State of Maine
Master Score Sheet

RFP# 202309195					
Pavement and Bridge Asset Management Software as a Service					
	Bidder Name:	Applied Research Associates, Inc. (ARA)	Agelix Consulting	Deighton Associates Ltd.	DOT-US (Decision Optimization Technology-United States, L.P.)
	Proposed Cost:	$2,679,266.00	2,268,035.00	1,791,015.11	4,093,285.00
Scoring Sections	**Points Available**				
Section I: Preliminary Information	Pass/Fail	N/A	N/A	N/A	N/A
Section II: Organization Qualifications and Experience	25	15	5	20	12
Section III: Proposed Services	50	22	3	38	35
Section IV: Cost Proposal	25	17	20	25	11
TOTAL	**100**	**54**	**28**	**83**	**58**
	Bidder Name:	Trimble Inc.			
	Proposed Cost:	$2,061,807.79* Corrected math from 2,061,807.76			
Scoring Sections	**Points Available**				
Section I: Preliminary Information	Pass/Fail	N/A			

REV 4/4/2023

Section II: Organization Qualifications and Experience	25	22			
Section III: Proposed Services	50	20			
Section IV: Cost Proposal	25	22			
TOTAL	**100**	**64**			

Award Justification Statement

RFP# 202309195 Pavement and Bridge Asset Management Software as a Service

I. Summary

Maine Dept of Transportation is seeking Pavement and Bridge Asset Management Software as a Service, implementation services, and on-going customer support. This system consumes a wide range of Highway and Bridge data, performs condition/deterioration modeling and optimization to determine the most effective set of capital investments within existing constraints to maintain the Transportation infrastructure over a long term. The system and data produced are mission critical in the production of the Department's State-mandated annual 3 year Capital Work Plan, and in producing the Federal reports upon which federal funding allocations are based.

II. Evaluation Process

The proposals were evaluated by consensus scoring for Sections I and II. There was an initial scoring session prior to demos with all bidders receiving at least 40 combined points for the two sections were then invited to do clarification demos. After these demos, the consensus scores for those bidders were reviewed and finalized. The cost proposals were scored using a mathematical formula.

Key evaluation team qualifications and expertise:

1. The senior highway analyst, highway analysis subject matter expert and has participated in other RFPs.
2. The next most senior highway analyst, highway analysis subject matter expert
3. The senior bridge analyst, bridge analysis subject matter expert.
4. An (OIT) Systems Team Lead who has 25 years of experience leading DOT's IT procurements provided technical, financial, and RFP process expertise.

III. Qualifications & Experience

The awarded bidder, Deighton Associates, Inc. is an established company with high expertise in government transportation asset management software. They have deep experience implementing their dTIMS system including 25 DOTs, and 30 years of successfully implementing and supporting it at MaineDOT. This includes 10 years of incorporating bridge analysis in their product, which is a newer area than highway pavement. They have an unobjectionable financial risk profile and litigation history.

IV. Proposed Services

In dTIMS, the critical functionality is already built, configured and proven to work for the Department. We understand and can manipulate its various models. We can obtain the data and reports we need, and NBI data compliance and HPMS reporting

are currently supported by the system. There is a record of compliance with IT Policy. The modernization of the Department's use of the system should enhance our system, while allowing us to quickly back off any changes that disrupt the important continuity of the data. We understand the proposed project approach, the Department's roles and responsibilities, are comfortable that we can perform the expected project tasks, and find the risks to the Department manageable.

V. Cost Proposal

Deighton was the low bid.

Bidder	Cost Proposed	Points
Deighton Associates Ltd	1,791,015.11	25
Trimble Inc.	2,061,807.79	22
Agelix Consulting	2,268,035.00	20
Applied Research Associates	2,679,266.00	17
DOT-US (Decision Optimization Technology-United States, L.P.)	4,093,285.00	11

VI. Conclusion

The major factors driving the selection were a combination of outstanding organizational qualifications; a system already configured and proven to meet our requirements, to be further improved within the Department's resource capabilities/capacity and with manageable risk; and cost.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce Van Note
Commissioner

March 12, 2024

Ramesh R Ammana
7300 WEST 110th STREET,
COMMERCE PLACA I, 7th FLOOR
OVERLAND PARK, KANSAS 66210
rammana@agelixconsulting.com

SUBJECT: Notice of Conditional Contract Award under RFP # **202309195,** Pavement and Bridge Asset Management Software as a Service

Dear M. Ammana,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Pavement and Bridge Asset Management Software as a Service. The Department has evaluated the proposals received using the evaluation criteria identified in the RFP, and the Department is hereby announcing its conditional contract award to the following bidder:

- Deighton Associates Ltd.

