractor shall incur no further obligations in connection with the terminated orders, and, on the date set forth in the notice of termination, the Contractor will stop providing Services to the extent specified. The Contractor also shall terminate outstanding orders and subcontracts as they relate to the terminated order. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated orders. The Authority may direct the Contractor to assign the Contractor's right, title, and interest under terminated orders or Subcontracts to the Authority. The Contractor must still complete any orders not terminated by the notice of termination and may incur such obligations as are necessary to do so.

(c)   The Authority may require the Contractor to transfer title and deliver to the Authority in the manner and to the extent directed by the Authority: (1) any completed supplies; and (2) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information and contract rights (hereinafter called "Manufacturing Materials") as the Contractor has specifically produced or specially acquired for the performance of the terminated part of this Contract. The Contractor shall, upon direction of the Authority, protect and preserve property in the possession of the Contractor in which the Authority has an interest. If the Authority does not exercise this right, the Contractor shall use its best efforts to sell such supplies and Manufacturing Materials.

(d)   The Authority shall pay the Contractor the following amounts:

(1)   Contract prices for supplies accepted under the Contract;

(2)   costs incurred in preparing to perform and performing the terminated portion of the Services plus a fair and reasonable profit on such portion of the Services (such profit shall not include anticipatory profit or consequential damages), less amounts paid or to be paid for accepted supplies; provided, however, that if it appears that the Contractor would have sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included, and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(3)   costs of settling and paying claims arising out of the termination of subcontracts (these costs must not include costs paid in accordance with subparagraph (2) of this paragraph); and

(4)   the reasonable settlement costs of the Contractor and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this Contract.

(5)   The total sum to be paid the Contractor under this paragraph shall not exceed the total Contract Sum plus the reasonable settlement costs of the Contractor reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and Manufacturing Materials under this paragraph, and the contract price of orders not terminated.

23.   CONTRACTOR CERTIFICATION

The Contractor certifies that the fees in this Contract have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.

24.   INTELLECTUAL PROPERTY; DATA PRIVACY PROPERTY PROVISIONS

(a)   Unless otherwise specified in **Exhibit A (including revisions) and Exhibit A-1.1 (including revisions)** to the Contract, the Deliverables and Intellectual Property Rights therein shall be owned by the Contractor. The Contractor may use its own previously developed data, documentation, software, concepts, materials, or information, in whatever form, or develop the Deliverables in performing its services for the Authority.

(b)   Unless otherwise specified in **Exhibit A (including revisions) and Exhibit A-1.1 (including revisions)** to the Contract, the Contractor hereby grants to the Authority the irrevocable, perpetual, non-exclusive, worldwide, royalty-free right and license to use, execute, reproduce, display, perform, distribute copies of, and prepare derivative

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works of the Deliverables in connection with the sale, offering for sale, marketing, advertising, and promotion of the Authority's goods and services, and in all forms of media, media channels and/or publicity that may now exist or hereafter be created or developed, including but not limited to television, radio, print, Internet, and social media (e.g., Facebook, Twitter, YouTube, etc.) and to authorize its employees, contractors, personnel and service providers to do any or all of the foregoing on behalf of or for the Authority. The Contractor hereby irrevocably and forever waives, and agrees never to assert, any moral rights or other rights of restraint or attribution in or to the Deliverables that the Contractor may now have or which may accrue to the Contractor's benefit under U.S. or foreign copyright laws and any and all other residual rights and benefits which arise under any other applicable law now in force or hereafter enacted.

(c)   To the extent that any Intellectual Property Rights owned by a third-party are embodied, contained, reserved or reflected in the Deliverables, the Contractor shall either:

(1)   grant to the Authority the irrevocable, perpetual, non-exclusive, worldwide, royalty-free right and license to use, execute, reproduce, display, perform, distribute copies of, and prepare derivative works based upon such pre-existing rights and any derivative works thereof in connection with the sale, offering for sale, marketing, advertising, and promotion of the Authority's goods and services, and in all forms of media, media channels and/or publicity that may now exist or hereafter be created or developed, including but not limited to television, radio, print, Internet, and social media (e.g., Facebook, Twitter, YouTube, etc.) and authorize others to do any or all of the foregoing, on behalf of or for the Authority; or

(2)   where the obtaining of such rights is not reasonably practical or feasible, provide written notice to the Authority of such pre-existing or third party rights or limitations, request the Authority's approval of such pre-existing or third party rights, obtain a limited right and license to use such pre-existing or third party rights on such terms as may be reasonably negotiated, and obtain the Authority's written approval of such pre-existing or third party rights and the limited use of same. The Contractor shall provide the Authority with documentation indicating a third party's written approval for the Contractor to use any third-party rights that may be embodied, contained, reserved or reflected in the Works. THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD THE AUTHORITY HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, REGULATORY PROCEEDINGS AND/OR CAUSES OF ACTION, AND ALL LOSSES, DAMAGES, AND COSTS (INCLUDING ATTORNEYS' FEES AND SETTLEMENT COSTS) ARISING FROM OR RELATING TO, DIRECTLY OR IN-DIRECTLY, ANY CLAIM OR ASSERTION BY ANY THIRD PARTY THAT THE DELIVERABLES INFRINGE ANY THIRD-PARTY RIGHTS. The foregoing indemnity obligation shall not apply to instances in which the Authority either:

a.   exceeded the scope of the limited license that was previously obtained by the Contractor and agreed to by the Authority, or

b.   obtained information or materials, independent of the Contractor's involvement or creation, and provided such information or materials to the Contractor for inclusion in the Works, and such information or materials were included by the Contractor, in an unaltered and unmodified fashion, in the Deliverables.

(d)   The Contractor hereby warrants and represents to the Authority that individuals or characters appearing or depicted in any advertisement, marketing, promotion, publicity or media, of any type or form that may now exist or hereafter be created or developed by or on behalf of the Contractor for the use by or benefit of the Authority, have provided their written consent for the use, reproduction, display, performance, and distribution of, and/or preparation of derivative works to, their persona or personality rights, including name, biographical information, picture, portrait, likeness, performance, voice and/or identity ("Personality Rights"), and have been compensated for such Personality Rights, if appropriate. If such permission has been obtained for a limited time, the Contractor shall be responsible for any costs associated with claims resulting from such use, etc., of the Personality Rights after the expiration of those time limits. THE CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE AUTHORITY HARMLESS FROM ANY CLAIMS, INCLUDING BUT NOT LIMITED TO CLAIMS FOR INVASION OF PRIVACY, INFRINGEMENT OF THE RIGHT OF PUBLICITY, LIBEL, UNFAIR COMPETITION, FALSE ADVERTISING, INTENTIONAL OR NEG-LIGENT INFLICTION OF EMOTIONAL DISTRESS, COPYRIGHT OR TRADEMARK INFRINGEMENT, AND/OR CLAIMS FOR ATTORNEY'S FEES, RESULTING FROM SUCH USE, ETC., OF THE PERSONALITY RIGHTS.

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(e)   The Contractor and its subcontractors and their respective employees and personnel may have access to the Authority Data (including without limitation, personally identifiable information ("PII")) in connection with the performance of the Contract. PII shall be any information that identifies or describes a person or can be directly linked to a specific individual, including ridership and usage data. Examples of PII include, but are not limited to, name, address, phone or fax number, signature, date of birth, e-mail address, method of payment, ridership and travel pattern data. Customer Personally Identifiable Information, or Customer PII, means any PII relating to the Authority's customers. To the extent any Authority Data (including PII) is made available to the Contractor under the Contract, the Contractor shall take reasonable steps maintain the confidentiality, security, safety, and integrity of all PII and other Authority Data in accordance with the Authority's Proprietary Rights and Data Security Addendum, which will be attached as an addendum to the Contract, as applicable.

(f)   The Contractor and its subcontractors, employees and consultants may have require access to the Authority Electronic Property and related Authority Data in connection with the performance of services under the Contract. In such event, the Contractor agrees that it will, and it will cause its subcontractors and any of their respective employees and personnel to execute the Authority's Access and Use Agreement, which will be attached as an addendum to the Contract, as applicable.

(g)   This Paragraph 24 will survive termination or expiration of this Agreement for any reason.

25.   STANDARDS OF PERFORMANCE

The Contractor shall perform the Services hereunder in compliance with all applicable federal, state, and local laws and regulations. The Contractor shall use only licensed personnel to perform Services required by law to be performed by such personnel.

26.   INSPECTIONS AND APPROVALS

(a)   All Services performed by the Contractor or its Subcontractors or consultants shall be subject to the inspection and approval of the Authority at all times, but such approval shall not relieve the Contractor of responsibility for the proper performance of the Services. The Contractor shall provide sufficient, safe, and proper facilities at all times for such inspection of the Services and shall furnish all information concerning the Services and give the Authority or its representatives free access at all reasonable times to the facilities where the Services are performed.

(b)   The Contractor shall provide and maintain an inspection system acceptable to the Authority covering the Services under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Authority during Contract performance and for as long afterwards and the Contract requires.

(c)   The Authority has the right to inspect and test all Services called for by this Contract, to the extent practicable, at all times and places during the term of the Contract. The Authority shall perform inspections and tests in a manner that will not unduly delay the Services.

(d)   If any of the Services do not conform with Contract requirements, the Authority may require the Contractor to perform the Services again in conformity with the Contract requirements, at no increase in the Contract Sum. When the defects in services cannot be corrected by performance, the Authority may (1) require the Contractor to take necessary action to ensure that future performance conforms to Contract requirements and (2) reduce the Contract Sum to reflect the reduced value of the Services performed.

(e)   If the Contractor fails promptly to perform the Services again or to take the necessary action to ensure future performance in conformity with Contract requirements, the Authority may (1) by contract or otherwise, perform the Services and charge to the Contractor any cost incurred by the Authority that is directly related to the performance of such service or (2) terminate the Contract for default.

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27. SUSPENSION OF SERVICES

(a) The Authority may order the Contractor in writing to suspend all or any part of the Services for such period of time as the Authority determines to be appropriate for the convenience of the Authority.

(b) If the performance of all or any part of the Services is, for an unreasonable period of time, suspended or delayed by an act of the Authority in the administration of this Contract, or by the Authority's failure to act within the time specified in this Contract (or, if no time is specified, within a reasonable time), an adjustment shall be made for any increase in cost of performance of this Contract (excluding profit) necessarily caused by such unreasonable suspension or delay, and the Contract modified in writing accordingly. However, no adjustment shall be made under this paragraph for any suspension or delay to the extent (1) that performance would have suspended or delayed by any other cause, including the fault or negligence of the Contractor, or (2) for which an equitable adjustment is provided for or excluded under any other provision of this Contract.

(c) No claim under this paragraph shall be allowed (1) for any costs incurred more than twenty (20) days before the Contractor shall have notified the Authority in writing of the act or failure to act involved (but this requirement shall not apply to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension or delay, but not later than the date of final payment. No part of any claim based on the provisions of this subparagraph shall be allowed if not supported by adequate evidence showing that the cost would not have been incurred but for a delay within the provisions of this paragraph.

28. PAYMENT TO SUBCONTRACTORS

(a) Payments by contractors to subcontractors associated with Authority contracts are subject to the time periods established in the Texas Prompt Payment Act, Tex. Gov't Code § 2251.

(b) A false certification to the Authority under the provisions of the paragraph entitled "Invoicing and Payment" hereof may be a criminal offense in violation of Tex. Penal Code § 10.

