MnDOT Office of Transit and Active Transportation (OTAT)

REQUEST FOR INFORMATION (RFI) Regional Mobility as a Service Platform

1.0 Description

1.1 The Office of Transit and Active Transportation (OTAT) in support of its Greater Minnesota Shared Mobility Program is seeking information on how an interested contractor could help build all or part of a Regional Mobility as a Service Platform (MaaS).

The purpose of this RFI is to solicit feedback from technology experts and other stakeholders on the building of a Regional MaaS. OTAT is exploring piloting a Regional MaaS in partnership with select Greater Minnesota transit agencies and private shared mobility service providers as a proof of concept to build a statewide platform. The MaaS platform would allow residents and visitors to plan trips, purchase and redeem fare/tickets, and receive real time updates on trip status on public transit and private sector shared mobility providers. In addition, vehicle routing, projected and real world trip data, and ridership information generated by this platform will be used to assist local, regional, and state planners and policymakers on transit service changes and public policy changes to improve service delivery and operational efficiency.

The Regional MaaS platform will cover up to six transit agencies with varying sizes and service levels from robust, regular fixed route service to completely on-demand trip delivery. Private sector providers on the platform may include the following services: intercity and regional commuter buses, microtransit, paratransit, health and human services transportation, taxi, TNCs, carshare, and microtransit (bike and scooter share.)

Components of the MaaS platform should include:

- 1. consumer facing trip planner, booking, trip status and account management application;
- 2. management of data feeds and data transfer including GTFS, GTFS-RT, GTFS-Flex, and third party application APIs and SDKs;
- 3. process to assist transit agencies and private bus providers in implementing and maintaining GTFS, GTFS-RT, and GTFS-Flex feeds;
- 4. e-ticketing system for transit agencies and private bus providers and accompanying SDK for MaaS platform; and
- 5. data analysis and planning tool that will allow transit agencies, regional planners, and MnDOT to view historic ridership and trip trends by periods as short as hourly and model impact of change in service.
- 6. Optional component for this information request: On-demand/microtransit booking and dispatching software. All transit agencies with on-demand services in the initial Regional MaaS are expected to already have deployed dispatching software. This solution will be needed for agencies without existing software providers in a statewide MaaS build out.

OTAT is looking for solutions that incorporate recognized and developing industry standards (such as GTFS) wherever possible and support open sources of data wherever possible to allow ongoing innovation in mobility and to build MaaS features that can be used on other platforms.

Solutions should be designed to be scalable to a statewide deployment covering dozens of transit agencies of various sizes and service types.

1.2 THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This RFI is issued solely for information and planning purposes – it does not constitute a Request for Proposal (RFP) or a promise to issue an RFP in the future. This request for information does not commit the MnDOT OTAT to contract for any supply or service whatsoever. Further, the MnDOT OTAT is not at this time seeking proposals and will not accept unsolicited proposals. Responders are advised that the MnDOT OTAT will not pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. If a solicitation is released, it will be posted on the MnDOT Transit website and the Minnesota State Register. It is the responsibility of the potential offerors to monitor these sites for additional information pertaining to this requirement.

2.0 Background

2.1 Planned Production:

OTAT would work with selected vendor(s) to develop and implement a regional MaaS for a test period of at least one year after launch. With OTAT as the project lead, representatives from OTAT, participating transit agencies and private shared mobility providers, and selected vendor(s) will form a working group that will meet regularly throughout the project to ensure all participating entities have what they need and the project remains on schedule. Depending on the final project plan adopted by the working group, components of the MaaS may be developed and released in phases or all at one time. After initial release, the working group will continue to meet to address platform improvements, need for additional features, and the status of key performance indicators established at the beginning of the project.

2.2 Delivery Period:

Once project vendor(s) are selected, the goal of the project will be to deliver all components of the MaaS as outlined in Selection 1.1 in no later than 9 months. Components may be delivered separately earlier than this date.