The bidder listed above received the evaluation team's highest ranking. The Department will be contacting the aforementioned bidder soon to negotiate a contract. As provided in the RFP, the Notice of Conditional Contract Award is subject to execution of a written contract and, as a result, this Notice does NOT constitute the formation of a contract between the Department and the apparent successful vendor. The vendor shall not acquire any legal or equitable rights relative to the contract services until a contract containing terms and conditions acceptable to the Department is executed. The Department further reserves the right to cancel this Notice of Conditional Contract Award at any time prior to the execution of a written contract.

As stated in the RFP, following announcement of this award decision, all submissions in response to the RFP are considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA). 1 M.R.S. §§ 401 et seq.; 5 M.R.S. § 1825-B (6).

This award decision is conditioned upon final approval by the State Procurement Review Committee and the successful negotiation of a contract. A Statement of Appeal Rights has been provided with this letter; see below.

Thank you for your interest in doing business with the State of Maine.

Sincerely,

Jennifer Chisum
207-620-2077
Jennifer.chisum@maine.gov
16 State House Station
Augusta, ME 04330-0016

STATEMENT OF APPEAL RIGHTS

Any person aggrieved by an award decision may request an appeal hearing. The request must be made to the Director of the Bureau of General Services, in writing, within 15 days of notification of the contract award as provided in 5 M.R.S. § 1825-E (2) and the Rules of the Department of Administrative and Financial Services, Bureau of General Services, Division of Purchases, Chapter 120, § (2) (2).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce Van Note
Commissioner

March 12, 2024

Mr. Jacob Walter, P.E.
3605 Hartzdale Drive
Camp Hill, PA 17011
jwalter@ara.com

SUBJECT: Notice of Conditional Contract Award under RFP # **202309195,** Pavement and Bridge Asset Management Software as a Service

Dear Mr. Walter,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Pavement and Bridge Asset Management Software as a Service. The Department has evaluated the proposals received using the evaluation criteria identified in the RFP, and the Department is hereby announcing its conditional contract award to the following bidder:

- Deighton Associates Ltd.

The bidder listed above received the evaluation team's highest ranking. The Department will be contacting the aforementioned bidder soon to negotiate a contract. As provided in the RFP, the Notice of Conditional Contract Award is subject to execution of a written contract and, as a result, this Notice does NOT constitute the formation of a contract between the Department and the apparent successful vendor. The vendor shall not acquire any legal or equitable rights relative to the contract services until a contract containing terms and conditions acceptable to the Department is executed. The Department further reserves the right to cancel this Notice of Conditional Contract Award at any time prior to the execution of a written contract.

As stated in the RFP, following announcement of this award decision, all submissions in response to the RFP are considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA). 1 M.R.S. §§ 401 et seq.; 5 M.R.S. § 1825-B (6).

This award decision is conditioned upon final approval by the State Procurement Review Committee and the successful negotiation of a contract. A Statement of Appeal Rights has been provided with this letter; see below.

Thank you for your interest in doing business with the State of Maine.

Sincerely,

Jennifer Chisum
207-620-2077
Jennifer.chisum@maine.gov
16 State House Station
Augusta, ME 04330-0016

STATEMENT OF APPEAL RIGHTS

Any person aggrieved by an award decision may request an appeal hearing. The request must be made to the Director of the Bureau of General Services, in writing, within 15 days of notification of the contract award as provided in 5 M.R.S. § 1825-E (2) and the Rules of the Department of Administrative and Financial Services, Bureau of General Services, Division of Purchases, Chapter 120, § (2) (2).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce Van Note
Commissioner

March 12, 2024

Daniel Weymouth
Deighton Associates Ltd.
1555 Wentworth St unit 200
Whitby, ON, L1N9T6
Daniel.weymouth@deighton.com

SUBJECT: Notice of Conditional Contract Award under RFP # **202309195,** Pavement and Bridge Asset Management Software as a Service

Dear Mr. Weymouth,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Pavement and Bridge Asset Management Software as a Service. The Department has evaluated the proposals received using the evaluation criteria identified in the RFP, and the Department is hereby announcing its conditional contract award to the following bidder:

- Deighton Associates Ltd.

The bidder listed above received the evaluation team's highest ranking. The Department will be contacting the aforementioned bidder soon to negotiate a contract. As provided in the RFP, the Notice of Conditional Contract Award is subject to execution of a written contract and, as a result, this Notice does NOT constitute the formation of a contract between the Department and the apparent successful vendor. The vendor shall not acquire any legal or equitable rights relative to the contract services until a contract containing terms and conditions acceptable to the Department is executed. The Department further reserves the right to cancel this Notice of Conditional Contract Award at any time prior to the execution of a written contract.

As stated in the RFP, following announcement of this award decision, all submissions in response to the RFP are considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA). 1 M.R.S. §§ 401 et seq.; 5 M.R.S. § 1825-B (6).

This award decision is conditioned upon final approval by the State Procurement Review Committee and the successful negotiation of a contract. A Statement of Appeal Rights has been provided with this letter; see below.

Thank you for your interest in doing business with the State of Maine.