29. FEDERAL, STATE AND LOCAL TAXES

The Contract Sum includes all applicable federal, state, and local taxes and duties. The Authority is exempt from taxes imposed by the State of Texas and local sales and use taxes under Texas Tax Code § 151.309, and any such taxes included on any invoice received by the Authority shall be deducted from the amount of the invoice for purposes of payment. The Contractor may claim exemption from payment of applicable State taxes by complying with such procedures as may be prescribed by the State Comptroller of Public Accounts. The Contractor bears sole and total responsibility for obtaining information pertaining to such exemption.

30. EQUAL OPPORTUNITY

During the performance of this Contract, the Contractor agrees that it will, in good faith, afford equal opportunity required by applicable federal, state, or local law to all employees and applicants for employment without regard to race, color, religion, sex, national origin, disability or any other characteristic protected by federal, state or local law.

31. CONFLICT OF INTEREST

(a) Reference is made to Exhibit B, Representations and Certifications, Code of Ethics, which is incorporated herein and made a part of this Contract. Capitalized terms used in this paragraph and not otherwise defined shall have the meanings as described to them in the Code of Ethics.

(b) The Contractor represents that no Employee has a Substantial Interest in the Contractor or this Contract, which Substantial Interest would create or give rise to a Conflict of Interest. The Contractor further represents that no person who has a Substantial Interest in the Contractor and is or has been employed by the Authority for a period of two (2) years prior to the date of this Contract has or will (1) participate, for the Contractor, in a recommendation, bid, proposal or solicitation on any Authority contract, procurement or personnel administration matter, or (2) receive any pecuniary

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benefit from the award of this Contract through an ownership of a Substantial Interest (as that term is defined in Paragraph II, subparagraphs (1) and (3) of the Code of Ethics) in a business entity or real property.

(c)   The Contractor agrees to ensure that the Code of Ethics is not violated as a result of the Contractor's activities in connection with this Contract. The Contractor agrees to immediately inform the Authority if it becomes aware of the existence of any such Substantial Interest or Conflict of Interest, or the existence of any violation of the Code of Ethics arising out of or in connection with this Contract.

(d)   The Authority may, in its sole discretion, require the Contractor to cause an immediate divestiture of such Substantial Interest or elimination of such Conflict of Interest, and failure of the Contractor to so comply shall render this Contract voidable by the Authority. Any willful violation of these provisions, creation of a Substantial Interest or existence of a Conflict of Interest with the express or implied knowledge of the Contractor shall render this Contract voidable by the Authority.

(e)   In accordance with paragraph 176.006, Texas Local Government Code, "vendor" is required to file a conflict of interest questionnaire within seven business days of becoming aware of a conflict of interest under Texas law. The conflict of interest questionnaire can be obtained from the Texas Ethics Commission at www.ethics.state.tx.us. The questionnaire shall be sent to the Authority's Contract Administrator.

32.   GRATUITIES

The Authority may cancel this Contract, without liability to the Contractor, if it is found that gratuities in the form of entertainment, gifts, or otherwise were offered or given by the Contractor or any agent or representative to any Authority official or employee with a view toward securing favorable treatment with respect to the performance of this Contract. In the event this Contract is canceled by the Authority pursuant to this provision, the Authority shall be entitled, in addition to any other rights and remedies, to recover from the Contractor a sum equal in amount to the cost incurred by the Contractor in providing such gratuities.

33.   PUBLICATIONS

All published material and written reports submitted under this Contract must be originally developed material unless otherwise specifically provided in the Contract document. When material, not originally developed, is included in a report, it shall have the source identified. This provision is applicable when the material is in a verbatim or extensive paraphrased format.

34.   REQUEST FOR INFORMATION

(a)   The Contractor shall not provide information generated or otherwise obtained in the performance of its responsibilities under this Contract to any party other than the Authority and its authorized agents except as otherwise provided by this Contract or after obtaining the prior written permission of the Authority.

(b)   This Contract, all data and other information developed pursuant to this Contract shall be subject to the Texas Public Information Act. The Authority shall comply with all aspects of the Texas Public Information Act.

(c)   The Contractor is instructed that any requests for information regarding this Contract and any deliverables shall be referred to the Authority.

(d)   The requirements of Subchapter J, Chapter 552, Government Code, may apply to this **contract** and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

(1)   The requirement of Subchapter J, Chapter 552, Government Code as amended currently applies to expenditures of at least $1 million in public funds for the purchase of goods or services.

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35.   RIGHTS TO PROPOSAL AND CONTRACTUAL MATERIAL

(a)   All documentation related to or prepared in connection with any proposal, including the contents of any proposal contracts, responses, inquiries, correspondence, and all other material submitted in connection with the proposal shall become the property of the Authority upon receipt.

(b)   All documents, reports, data, graphics and other materials produced under this Contract shall become the sole possession of the Authority upon receipt and payment, subject only to the Contractor's professional obligation to maintain copies of its work product.

36.   LIMITATION OF LIABILITY

In no event shall the Authority or its officers, directors, agents or employees be liable in contract or tort, to the Contractor or its Subcontractors for special, indirect, incidental or consequential damages, resulting from the Authority's performance, nonperformance, or delay in performance of its obligations under this Contract, or the Authority's termination of the Contract with or without cause, or the Authority's suspension of the Services. This limitation of liability shall not apply to intentional tort or fraud. The Contractor shall include similar liability provisions in all its Subcontracts.

37.   LAWS, STATUTES AND OTHER GOVERNMENTAL REQUIREMENTS

The Contractor agrees that it shall be in compliance with all laws, statutes, and other governmental requirements, regulations or standards prevailing during the term of this Contract.

38.   CLAIMS

In the event that any claim, demand, suit, or other action is made or brought by any person, firm, corporation, or other entity against the Contractor arising out of this Contract, the Contractor shall give written notice thereof, to the Authority within three (3) working days after being notified of such claim, demand, suit, or action. Such notice shall state the date and hour of notification of any such claim, demand, suit, or other action; the name and address of the person, firm, corporation, or other entity making such claim or instituting or threatening to institute any type of action or proceeding; the basis of such claim, action, or proceeding; and the name of any person against whom such claim is being made or threatened. Such written notice shall be delivered either personally or by mail and shall be directly sent to the attention of the President/CEO, Capital Metropolitan Transportation Authority, 2910 E. 5th Street, Austin, Texas 78702.

39.   LICENSES AND PERMITS

The Contractor shall, without additional expense to the Authority, be responsible for obtaining any necessary licenses, permits, and approvals for complying with any federal, state, county, municipal, and other laws, codes, and regulations applicable to the Services to be provided under this Contract including, but not limited to, any laws or regulations requiring the use of licensed Subcontractors to perform parts of the work.

40.   NOTICE OF LABOR DISPUTES

(a)   If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor immediately shall give notice, including all relevant information, to the Authority.

(b)   The Contractor agrees to insert the substance of this paragraph, including this subparagraph (b), in any Subcontract under which a labor dispute may delay the timely performance of this Contract; except that each Subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor shall immediately notify the next higher tier Subcontractor or the Contractor, as the case may be, of all relevant information concerning the dispute.

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41. PUBLICITY RELEASES

All publicity releases or releases of reports, papers, articles, maps, or other documents in any way concerning this Contract or the Services hereunder which the Contractor or any of its Subcontractors desires to make for the purposes of publication in whole or in part, shall be subject to approval by the Authority prior to release.

42. INTEREST OF PUBLIC OFFICIALS

The Contractor represents and warrants that no employee, official, or member of the Board of the Authority is or will be pecuniarily interested or benefited directly or indirectly in this Contract. The Contractor further represents and warrants that it has not offered or given gratuities (in the form of entertainment, gifts or otherwise) to any employee, official, or member of the Board of the Authority with a view toward securing favorable treatment in the awarding, amending, or evaluating the performance of this Contract. For breach of any representation or warranty in this paragraph, the Authority shall have the right to terminate this Contract without liability and/or have recourse to any other remedy it may have at law or in equity.

43. INDEMNIFICATION

(a)   THE CONTRACTOR WILL INDEMNIFY, DEFEND AND HOLD THE AUTHORITY AND ITS OFFICERS, DI-RECTORS, EMPLOYEES, AGENTS AND REPRESENTATIVES (THE AUTHORITY AND EACH SUCH PERSON OR ENTITY IS AN "INDEMNIFIED PARTY") HARMLESS FROM AND AGAINST AND PAY ANY AND ALL DAM-AGES (AS DEFINED HEREIN) DIRECTLY OR INDIRECTLY RESULTING FROM, RELATING TO, ARISING OUT OF OR ATTRIBUTABLE TO ANY OF THE FOLLOWING:

(1)   ANY BREACH OF ANY REPRESENTATION OR WARRANTY THAT THE CONTRACTOR HAS MADE IN THIS CONTRACT;

(2)   ANY BREACH, VIOLATION OR DEFAULT BY OR THROUGH THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS OF ANY OBLIGATION OF THE CONTRACTOR IN THIS CONTRACT OR ANY OTHER AGREEMENT BETWEEN THE CONTRACTOR AND THE AUTHORITY;

(3)   THE USE, CONDITION, OPERATION OR MAINTENANCE OF ANY PROPERTY, VEHICLE, FACILITY OR OTHER ASSET OF THE AUTHORITY TO WHICH THE CONTRACTOR HAS ACCESS OR AS TO WHICH THE CONTRACTOR PROVIDES SERVICES; OR

(4)   ANY ACT OR OMISSION OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS OR ANY OF THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, CUSTOMERS, INVITEES, REPRESENTATIVES OR VENDORS.

(b)   TO THE EXTENT THAT EXHIBIT IT (HOSTED SOLUTION) IS PART OF THE CONTRACT, THE CONTRAC-TOR SHALL, TO THE PROPORTIONATE EXTENT THAT THEY ARE RESPONSIBLE, INDEMNIFY, DEFEND AND HOLD HARMLESS THE AUTHORITY AND ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, CUS-TOMERS AND AGENTS FROM AND AGAINST ANY AND ALL CLAIMS AND LOSSES OF ANY NATURE OR KIND TO THE EXTENT ARISING OUT OF, CAUSED BY, OR RESULTING FROM: (I) ANY FAILURE OF THE APPLICATION OR THE SERVICES TO CONFORM WITH APPLICABLE LAWS OR THE TECHNICAL SPECIFI-CATIONS (AS DEFINED IN EXHIBIT IT (HOSTED SOLUTION)) OR SECURITY REQUIREMENTS (AS DEFINED IN EXHIBIT IT (HOSTED SOLUTION)) SET FORTH IN THE CONTRACT; (II) ANY SECURITY INCIDENT (AS DEFINED IN EXHIBIT IT (HOSTED SOLUTION)); AND (III) ANY ACTUAL OR ALLEGED VIOLATION, INFRINGE-MENT OR MISAPPROPRIATION OF ANY INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY RELATED TO THE SERVICES AND THE APPLICATION, REGARDLESS OF WHETHER OR NOT ANY SUCH CLAIM OR LOSS IS CAUSED IN PART BY ANY INDEMNITEE. IN PARTICULAR, THE CONTRACTOR ACKNOWLEDGES THAT THE CONTRACTOR'S OBLIGATION TO INDEMNIFY THE AUTHORITY EXTENDS TO ANY LIABILITY ARISING OUT OF ANY ACTUAL NEGLIGENCE BY THE CONTRACTOR IN THE DELIVERY OF ANY PRODUCTS OR SERVICES UNDER THE CONTRACT. NOTWITHSTANDING THE FOREGOING, THE CONTRACTOR SHALL NOT BE LIABLE TO AN INDEMNITEE FOR ANY LOSSES INCURRED BY SUCH INDEMNITEE TO THE EXTENT

SUCH CLAIM IS ATTRIBUTABLE SOLELY TO THAT INDEMNITEE'S SOLE NEGLIGENCE.

