STATE OF TENNESSEE
DEPARTMENT OF HEALTH

REQUEST FOR INFORMATION
FOR
LABORATORY INFORMATION MANAGEMENT SYSTEM

RFI # 34308-11225
OCTOBER 15, 2024

1. STATEMENT OF PURPOSE:

The State of Tennessee, Department of Health, Division of Laboratory Services (DLS) issues this Request for Information ("RFI") for the purpose of procuring a modern Laboratory Information Management System (LIMS) that includes but is not limited to enhancements such as: sample tracking, inventory management, quality management, test management, personnel management, standardization of procedures, centralization of data, advance search tools, data analysis, chain of custody, audit trails, electronic signatures, storage management. We appreciate your input and participation in this process.

2. BACKGROUND:

DLS currently employs the STARLIMS v11 application as the Laboratory Information System for Clinical and Environmental testing at the Nashville Central Lab and the Knoxville Regional Lab. These two lab locations utilize the STARLIMS Public Health System and the Environmental Sciences System veriticals. In addition, DLS dually utilizes Neometrics and Specimen Gate as Newborn Screening LIMS. The agency seeks information regarding available LIMS to replace the STARLIMS v11 application that will meet, at minimum, all of the needs for Clinical and Environmental testing. It is preferred that the system also support the needs of the Newborn Screening testing section resulting in one unified LIMS to meet all the needs of the Public Health Laboratory.

3. COMMUNICATIONS:

3.1. Please submit your questions and response to this RFI to:

Simeon Ayton, Sourcing Account Specialist
Central Procurement Office
Division of General Services
WRS Tennessee Tower, 3rd Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243
(615) 532-0110
Simeon.Ayton@tn.gov

3.2. Please reference RFI #34308-11225 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		October 15, 2024
2.	Written "Questions & Comments" Deadline	2:00 p.m.	October 25, 2024
3.	State Response to Written "Questions & Comments"		November 1, 2024
4.	RFI Response Deadline		November 8, 2024
5.	Review Responses and Schedule Demos		November 15, 2024
6.	Conduct Demos	8:00am to 4:30pm	November 18-21, 2024

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 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. Demonstrations will be virtual and hosted on Microsoft Teams.

5.4. Demonstrations provide an opportunity for Respondents to explain and clarify their responses. Respondent pricing shall not be discussed during demonstration presentations.

5.5. 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 #34308-11225 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
4. To what extent can your solution be customized to meet the specific needs and requirements of the State, DLS and how easily can it adapt to changes in processes, regulations, or policies?
5. Can DLS Informatics staff make customizations to the system without vendor intervention?
6. How does the solution ensure scalability and flexibility to accommodate future growth, expansion, and changes in needs and services?
7. If cloud hosted/vendor hosted solution, are the client's staff allowed connections to underlying database in read-only modes?
8. In addition to laptop and desktop workstation compatibility, is the system capable of functioning in its optimal manner when using mobile devices including phones, tablets and iPads?
9. How does the system support data modernization and interoperability initiatives?
10. Does the system natively handle HL7 messaging? Does the system conform to HL7 2.5.1 and or FHIR messaging standards?
11. Can the system capture a result file and pass it along to an external system?
12. Can the system generate and send a lab order message/file in HL7 LOI format?
13. Can the system accept HL7 2.5.1 OML messages?
14. Can the system create HL7 2.5.1 ORU messages?
15. Can the system support parent, child, grandchild linkages in sample workflow and electronic messaging?
16. Can a data conversion be executed to transfer existing data in the current LIMS to the new product?
17. Can the system configure/adjust business management rules and logic for data validation and analysis?
18. Can the system capture various data points from samples to perform analysis?
19. Does the database reside on Tennessee database servers or vendor hosted database servers? What level of access do the Tennessee public health laboratory LIMS administrators have to a vendor hosted database server (Read/Write, Read Only, none)?
20. Can the system ingest data extracts in various formats?

21. Can the system merge data for analysis purposes?
22. Can the system be searched by various data elements to find desired data (example: searching by name, DOB, Submitter, etc.)?
23. Can the output of the database search or filter operations be accessed in a printable format?
24. Does the system have the functionality to develop ad hoc reports, run queries by type, or perform data analytics of specified data filters?
25. What data analytics and reporting capabilities does the solution offer?
26. Can the system limit viewing access between lab locations (i.e. Knoxville staff cannot view Nashville results and vice versa)?
27. What are your disaster recovery and business continuity plans to ensure uninterrupted service in case of system failures, data loss, or other unforeseen events?
28. Does the system accommodate a single sign on with the agency active directory?
29. Does the system have the ability for bi-directional interfaces between the LIMS and the instruments, (including bloodspot punch instruments)?
30. What middleware is used for the instrument interfaces?
31. Can the system interface with the DLS Lab Web Portal to receive electronic orders and eliminate hand-keying?
32. Does the solution have an Electronic Test Order Request Portal? – Ordering providers placing lab order and receiving lab result securely?
33. Does the solution have a Patient Portal option – individuals receiving lab result securely?
34. Does the system allow for creation and management of testing price list (by sample type, test plan, test, etc.) by DLS Informatics staff?
35. Does the system have a billing component? Can that component receive and store patient insurance information? Can the system track billing (Insurance - clinical, billing codes - environmental science)?
36. Can the system manage insurance claim billing, adjudication, invoicing (environmental) and discounting?
37. Can the system manage and retain international client and patient addresses, and distribute results to international client addresses?
38. Can the system provide ability for international clients to access lab results?
39. Does the system have multi-level roles accessibility to access different functionality, including administration?
40. Can the system be configured for different views, dashboards, alerts etc. based on level of access?
41. Does the system provide alerts for system maintenance?
42. Does the system provide a unique ID for lab orders?
43. Does the system create a master patient ID?
44. Can the system send alert value messages to submitters?
45. Does the system have a Customer Communication Log at both an overall level and a particular sample/test level?
46. How does the system execute multiple lab orders in multiple formats?