Sincerely,

Jennifer Chisum
207-620-2077
Jennifer.chisum@maine.gov
16 State House Station
Augusta, ME 04330-0016

STATEMENT OF APPEAL RIGHTS

Any person aggrieved by an award decision may request an appeal hearing. The request must be made to the Director of the Bureau of General Services, in writing, within 15 days of notification of the contract award as provided in 5 M.R.S. § 1825-E (2) and the Rules of the Department of Administrative and Financial Services, Bureau of General Services, Division of Purchases, Chapter 120, § (2) (2).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce Van Note
Commissioner

March 12, 2024

Erin Calcari
Decision Optimization Technology- United States, L.P.
1525 S. Sixth St
Springfield, IL 62703
Ecalcari@hanson-inc.com

SUBJECT: Notice of Conditional Contract Award under RFP # **202309195,** Pavement and Bridge Asset Management Software as a Service

Dear M. Calcari,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Pavement and Bridge Asset Management Software as a Service. The Department has evaluated the proposals received using the evaluation criteria identified in the RFP, and the Department is hereby announcing its conditional contract award to the following bidder:

- Deighton Associates Ltd.

The bidder listed above received the evaluation team's highest ranking. The Department will be contacting the aforementioned bidder soon to negotiate a contract. As provided in the RFP, the Notice of Conditional Contract Award is subject to execution of a written contract and, as a result, this Notice does NOT constitute the formation of a contract between the Department and the apparent successful vendor. The vendor shall not acquire any legal or equitable rights relative to the contract services until a contract containing terms and conditions acceptable to the Department is executed. The Department further reserves the right to cancel this Notice of Conditional Contract Award at any time prior to the execution of a written contract.

As stated in the RFP, following announcement of this award decision, all submissions in response to the RFP are considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA). 1 M.R.S. §§ 401 et seq.; 5 M.R.S. § 1825-B (6).

This award decision is conditioned upon final approval by the State Procurement Review Committee and the successful negotiation of a contract. A Statement of Appeal Rights has been provided with this letter; see below.

Thank you for your interest in doing business with the State of Maine.

Sincerely,

Jennifer Chisum
207-620-2077
Jennifer.chisum@maine.gov
16 State House Station
Augusta, ME 04330-0016

STATEMENT OF APPEAL RIGHTS

Any person aggrieved by an award decision may request an appeal hearing. The request must be made to the Director of the Bureau of General Services, in writing, within 15 days of notification of the contract award as provided in 5 M.R.S. § 1825-E (2) and the Rules of the Department of Administrative and Financial Services, Bureau of General Services, Division of Purchases, Chapter 120, § (2) (2).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce Van Note
Commissioner

March 12, 2024

Dan Collins
Trimble Inc
10368 Westmoor Drive
Westminster, Colorado 80021
Daniel_collins@trimble.com

SUBJECT: Notice of Conditional Contract Award under RFP # **202309195,** Pavement and Bridge Asset Management Software as a Service

Dear Mr. Collins,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Pavement and Bridge Asset Management Software as a Service. The Department has evaluated the proposals received using the evaluation criteria identified in the RFP, and the Department is hereby announcing its conditional contract award to the following bidder:

- Deighton Associates Ltd.

The bidder listed above received the evaluation team's highest ranking. The Department will be contacting the aforementioned bidder soon to negotiate a contract. As provided in the RFP, the Notice of Conditional Contract Award is subject to execution of a written contract and, as a result, this Notice does NOT constitute the formation of a contract between the Department and the apparent successful vendor. The vendor shall not acquire any legal or equitable rights relative to the contract services until a contract containing terms and conditions acceptable to the Department is executed. The Department further reserves the right to cancel this Notice of Conditional Contract Award at any time prior to the execution of a written contract.

As stated in the RFP, following announcement of this award decision, all submissions in response to the RFP are considered public records available for public inspection pursuant to the State of Maine Freedom of Access Act (FOAA). 1 M.R.S. §§ 401 et seq.; 5 M.R.S. § 1825-B (6).

This award decision is conditioned upon final approval by the State Procurement Review Committee and the successful negotiation of a contract. A Statement of Appeal Rights has been provided with this letter; see below.

Thank you for your interest in doing business with the State of Maine.

Sincerely,

Jennifer Chisum
207-620-2077
Jennifer.chisum@maine.gov
16 State House Station
Augusta, ME 04330-0016

STATEMENT OF APPEAL RIGHTS

Any person aggrieved by an award decision may request an appeal hearing. The request must be made to the Director of the Bureau of General Services, in writing, within 15 days of notification of the contract award as provided in 5 M.R.S. § 1825-E (2) and the Rules of the Department of Administrative and Financial Services, Bureau of General Services, Division of Purchases, Chapter 120, § (2) (2).

