

Peter S. Merfeld, P.E., Interim Executive Director John P. Sirois, Chief Financial Officer & Treasurer Jonathan A. Arey, Secretary & General Counsel

REQUEST FOR QUALIFICATIONS MAINE TURNPIKE AUTHORITY NOTICE TO VENDORS

Statements of Qualifications will be received by the Maine Turnpike Authority for: CONSULTANT CONTRACT 2024.108

AUTOMATIC LICENSE PLATE RECOGNITION (ALPR) SOLUTION

at the office of the Maine Turnpike Authority ("Authority"), 2360 Congress Street, Portland, ME, 04102, until 4:00 p.m., prevailing time as determined by the Authority on February 7, 2025. In order to be considered responsive, the entity (the "Proposer") submitting a Statement of Qualification shall submit five (5) printed copies and one electronic copy in PDF of the complete Statement of Qualification ("Statement"). The Statement which will outline the solution by the Proposer shall be limited to ten (10) pages. An additional Appendix with technical diagrams, flow diagrams, technical specifications, or optional features can supplement the Statement and shall be limited to an additional ten (10) pages. One sheet of paper consists of one page single-sided size 12-point font or two pages double-sided size 12-point font. Therefore, the complete submission shall not exceed 20 sheets of paper, single-sided or 10 sheets of paper, double-sided. All sheets of paper shall be 8 ½" x 11". Page count does not include covers, the transmittal letter or dividers. All Letters shall utilize recycled paper and print on both sides, if feasible. Submitted Statements need to be clearly marked "Request for Qualifications for Automatic License Plate Recognition (ALPR) Solution."

The Authority is seeking a solution that is completely on the premises of the Authority (not cloud-based) with the ongoing maintenance of the solution to be serviced by Authority staff with some nominal assistance by the Proposer throughout the Contract term. The Authority is expecting the final solution to be available for production deployment within four (4) months of Notice to Proceed (NTP). The Proposer will be required to provide a turn-key, efficient, accurate, and cost-effective ALPR solution that can utilize the Authority's roadside toll system image data and be integrated with the Authority's Back-Office System (BOS). Once an ALPR solution is implemented and deployed, it is expected that the ALPR process will be relied upon to have a high degree of accuracy and confidence that will significantly reduce the need for manual review of images.

The selection is expected to be made by February 20, 2025 with contract start dates of March 3, 2025. Initial contract(s) will be awarded with terms of a maximum of five (5) years with an optional three (3) one (1)-year extensions. These options are to be exercised at the discretion of the Authority under the same terms and conditions of the original contract. This contract may be terminated at the Authority's discretion at any time with a 180-day written notice, to be delivered by registered mail.

I. GENERAL INFORMATION

Interested Proposers shall respond to this request by submitting a compliant Statement on or before the time due for submission. Following the receipt of the Statements of Qualifications, a review committee shall evaluate the submissions and may select a Proposer for an interview. In selecting a proposal,



emphasis shall be placed on the Proposer's qualifications and experience in projects similar to those which the Authority anticipates undertaking. During the evaluation of the Statements, if necessary, the Authority may wish to request supplemental information and demonstrations from some or all of the Proposers. Once a pre-execution review has been conducted and all is in order, and a contract is signed, the Authority will forward a Task/Project Order authorizing work to proceed for a project.

For general information regarding Bidding and Contracting procedures and technical and solution delivery questions, contact Nate Carll, Purchasing Manager, at (207) 871-7771 Ext. 115. For Project specific information, email all questions to Nate Carll, Purchasing Manager, at ncarll@maineturnpike.com. Responses will not be prepared for questions received by telephone. All questions need to be provided by January 31, 2025 at 4 o'clock PM in order for the Authority to respond to Proposers prior to acceptance time. Proposers shall not contact any other Authority staff or Consultants for clarification of Contract provisions, and the Authority will not be responsible for any interpretations so obtained.

II. GUIDELINES FOR PROSPECTIVE PROPOSERS

1. In preparing responses to this Request for Qualifications (RFQ), Proposers should be aware that the Authority has structured this RFQ in a manner that allows Proposers some freedom to offer a solution or solutions that best meets the goals of the Authority. Specifically, the Authority is seeking a cost-effective solution with emphasis on accuracy and a low false-positive rate. As the Authority is sensitive to customer facing errors such as misidentified license plates, the Authority stresses the importance of ALPR precision, including correct plate typing.

In the Scope of Work (SOW) the Authority has established only minimal requirements in an effort to reduce prescriptive directives regarding the design of an ALPR solution. The Authority is open to Proposer's offerings that exceed the SOW requirements and/or offer supplemental, value-added features. However, the SOW does contain a number of requirements that the Proposer and the Proposer's solution must meet or exceed.

For additional direction on the contents of the Proposer's response, please refer to Section III. For additional background and Authority information related to this RFQ, please refer to Section VI.

- 2. Prospective Proposers must meet the following standards as they relate to this request:
 - a. Have the necessary experience, organization, technical and professional qualification, skills and facilities;
 - b. Be able to demonstrate understanding of the Authority's requirements for the desired ALPR solution through the written proposal, interview, and demonstration. The demonstration will require the Proposer to showcase the solution's capabilities by processing a sample of representative Maine Turnpike images provided by the Authority.
 - c. Be able to comply with the proposed or required time of completion schedule;
 - d. Have a demonstrated satisfactory record of performance.



III. STATEMENT OF QUALIFICATION PREPARATION

The Statement of Qualification shall be typewritten, with pages numbered and shall include sufficient documentation to allow a total and accurate evaluation of the Proposer's solution and the work to be performed. To facilitate the evaluation, the Proposer is requested to organize its Statement of Qualification to coincide with the sequence of Items 1 through 9 below. Those statements that do not follow the outline, or do not contain the required information may be considered unresponsive. If the Proposer intends to subcontract a portion of the proposed work, the Statement shall identify the name of the Subconsultant(s) and the services that are to be provided by the Subconsultant(s).

1. Statement of Interest

2. Proposer's qualifications

The Proposer shall describe its range and depth of experience relevant to this solicitation and the extent to which such services and solutions will satisfy the requirements defined in the SOW. In addition:

- a. The Proposer shall describe experience with working collaboratively directly with toll authorities.
- b. The Proposer shall describe experience working with both TransCore and their Infinity Toll System.
- c. The Proposer shall highlight profiles of previous projects (within the last five (5) years), which demonstrate the Proposer's qualifications for this proposed solution.
- d. The Proposer in their response shall demonstrate that the proposed ALPR Solution has been previously used in a production environment similar to that as required by the Authority.
- e. The response shall provide a detailed description of the proposed System's performance capabilities and how the System will address the requirements in the Scope of Work.

3. Project Team's Qualifications

The Proposer shall identify the key staff that will comprise the project team and the Project Manager who will be assigned to administer the contract and the implementation of the solution with the Authority.

4. Approach to Solution

The Proposer shall respond, elaborate and describe their solution which will meet or exceed the expectations of the Authority as listed in the SOW, with a focus on the following areas;

a. Overall Solution describing the products and services that will be provided by the Proposer including features that ensure high accuracy and an optimal yield such as Fingerprinting or



Vehicle Signatures and where the proposed ALPR Solution has been previously used in a production environment similar to that as required by the Authority;

- b. The Proposer's approach shall provide a detailed description of the proposed System's performance capabilities and the Proposers approach to achieving the highest performance of the ALPR Solution, including, computations for quantity, quality, confidence, and yield through automation. This should include details of the computations for the confidence and yield definition, sources of numerator and denominator, etc. as well as provide a detailed description of the proposed System's performance capabilities and how the System will address the requirements of this RFQ;
- c. A detailed description and specifications of the hardware, including servers, network equipment, and any other components, and any reasonable redundancy, required to install and operate the ALPR Solution at the required performance levels on Authority premises. The Authority will manage the purchase, delivery, and maintenance of the selected equipment;
- d. The Proposer's approach to providing the required documentation for Authority review and including the anticipated review schedule of submissions and approvals, to aid the Authority in the understanding of the system/solution and how to maintain it;
- e. Project Management Approach including:
 - i. A description of the Proposer's implementation plan and how the Proposer will ensure project success;
 - ii. A proposed project schedule that demonstrates their understanding of the necessary project activities required to implement the solution successfully;
- f. Integration approach including ability to work directly with Authority staff to ensure a mutually agreeable interface and a seamless data transfer process;
- g. Testing approach to include how the Proposer will gather any requisite sample data from the Authority, demonstrate testing procedures, involve the Authority in the testing process, and provide results to the Authority;
- h. Approach to supporting the Authority post-implementation during the operations and maintenance phase of the project.

5. Optional Offerings

The Authority may be interested in other features and functionality offered by the Proposer that are beyond what was specified in the Scope of Work and is open to responses on the overall solution and process that meets the highest performance for automation and may enhance the performance of the ALPR Solution.

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If the Proposer has optional services or distinguishing features and/or solution variables that exceed, supplement, or add value to the core requirements outlined in the Scope of Work, the Proposer shall clearly identify and describe any optional or add-on features that are not included in a base configuration of the ALPR Solution for consideration in an appendix to their response.

6. Pricing

The Authority is seeking a 'turn-key' solution that meets or exceeds the requirements documented in the Scope of Work and as such is requiring pricing that includes all project elements for the Contract term. Proposals submitted shall include cost-effective pricing for standard use license and include nominal maintenance assistance to the Authority to allow for operational support through the Contract term and the optional extensions.