2.3 Limitations:

Software solutions must use industry data standards (such as GTFS) instead of proprietary data standards wherever it is practical. Solutions should seek to be as open source and as interoperable as possible. Where open source is not possible, solutions should be developed to be interoperable with existing providers as part of a vendor's offering.

2.4 Security Requirements:

All solutions must protect the privacy of MaaS platform users and follow applicable state and federal privacy laws. Components of the system that pertain to financial transactions must be PCI compliant and remain so for the duration of project, including security upgrades as PCI guidelines change. With the exception of established open source data, each component of the MaaS platform must protect the data ownership rights of each transportation provider and allow the owners of this data to opt-in/opt-out of sharing data sets per agreed upon terms at the start of the pilot.

3.0 Requested Information

3.1

Category 1: Technology Solution:

- 1. The MaaS could address a regional platform to allow transportation users the capability to interact with various providers, as described in Section 1.1. Are all of the technology options addressed? What limitations or needs were not addressed or should be included?
- 2. How can proposals account for providing the data standards or data sharing access it would need to access booking, vehicle route and location information, and dispatching information for consumer facing applications?
- 3. How can proposals account for protecting MaaS platform users financial and personal data in daily operational use? How can proposals address this privacy protection in data sets that are shared with local and agency planners for policy building analysis? How can proposals address the collection and analysis of data while complying with privacy laws and best practices while also conforming to state and federal freedom of information laws?
- 4. How can proposals account for obtaining and maintaining trip and ridership data from all the transportation service providers involved while protecting their rights to the data? How can proposals address needs for data access to be time limited based on either data sharing agreements or operational best practices? How can proposals address this collection and analysis of data sets while also conforming to state and federal freedom of information laws?
- 5. There is interest in making components of the MaaS platform (system data feeds, ticketing and dispatching software API and SDK, etc) as interoperable as is possible with not just the consumer facing MaaS app in this project but other platforms developed by public and private sector entities. What are the limitations and needs to allow this type of interoperability? What factors should a proposal address in the development and ongoing maintenance of such a system?
- 6. For public and private bus systems that have not yet implemented data standards like GTFS, how can proposals address the need for these systems to develop, deploy, and maintain data feeds using these standards to communicate with the MaaS platform?
- 7. How can proposals take into account cost and benefit differences between using an established, existing MaaS platform versus a custom built white label platform?
- 8. For data analysis and planning tools, how can proposals address the need for data standards from other components of the platform? How can proposals incorporate

- the need for taking massive, often complex data sets from transit and bike share feeds, on-demand trip information from dispatching software, and search and booking information from the consumer app to display meaningful information for transportation planners to understand historic trends and model future service changes?
- 9. For transit systems with existing dispatching software, how can proposals address the need for interoperability with the consumer facing application and data analysis software? How can proposals incorporate data standards and a desire for the use of open source data to address the need for interoperability?
- 10. For transit systems that do not have dispatching software for on-demand services, how can proposals address the need for implementing such services including driver and dispatcher training, system booking rules, and interoperability on the MaaS platform?
- 11. Deploying a Regional MaaS requires developing a technology ecosystem that allows the free flow of information across many different software systems with many different functions. How can proposals address the need to manage this ecosystem and ensure all the parts are communicating as needed? How can proposals incorporate data standards and an open source approach to interoperability and what are benefits and limitations to such an approach? How can proposals address the need to establish and maintain a high quality of data between components and ensure data such as vehicle location, service schedule, and fare price remain accurate over time?
- 12. Do the proposed Regional MaaS description and background sections above provide sufficient information to inform proposals? If not, what additional information would be helpful?