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

SUMMARY PAGE

Department Name: Department of Transportation
Name of RFP Coordinator: Jennifer Chisum
Names of Evaluators: Chester Kolota, Dorita Schweier, James Havu, Jennifer Chisum

---

Pass/Fail Criteria	Pass	Fail
Section I. Preliminary Information (Eligibility)	**N/A**	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**5**
Section III. Proposed Services	**50**	**3**
Section IV. Cost Proposal	**25**	**20**
Total Points	**100**	**28**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

OVERVIEW OF SECTION I
Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:
No comments

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

EVALUATION OF SECTION II
Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**5**

Evaluation Team Comments:
Appendix C - Qualifications and Experience

- established company
- Company focus is business consulting in asset management domain, and software
- No highway / bridge asset management / DOT / FHWA experience
- IT expertise
- implemented ServiceMaestro for >32 clients
- Some concern with apparent emphasis on customization rather than configured COTS, as it can impact later maintenance/reliability.

Appendix C – Litigation
None
Appendix C – Subcontractors
None
Referenced projects
are not at all similar to our project
Dun and Bradstreet Business Information Report Snapshot
Not provided

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

EVALUATION OF SECTION III
Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	**50**	**3**

Evaluation Team Comments:

Appendix F -

1. **Software Proposed**
   - Appears to be an asset tracking/maintenance system proposed, given module names and responses throughout proposal.
   - License restriction on active bridge and linear miles of road would be difficult to manage.
2. **System Maturity**
   - New - ServiceMaestro is only 5 years old -- build started in 2017 and first deployed to customers in 2018. Still building core functionality.
   - We stated we needed a COTS system that is already built and in use, but most of our core functionality requirements would have to be built into the system during implementation which defeats our purpose
3. **Transportation Network and Asset**
   - Realtime or frequent LRS integration as proposed would be undesirable.
   - Did not describe their system's network well
   - Did not describe how bridge and highway assets will be managed
4. **Inputs**
   Don't seem to understand our needs. Very vague off-base response.
5. **Condition Index Values**
   - This key functionality will be understood then custom built during implementation.
   - No demonstration of understanding of our requirements
6. **Analysis and Deterioration modeling**
   - this key functionality will be understood then custom built during implementation.
   - No demonstration of understanding of what we need
7. **Optimization**
   - Response demonstrates clear lack of understanding of requirements and improper fit of this system for the RFP (they discuss work orders, realtime asset monitoring).
8. **Mapping**
   - Not provided. Users have to build out using API integration to Google maps.
9. **Reporting**

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

- Too vague.

10. NBI Data Compliance
Demonstrates lack of understanding of what is required. (They discuss maintenance templates)

11. Implementation Services
Completely generic, includes development of RFP, selection of an Asset Management System, and implementation of selected platform. Did not attempt to address many specific points requested in RFP. Timeline makes no sense.

12. Customer Support
No business hours or response standards provided
Training description demonstrates lack of understanding of requirements and improper fit of this system for the RFP (they include asset inventory, service calls, parts/work orders…)

13. IT Hosting
Have not selected the IT hosting service. No RTO or RPO provided.

14. Caveats and Limitations
none

APPENDIX G
They marked 10/27 Appendix G business requirements (over one third) as could not be met out of the box

SLA and Uptime and Unplanned Outage Report –
not provided except for an uptime guarantee

IT Policy Form (File 4)
No response to hosting policy compliance question.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Agelix Consulting
DATE: 1/16/2024

EVALUATION OF SECTION IV
Cost Proposal

Lowest Submitted Cost Proposal	÷	Cost Proposal Being Scored	x	Score Weight	=	Score
1,791,015.11	÷	2,268,035.00	**x**	**25 points**	**=**	**20**

Evaluation Team Comments:

Did not provide professional service rates requested in Section 1

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

SUMMARY PAGE

Department Name: Department of Transportation
Name of RFP Coordinator: Jennifer Chisum
Names of Evaluators: Chester Kolota, Dorita Schweier, James Havu, Jennifer Chisum

---

Pass/Fail Criteria	Pass	Fail
Section I. Preliminary Information (Eligibility)	**N/A**	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**15**
Section III. Proposed Services	**50**	**22**
Section IV. Cost Proposal	**25**	**17**
Total Points	**100**	**54**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

OVERVIEW OF SECTION I
Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

No comments

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

EVALUATION OF SECTION II
Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**15**

Evaluation Team Comments:

Appendix C - Qualifications and Experience

- Established company with broad civil engineering/research/software focus
- Expertise in road / bridge asset management and IT
- We would be only 3rd DOT getting an AssetFox implementation
- 30+ AssetFox clients
- Concerned with strong reliance on customization rather than configured COTS, as it can impact later maintenance/reliability.
- PM proposed has good background for the project

Appendix C – Litigation
None

Appendix C – Subcontractors
None

Appendix C – References
Similar projects to our requirements, bridge and pavement included. Includes experience moving from Deighton to their platform.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – low-moderate risk

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

EVALUATION OF SECTION III
Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	**50**	**22**

Evaluation Team Comments:

Appendix F -

- **Software Proposed**
  - No license restrictions.
  - Unclear if the proposed solution will meet all our requirements without data analytics or ARGIS licenses, which were not included. They informed us in demo that *they* would not consider running it without adding data analytics.
  - Open source can be risky but their management of the source code should be effective.