47. Can the system receive and match Lab orders to physical specimens received?
48. Can the system place pre-ordered labs, including electronic lab orders (different from HL7)?
49. Can the system mirror paper lab requisitions in system (i.e. Collect all demographic information included on the paper requisition)?
50. Does the system provide chain of custody management capabilities (documents, time stamps, point of collection, geographical/spatial locations, transportation mechanism, sample type, etc.)?
51. Can the system perform accessioning functions?
52. Can the application support diagnostic and surveillance testing workflows?
53. Does the application align patient demographics with USCDI+?
54. Can the system record outbreak number identifiers and assign sample numbers to the outbreak?
55. Can the system produce barcode labels (2D, 3D/QR Code)?
56. Can the system identify the relevant test(s) for the order file?
57. Can comments be entered into the system, both internal and external, for lab tests?
58. Does the system allow for teams-based testing (tests are associated with staff on those teams)?
59. Can the system create runs to allow for multiple tests to be run simultaneously?
60. Can the system perform various types of environmental tests based on client and project needs such as, but not limited to water and soil samples?
61. Can the system run specific types of tests dependent upon specimen needs, types of reagents?
62. Does the system allow for the processing of both state managed labs and testing outsourced to contracted labs?
63. How does the system accommodate the unique workflow for whole genome sequencing?
64. Can the system create, assign, and execute work lists for punched bloodspot plates?
65. Can the system perform retests on samples?
66. Can the system manage repeat or second tier testing on punched bloodspot plates?
67. Does the system have reflexive trigger actions (decision support based on lab test result)?
68. Can the system test samples from bloodspot cards (using "punched plates") and provide test results for those punched plates?
69. Does the system store and display Reference Ranges for clinical and DST/AST testing?
70. Can the system identity out of range results?
71. Can the system execute/alert trigger actions based on out-of-range results?
72. How does the system handle 2nd and 3rd tier testing?
73. Does the system execute and issue peer reviews of run results, utilizing any quality control measures necessary for the unique run to ensure testing integrity?
74. Can the system generate various report types such as Preliminary, Original, Follow-up and Corrected reports?
75. Can the system create lab reports in various formats, including PDF (inc. digital signatures). If so what formats?
76. Does the system distribute lab reports (or test results) based on specific distribution rules to relevant customers, organizations, etc.? Examples are email, fax, electronic HL7, etc.

77. Does the system distribute lab result reports to multiple contacts for the same report? Example: If a client has two contacts listed that need a copy of the report where one has requested a report by email and the other request report by fax.
78. Does the system allow for the creation of electronic data deliverables (EDDs)?
79. What is the systems capability for lab report production (printing, faxing, email, file share) and printer management?
80. Can the system send relevant reports to providers, state public health authorities in Communicable and Environmental Diseases and Emergency Preparedness (CEDEP), or federal public health authorities via HL7 messaging?
81. Can the system produce separate reports for initial testing while 2nd and 3rd tier Newborn screening testing is still ongoing?
82. Does the system allow for the delivery and receipt of lab results?
83. Does the system have audit and traceability functions for any action performed in the LIMS by user and timestamp (lab order entry, lab order receipt, specimen receipt, specimen/lab order accession, run creation, sample run assignment, result entry, result edits, run completion, environmental projects, peer review approval, run approval, final lab result report approval)?
84. Can the system calculate turnaround times and other quality assurance parameters?
85. Does the system track lab tests, lab results, allow for lab entry and quality control tracking?
86. Can the system track materials (reagents and other materials), material recipes, material creation and expiration dates, lot numbers, wastage, and reorder points?
87. Does the system have inventory management capabilities, including keeping inventory of final lab product?
88. Can the system track laboratory instrument maintenance schedules and be taken offline as needed?
89. Can the system perform calibration tracking?
90. Is the system capable of tracking sample viability times by specimen type and test, and automating lab order cancelation if no specimen received within viable timing?
91. Can the system perform sample location tracking including isolates or aliquots?
92. Does the system have access to training modules and/or recorded video links for onboarding new staff?
93. What training materials, resources, and methods do you offer sand what ongoing support and maintenance services do you provide?
94. How is the system updated?
95. Is your system in place at other Public Health Laboratories? If so, can you provide reference contact information?
96. Is your system employed by an environmental lab? Can you provide redacted examples of reports?
97. Can the system track hold times?
98. Does the system alert users when hold times are imminent?
99. Can the system house information from multiple sites (host lab and contract labs) under ONE login by the user?
100. Can the system maintain and produce a list of signatories or users who are permitted to release

reports/data?
101. Can the system track Quality Control data without it being forward facing to the client? Can the system produce control charts of QC data?
102. Can the system track preventive maintenance of equipment and or instrumentation?
103. Are you able to provide a detailed demo of your product?
104. Can you provide an estimated timeline for the deployment and implementation of your proposed solution, including any necessary customization and integration with existing systems such as the Lab Web Portal, Instrument Manager, and local and federal ELR reporting platforms?
105. Is the application browser agnostic?

COST INFORMATIONAL FORM
1. Describe what pricing units you typically utilize for similar services or goods (e.g., per hour, each, etc.:
2. Describe the typical price range for similar services or goods
3. Can you provide an estimated, non-binding cost range for gap analysis, implementation, and data conversion?
4. Please provide an estimated cost range for the upfront versus ongoing and/or recurring costs for maintenance, change requests, implementation, training, etc. for the product.

ADDITIONAL CONSIDERATIONS
1. Please provide input on alternative approaches or additional things to consider that might benefit the State: