



CENTRAL TEXAS REGIONAL
MOBILITY AUTHORITY

February 24, 2021
AGENDA ITEM #6

Discuss and consider awarding a contract to Deloitte Consulting LLP for the development of a data platform and associated transaction routing and system interfaces to support toll transaction management

Strategic Plan Relevance: Explore and Invest in Transformative Technology and Adopt Industry Best Practices; Deliver Multi-faceted Mobility Solutions; Invest in Effort that Extend Beyond Roadways

Department: Operations

Contact: Tracie Brown, Director of Operations

Associated Costs: estimated at \$4,559,700 for procurement and implementation *(does not include required hardware, software or software licenses)*

Funding Source: 183A Phase III Other Project funds

Action Requested: Consider and act on draft resolution

Background: Toll transaction management is a critical business process area within a tolling agency. The process begins when a vehicle travelling on a toll agency maintained and operated toll road passes through a toll gantry. Equipment at the toll gantry captures a suite of data that uniquely identifies the toll transaction. This data includes an image of the license plate used to extract the license plate number and state, vehicle axles, or class, date/time, location, and transponder device information. The resulting data set serves as inputs necessary to determine the toll amount, the individual responsible for paying the toll and the payment path used to submit a request for payment. Additionally, toll transaction data is used for traffic and customer pattern analysis, monitoring and validation of toll system performance and accuracy, revenue and financial analysis, and other data points for the toll agency to make informed business decisions.

The Mobility Authority currently uses an outsourced solution developed by Kapsch TrafficCom to handle the end-to-end toll transaction management processes and workflow. To provide more flexibility in the future, the Operations Department has recommended that the agency move to a stratagem wherein all toll transaction processing

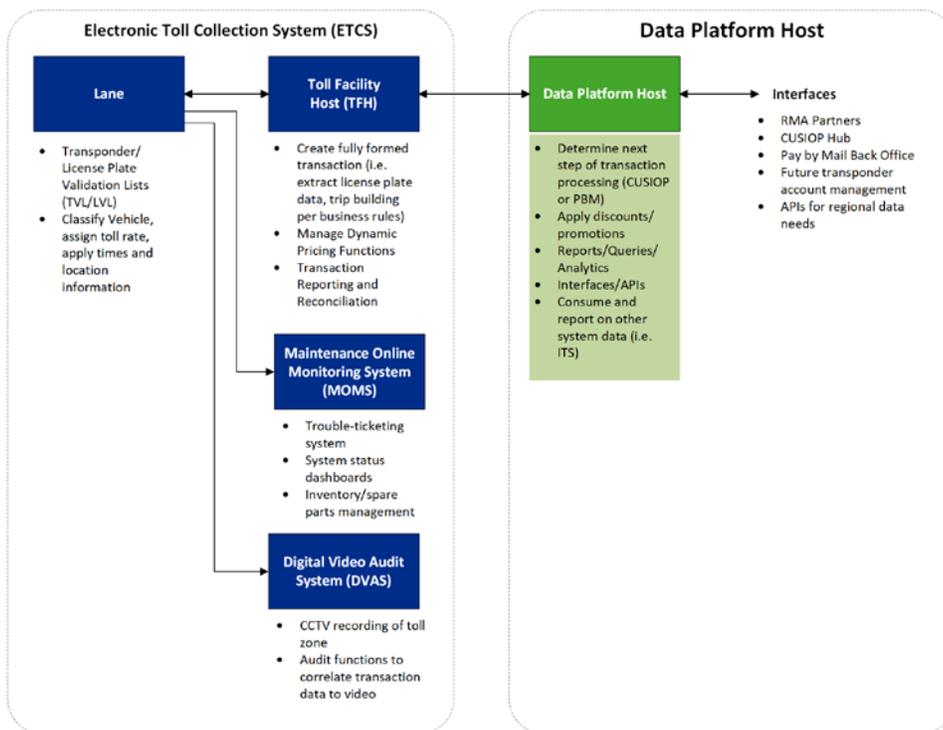
and data management capabilities after the point of transaction creation is advanced to an Authority-managed solution. A third-party vendor would continue to collect and create the toll transaction data set at the roadside, then pass the toll transaction data to a “data platform” within the Mobility Authority’s network; however, the new approach gives the Authority more control of the data which will lead to better informed decision-making. More about this approach is explained below.