- **System Maturity**
  - Only 3 clients are using the web software proposed, 30+ other clients yet to transition from desktop software. 2 of these 3 web clients use internal hosting.
  - Learned in demo that the proposal is based on a major new version not yet released which is risky because plans can go awry

- **Transportation Network and Asset**
  - Bridge and Pavement are completely separate implementations, with their own Test/prod environments
  - Reporting rollups can be set up in Transportation network definition - with difficulty acc to demo.
  - All fields, network, models etc must be custom configured. There may be useful code to leverage in the open source repository, however they are not documented/cataloged.

- **Inputs**

- **Condition Index Values**

  - Must be custom configured.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

- **Analysis and Deterioration modeling**
  - Models must be custom configured
  - No one has done bridge element level analysis yet.
  - No experience with using historical data.
  - Very deterministic.

- **Optimization**
  - Appears it can be engineered to do what we need
  - We do not understand what it provides for dynamic segmentation functionality

- **Mapping**
  In-app mapping is not provided. Must build export to feed other systems (limited to 1) and the Department must develop the map products there.

- **Reporting**
  Very weak. All, or nearly all, reports are custom built by their staff. They are based on outputs of single scenario. Few report formats are available. They advised creating a few massive spreadsheets from which the Department can develop various reports and graphics. In demo, they strongly advised we export the data to our data analytics system for reporting. It appears that the Department is expected to perform development work in Excel or our BI system to meet our reporting requirements.

- **NBI Data Compliance**
  - Vague, anything is possible type response
  - Use of historical data, required for this feature, is very unusual for them.

- **Implementation Services**
  - Comprehensive, ambitious timeline. We are concerned about how much definition work is required to get it up, and the bridge work and historical data inclusions will be novel to the implementation team.
  - Roles and Responsibilities are reasonably clear. The Department must provide a tremendous amount of information for 2 separate implementations, provide new historical data, perform all GIS development in-house, and create reports in Excel or BI. The Department effort required to meet the requirements for a Production go-live is not fully included in the timeline. We are not confident that we can accommodate the proposed schedule.

- **Customer Support**

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

- Supported by their Development team. With so much customization, risky if key team members depart.
- Documentation/training resources available to new employees without added cost are limited.
- Updates are usually put in immediately not in releases, and according to demo, the vendor does not maintain a change log.

- **IT Hosting Provision**
  Information not provided as they plan to make the decisions on IT hosting during contract negotiation, rather than making selection and bidding it as expected.

- **Caveats and Limitations**
  - None stated in proposal. In demo, they said they will rely on the RFP's explicit requirements for the reports and graphics to be provided, or there would be too many change requests ---- however we wrote a more open-ended RFP rather than providing exact specifications for every report we will need so there is project cost/scope risk.

APPENDIX G

- Challenging to them to do any math operation on a dataset rather than a datum.
- Asset valuation cannot be an attribute – we do not understand the data model well enough to know how often we might hit roadblocks that we cannot comfortably work around

SLA and Uptime and Unplanned Outage Report
They state that they cannot provide any SLA due to their use of open source code.
Did not provide an outage report.

IT Policy Form (File 4)
Barely responsive – they will worry about it later.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Applied Research Associates, Inc. (ARA)
DATE: 1/16/2024

EVALUATION OF SECTION IV
Cost Proposal

Lowest Submitted Cost Proposal	÷	Cost Proposal Being Scored	x	Score Weight	=	Score
1,791,015.11	÷	$2,679,266.00	**x**	**25 points**	**=**	**17**

Evaluation Team Comments:

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

SUMMARY PAGE

Department Name: Department of Transportation
Name of RFP Coordinator: Jennifer Chisum
Names of Evaluators: Chester Kolota, Dorita Schweier, James Havu, Jennifer Chisum

---

Pass/Fail Criteria	Pass	Fail
Section I. Preliminary Information	**N/A**	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**20**
Section III. Proposed Services	**50**	**38**
Section IV. Cost Proposal	**25**	**25**
Total Points	**100**	**83**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

OVERVIEW OF SECTION I
Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

No comments

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

EVALUATION OF SECTION II
Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**20**

Evaluation Team Comments:

Appendix Qualifications and Experience C –

- Established company with Government / Transportation asset management software and consulting focus
- High expertise in highway/bridge asset management, IT, DOT, FWHA including 100s of dTIMS installations, 25 DOTs, 30 years at MaineDOT
- 10 years of dTIMS bridge experience - 7 DOTs in US use bridge and 5-6 more outside US.
- Mostly COTS with some customization, we prefer minimal customization due to risk of maintenance/reliability

Appendix C – Litigation
None

Appendix C – Subcontractors
None

Appendix C – References

- Similar projects to our requirements, bridge and pavement included.
- This is our current provider. We have some dissatisfaction with the vendor's slow problem resolution of GIS integration but are otherwise very satisfied.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
Low-Moderate risk

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

EVALUATION OF SECTION III
Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	**50**	**38**

Evaluation Team Comments:

Appendix F -

1. **Software Proposed**
   dTIMS BA 5 named users license restriction.
   MS PowerBI licenses required if we chose certain reporting enhancements due to changes in future, in MS PowerBI licensing rules.
2. **System Maturity**
   Mature, still maintaining and enhancing.
3. **Transportation Network and Asset**
   Provides the requested functionality
   bridge and highway assets both handled well
   Very configurable, we can do a lot of it for ourselves.
4. **Inputs**
5. **Condition Index Values**
   Provides the requested functionality, is already set up.
6. **Analysis and Deterioration modeling**
   It does what we require well and consistently, although a little old school.
   Has capacity to use the historical data more than we currently do
7. **Optimization**
   True multi-objective optimization not available yet.
   Section rollup handled
8. **Mapping**
   In-app mapping is available but not fully delivered to date
9. **Reporting**
   We can currently obtain the reports that we require, and have SQL query access.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

10. NBI Data Compliance

Currently supported, but they did not address approach/timeline for the SNBI improvements.

11. Implementation Services

- We like the system audit approach to modernize our use of the system through workflow and configuration changes. However coding work is out of scope, so our outstanding enhancement requests are not addressed through this.
- There will be a risk of data continuity discrepancies but we will be able to back out changes to restore data continuity as necessary.
- As it does not require an implementation from scratch, there is not as much risk of discovering that we must make unwelcome changes to our modeling or computations, that needed features / reports are not available or do not meet our needs out of the box, or project delays causing us to have to continue to operate the current system until the following year's implementation window.
- Clear roles and responsibilities. We understand type and amount of work that will be required of the Department and are confident that we accommodate the proposed schedule.
- Optimistic timeframes.

12. Customer Support

No issues.

13. IT Hosting Provision

No issues.

14. Caveats and Limitations

APPENDIX G

They marked all will meet as stated and they already do.

SLA and Uptime and Unplanned Outage Report

Provided, no issues.

IT Policy Form (File 4).

They have already passed the CSO NIST security review.
IT Policy waiver will be needed for certain policy exceptions.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Deighton Associates, Inc
DATE: 1/16/2024

EVALUATION OF SECTION IV
Cost Proposal

Lowest Submitted Cost Proposal	÷	Cost Proposal Being Scored	x	Score Weight	=	Score
1,791,015.11	÷	**1,791,015.11**	**x**	**25 points**	**=**	**25**

Evaluation Team Comments:

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

SUMMARY PAGE

Department Name: Department of Transportation
Name of RFP Coordinator: Jennifer Chisum
Names of Evaluators: Chester Kolota, Dorita Schweier, James Havu, Jennifer Chisum

---

Pass/Fail Criteria	Pass	Fail
Section I. Preliminary Information (Eligibility)	**N/A**	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**12**
Section III. Proposed Services	**50**	**35**
Section IV. Cost Proposal	**25**	**11**
Total Points	**100**	**58**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

OVERVIEW OF SECTION I
Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:
No comments

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

EVALUATION OF SECTION II
Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**12**

Evaluation Team Comments:

Appendix C - Qualifications and Experience

- According to the demo, DOT-US is a Limited Partnership of 3 years between two established companies who started collaborating 5 years ago to market this asset investment planning software
- According to the demo, this software was developed by ISI (software company), starting 8 years ago.
- Bridge/highway asset management / IT Expertise
- According to demo, they are gaining experience with DOTs - currently doing implementations with 3 DOT type clients, 2 in US.
- Not many clients
- They customize as well as configure the product. We prefer less customization as it introduces risk for maintenance/reliability over time

Appendix C - Litigation
none
Appendix C – Subcontractors
None
Appendix C – References
Provided various IT and professional services to projects with some similarity of needs, but only one software implementation. No experience with changing over from a prior system.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
D&B not provided

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

EVALUATION OF SECTION III
Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	**50**	**35**

Evaluation Team Comments:

Appendix F -

1. **Software Proposed**
   Unlimited user licenses for 2 modules (Transportation and Structures)
   70 implementations of one or other of these modules, including a trial of Bridges in Arkansas.

2. **System Maturity**
   New -- Built over last 3 years, still building out the base functionality.
3. **Transportation Network and Asset**
   - nice features, modern
   - bridge and highway assets both handled well

4. **Inputs**

5. **Condition Index Values**
   - You have to compute and load the condition index values, Percentage Cracking data, and PCR from other sources rather than compute in this system -- this is critical functionality performed by our existing system now. They wrote that they are willing to build these in at no cost if essential, but then we would end up the beta testers.
6. **Analysis and Deterioration modeling**
   - Leading edge approach
   - Detailed bridge functionality built in
   - Like the use of the historical data.
7. **Optimization**
   - Optimization is really quite good.
   - Section roll up not great
8. **Mapping**

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

Good GIS integration systemwide

9. Reporting

- Reports include cutting edge visuals which are effective for management discussion/presentation.
- We are limited to their 10 canned reports plus those we develop through the ARCGIS and BI add-ons. There is a risk that the Department will have development work to meet our reporting requirements.

10. NBI Data Compliance

- They do not have that functionality built in, it would be a Departmental responsibility to address this compliance.

11. Implementation Services

- Seriously flawed approach– omits requirements definition, UAT , the need to understand and load appropriate historical data, they plan the initial implementation before customizations are available but some of the customizations must be in place for production operation, such as condition index values, Percentage Cracking data, and PCR computations.
- Overly optimistic timeframes.
- Apparent Department effort to build out NBI compliance reporting is not included in the estimate.
- No clear roles/responsibilities between DOT/Vendor leaves the Department unable to assess the resources that will be required by the Department for the implementation.

12. Customer Support

- 10-6 m-f plus a service support desk w email/phone. . Not a great fit for our business hours. No response standards.
- According to demo, they do not regression test customizations when updating the software – that is a Department responsibility.

13. IT Hosting Provision

- No issues.

14. Caveats and Limitations

- VERY RISKY – strict limitations on scope of work combined with vague and sometimes conflicting language in proposal.

APPENDIX G

SLA and Uptime and Unplanned Outage Report
SLA provided, no issues

IT Policy Form (File 4)
No issues.

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 1/16/2024

EVALUATION OF SECTION IV
Cost Proposal

Lowest Submitted Cost Proposal	÷	Cost Proposal Being Scored	x	Score Weight	=	Score
1,791,015.11	÷	**4,093,285.00**	**x**	**25 points**	**=**	**11**

Evaluation Team Comments:

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

SUMMARY PAGE

Department Name: Department of Transportation
Name of RFP Coordinator: Jennifer Chisum
Names of Evaluators: Chester Kolota, Dorita Schweier, James Havu, Jennifer Chisum

---

Pass/Fail Criteria	Pass	Fail
Section I. Preliminary Information (Eligibility)	**N/A**	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**22**
Section III. Proposed Services	**50**	**20**
Section IV. Cost Proposal	**25**	**22**
Total Points	**100**	**64**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

OVERVIEW OF SECTION I
Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

No Comments

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

EVALUATION OF SECTION II
Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	**25**	**22**

Evaluation Team Comments:

Appendix C - Qualifications and Experience
- Established company working with wide range of industry sectors and technologies
- AgileAssets acquired by Trimble in 2021; they retained key AgileAssets staff per demo.
- High Expertise in road / bridge asset management / DOTs/ FHWA/ IT
- 21 DOTs use AgileAssets; >50% of State DOT maintained roads in US

Appendix C - Litigation
- Litigation yes - declined to provide the requested information.

Appendix C – Subcontractors
- None

Appendix C – References
- Similar projects to our requirements, bridge and pavement included.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
- Low to moderate risk

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

EVALUATION OF SECTION III
Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	**50**	**20**

Evaluation Team Comments:

Appendix F -

1. **Software Proposed**

- Unlimited usage, 3 modules – but Cost Proposal said 5 named users -- they confirmed in the demo that there would be an additional charge for each additional user which would vary by module type.
- In item I.6 (not 1.2) they state that "2 TB of egress data transfer per month, above which it is metered at a cost +10% over current rates" – feasible situation – -- they confirmed in the demo that there would be an additional charge could not get clarification of likelihood
- 400 GB high availability disk, with 1 TB allocated storage- we do not know if that would be a problem or not, but we use more than that in storage now. In the demo, they said it would be highly unlikely to exceed as Texas does not.
- 10 agencies using the bridge module. 14 DOTS pavement module
- They use a number of open source toolsets which are not familiar to us. There is a risk of management issues, security vulnerabilities, or disappearance of support for them.
- Work/Reporting environment seems similar to what we do now.

2. **System Maturity**
   Mature, product is actively maintained and enhanced.

3. **Transportation network**
   Similar to current solution
   Appears it will handle bridges well
   Handles the reporting rollups
   Does dynamic segmentation
   Will require loading historical asset maintenance data which we don't currently do, not a bad thing.

4. **Inputs**

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

5. **Condition Index Values**
   PCR - they can't do standard deviation, the **Department** would have code the computation Groovy. We prefer a system that does not require Departmental programming, especially in unfamiliar languages.

6. **Analysis and Deterioration modeling**
   - AgileAssets team will implement any **client-developed** performance models or use one of their existing models. We prefer a system that does not require Departmental programming, and cannot assess whether it would be required for our models.
   - Supports bridge element level deterioration models.
   - Like the use of the historical data.
7. **Optimization**
   Pretty advanced. Uses advanced integer programming for optimization analysis, risk assessment and life cycle cost analysis features,
8. **Mapping**
   In-app mapping is available
   Can print the maps, which is nice and not always available.
   Unclear on what is provided by Bidder and what must be built/configured within the app by the Department.

