REQUEST FOR PROPOSALS
MAINE TURNPIKE AUTHORITY
NOTICE TO VENDORS

Statements of Qualifications will be received by the Maine Turnpike Authority for: CONSULTANT CONTRACT 2026.101
LiDAR MOBILE SCANNING OF MAINE TURNPIKE AUTHORITY ROADWAY NETWORK

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 **April 27, 2026**. To be considered responsive, the entity (the "Proposer") submitting a Statement of Qualification shall submit 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, including appendices. Page count does not include covers, the transmittal letter or dividers. Submitted Statements need to be clearly marked "Request for Proposals for LiDAR Mobile Scanning of Maine Turnpike Authority Roadway Network." The selection is expected to be made by **May 1, 2026**, with a contract start date of May 11, 2026. Initial contract(s) will be awarded with terms of a maximum of five (5) years. These options are to be exercised at the discretion of the Authority under the same terms and conditions of the original contract. This contract will be executed under the Authority's Engineering Consultant General Conditions (https://www.maineturnpike.com/getattachment/862a867b-1ab6-4c6a-b9a9-625d890f9de0/UPDATEDAPRIL2025Maine-Turnpike_2024_v8_General-Conditions-08302024.pdf?lang=en-US).

I. GENERAL INFORMATION

The Authority seeks a qualified Vendor with demonstrated experience in large-scale transportation LiDAR acquisition, processing, and delivery of geospatial datasets that meet transportation-industry accuracy standards.

The selected Vendor shall furnish all labor, equipment, vehicles, software, and expertise necessary to:

- Perform mobile LiDAR data collection for the entire Authority network
- Capture dense point clouds, pavement surfaces, structures, appurtenances, and roadside features
- Process, classify, and deliver geospatial datasets according to Authority specifications

A single Vendor will be selected. The anticipated Contract duration is 5 years with an initial Task Order issued following the Contract execution. There is potential for additional task orders. The Authority intends for this contract to support routine and continued inventory-level data collection of roadway and asset information, with the objective of maintaining a current system-wide inventory on an approximately three-year recurring cycle. The Authority may, at its discretion, utilize this contract for initial baseline data collection as well as subsequent refresh efforts over the term of the contract.

II. SCOPE OF WORK

The Scope of Work includes, but is not limited to, the following:

Task 1: Pre- Data Acquisition Coordination

1. Kickoff meeting with Authority staff
2. Review of network limits, ramps, toll plazas, and special areas
3. Development of a detailed Data Acquisition Plan

Task 2: Mobile LiDAR Data Collection

1. Use of state-of-the-art mobile LiDAR units capable of collecting:
    i. ≥ 1 million points per second (or Vendor's equivalent capability)
    ii. Horizontal accuracy meeting or exceeding ASPRS Class 2.5
2. Collection must include:
    i. All mainline segments from Kittery to Augusta
    ii. All ramps, interchanges, and associated connectors
    iii. Toll plazas

The mobile LiDAR survey shall capture sufficient detail to identify, measure, and locate the following elements throughout the Authority's roadway network:

1. **Edge of Pavement and Drop-Offs**
    - Location of pavement edges at 0.1 mile intervals to determine pavement widths
    - Vertical drop-off at pavement edges where present at greater than 1"
2. **Guardrail Systems**
    - Guardrail location (horizontal and vertical)
    - Guardrail height (Height is measured from the final pavement surface at face of rail to the top of the guardrail beam.)
    - Guardrail lean or deflection relative to vertical
    - All guardrail data will be measured and reported at 0.02 mile intervals.
3. **Structure and Overhead Clearances**
    - Vertical and horizontal clearance to bridges (95 Mainline Underpasses)
    - Clearance to overhead sign structures (78 overhead and cantilevered sign structures)
    - Clearance to tolling gantries, tolling systems, and associated appurtenances (42 structures and 28 toll plaza roofs)
    - All clearances will be measured and reported at edges of pavement and all striped lines.
    - Clearances to appurtenances will be measured and reported for each individual piece of equipment.

4. **Pavement Cross Slope**
   Pavement cross slope measurements for traveled lanes and shoulders at 0.1 mile intervals. Cross slope measurement for each lane shall consist of data extrapolated from data collected at each lane edge and the quarter point of each lane, such that data conveyed will consist of slopes representative of each half lane. Cross slope measurements for shoulders shall be extrapolated and conveyed as the full width of the shoulder.
5. **Signing Inventory**
   - Sign locations for Guide Signs, Regulatory, Warning, Confirmation and Route Marker Signs on the mainline and ramps (approximately 4,500 sign locations)
   - Sign height and width and mounting height
   - Number and type of posts
   - Sign retroreflectivity (measured or derived, as applicable based on Vendor methodology)

Task 3: Data Processing

- Classification of point cloud into Authority-defined categories such as guardrail, bridges, cross slope, etc.
- Extraction of roadway geometry, edges, pavement conditions as applicable
- Deliverables shall be georeferenced in MTA-specified coordinate systems

Data Storage and Retention

The selected Vendor shall be responsible for securely storing the complete mobile LiDAR point cloud datasets and associated derived data on an annual basis as determined by the Authority. Storage shall support routine access by the Authority for review, validation, and follow-on analysis. At the completion of a subsequent data collection cycle if requested, the Vendor shall replace the previously stored datasets with the newly collected and processed data, such that the Authority maintains access to the most current system-wide inventory without a requirement for indefinite historical data retention.

