



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**REQUEST FOR INFORMATION
FOR
Transit Scheduling and Dispatch Software and Related
Functions**

**RFI # 40100-30900
April 27, 2020**

1. STATEMENT OF PURPOSE:

The Tennessee Department of Transportation (TDOT) (Division of Multimodal Transportation Resources) is seeking information from vendors of Transit Scheduling and Dispatch Software and Related Services and Equipment. This Request for Information (RFI) may be used as a preliminary step to help TDOT develop a formal Request for Proposals (RFP) to solicit additional participation for Transit Scheduling and Dispatch Software and services. Responses will be reviewed by TDOT for the purpose of determining the feasibility and structure of proceeding with a subsequent RFP. TDOT will take into consideration the benefits to the Department and the transit systems of the state. Responses submitted hereunder create no binding obligations and confer no rights on any party. At any time, TDOT may request additional information from any Responder and may terminate this RFI without incurring any liability to any Responder. By submitting a response, each Responder expressly waives claims for any costs and expenses the Responder incurs in connection with preparation and submission of a response.

PURPOSE:

TDOT is interested in supporting Tennessee transit providers by conducting a statewide procurement of technology for transit scheduling, dispatch, core and ancillary functionalities that can be tailored to the needs of varied systems and serve them well over time. Selected vendors would hold a statewide contract with the Tennessee Department of General Services and individual transit agencies would be able to purchase goods and services identified in that contract based on the terms established in the statewide procurement.

Recognizing that technology is in a period of rapid change, TDOT is exploring the most effective way to procure technology solutions that will meet varied objectives:

- Meet the scheduling, dispatch, and core functional requirements of varied systems to enhance their efficiency and effectiveness.
- Determining passenger eligibility for multiple programs, tracking costs, and allocating costs to varied funding sources for passenger trips.
- Provide for enhanced features such as CAD/AVL, contactless fare payment, vehicle pre- and post-trip inspections via a tablet application, customer notifications, etc.
- Support transit systems in migrating to a modular approach to software that enables them to procure varied applications that best meet their needs and to change out only modules, rather than the entire system, when upgrades or changes are needed.

- Provide for integration with rider information and trip planning applications.
- Provide for integration with other core systems such as financial, maintenance, and grant management and reporting systems.
- Incorporate current transactional and informational data specifications and adapt to new specifications as they are developed.
- Support ease of use, data entry, reporting and customer service needs of agency staff
- Enable transit agencies to provide necessary reports to TDOT, including but not limited to data for National Transit Database (NTD) reporting, based on queries that satisfy NTD definitions of data items.
- Support scheduling and dispatch by accurate maps, including an accurate Census defined-Urbanized Area boundary.
- Enable transit agencies to export origin-destination trip data using geographic coordinates that have been anonymized to obscure the precise location of passengers' origin and destination.
- Support a flexible platform that allows agencies to be responsive to changing market and customer needs.

OBJECTIVES: The objectives of this RFI include:

- Help inform TDOT on how a procurement for scheduling, dispatch, and related functions might look-like/include for small to mid-size transit providers with multiple modes of transit (fixed route, demand response, deviated fixed route, etc.).
- Determine capabilities of vendors regarding such technology systems for Tennessee transit providers.
- Determine how best to structure the procurement to reflect choices for access to products where integration with third party vendors is preferred by transit systems.
- To understand how vendors are working to incorporate specifications (GTFS-family, communications protocols for on-vehicle equipment, and Transactional Data Specification), develop interfaces for exchanging information with other technology systems, and integrate information from other systems into their software functionalities.
- Receive input from potential vendors concerning how teams of core system vendors and vendors offering peripheral applications might be structured.

2. BACKGROUND:

The Tennessee Department of Transportation (TDOT) supports over twenty transit systems in the rural and small urban areas of Tennessee and is interested in procuring appropriate technology for their scheduling, dispatching, core operations, and reporting needs. It is anticipated that up to twenty systems will seek scheduling software through a procurement subsequent to this RFI. TDOT is also interested in helping inform transit providers of the current technology landscape to improve the utility of the statewide transit network and improve the experience of passengers traveling across transit providers.

Tennessee rural and small urban transit systems include a range of organizational sizes, structures, and services. The State includes dedicated transit agencies and agencies where transit is only one service of many. Many of Tennessee's transit providers have no dedicated technical staff and staff resources are typically stretched to manage day to day activities. Tennessee's smallest transit providers may have fewer than five vehicles, while Tennessee's largest transit providers are technologically complex and sophisticated.

TDOT seeks to promote an effective, efficient, and seamless public transportation system. One focus is to help transit providers further integrate their functional activities and coordinate efforts throughout their organizations. This includes acquiring technologies and standards that support such integration.

3. COMMUNICATIONS:

3.1. Please submit your written response to this RFI to:
Jennifer Garrison

Tennessee Department of Transportation
615-532-8165
Jennifer.Garrison@tn.gov

3.2. Please feel free to contact the Department of Transportation with any questions regarding this RFI. The main point of contact will be:

Jennifer Garrison
Tennessee Department of Transportation
615-532-8165
Jennifer.Garrison@tn.gov

**Note: If you submit questions via email, please include the email address for both contacts listed above.*

3.1. Please reference RFI 40100-30900 with all communications to this RFI.

4. RFI SCHEDULE OF EVENTS:

EVENT		TIME (Central Time Zone)	DATE (all dates are State business days)
1.	RFI Issued		April 28, 2021
2.	RFI Response Deadline	2:00 p.m.	May 14, 2021
3.	State Schedules Demos and Presentations		May 21, 2021
4.	Hold 30-minute Demos and Presentations* *Presentations will be scheduled via WebEx by the State.	TBD	June 2-3, 2021

5. GENERAL INFORMATION:

- 5.1. Please note that responding to this RFI is not a prerequisite for responding to any future solicitations related to this project and a response to this RFI will not create any contract rights. Responses to this RFI will become property of the State.

- 5.2. The information gathered during this RFI is part of an ongoing procurement. In order to prevent an unfair advantage among potential respondents, the RFI responses will not be available until after the completion of evaluation of any responses, proposals, or bids resulting from a Request for Qualifications, Request for Proposals, Invitation to Bid or other procurement method. In the event that the state chooses not to go further in the procurement process and responses are never evaluated, the responses to the procurement including the responses to the RFI, will be considered confidential by the State.

- 5.3. The RFI Coordinator will invite each Respondent, who is apparently responsive and responsible, to make an oral presentation or provide a demonstration of relevant functionality.
 - 5.3.1. The RFI Coordinator will schedule Respondent presentations during the period indicated by the RFI Section 4, Schedule of Events. The RFI Coordinator will make every effort to accommodate each Respondent's schedules. When the Respondent presentation schedule has been determined, the RFI Coordinator will contact Respondents with the relevant information as indicated by RFI Section 4, Schedule of Events. A webex style presentation will be allowed.

 - 5.3.2. Oral presentations and demonstrations provide an opportunity for Respondents to explain and clarify their responses. Respondent pricing shall not be discussed during oral presentations.

 - 5.3.3. RFI Responses become property of the State and shall remain confidential, unless a formal solicitation is completed. If a formal solicitation is completed, all RFI response material will become part of the procurement file and will be available for public inspection.

- 5.4. The State will not pay for any costs associated with responding to this RFI.

6. INFORMATIONAL FORMS:

The State is requesting the following information from all interested parties. Please fill out the following forms:

RFI #40100-26220
TECHNICAL INFORMATIONAL FORM

1. RESPONDENT LEGAL ENTITY NAME:

2. RESPONDENT CONTACT PERSON:

Name, Title:

Address:

Phone Number:

Email:

3. BRIEF DESCRIPTION OF EXPERIENCE PROVIDING SIMILAR SCOPE OF SERVICES/PRODUCTS, EITHER AS A MULTI-FUNCTIONAL SUITE OR SPECIALIZED TOOL THAT MIGHT BE PART OF A SUITE OF TOOLS.

4. HAVE YOU IMPLEMENTED THIS TYPE OF SOLUTION FOR ANY GOVERNMENT ENTITY OR QUASI-GOVERNMENTAL ENTITY AT THE STATE OR LOCAL LEVEL?

5. PLEASE STATE THE NUMBER OF PUBLIC SECTOR ENTITIES THAT HAVE IMPLEMENTED YOUR SOLUTION.

6. Summarize your products and complete Table A-1. Responses are welcome from technology systems that offer products that serve specific functions (e.g. fare applications) rather than full scheduling systems.

