Request for Information (RFI)
Louisiana Department of Transportation and Development (DOTD)
Robotic and Remote Inspection Technologies for Infrastructure Assessment

Issue Date: February 2, 2026
Deadline for Receipt of Questions/Inquires: February 12, 2026
Agency Response to Written Inquiries: No later than February 23, 2026
Deadline for RFI Response: March 5, 2026

Questions / Inquiries: Should be submitted via email to Julie.Kennison@la.gov no later than February 12, 2026. Inquiries received after this deadline may not be entertained.

RFI Response: Email Responses should be submitted by March 5, 2026, to Julie.Kennison@la.gov. Please include the following:

1. A brief company profile, including relevant experience and qualifications
2. Responses to the "RFI Questions" in Attachment I
    - Please number responses according to the format in Attachment I
    - Responses are not required for all questions
3. Any additional comments or recommendations for DOTD

Confidentiality: This RFI is for information gathering purposes only and does not constitute a solicitation or commitment to issue an RFP or award any contracts. Responses will be treated as confidential to the extent permitted by law.

Introduction:

The Louisiana Department of Transportation and Development (DOTD) is seeking information from qualified firms with expertise in robotic inspection systems, remote sensing, and automated infrastructure assessment technologies.

DOTD maintains an extensive network of culverts and drainage structures that require regular condition assessments to ensure safety and asset performance. Many of these assets are located in confined or difficult-to-access environments that present safety risks and logistical challenges for manual inspection.

The Department is exploring the use of robotic crawlers, remote camera-based inspection systems, and other automated or semi-autonomous technologies capable of capturing imagery, video, and structural data from inside culverts and similar structures.

DOTD's objective is to understand current industry capabilities, equipment specifications, and data management practices that can support safer, more efficient, and more consistent inspection operations statewide. DOTD also seeks solutions that

can integrate with existing digital inspection and asset management systems to ensure compatibility.

Key considerations for DOTD's implementation:

Information from this RFI will guide future procurement strategies and technology pilots under DOTD's infrastructure asset management and safety innovation initiatives.

Purpose: The purpose of this RFI is to:

1. Identify robotic and remote inspection solutions suitable for culvert, drainage, and confined space assessment.
2. Understand available technologies, capabilities, and data outputs that improve safety, quality, and consistency in inspections.
3. Assess deployment logistics, integration needs, and data management workflows for DOTD's inspection and maintenance programs.
4. Inform the scope, specifications, and resource planning for a potential future solicitation or pilot program.

This RFI is not a solicitation or commitment to purchase. Responses will inform DOTD's planning and evaluation process

Scope of Work: DOTD is interested in technology platforms that can:

1. Safely inspect culverts, drains, and other confined structures without requiring entry by personnel.
2. Capture high-resolution imagery, video, LiDAR, or other data for condition assessment and defect identification.
3. Operate effectively in a range of environmental conditions (e.g., wet, debris-filled, submerged, or low-light environments).
4. Support data storage, viewing, and integration with DOTD's existing asset management and GIS platforms.
5. Provide reporting tools or automated analytics to classify or tag structural defects and inspection findings.

Key Objectives:

1. Enhance worker safety by reducing the need for confined space entry and hazardous inspections.
2. Improve inspection efficiency, accuracy, and repeatability using robotic and sensor-based tools.

3. Enable consistent data collection and digital recordkeeping across statewide maintenance and asset programs.
4. Support DOTD's long-term goal of integrating inspection data into a centralized GIS and asset management environment.

Next Steps: Based on the responses to this RFI, DOTD will:

1. Refine the scope and technical requirements for future solicitations
2. Potentially engage with industry participants through informational sessions or pre-solicitation meetings to further explore available technologies and implementation strategies
3. Identify potential pilot opportunities and integration approaches with existing systems

DOTD thanks you for your interest and looks forward to your valuable input on this important initiative.

ATTACHMENT I

RFI Questions:

DOTD is seeking responses to the following questions:

1. **Interest and Capacity:**
    a) Describe your firm's experience developing, manufacturing, or implementing robotic or automated inspection technologies for culverts, storm drains, pipelines, or similar infrastructure.
    b) Identify agencies or organizations where your equipment or software has been deployed, including project scale, operating conditions, and measurable outcomes.
    c) Provide an overview of your system's core components, such as crawler units, cameras, sensors, control consoles, and data platforms, and highlight the specific applications best suited for DOTD's operations.
    d) Quantify, where possible, the safety benefits of your technology for field personnel:
        a. Describe how its use reduces worker exposure to confined spaces, hazardous environments, or other field risks, and provide any available metrics or case studies demonstrating safety improvements.
    e) Describe the measurable productivity gains or time savings achieved using your system:
        a. If available, include data or examples illustrating how your technology accelerates inspection timelines, reduces staffing needs, or improves inspection coverage and reporting efficiency.

2. **System Capabilities and Integration:**
    a) Summarize your system's inspection capabilities, including operational range, lighting, mobility, sensor options (e.g., video, LiDAR, sonar, infrared, acoustic, or other data types), and suitability for inspecting a variety of transportation infrastructure assets (e.g., such as culverts, pipes, drainage structures, and confined spaces of varying sizes, materials, and conditions).
    b) Explain how inspection data is collected, stored, viewed, and shared, including any cloud-based or on-premises options. Indicate whether your platform integrates with GIS and asset management systems (e.g., ESRI, AgileAssets, Infor) to support visualization, reporting, and data retention.

c) Specify whether your system contains any proprietary components, file formats, or interfaces that would require accommodation during integration, or if all subsystems and data outputs are open and fully compatible with DOTD's asset management and interoperability standards.
d) Describe how your system ensures data quality, spatial accuracy, and consistency, including options for annotating observations / hot-linked images and automating defect or condition ratings.
e) Outline your system's operational requirements, including power, communication, and maintenance needs, and note any specific environmental or access limitations (e.g., slope, water depth, debris levels, or confined-space restrictions).

3. **Implementation and Support:**
   a) Outline your recommended approach for introducing and scaling robotic inspection within a statewide DOT program, including pilot and training phases.
   b) Describe typical staffing and skill requirements for field deployment, including operator training (e.g., time required for training, resources) and certification needs.
   c) Indicate whether your robotic inspection technologies are typically purchased, leased, or provided as a contracted service, and outline the advantages, limitations, and support implications of each model for an agency like DOTD.
   d) Describe the maintenance requirements to keep the equipment operational. Specify the frequency, complexity, and type of maintenance activities required (e.g., calibration, cleaning, software updates), and indicate which of these tasks can be performed by DOTD staff versus those typically handled by the vendor.
   e) Summarize the support services your firm provides, such as technical assistance, maintenance, spare parts, software updates, and user training.
   f) Provide an overview of your anticipated resource requirements and cost structure for a project of this scope. Please outline the key factors that influence pricing (e.g., data volume, record conversion, system configuration, training, and ongoing support) and identify any assumptions or variables that DOTD should consider when estimating project costs.

4. **Potential Challenges:**
    a) What common challenges have you encountered when implementing similar robotic inspection tools in DOT environments, and how were those challenges addressed or mitigated?
    b) What recommendations do you have for ensuring safety compliance, equipment reliability, and data standardization during statewide use?
    c) How can DOTD best address or mitigate these challenges to ensure successful deployment and user adoption?

5. **Feedback, Recommendations, and Demos:**
    a) What innovative technologies, best practices, or lessons learned from other large-scale public-sector projects could be applied to this initiative?
    b) What innovations, automation features, or analytics capabilities distinguish your platform from others in the market?
    c) Can you share any promotional or explanatory videos, images, or other demo materials for your solution?