Any optional features as described in response to Section III. 5. above, shall be priced by the Proposer and clearly labeled as "optional."

The Proposer shall provide a detailed cost breakdown, as applicable, to include the following elements, and whether each element price is a one-time, lumpsum, monthly, annual, periodic (state the period) or time and materials cost. Please reference the pricing sheet which is included as Appendix #1

- a. Implementation Base and Optional Items
- b. User Training and System Documentation Base and Optional Items
- c. Software License Base and Optional Items
- d. Maintenance and Support Services Base and Optional items
- e. Equipment List Base and Optional Items
- f. Terms and Conditions

7. Conflict of Interest

The Proposer should list any projects that they have worked on or are currently under contract to perform work where there may be a potential conflict of interest with an Authority project and those that may create an appearance of a conflict of interest with an Authority project

8. Appendices

Appendices shall be used to describe technical diagrams, flow diagrams and technical specifications, but should be limited to a combined total of no more than ten pages. One sheet of paper consists of one page single sided or two pages double-sided.

IV. DEMONSTRATION

As part of the evaluation, the Authority may extend invitations to meet with select Proposers for an interview and demonstration of their solution. For the demonstration, the Authority will provide a sample



file or files containing a minimum of 1,000 transactions which will include images that have been manually validated and truthed by Authority staff. Proposers selected for the demonstration will be provided the same image file(s) which will be representative of typical transactions expected to be seen on the Authority's facilities under normal operating conditions. The Proposer will process the file(s) through their solution and provide the Authority with the results of their process.

V. SCORING

Following the Proposal submission, review, and evaluation of the demonstration, if any, the Authority will score the Proposals with maximum potential score points for each Response Area as shown in Table 1-2 below.

Response Areas	Maximum Possible
	Points
Overall Solution and Performance Approach	45
Project Management and Testing Approach	20
Approach to Maintenance	25
Price	10
Maximum Possible Points	100

Table 1-2 Scoring Matrix

V. CONTRACT AWARD

Any contract entered into by the Authority shall be in response to the Statement of Qualification and subsequent discussions. The contract award shall be based on the criteria described herein.

The Contract will include the Authority's Final Scope of Work for the contract.

Each proposal will be evaluated on both technical capabilities and cost, with a higher emphasis on technical. The Authority reserves the unqualified right to reject any or all Statements of Qualifications and to accept the Statements of Qualifications which in its sole judgment will under all circumstances serves its best interest. The Maine Turnpike Authority reserves the right to negotiate the final product and cost with the selected Proposer through a Best and Final Offer (BAFO) process. If the Authority is unable to enter into an agreement with any selected Proposer, the Authority reserves the right to terminate negotiations and initiate negotiations with another Proposer. No compensation will be paid for the failed negotiations.

1. Task/Project Order Process

All services shall be managed through the Task/Project Order Process. All of these services shall be initiated by the Authority through the Task/Project Order Process. Judgment on the content of

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the scope of the Task/Project Order will be with the Authority. The successful proposer will be notified via e-mail and a purchase order will be issued. No work shall proceed until a Task/Project Order has been approved and executed by the Authority and executed by the Proposer. In order to satisfactorily complete a Task/Project Order, the Proposer will be required to provide the following information:

- a. Personnel proposed for assignment to the project; including contact person;
- b. Total estimated cost to complete the assignment;
- c. A written understanding of the project requirements, including deliverables; and
- d. A project schedule complete with milestones and completion date.

2. Coordination and Administration of Services

The Proposer shall coordinate its activities with assigned Authority personnel throughout the course of this Contract. Early on, the Proposer shall_establish a means of coordinating and reporting its activities with the designated project liaison to ensure an expeditious exchange of information. The Proposer shall provide a detailed description of all activities conducted under this Contract as part of each month's progress report. The Proposer shall prepare Memoranda of Record for all meetings. All correspondence, invoices and transmittals shall be referenced by the Authority's Project number, the Authority's Contract number and when appropriate, the specific Task/Project Order number.

3. Responsibilities of the Authority

The Authority will furnish, without cost to the Proposer, services and data to the Proposer in connection with services performed under the terms of this contract, as deemed necessary provided the Authority has reasonable advanced notice of the request.

VI. ADDITIONAL BACKGROUND INFORMATION

Purpose

The Maine Turnpike Authority ("Authority") seeks a qualified Vendor to develop, implement, and support a highly accurate and high yield Automated License Plate Recognition (ALPR) solution for the purpose of allowing the Authority to reduce its reliance on manual image review. The Authority requires an ALPR Solution that maximizes the number of images that can be accurately processed automatically, without the need for manual intervention, while simultaneously minimizing errors and/or false positives of the automatically identified images.