(c)   TO THE EXTENT THAT EXHIBIT IT (ON-PREMISES SOLUTION) IS PART OF THE CONTRACT, THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE AUTHORITY AND ITS AFFILIATES AND THEIR TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, CUSTOMERS AND AGENTS FROM AND AGAINST ANY AND ALL DAMAGES OF ANY NATURE OR KIND TO THE EXTENT ARISING OUT OF, CAUSED BY, OR RESULTING FROM: (I) ANY BODILY INJURY OR DEATH OF ANY PERSON INCURRED BY THE AUTHORITY OR ANY THIRD PARTY RESULTING FROM THE NEGLIGENCE OR WILLFUL MISCONDUCT OF THE CONTRACTOR OR ITS EMPLOYEES, CONTRACTORS OR REPRESENTATIVES; (II) ANY FAILURE OF THE ON-PREMISES SYSTEM, SOFTWARE AND/OR HARDWARE TO CONFORM WITH APPLICABLE LAWS OR THE TECHNICAL SPECIFICATIONS (AS DEFINED IN EXHIBIT IT (ON-PREMISES SOLUTION)) OR OTHER REQUIREMENTS (AS DEFINED IN EXHIBIT IT (ON-PREMISES SOLUTION)) SET FORTH IN THE CONTRACT; (III) ANY SECURITY INCIDENT (AS DEFINED IN EXHIBIT IT (ON-PREMISES SOLUTION)); AND (IV) ANY ACTUAL OR ALLEGED VIOLATION, INFRINGEMENT OR MISAPPROPRIATION OF ANY COPYRIGHT, PATENT, TRADEMARK, TRADE SECRET, PRODUCT NAME, RIGHT OF PRIVACY OR PERSONA OR OTHER INTELLECTUAL PROPERTY RIGHT AND PROPRIETARY RIGHT OF A THIRD PARTY RELATED TO THE SERVICES AND THE ON-PREMISES SYSTEM, SOFTWARE AND/OR HARDWARE REGARDLESS OF WHETHER OR NOT SUCH CLAIM, DAMAGE, LOSS, OR EXPENSE IS CAUSED IN PART BY ANY INDEMNITEE. IN PARTICULAR, THE CONTRACTOR ACKNOWLEDGES THAT THE CONTRACTOR'S OBLIGATION TO INDEMNIFY THE AUTHORITY EXTENDS TO ANY LIABILITY ARISING OUT OF ANY ACTUAL NEGLIGENCE BY THE CONTRACTOR IN THE DELIVERY OF ANY PRODUCTS OR SERVICES UNDER THE CONTRACT. NOTWITHSTANDING THE FOREGOING, THE CONTRACTOR SHALL NOT BE LIABLE TO AN INDEMNITEE FOR ANY LOSSES INCURRED BY SUCH INDEMNITEE TO THE EXTENT SUCH CLAIM IS ATTRIBUTABLE SOLELY TO THAT INDEMNITEE'S SOLE NEGLIGENCE.

(d)   "ACTION" MEANS ANY ACTION, APPEAL, PETITION, PLEA, CHARGE, COMPLAINT, CLAIM, SUIT, DEMAND, LITIGATION, MEDIATION, HEARING, INQUIRY, INVESTIGATION OR SIMILAR EVENT, OCCURRENCE OR PROCEEDING.

(e)   "DAMAGES" MEANS ALL DIRECT OR INDIRECT DAMAGES, LOSSES, LIABILITIES, DEFICIENCIES, SETTLEMENTS, CLAIMS, AWARDS, INTEREST, PENALTIES, JUDGMENTS, FINES, OR OTHER COSTS OR EXPENSES OF ANY KIND OR NATURE WHATSOEVER, WHETHER KNOWN OR UNKNOWN, CONTINGENT OR VESTED, MATURED OR UNMATURED, AND WHETHER OR NOT RESULTING FROM THIRD-PARTY CLAIMS, INCLUDING COSTS (INCLUDING, WITHOUT LIMITATION, REASONABLE FEES AND EXPENSES OF ATTORNEYS, OTHER PROFESSIONAL ADVISORS AND EXPERT WITNESSES) RELATED TO ANY INVESTIGATION, ACTION, SUIT, ARBITRATION, APPEAL, CLAIM, DEMAND, INQUIRY, COMPLAINT, MEDIATION, INVESTIGATION OR SIMILAR EVENT, OCCURRENCE OR PROCEEDING.

(f)   "THREATENED" MEANS A DEMAND OR STATEMENT HAS BEEN MADE (ORALLY OR IN WRITING) OR A NOTICE HAS BEEN GIVEN (ORALLY OR IN WRITING), OR ANY OTHER EVENT HAS OCCURRED OR ANY OTHER CIRCUMSTANCES EXIST THAT WOULD LEAD A PRUDENT PERSON OR ENTITY TO CONCLUDE THAT AN ACTION OR OTHER MATTER IS LIKELY TO BE ASSERTED, COMMENCED, TAKEN OR OTHERWISE PURSUED IN THE FUTURE.