The Data Platform Project Explained

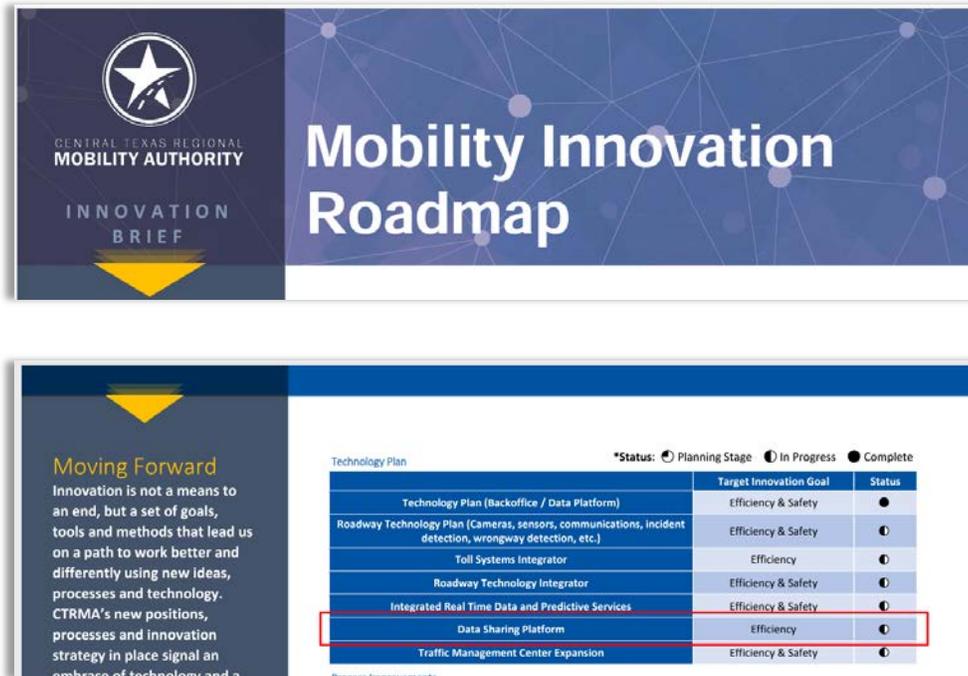
The objective of the data platform project is to transition all toll transaction data processing and data management capabilities after the point of transaction creation to an Authority-managed solution. A third-party vendor will continue to collect and create the toll transaction at the roadside, then pass the fully formed toll transaction to the data platform. Business logic and rules will then consume the transaction and route the payment request to either the Central United States Interoperability (CUSIOP) Hub or the Pay by Mail (PBM) vendor.

The Authority-managed data platform will also support additional business capabilities such as external reporting and internal data analytics. A connection to the Texas Department of Motor Vehicles’ datasets will enable the Authority to better its customer base and their travel habits. Future development could include adding promotions and discount program logic.

This new configuration is depicted below.



The Data Platform Project is a component of the Authority’s *Roadway Technology Plan*. The *Roadway Technology Plan* is part of a larger initiative to modernize the Mobility Authority’s toll and roadway technology systems, and to thoughtfully expand the use of technology to maximize road capacity. The *Roadway Technology Plan* was first presented to the Authority’s Board at its February 2020 meeting.



The Solution Approach

To achieve the new transaction processing arrangement, the Mobility Authority defined a multi-faceted strategic plan to implement an end-to-end scalable tolling transaction system to meet current and future business capabilities. This architecture design provides solutions for:

- Centralized, secure, and redundant data hosting for all data entities owned by the Mobility Authority and necessary for toll transaction processing;
- External data exchange points that provide flexible structured transaction data transmissions to and from third parties such as service providers, universities, or research institutions;
- Multi-step modular pricing and discounting business logic;
- Auditable data governance and security;
- User driven self-service data updates and business process administration; and
- Public, external, and internal reporting.