The contract-compliant ALPR Solution to be provided by the selected Vendor shall utilize images and image data produced by the Authority's existing roadside toll collection system and related image capture system, as well as integrate with the Authority's BOS.

2. Technical Background



The Authority operates a 109-mile turnpike currently consisting of 23 interchanges, with 42 Open Road Tolling (ORT) lanes and 80 manual/cash lane configurations, utilizing the TransCore Infinity system. These lanes are equipped with a combination of FLIR, LARA, and Luminera video cameras, which are designed to capture vehicle license plates for toll collection purposes. Images are captured in color at approximately 100 Kilobytes per image. The Authority currently relies on an in-house developed Manual Image Review (MIR) process for all its image-based transactions. Images of every vehicle that travels through a tolling pay point are captured; however, only images not associated with either: a) valid transponder transactions, or b) transactions with a toll collector-indicated payment, are saved for further processing. These image-based transactions are commonly referred to as 'Run-Throughs' (also known as violations) by the Authority.

Traffic demographics currently stands at approximately 80% electronic tolls (Tags), 13% cash (manual/toll collector) transactions, and 7% image tolls. On average the toll system currently generates approximately 38,000 images per day which require further processing (currently through MIR). To allow for future expansion and other initiatives, the Authority desires the ALPR Solution to be capable of processing up to 150,000 images per day. Once plate data is identified, many of these images are matched to E-ZPass customers and these transactions are posted as I-Tolls to customer accounts. Those that cannot be matched to customer accounts are further processed as violations whereby notices are issued for toll collection to the registered owner of the vehicle.

The number of images per transaction varies between four and six images, depending on the type of lane and whether a vehicle is straddling one or more lanes. The plate jurisdictions most frequently encountered at Authority toll facilities are Maine, Massachusetts, and New Hampshire. The remainder of the traffic is mostly composed of the other states in the U.S. Northeast and Canada. The following table summarizes the ten most common plate jurisdictions found in image-based transactions on the Maine Turnpike:

Issuing Jurisdiction	Percentage (%)
Maine	53.9
Massachusetts	18.2
New Hampshire	7.5
New York	2.3
Connecticut	2.3
Florida	1.9
Indiana	1.7
New Jersey	1.1
Pennsylvania	1.0
Rhode Island	1.0

Table 1- Most Common Jurisdictions



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The State of Maine's Bureau of Motor Vehicles (BMV) currently issues more than 60 different plate types, of which the same plate number may be duplicated across types. Additionally, four of the other five New England states' Departments of Motor Vehicles (DMVs) also utilize plate types (unique to the respective jurisdictions) to differentiate between duplicate plate numbers as well as to signify various vehicle registration types (e.g.: truck vs car vs. trailer, etc.). For these and other states that have plate types, the Authority must include the plate type as part of the data submitted with the DMV inquiry in order to receive accurate name and address responses. Therefore, it is critical that accurate plate data (which includes jurisdiction, plate type, and plate number) be highly accurate so that the Authority identifies the proper vehicle owner.



VII. GLOSSARY

The following terms are used within the RFQ and are defined here for clarity:

ALPR Solution The hardware, software, interfaces, processes, dataflows, documentation, and other aspects of the Proposer's offering that will meet or exceed the requirements of the Contract. Authority BMV/DMV BMV- Bureau of Motor Vehicles also referenced as DMV - Department of Motor Vehicles, is the government agency used to register vehicles to owner/operator and the various elements comprising Plate Data representing the likelihood that the Plate Data produced by the ALPR is correct The Confidence Level is a monotonically increasing number wherein the highest level indicates 100% likelihood that the Plate Data is correct. Confidence Threshold The minimum Confidence Level value at which an ALPR result is accepted for automation, and below which a license plate must be sent for further processing number wherein the processing number wherein the highest level indicates 100% likelihood that the Plate Data is correct.
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Threshold automation, and below which a license plate must be sent for further procession
The control of the processing the series of
through Manual Image Review.
False Positive An ALPR result where the Confidence Level is at or above the Confidence
Threshold, but such result contains incorrect plate data (incorrect plate numbe
state, and/or plate type).
Plate Data Plate data consists of the plate jurisdiction, the plate type for that jurisdiction (
applicable), and the plate number which is the alpha-numeric and special
characters that are displayed on a license plate, and any required prefixes or
suffixes as required for DMV look-up purposes.
Plate Type The specific category or classification assigned to a license plate, denoting the
purpose, type, or other characteristics of the vehicle or its owner or operator.
Proposer The entity responding to this Request for Qualifications
Run-Through A vehicle which travels through a tolling point without paying or having a valid
transponder mounted.
Truthed Any image that has been verified as correct by manual review
Vendor The entity awarded a Contract for this procurement by the Authority
Yield The percent of ALPR results whose Confidence Level is above a selected value (
Confidence Threshold).

Table 2- Glossary of Terms