(g)   IF ANY ACTION IS COMMENCED OR THREATENED THAT MAY GIVE RISE TO A CLAIM FOR INDEMNIFICATION (A "CLAIM") BY ANY INDEMNIFIED PARTY AGAINST THE CONTRACTOR, THEN SUCH INDEMNIFIED PARTY WILL PROMPTLY GIVE NOTICE TO THE CONTRACTOR AFTER SUCH INDEMNIFIED PARTY BECOMES AWARE OF SUCH CLAIM. FAILURE TO NOTIFY THE CONTRACTOR WILL NOT RELIEVE THE CONTRACTOR OF ANY LIABILITY THAT IT MAY HAVE TO THE INDEMNIFIED PARTY, EXCEPT TO THE EXTENT THAT THE DEFENSE OF SUCH ACTION IS MATERIALLY AND IRREVOCABLY PREJUDICED BY THE INDEMNIFIED PARTY'S FAILURE TO GIVE SUCH NOTICE. THE CONTRACTOR WILL ASSUME AND THEREAFTER DILIGENTLY AND CONTINUOUSLY CONDUCT THE DEFENSE OF A CLAIM WITH COUNSEL THAT IS SATISFACTORY TO THE INDEMNIFIED PARTY. THE INDEMNIFIED PARTY WILL HAVE THE RIGHT, AT ITS OWN EXPENSE, TO PARTICIPATE IN THE DEFENSE OF A CLAIM WITHOUT RELIEVING THE CONTRACTOR OF ANY OBLIGATION DESCRIBED ABOVE. IN NO EVENT WILL THE CONTRACTOR APPROVE THE ENTRY OF ANY JUDGMENT OR ENTER INTO ANY SETTLEMENT WITH RESPECT TO ANY CLAIM WITHOUT THE

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INDEMNIFIED PARTY'S PRIOR WRITTEN APPROVAL, WHICH WILL NOT BE UNREASONABLY WITHHELD. UNTIL THE CONTRACTOR ASSUMES THE DILIGENT DEFENSE OF A CLAIM, THE INDEMNIFIED PARTY MAY DEFEND AGAINST A CLAIM IN ANY MANNER THE INDEMNIFIED PARTY REASONABLY DEEMS APPROPRIATE. THE CONTRACTOR WILL REIMBURSE THE INDEMNIFIED PARTY PROMPTLY AND PERIODICALLY FOR THE DAMAGES RELATING TO DEFENDING AGAINST A CLAIM AND WILL PAY PROMPTLY THE INDEMNIFIED PARTY FOR ANY DAMAGES THE INDEMNIFIED PARTY MAY SUFFER RELATING TO A CLAIM.

(h)   THE INDEMNIFICATION OBLIGATIONS AND RIGHTS PROVIDED FOR IN THIS CONTRACT DO NOT REQUIRE (AND SHALL NOT BE CONSTRUED AS REQUIRING) THE CONTRACTOR TO INDEMNIFY, HOLD HARMLESS, OR DEFEND ANY INDEMNIFIED PARTY (OR ANY THIRD PARTY) AGAINST ANY ACTION OR CLAIM (OR THREATENED ACTION OR CLAIM) CAUSED BY THE NEGLIGENCE OR FAULT, THE BREACH OR VIOLATION OF A STATUTE, ORDINANCE, GOVERNMENTAL REGULATION, STANDARD, OR RULE, OR THE BREACH OF CONTRACT OF ANY INDEMNIFIED PARTY, ITS AGENTS OR EMPLOYEES, OR ANY THIRD PARTY UNDER THE CONTROL OR SUPERVISION OF ANY INDEMNIFIED PARTY, OTHER THAN THE CONTRACTOR OR ITS AGENTS, EMPLOYEES, OR SUBCONTRACTORS OF ANY TIER.

(i)   THIS PARAGRAPH WILL SURVIVE ANY TERMINATION OR EXPIRATION OF THIS CONTRACT.

44.   RECORD RETENTION; ACCESS TO RECORDS AND REPORTS

(a)   The Contractor will retain, and will require its Subcontractors of all tiers to retain, complete and readily accessible records related in whole or in part to the Contract, including, but not limited to, data, documents, reports, statistics, sub-agreements, leases, subcontracts, arrangements, other third party agreements of any type, and supporting materials related to those records.

(b)   If this is a cost-reimbursement, incentive, time and materials, labor hour, or price determinable Contract, or any combination thereof, the Contractor shall maintain, and the Authority and its representatives shall have the right to examine, all books, records, documents, and other evidence and accounting procedures and practices sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this Contract.

(c)   If the Contractor submitted certified cost or pricing data in connection with the pricing of this Contract or if the Contractor's cost of performance is relevant to any change or modification to this Contract, the Authority and its representatives shall have the right to examine all books, records, documents, and other data of the Contractor related to the negotiation, pricing, or performance of such Contract, change, or modification for the purpose of evaluating the costs incurred and the accuracy, completeness, and currency of the cost or pricing data submitted. The right of examination shall extend to all documents necessary to permit adequate evaluation of the costs incurred and the cost or pricing data submitted, along with the computations and projections used therein.

(d)   The Contractor shall maintain all books, records, accounts and reports required under this paragraph for a period of at not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case records shall be maintained until the disposition of all such litigation, appeals, claims or exceptions related thereto.

(e)   The Contractor agrees to provide sufficient access to the Authority and its contractors to inspect and audit records and information related to performance of this Contract as reasonably may be required.

(f)   The Contractor agrees to permit the Authority and its contractors access to the sites of performance under this Contract as reasonably may be required.

(g)   If an audit pursuant to this paragraph reveals that the Authority has paid any invoices or charges not authorized under this Contract, the Authority may offset or recoup such amounts against any indebtedness owed by it to the Contractor, whether arising under this Contract or otherwise, over a period of time equivalent to the time period over which such invoices or charges accrued.

(h)   This paragraph will survive any termination or expiration of this Contract.

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45. EXCUSABLE DELAYS

(a)   Except for defaults of Subcontractors at any tier, the Contractor shall not be in default because of any failure to perform this Contract under its terms if the failure arises from Force Majeure Events. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor. "Default" includes failure to make progress in the performance of the Services.

(b)   If the failure to perform is caused by the failure of a Subcontractor at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Contractor and Subcontractor and without the fault or negligence of either, the Contractor shall not be deemed to be in default, unless:

  (1)   the subcontracted supplies or services were obtainable from other sources;

  (2)   the Authority ordered the Contractor in writing to obtain these services from the other source; and

  (3)   the Contractor failed to comply reasonably with this order.