Category 2: Evaluation:

- 1. How can MnDOT OTAT evaluate proposals on the basis of:
 - a. Inclusiveness?
 - b. Product feasibility?
 - c. Expected integration of Products?
 - d. Ability to deliver desired functionality within the project timeline?
 - e. Utility and function of the solution beyond the initial project timeline and to scale to a statewide platform?
- 2. What evaluation criteria are most important when considering how proposals can best achieve a regional MaaS platform?
 - a. Description of how residents and visitors can access and plan trips, purchase and redeem fare/tickets, and receive real time updates on trip status on public transit and private sector shared mobility providers
 - b. Demonstration of a realistic understanding of users and their unique needs
 - c. Demonstration of the technology needs and explaining how the team arrived at that determination of need
 - d. Determination of the potential cost and manufacturability
 - e. Thorough description of the user experience when the technology is implemented

- f. Consideration of a range of needs and limitations, including users in a range of geographic contexts, and with and without access to a smartphone or bank account.
- g. Other criteria

3.2 Customer reference for similar project cost

If available, the vendor should provide the contact information for customers for whom they have done a similar project awarded through competitive bidding. Vendors may reference price in their response only if this information is publicly available as part of a standard project pricing.

4.0 Responses

- 4.1 Interested parties are requested to respond to this RFI in written format. Responses may include answers to all of the questions in Section 3 or address any combination of information requested.
- 4.2 Written information regarding this request are <u>due no later than 11:59:59 CST, May 4,</u>

 2020. Responses shall be limited to 10 pages and submitted via e-mail only to

 Elliott McFadden,

 elliott.mcfadden@state.mn.us

If a responder submits information in response to this RFI that it believes to be trade secret materials, as defined by the Minnesota Government Data Practices Act, Minnesota Statutes §13.37, the responder must:

- Clearly mark all trade secret materials in its information at the time it is submitted;
- Include a statement justifying the trade secret designation for each item; and
- Defend any action seeking release of the materials it believes to be trade secret, and indemnify and hold harmless the state, its agents and employees, from any judgments or damages awarded against the state in favor of the party requesting the materials, and any and all costs connected with that defense. This indemnification survives MnDOT's award of a contract. In submitting an informational response to this RFI, the responder agrees that this indemnification survives as long as the trade secret materials are in possession of MnDOT. MnDOT is required to keep all the basic documents related to its contracts, including responses to RFPs, for a minimum of seven years.

Please be advised that all submissions become MnDOT OTAT property and will not be returned.

- 4.3. Responders shall provide administrative information, and shall include the following as a minimum:
 - 4.3.1. Name, mailing address, phone number, and e-mail of designated point of contact.

4.3.2. Business type (large business, small business, woman-owned small business, veteran-owned small business, targeted-group business owned). Responders are cautioned, however, that this is a general description only.

5.0 Industry Discussions

Respondents are advised that MnDOT OTAT is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind MnDOT OTAT to any further actions related to this topic. MnDOT OTAT representatives may or may not choose to meet with potential offerors. Such discussions would only be intended to get further clarification of potential capability to meet the requirements, especially any development and certification risks.

6.0 Questions

Questions regarding this RFI shall be submitted in writing by e-mail to the Elliott McFadden, elliott.mcfadden@state.mn.us. Verbal questions will NOT be accepted. Questions will be answered by posting the question, verbatim and supplying responses to the MnDOT Transit website; accordingly, questions shall NOT contain proprietary or classified information. The MnDOT OTAT does not guarantee that questions received after May 1, 2020 be answered. To access the MnDOT OTAT website, go to http://www.dot.state.mn.us/transit.html.

7.0 Summary

THIS IS A REQUEST FOR INFORMATION (RFI) ONLY to identify information on how an interested contractor could help build all or part of a Regional Mobility as a Service Platform (MaaS). The information provided in the RFI is subject to change and is not binding on the MnDOT OTAT. The MnDOT OTAT has not made a commitment to procure any of the items discussed, and release of this RFI should not be construed as such a commitment or as authorization to incur cost for which reimbursement would be required or sought. All submissions become MnDOT OTAT property and will not be returned.