Task 4: Deliverables

The Vendor shall submit the following deliverables in formats acceptable to the Authority:

1. **Spreadsheets**
   Comprehensive spreadsheets serving as the deliverable for the specific data elements identified in Task 2. The spreadsheets shall:
   - List each applicable asset or feature (e.g., pavement edge drop-off, guardrail segment, structure clearance location)
   - Include measured or derived attributes as applicable (e.g., height, lean, vertical and horizontal clearance)
   - Provide spatial referencing that correlates directly to the Maine Turnpike Authority baseline stationing (including route, direction, and station) and the Authority's coordinate system, enabling integration with Authority GIS and engineering datasets

- Include unique identifiers allowing traceability back to the source LiDAR data

2. **Classified Point Cloud Datasets, including:**
   - Digital Terrain Models (DTMs) or Digital Elevation Models (DEMs), as applicable.
   - Metadata documenting acquisition conditions, coordinate system, accuracy, calibration, processing methods, and QA/QC results
3. **GIS-ready datasets**
   - LAS/LAZ, geodatabases, shapefiles, kmz, or other Authority-approved formats

Task 5: Quality Assurance / Quality Control

The Vendor shall submit a plan on how and when the QA/QC tasks will be accomplished. The plan shall include calibration procedures, checkpoint surveys (if required), and accuracy reporting documentation.

III. COST PROPOSAL & SCHEDULE

Vendors shall submit two cost proposals - with and without the collection and processing of "Signing Inventory".

The cost proposal shall also include a per annum price for a maximum of five (5) years for the secure storage and retrieval of data. The Authority reserves the right to, as part of this contract, accept in full duration, accept in partial duration, or reject data storage.

Vendors shall submit a schedule that includes complete data collection by no later than June 5, 2026. The Authority prefers to have receipt of the deliverables identified in Task 4 by no later than September 15, 2026.

IV. PROPOSAL REQUIREMENTS

Proposals shall be typewritten, page-numbered, and organized in the following sequence:

1. Cover Letter & Statement of Interest
2. Company Qualifications & Experience
3. Project Management & Staffing
4. Technical Approach to the Scope of Work
5. Schedule
6. Cost Proposal
7. Appendices

V. EVALUATION CRITERIA

Evaluation will consider:

- Specialized experience with mobile LiDAR
- Technical approach and demonstrated accuracy
- Staff qualifications and experience
- Past performance and ability to meet schedules)
- Cost proposal
- Other project-specific considerations

VI. ADMINISTRATIVE REQUIREMENTS

Questions:

- All questions shall be emailed to: Lauren Fleming, Engineering Program Manager – lfleming@maineturnpike.com with the email subject line of: LiDAR MOBILE SCANNING QUESTIONS
- Questions must be submitted before: **April 23, 4:00 PM**.
- Vendors shall not contact other Authority staff regarding this RFP.

Submission Format:

- One (1) electronic PDF copy
- Proposals shall be submitted via email to Lauren Fleming, Engineering Program Manager - lfleming@maineturnpike.com with the email subject line of: LiDAR MOBILE SCANNING RFP (FIRM NAME)
- All proposals must be received before the deadline of **April 27, 4:00 PM**

VII. CONTRACT AWARD

The Authority reserves the right to reject any or all proposals, waive technicalities, negotiate final scope and cost, and issue Task Orders following contract execution. Award will be made to the Vendor whose Proposal is determined to be in the best interest of the Authority.

VIII. CONTRACT CONDITIONS

Any contract entered into as a result of this Request for Proposals shall be subject to the Maine Turnpike Authority's Engineering Consultant General Conditions (https://www.maineturnpike.com/getattachment/862a867b-1ab6-4c6a-b9a9-625d890f9de0/UPDATEDAPRIL2025Maine-Turnpike_2024_v8_General-Conditions-08302024.pdf?lang=en-US) including but not limited to the following:

A. Ownership of Data and Work Products. All data, documents, reports, spreadsheets, point cloud datasets, models, and other work products prepared or furnished by the Vendor shall become the

property of the Authority upon submission or acceptance, as applicable. The Vendor shall not use or distribute this data for any reason other than specified within this contract without the written approval of the Authority.

B. Insurance and Indemnification. The selected Vendor shall be required to maintain insurance coverages and provide indemnification in accordance with Authority requirements prior to contract execution and for the duration of services.
C. Compliance with Laws and Regulations. The Vendor shall comply with all applicable federal, state, and local laws, ordinances, rules, and regulations, including those specific to the Maine Turnpike Authority.
D. Confidentiality. The Vendor shall not disclose any information obtained through performance of services without prior written authorization from the Authority.
E. Assignment and Subcontracting. The Vendor shall not assign the contract or subcontract portions of the work without prior written approval from the Authority.
F. Termination. The Authority reserves the right to suspend or terminate the contract, in whole or in part, for convenience or for cause, in accordance with Authority policies.
G. Governing Law. The contract shall be governed by and construed in accordance with the laws of the State of Maine.

The selected Vendor shall be required to execute a contract incorporating these and other standard Maine Turnpike Authority contract provisions prior to commencement of work.