The Mobility Authority has chosen a modular approach to complete the Data Platform Project. Release 1 will establish the platform. Release 2 will create the routing and exchange processes. The third release defines how data governance is handled in the new processing schema. The fourth release will identify the suite of reports necessary to account for the agency's revenue and monitor performance. Promotions and discount programs are defined in Release 5.

Current Action: In late 2019, the Operations Department began evaluating the best fit solution for procuring a replacement roadside system. The team determined that a solution involving separate procurements for the Electronic Toll Collection System and a new Data Platform for reporting and transaction processing would provide the most flexibility and best of breed solution. A plan was built to complete the Data Platform project as described above in five releases through multiple procurements.

The scope of the first procurement is limited to Releases 1 and 2. The deliverables include: 1) build a data platform; 2) build and manage internal transaction databases; 3) create transaction data exchanges; 4) mirror pricing and payment logic; 5) ensure SOC 2 Type 2 Trust Services Criteria compliance; and 6) add additional data sources.

In September 2020 the Authority released a Request for Information (RFI) to 51 Texas Department of Information Resources (DIR) qualified vendors who identified themselves as having the skill set needed to complete Release 1 and 2 of the Data Platform Project. Five responses to the RFI were received.

A Statement of Work (SOW) was developed, in a format matching that outlined by DIR, and released in November 2020 to the five RFI respondents plus an additional five DIR vendors from the original RFI list who either did not receive the original document or did not have time to respond.

Three responses were received by the deadline of December 18, 2020. **The respondents were Catapult, LLC; Deloitte Consulting LLP; and Ernst & Young.** All submissions received were reviewed by the Pass/Fail Committee and conveyed to evaluation team members for individual review and scoring. A combined session was convened to evaluate individual scoring and share reviewer comments. Individual scores were recorded, and averages calculated. The resultant ranking and recommendations were presented to the Mobility Authority's Interim Executive Director.

After a review of the technical scores and price, staff recommends Deloitte Consulting LLP as the successful vendor.

About Deloitte Consulting, LLP

Deloitte Consulting is a full-service professional services organization providing consulting, financial advisory, tax, and audit services under a unified Deloitte brand. It has more than 286,000 professionals globally, generating annual global revenue of \$46.2 billion. Deloitte Consulting is an approved Texas Department of Information Resources (DIR) vendor for deliverable-based information technology services (DBITS). Deloitte's contract with DIR, contract #DIR-TSO-4031, expires on February 22, 2022. Deloitte will partner with Google, LLC to deliver the data platform development work to the Mobility Authority.

Next Steps: Upon Board approval staff will work with Deloitte to refine the project schedule and price. These elements will be presented to the Board at March 24, 2021 meeting and a request made to approve a Statement of Work.

Previous Actions: In February 2012 the Mobility Authority Board of Directors approved the agency's Policy Code. The Board has approved numerous amendments since its adoption, including an amendment in November 2020. This amendment allowed for utilization of contractors and vendors procured by the Department of Information Resources (DIR) without the need for any further procurement process, allowing contractors or vendors to be engaged through a Statement of Work or other means of identifying goods and services. DIR's Cooperative (Co-op) Contracts program is a streamlined cooperative purchasing program for state and local government, public education, and other public entities in Texas, as well as public entities outside the state.

Staff Recommendation: Staff recommends awarding a contract to Deloitte Consulting LLP for the development of a data platform and associated transaction routing and system interfaces to support toll transaction management through their contract with the Texas Department of Information Resources. Pursuant to Government Code Section 2054.0565 and the Mobility Authority Policy Code, use of the DIR contract with Deloitte Consulting LLP satisfies all competitive purchasing requirements.

Backup Provided: Draft Resolution to be provided at the Board Meeting
Presentation