Texas Department of Transportation

Request for Information: Back Office Transaction Processing Software and Customer Service Interface

Foundation for Statewide Tolling Operations

Toll Operations Division

Version 4.8
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Request for Information

The Toll Operations Division's mission is to be a customer-focused service provider that creates economic opportunities, stimulates investment and enhances quality of life by supporting high-performing transportation systems in Texas and beyond.

This Request for Information (RFI) is issued by the Toll Operations Division (TOD) of the Texas Department of Transportation (TxDOT) for information related to transaction processing, billing and customer service interface software that supports electronic tolling collection (ETC), image or video tolling, as well as violations and collections processing. TxDOT intends to have the rights to use, display, configure and modify software using TxDOT resources or its designated agents. This RFI is issued solely to obtain information to assist the Department in its planning process and to identify vendors that may be interested in participating in any future procurement.

The information received in response to this RFI will be reviewed and evaluated by a team composed of staff from different functional areas within the department. It is the department's intent to analyze the responses to determine appropriate and suitable solutions to meet the department's requirements and to potentially develop specifications for a future Request for Proposals (RFP).

This RFI does not constitute a Request for Qualifications (RFQ), an RFP, a Request for Offer (RFO) or other solicitation document, nor does it infer intent to conduct a solicitation in the future. This RFI does not commit the department to contract for any supply or service, nor will any response to this RFI be considered in the evaluation of any response to a solicitation document. The department will not pay for any information or administrative cost incurred in response to this RFI.

1.0 Overview

TxDOT currently manages 199 miles of all electronic tolling (AET) fixed pricing toll roads throughout the state, with 206 tolling points. TxDOT owns additional roadways, currently managed by other agencies in the state, which are dynamically priced. Approximately 305 million transactions are handled per year, including interoperable roadways. Toll transactions from these roadways are billed to TxTag customers using vendor software, modified to TxDOT requirements. TxTag main offices and operations are based in Austin.

Transactions from all TxDOT managed facilities are processed by the back office system (BOS), and include both TxTag customer and interoperable transactions. The following core functions are performed by the current system: process transactions from the lane, post to accounts and invoice customers with additional capabilities to conduct image review, escalated violations and provide customers with an account management interface.

TxDOT processes transactions for multiple roadways around the state. At this time, this includes SH 130 (Segments 1 – 4), SH 130C (Segments 5 & 6), SH 45N, SH 45SE and Loop 1 in Austin, Texas; SH 255 in Laredo, Texas; and SH 99, Segments D, E, F, G and I-2 in the Houston, Texas region.

TxDOT is currently interoperable with all Texas tolling authorities, including North Texas Tollway Authority (NTTA), Harris County Toll Road Authority (HCTRA), Central Texas Regional Mobility Authority (CTRMA) and Fort Bend County Toll Road Authority (FBCTRA). The department is phasing in system modifications to fulfill Southern State Interoperability (SSIOP) and national interoperability (NIOP) requirements. The first phase in fulfilling SSIOP and NIOP requirements is the implementation of Central United States Interoperability (CUSIOP) which links current Texas interoperable agencies with Kansas and Oklahoma agencies via a centralized communications hub.

The following table contains relevant fiscal year 2016 (September 2015 to August 2016) statistics, inclusive of the roadways listed above, for consideration:

Description	Current Condition
Total Annual Transactions	305 Million
Transactions (monthly average)	25.4 Million
Transactions (monthly low and high)	Low: 18 Million High: 28 Million
Tag penetration	73%
Number of tags in circulation	2,931,303
Number of active tags	1,801,447
Accounts ETC	1,029,614
Accounts ETC – Active	1,020,792
Accounts Pay By Mail	5,279,302
Accounts Pay By Mail – Active	5,245,600
Estimated number of statements generated daily	250,000*
Number of toll road miles	199 miles
Number of tolling points	206 points
Data feeds from lane servers	3 feeds
Estimated # of frequent system users	180 users
Estimated # of infrequent system users	20 users
Billing data retention (for immediate retrieval)	4 years
Estimated # of monthly customer web visits	200,000
Estimated # of monthly customer web visitors	67,500

Including no-activity statements

TxDOT has experienced significant transaction growth over the last four years and anticipates continued sizable transaction growth over the next 15 to 20 years of operations for all TxDOT managed facilities. Between 2017 and 2024, transaction volume is expected to grow annually by 11%. After 2024, growth increases can be assumed to be between 7% and 13% annually.

TxDOT expects its back office transaction processing system and customer interface to be:

> Accurate — the system should meet high standards of financial and invoicing accuracy.

> Scalable — the system should be capable of handling anticipated long term growth estimated at 7% to 13% annually, short term activity spikes and additional roadways.

> Flexible — the system should be highly configurable, and when necessary, easily customizable without compromising upgradeability of core software.

> Secure — the system must adhere to all security best practices, including Payment Card Industry (PCI) Tier 1.

A well-planned and strategic approach to the migration of existing data, including database and file system artifacts, will be critical.

2.0 Information Requested

Purpose

TOD expects to achieve the highest standards in tolling performance and provide leading mobility solutions in hopes of exceeding customers' expectations. TxDOT adheres to strict standards for data security, integrity and top level PCI compliance. The longevity of this system is of great importance. Building a system with the latest state-of-the-art technologies and capabilities should enable TOD in achieving overall effectiveness and efficiency of business.

Objectives

1) Scalability of the system to meet growing business needs, including transaction volume

2) Alignment of business interests and data security standards

3) Utilization of new technology, functionality and opportunities

4) System longevity and a lifespan of 15 to 20 years

Information gathered may support future procurement planning and development. Respondents are encouraged to provide information on their products, solutions, systems and accompanying services that are applicable to the specifications outlined in the following sections. TxDOT may contact respondents to clarify all or part of submittal contents.

Requirements

TOD seeks information about commercially available off-the-self (COTS) software solutions that can be licensed to TxDOT for the purpose of implementing a tolling BOS. TxDOT envisions a solution which is highly configurable at the application level and requires no customization to achieve the proposed objectives and functionality; however, TxDOT intends to have the rights to use, display, configure and modify software using TxDOT resources or its designated agents.

The requested information is restricted to the availability of and the responding vendor's ability to provide the following functionality:

1) BOS, consisting of:
   a) Customer relationship management (CRM) for the use of customer service representatives (CSRs)
   b) Transaction processing system
   c) Interfaces to external entities
2) Image processing system, consisting of:
   a) Optical character recognition (OCR) and/or vehicle fingerprinting system
   b) Manual review front end
3) General ledger and financial reconciliation/auditing
4) Reporting or Business intelligence (BI) interface
5) Data warehouse and data archival software
6) System and network monitoring software
7) Customer website: ability to interface with a third-party marketing website and provide the application for customer user account management
8) Interactive voice recognition (IVR) phone system: ability to interface with a third-party IVR system

TOD is interested in obtaining the following information regarding any software offerings that can assist in achieving the department's objectives and meet the functionality listed above:

1) Overview of solution functions and product offerings
   a) Overview of applications already built-in, configurability of each and overall solution applicability to the tolling industry. Specifically reference the following:
      i) Overview of CRM and Customer portal (website)
      ii) Overview of OCR and image review capabilities
      iii) Overview of financial module, reconciliation and integration capabilities
      iv) Overview of reporting functionality and BI system
      v) Overview of transaction processing system
      vi) Overview of account management and billing system
   b) Overview of system technical architecture and configurability, specifically addressing the following items:
      i) Tolling locations (roadways/plazas)
      ii) Variable messages on customer statements
      iii) Billing cycles (how often a customer gets a bill)
      iv) Transaction fee structure (when a fee gets attached, and what the fee will be)
      v) Invoice/account fee structure (fees attached to the account or invoice, instead of the transaction)
      vi) Toll rates

vii) Marketing plans ("10ᵗʰ trip is free," or "5 axle vehicles get the 3 axle rate")

viii) Retry logic (number of retries with DMV, or attempts to post to away agencies)

ix) GL codes and mapping

x) Payment application precedence (toll then fee, oldest first, FIFO)

xi) Account hierarchy for posting transactions

xii) Variable billing thresholds: time-based, minimum transaction count or minimum balance due

c) Overview of data handling protocols

d) Detailed description of previous implementations and system transitions, including project management methodology and approach to database migration

e) Licensing options with details regarding:

f) Product maintenance and support offerings

g) Base software upgrade offerings

3.0 Response Format

Please number the answers to match the question numbers below. In addition, please provide a brief summary of respondent organization and other relevant information.

Respondents are invited to provide a written summary, and any additional literature, of how best to address this RFI, limiting their response to 100 pages. The response should be organized with separate sections as follows:

1.1 Title Page – maximum of 1 page

The title page should include:

(a) The following title & subtitle:

Back Office Transaction Processing Software and Customer Service Interface

Response to the Request for Information from

The Texas Department of Transportation, Toll Operations Division

(b) Company name, address, and point-of-contact name, Email address and phone number

1.2 Company Overview – maximum of 3 pages

(a) Company Profile – A statement describing respondent company, products, services, approaches

(b) Point-of-Contact – Identification of a single point of contact to respond to any questions regarding the response, including name, Email address, phone number, and address

1.3 Solution Functions and Product Offerings Description

(a) Software, Solutions and Applications Overview – An overview of software, solutions and built-in applications, described above, that the respondent could provide to the department should the department move forward with a procurement, including a description of the business model(s) and overall solution applicability to the tolling industry that would achieve the proposed objectives of this RFI

(b) Optional: Additional Solution Overview – An overview of additional related software solutions available beyond the outlined objectives of this RFI; include a description of the business model(s) that would support the solution(s) and the benefits to the department

1.4 Solution Technical Architecture Description

(a) Technical Overview – An overview of the technical architecture of the solution software

(b) Configurability Overview – An overview of the level of effort involved with configuring the system

    i.   Describe in detail each function that is configurable in the system, including specific reference to the items described above

    ii.   Identify all areas of functionality which are not configurable and would need to be customized in order to adopt new business rules

    iii.   Identify impacts and limitations on upgradability to core software should customization be needed

    iv.   Address if the architecture will allow for software extension development and application integration by third party developers

1.5 Data Security Description

An overview of default data handling protocols, including but not limited to, PCI DSS

1.6 Implementation Description

An overview of the implementation process. Please include examples from previously completed solution implementations to describe the respondent's approach to requirements gathering, system transition and estimated implementation timeline:

(a) Project Management Methodology – A statement of the methodology used in the project management of system development and implementation.

    i.   Describe overall functional and workflow strategy approach to system development and implementation

ii.   Address best practices used in previous system developments, specifically addressing approach to monitoring, product owner communication, development team management and structure.

(b) Requirements Gathering – A statement of the approach to discovery, derivation and documentation of the existing environment and validation of the business requirements

(c) Transition Approach – A statement of the approach to system transition and cut-over from legacy system

iii.   Describe approach to data migration and parallel operations prior to go-live
iv.   Address best practices used in previous system transitions and related data migration

(d) Estimated Timeline – Estimate of implementation timeframe for the development and implementation of the solution, as well as a detailed description of resources and staffing required at each phase and located in Austin, TX

1.7 Licensing Model Description

(a) Licensing Overview – A statement describing types of licenses offered and description of how they would achieve the proposed objectives of this RFI, including attention to objective of maintaining system longevity and a lifespan of 15 to 20 years

(b) Maintenance Support Overview – A statement describing software maintenance support required or recommended to maintain software and solutions described. Please also include a list of qualified and authorized third party vendors which may support, maintain and configure the proposed software and solutions described

(c) Upgrade Overview – A statement describing the availability of source code upgrade, including release frequency and development impact to overlying configurations. Please also describe the upgrade process when customizations to the software have been made

1.8 Attachments

Any relevant materials, documents, white papers, websites, etc., that help describe the potential offering of services, products, approaches, etc.

4.0 Confidentiality/Public Information Act

All written correspondence, exhibits, photographs, reports, other printed material, tapes, electronic disks, and other graphic and visual aids submitted to the department in response to this RFI are, upon their receipt by the department, the property of the State of Texas, may not be returned to the

submitting parties, and are subject to the Government Code, Chapter 552, Public Information Act (the "Act"). Respondents should familiarize themselves with the provisions of the Act. In no event shall the State of Texas, the department, or any of their agents, representatives, consultants, directors, officers, or employees be liable to a respondent for the disclosure of all or a portion of the information submitted in response to this RFI.

If the department receives a request for public disclosure of all or any portion of a response, the department will use reasonable efforts to notify the applicable respondent of the request and give such respondent an opportunity to assert, in writing and at its sole expense, a claimed exception under the Act or other applicable law within the time period specified in the notice issued by the department and allowed under the Act.

If a respondent has special concerns about information which it desires to make available to the department but which it believes constitute a trade secret, proprietary information, or other information excepted from disclosure, such respondent should specifically and conspicuously designate that information **by placing "CONFIDENTIAL" in the center header of each page affected**. Blanket, all-inclusive identifications by designation of whole pages or sections as containing proprietary information, trade secrets, or confidential commercial or financial information are discouraged and may be deemed invalid. Nothing contained in this provision shall modify or amend requirements and obligations imposed on the department by the Act or other applicable law, and the provisions of the Act or other laws shall control in the event of a conflict between the procedures described above and the applicable law.

The department will submit a request for an opinion from the Office of the Attorney General prior to disclosing any documents designated as "confidential." The respondent shall then have the opportunity to assert its basis for non-disclosure to the Office of the Attorney General; however, it is the sole responsibility of the respondent to monitor such proceedings and make timely filings. The department may, but is not obligated, to make filings of its own concerning possible disclosure; however, the department is under no obligation to support the positions of respondent. Under no circumstances will the department be responsible or liable to a respondent or any other party as a result of disclosing any such labeled materials, whether the disclosure is deemed required by law, by an order of court, or occurs through inadvertence, mistake, or negligence on the part of the department or its officers, employees, contractors, or consultants.

The department will not advise a submitting party as to the nature or content of specific documents entitled to protection from disclosure under the Act or other Texas laws or as to the interpretation of such laws. Each respondent is advised to contact its own legal counsel concerning the effect of applicable laws to the submitting party's own circumstances.

In the event of any proceeding or litigation concerning the disclosure of any material submitted by the respondent, the department will be a stakeholder retaining the material until otherwise ordered by a court or such other authority having jurisdiction with respect thereto, and the respondent shall

be responsible for otherwise prosecuting or defending any action concerning the materials at its sole expense and risk; provided, however, that the department reserves the right, in its sole discretion, to intervene or participate in the litigation in such manner as it deems necessary or desirable.

5.0 General Information

Milestone		Deadline
RFI Issuance		**Monday July 31, 2017**
Questions to be submitted by		August 21, 2017
Questions to be answered by		August 25, 2017
Submittals Due by 3:00 p.m. Central Time		**September 15, 2017**

Format: Please submit 2 paper copies and one identical electronic copy of the response to this RFI to the Point of Contact listed below.

Page Limit: 100 pages inclusive of the content described in Section 3.0, Response Format

Questions: Questions regarding this RFI should be submitted in writing to the Point of Contact at the email address listed below. The department will post responses to questions on the RFI website without identifying the party(ies) submitting the questions. Respondents are encouraged to submit questions prior to August 21, 2017.

RFI Website and Addenda: The department will post any addenda to the RFI on the RFI website. It is the respondent's responsibility to monitor the RFI website on a regular basis for updates, questions and responses, addenda, and additional RFI documents and information. The RFI website is - http://www.txdot.gov/inside-txdot/division/toll-operations/back-office-software-rfi.html.

The department reserves the right to modify the above anticipated schedule milestones at any time and for any reason. At its option, the department may also elect to follow-up directly with respondents with more detailed questions or to clarify submissions.

Contracting Office Address:

　　　　Texas Department of Transportation - Toll Operations Division

　　　　12719 Burnet Road

　　　　Austin, TX 78727

Point of Contact:

        Logan Brown

        Toll Operations Division

        Texas Department of Transportation

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6.0 Definitions and Acronyms

AET – All Electronic Tolling

BI – Business Intelligence

BOS – Back Office System

Configurable – No direct database updates or code changes are required to change system behavior; the behavior of the system can be changed by a non-technical "super user"

COTS – Commercially Available off-the-self

CRM – Customer Relationship Management

CSR – Customer Service Representative

CUSIOP – Central United States Interoperability

Customer Website – Website where customers can access and make updates to account information

Customization – Changes to the software source code that are necessary to change the behavior of the system

ETC – Electronic Toll Collection

IOP – Interoperability

IVR – Interactive Voice Recognition

Marketing Website – Public website which makes TxTag information, traffic updates and other related material available (TxTag.org)

NIOP – National Interoperability

OCR – Optical Character Recognition

PCI DSS – Payment Card Industry Data Security Standard

Reconciliation – Refers to the ability to reconcile transaction counts transmitted from the lane and from interoperable agencies with posting dispositions in the back office database, as well as their corresponding financial ledger and accounting data

SSIOP – Southern States Interoperability

TOD – Toll Operations Division of the Texas Department of Transportation, the tolling authority for state-owned and managed or operated toll roadways

Transaction – Refers to a toll transaction, which can be either a transponder-based or image-based record received from the lane host system or interoperable partner

TxTag – Refers to the branded ETC transponder, as well as the tolling organization managing TxTag customer accounts

TxTag Customer – Refers to owners of pre-paid or postpaid customer accounts managed by the TxTag Customer Service Center

TxDOT – Texas Department of Transportation

Vehicle Fingerprinting – Process of using image analysis to identify individual vehicles based on data points other than or in addition to its license plate