(c)   Upon the request of the Contractor, the Authority shall ascertain the facts and extent of the failure. If the Authority determines that any failure to perform results from one or more of the causes above, the delivery schedule or period of performance shall be revised, subject to the rights of the Authority under this Contract.

46. LOSS OR DAMAGE TO PROPERTY

The Contractor shall be responsible for any loss or damage to property including money securities, merchandise, fixtures and equipment belonging to the Authority or to any other individual or organization, if any such loss or damage was caused by the Contractor or any Subcontractor at any tier, or any employee thereof, while such person is on the premises of the Authority as an employee of the Contractor or Subcontractor.

47. CONTRACTOR CONTACT/AUTHORITY DESIGNEE

The Contractor shall provide the Authority with a telephone number to ensure immediate communication with a person (not a recording) anytime during Contract performance. Similarly, the Authority shall designate an Authority representative who shall be similarly available to the Contractor.

48. QUALITY ASSURANCE

A periodic review of the Contractor's scheduled work may be performed by the Authority. If work is deemed incomplete or unacceptable in any way, the Authority will determine the cause and require the Contractor to take corrective measures in accordance with the terms of the Contract.

49. INTERPRETATION OF CONTRACT – DISPUTES

All questions concerning interpretation or clarification of this Contract or the acceptable fulfillment of this Contract by the Contractor shall be immediately submitted in writing to the Authority's Contracting Officer for determination. All determinations, instructions, and clarifications of the Contracting Officer shall be final and conclusive unless the Contractor files with the Capital Metro President/CEO within two (2) weeks after the Authority notifies the Contractor of any such determination, instruction or clarification, a written protest, stating in detail the basis of the protest. The President/CEO shall consider the protest and notify the Contractor within two (2) weeks of the protest filing of his or her final decision. The President/CEO's decisions shall be conclusive subject to judicial review. Notwithstanding any disagreement the Contractor may have with the decisions of the President/CEO, the Contractor shall proceed with the Services in accordance with the determinations, instructions, and clarifications of the President/CEO. The Contractor shall be solely responsible for requesting instructions or interpretations and liable for any cost or expenses arising from its failure to do so. The Contractor's failure to protest the Contracting Officer's determinations, instructions, or clarifications within the two-week period shall constitute a waiver by the Contractor of all of its rights to further protest.

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50.   TOBACCO FREE WORKPLACE

(a)   Tobacco products include cigarettes, cigars, pipes, snuff, snus, chewing tobacco, smokeless tobacco, dipping tobacco and any other non-FDA approved nicotine delivery device.

(b)   The tobacco free workplace policy refers to all Capital Metro owned or leased property. Note that this includes all buildings, facilities, work areas, maintenance facilities, parking areas and all Authority owned vehicles.

(c)   Tobacco use is not permitted at any time on Capital Metro owned or leased property, including personal vehicles parked in Capital Metro parking lots.

(d)   Littering of tobacco-related products on the grounds or parking lots is also prohibited.

51.   ORDER OF PRECEDENCE

In the event of any inconsistency between the provisions of this Contract, the inconsistency shall be resolved by giving precedence in the following order:

1.   **Exhibit A – Revised – 1 – Pricing Schedule**
2.   **Exhibit A-1.1 Revised through A-1.4 Revised Pricing Supplement**
3.   **Exhibit E Revised -34 – Contractual Terms and Conditions**
4.   Exhibit F – Scope of Services and Compliance Matrices
5.   Exhibit B – Representations and Certifications
6.   Exhibit D – Small Business Enterprise Program/SBE
7.   Exhibit H – IT – Proprietary Rights and Data Security Addendum
8.   Exhibit L – IT – (Services) – Additional Terms and Conditions
9.   Exhibit K – IT – (Hosted Solutions) – Additional Terms and Conditions
10.   Exhibit J – IT – (On-Premises Solutions) – Additional Terms and Conditions
11.   Other provisions or attachments to the Contract

52.   ANTI-CORRUPTION AND BRIBERY LAWS

The Contractor shall comply with all Applicable Anti-Corruption and Bribery Laws. The Contractor represents and warrants that it has not and shall not violate or cause the Authority to violate any such Anti-Corruption and Bribery Laws. The Contractor further represents and warrants that, in connection with supplies or Services provided to the Authority or with any other business transaction involving the Authority, it shall not pay, offer, promise, or authorize the payment or transfer of anything of value, directly or indirectly to: (a) any government official or employee (including employees of government owned or controlled companies or public international organizations) or to any political party, party official, or candidate for public office or (b) any other person or entity if such payments or transfers would violate applicable laws, including Applicable Anti-Corruption and Bribery Laws. Notwithstanding anything to the contrary herein contained, the Authority may withhold payments under this Contract, and terminate this Contract immediately by way of written notice to the Contractor, if it believes, in good faith, that the Contractor has violated or caused the Authority to violate the Applicable Anti-Corruption and Bribery Laws. The Authority shall not be liable to the Contractor for any claim, losses, or damages related to its decision to exercise its rights under this provision.

53.   RESERVED

54.   ORGANIZATIONAL CONFLICT OF INTEREST (OCI)

(a)   This Contract may task the Contractor to prepare or assist in preparing work statements that directly, predictably and without delay are used in future competitive acquisitions. The parties recognize that by the Contractor providing this support a potential conflict of interest arises as defined by FAR 9.5.

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(b)   For the purposes of this paragraph, the term "Contractor" means the Contractor, its subsidiaries and affiliates, joint ventures involving the Contractor, any entity with which the Contractor may hereafter merge or affiliate and any other successor or assignee of the Contractor.

(c)   The Contractor acknowledges the full force and effect of this paragraph. It agrees to be bound by its terms and conditions and understands that violation of this paragraph may, in the judgment of the Contracting Officer, be cause for Termination for Default. The Contractor also acknowledges that this does not represent the sole and exclusive remedy available to the Authority in the event the Contractor breaches this or any other Organizational Conflict of Interest paragraph.

55. MISCELLANEOUS

(a)   This Contract does not intend to, and nothing contained in this Contract shall create any partnership, joint venture or other equity type agreement between the Authority and the Contractor.

(b)   All notices, statements, demands, requests, consents or approvals required under this Contract or by law by either party to the other shall be in writing and may be given or served by depositing same in the United States mail, postage paid, registered or certified and addressed to the party to be notified, with return receipt requested; by personally delivering same to such party; an agent of such party; or by overnight courier service, postage paid and addressed to the party to be notified; or by e-mail with delivery confirmation. Notice deposited in the U.S. mail in the manner hereinabove described shall be effective upon such deposit. Notice given in any other manner shall be effective only if and when received by the party to be notified.

If to the Contractor:	As set forth in Exhibit B to this Contract
If to the Authority:	Capital Metropolitan Transportation Authority
	Attn: Sr. Director/Chief Contracting Officer
	2910 E. 5th Street
	Austin, Texas 78702

Address for notice can be changed by written notice to the other party.

(c)   In the event the Authority finds it necessary to employ legal counsel to enforce its rights under this Contract, or to bring an action at law, or other proceeding against the Contractor to enforce any of the terms, covenants or conditions herein, the Contractor shall pay to the Authority its reasonable attorneys' fees and expenses, regardless of whether suit is filed.

(d)   If any term or provision of this Contract or any portion of a term or provision hereof or the application thereof to any person or circumstance shall, to any extent, be void, invalid or unenforceable, the remainder of this Contract will remain in full force and effect unless removal of such invalid terms or provisions destroys the legitimate purpose of the Contract in which event the Contract will be terminated.

(e)   This Contract represents the entire agreement between the parties concerning the subject matter of this Contract and supersedes any and all prior or contemporaneous oral or written statements, agreements, correspondence, quotations and negotiations. In executing this Contract, the parties do not rely upon any statement, promise, or representation not expressed herein. This Contract may not be changed except by the mutual written agreement of the parties.

(f)   A facsimile signature shall be deemed an original signature for all purposes. For purposes of this paragraph, the phrase "facsimile signature" includes without limitation, an image of an original signature.

(g)   Whenever used herein, the term "including" shall be deemed to be followed by the words "without limitation". Words used in the singular number shall include the plural, and vice-versa, and any gender shall be deemed to include each other gender. All Exhibits attached to this Contract are incorporated herein by reference.

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(h)   All rights and remedies provided in this Contract are cumulative and not exclusive of any other rights or remedies that may be available to the Authority, whether provided by law, equity, statute, or otherwise. The election of any one or more remedies the Authority will not constitute a waiver of the right to pursue other available remedies.

(i)   The Contractor shall not assign the whole or any part of this Contract or any monies due hereunder without the prior written consent of the Contracting Officer. No assignment shall relieve the Contractor from any of its obligations hereunder. Any attempted assignment, transfer or other conveyance in violation of the foregoing shall be null and void.

(j)   The failure of the Authority to insist upon strict adherence to any term of this Contract on any occasion shall not be considered a waiver or deprive the Authority thereafter to insist upon strict adherence to that term or other terms of this Contract. Furthermore, the Authority is a governmental entity and nothing contained in this Contract shall be deemed a waiver of any rights, remedies or privileges available by law.

(k)   This Contract shall be governed by and construed in accordance with the laws of the State of Texas. Any dispute arising with respect to this Contract shall be resolved in the state or federal courts of the State of Texas, sitting in Travis County, Texas and the Contractor expressly consents to the personal jurisdiction of these courts.

(l)   This Contract is subject to the Texas Public Information Act, Tex. Gov't Code, Chapter 552.

(m)   The Contractor represents, warrants and covenants that: (a) it has the requisite power and authority to execute, deliver and perform its obligations under this Contract; and (b) it is in compliance with all applicable laws related to such performance.

(n)   The person signing on behalf of the Contractor represents for himself or herself and the Contractor that he or she is duly authorized to execute this Contract.

(o)   No term or provision of this Contract is intended to be, or shall be, for the benefit of any person, firm, organization, or corporation for a party hereto, and no such other person, firm, organization or corporation shall have any right or cause of action hereunder.

(p)   Capital Metro is a governmental entity and nothing in this Contract shall be deemed a waiver of any rights or privileges under the law.

(q)   Funding for this Contract after the current fiscal year is subject to revenue availability and appropriation of funds in the annual budget approved by the Authority's Board of Directors.

(r)   Time is of the essence for all delivery, performance, submittal, and completion dates in this Contract.

56.   RESERVED

57.   FUNDING AVAILABILITY

Funding after the current fiscal year of any contract resulting from this solicitation is subject to revenue availability and appropriation of funds in the annual budget approved by the Authority's Board of Directors.

58.   COOPERATIVE CONTRACT

(a)   The Authority has entered into a master cooperative purchasing agreement with other governmental entities (with the Authority, the "Cooperative Members") to form the Texas Interlocal ~~Purchase~~ **Purchasing** Cooperative, under which the Cooperative Members grant access and make available to one another certain contracts of the Cooperative Members, pursuant to the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code and Chapter 271 of the **Texas** Local Government Code. The Contractor agrees to offer to other eligible Cooperative Members the goods and services provided under this Contract with the same prices, and under terms and conditions, of this Contract.'

(b)   The Authority does not accept any responsibility or liability arising from or related to a separate contract between another Cooperative Member and Contractor based on this Contract or for any purchases made thereunder.

(c)   **Cooperative Members shall not create participating cooperative contracts to procure professional services as defined by Texas Government Code Chapter 2254.**

~~59.   AUSTIN TRANSIT PARTNERSHIP~~

~~At the direction of Capital Metro, the services provided under the Contract may be performed on behalf of or in connection with Austin Transit Partnership (ATP), and ATP's projects, initiatives, and proposals.~~