7. Describe your firm's plans to (a) develop APIs or other interfaces and (b) steps your firm has taken to interoperate or integrate with other applications. Please address transit-specific applications (such as trip planning or fare purchases) as well as core administrative applications such as financial, maintenance, asset management, or grant management and compliance software.

- a. Please identify the software vendors with which you presently interoperate or any development plans currently underway in Table A-2.
- b. Please identify the on-board equipment with which you presently interoperate or any development plans currently underway in Table A-2.

8. TDOT will determine if an RFP resulting from this RFI should require vendors of core scheduling/dispatching systems to team with vendor partners with whom they interoperate that provide peripheral functionalities. Please provide your perspective on issues related to teaming arrangements between vendors of core systems and vendors offering interoperable applications.

9. TDOT seeks to provide technology tools that can be accessed by a diverse group of transit agencies that provide fixed route service, demand response service, or both. Please discuss how TDOT can best structure a procurement to meet diverse needs.

<p>10. Describe the specifications your software solutions currently uses including General Transit Feed Specification (GTFS), GTFS-flex, GTFS-Realtime, and GTFS-ride and Transit Transactional Data Specifications.</p>
<p>11. What is the basis of any mapping software used in your software? (OpenStreetMap, Google map, etc).</p>
<p>12. Describe your software's ability to import a csv table of customer or trip data.</p>
<p>13. Describe your familiarity with the General On-Demand Feed Specification that is in development</p>
<p>14. Provide an outline of your firm's approach to develop and maintain the use of current data specifications such as GTFS and your own APIs. Please include your process for changing data specifications for existing customers as needs or requests arise.</p>
<p>15. Describe the performance measures you apply to yourself to track your customer service by customer, e.g. hours of downtime per month, percent of data loss, number of customer support tickets created and resolved per month.</p>
<p>16. What are the hardware/equipment and internet/data speeds required to support your software?</p>
<p>17. Please describe how your organization provides IT support and maintenance for the solution. Does your solution require assistance from TDOT IT? If so, please describe.</p>

COST INFORMATIONAL FORM
<p>1. DESCRIBE WHAT PRICING UNITS YOU TYPICALLY UTILIZE FOR SIMILAR SERVICES OR GOODS (E.G., PER HOUR, EACH, HOURS, FLEET SIZE, ETC.).</p>
<p>2. DESCRIBE THE TYPICAL PRICE STRUCTURE (INCLUDING ONE-TIME AND ONGOING FEES) FOR SOFTWARE SERVICES AND RELATED SUPPORT, USING TABLE A-2 AS GUIDE FOR WHAT IS STANDARD VERSUS "ADD-ONS"</p>

Table A-1: Technology System and Features Provided Form

Feature	Part of Core System	Optional Add-On Modules to Core System	Standalone Module (not requiring the core scheduling/dispatching system to function)	Comments or additional description. Also list any modules or equipment required to fully function
Primary scheduling and dispatch system , including basic customer data records, driver data records, vehicle data, DR trip data, DR vehicle runs, DR scheduling & dispatch tools, fares and funding; billing, and reporting features				
Scheduling algorithm and optimization features				
Flex route services				
Fixed route vehicle and driver runs, etc.				
CAD/AVL				
Driver Apps: timesheets, pre- and post-trip (on in-vehicle tablet)				
Driver Management: licensing, training				
Customer (or agency) portals (from trip scheduling and confirmation to fares and account management)				
Customer messages (specify via SMS text messages or IVR reminder calls)				

Feature	Part of Core System	Optional Add-On Modules to Core System	Standalone Module (not requiring the core scheduling/dispatching system to function)	Comments or additional description. Also list any modules or equipment required to fully function
Brokering trips (e.g., to taxi companies)				
Coordination features (eligibility & program requirements by client and trip, cost allocation, billing & records by program & client, etc.)				
E-fare system				
Vehicle maintenance: (historical records, predictive requirements)				
In-Vehicle equipment requirements (e.g. CAD-AVL by specific vendors)				
Office/IT equipment requirements (e.g. internet connection, Windows 10+)				
Specify features/functionalities not mentioned above that Tennessee transit agencies should be aware of.				
	Hosting: Is your system cloud- or in-house server-based?			
	Security: Please describe general security features, conformance with NIST SP 800-53 as well as HIPAA compliance.			