9. **Reporting**
   Unclear how and whether it will meet our requirements as they provided information on wrong product.

10. **NBI Data Compliance**
    They appear to consider it their responsibility and are working on the mandated SNBI upgrade now.

11. **Implementation Services**
    Long timeline, probably realistic.
    Like the basic approach described
    Department roles and responsibilities are not clear, but it appears many of the requirements not met out of the box may have to be built by the Department with unfamiliar tools. The Department is concerned with its abilities to meet the Bidder's expectations.
    They plan for the **Department** to investigate/ address data continuity issues AFTER UAT testing - both of which are concerning as any data continuity issues that we cannot explain adequately risk Department management's rejection of the system.
12. **Customer Support**
    Project team post-implementation support lasts only one month
    Otherwise no issues

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

They do a new release every 8 weeks and it is critical that the Department retest its DOT-specific stuff, as they do not test it.

IT Hosting Provision

SLA states Trimble will make "reasonable efforts" but sets no objectives for RTO, RPO. 99 % by month uptime objective stated in the SLA for AgileAssets was confirmed accurate in demo – This does not meet our State IT policy requirements or the explicitly stated requirements in this section.

13. Caveats and Limitations

- They do not hold themselves accountable to their responses in the RFP, which introduces huge risk of time/cost overruns, and/or failure of the system to fully meet our requirements.
- They require their standard contract's Terms and Conditions, are not willing to accept the State's Terms and Conditions. The two sets do not align well.
- There is an additional 24 page "order form" – nearly all terms and conditions, which do not align with those of the State IT Service contract, that we will be required to agree to before they will authorize initial of the SaaS environment with AWS.

APPENDIX G

- 10 -Not Able to calculate Condition values as described – They cannot do statistics. Confirmed in demo with 1 dissenter
- 23 -Charts and reports – Unclear whether the customization work identified will be performed by the bidder or not due to conflicting information in various portions of the proposal.

SLA and Uptime and Unplanned Outage Report

Concerns with SLA noted above with **IT Hosting Provision**

IT Policy Form (File 4)

RTOs not clear, variable by module

STATE OF MAINE
TEAM CONSENSUS EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER: Trimble
DATE: 1/16/2024

EVALUATION OF SECTION IV
Cost Proposal

Lowest Submitted Cost Proposal	÷	Cost Proposal Being Scored	x	Score Weight	=	Score
1,791,015.11	÷	$2,061,807.79	**x**	**25 points**	**=**	**22**

Evaluation Team Comments:
Cost proposal math was corrected as follows, an increase of 3 cents.

$3,500.00	$3,675.00	$3,858.75	$4,051.69	$4,254.27	$4,466.99	$4,690.33	$4,924.85	$5,171.09		
$25,000.00	$26,250.00	$27,562.50	$28,940.63	$30,387.66	$31,907.04	$33,502.39	$35,177.51	$36,936.39		
$25,000.00	$26,250.00	$27,562.50	$28,940.63	$30,387.66	$31,907.04	$33,502.39	$35,177.51	$36,936.39		
$40,000.00	$42,000.00	$44,100.00	$46,305.00	$48,620.25	$51,051.26	$53,603.83	$56,284.02	$59,098.22		
$93,500.00	$98,175.00	$103,083.75	$108,237.95	$113,649.84	$119,332.33	$125,298.94	$131,563.89	$138,142.09	$1,030,983.79	
		table 2			$961,911.00					
					$40,199.00					
					$28,714.00					
					$1,030,824.00				$1,030,824.00	
		table 3			**$1,030,983.76**	wrong cents				
					$1,030,824.00					
					$2,061,807.76	wrong cents			$2,061,807.79	CORRECTED SUI

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments: <</<
Organization Qualifications and Experience

Appendix C - Qualifications and Experience

17 years consulting experience; 5 years experience in transportation asset management (RR)

Appendix C – Litigation

None

Appendix C – Subcontractors

N/A

Appendix C – References

The Lanco group of Companies: from heavy equipment manufacturing to sales and service; from facility operations to event promotions; from integrated technologies to equipment distribution. Uses Service Maestro to manage the asset life cycle.
Indorama Corporation: manufacturers of ammonia-based fertilizer; using the Service Maestro Platform for its plant maintenance.
Broderson Manufacturing: manufacturers of long and short-boom telehandlers; maintain over 17,000 assets and 50,000 unique parts.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

Certificate of Liability Insurance; no D&B report

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   ServiceMaestro (COTS) Platform.
   user access monthly subscription cost of $50 USD
   subscription model considers 1 linear mile as an asset.
   The software is licensed for continuous use, operating 24/7, 365 days a year.
   32 (thirty-two) organizations currently using this platform in production.

2. **System Maturity**
   ServiceMaestro development started around 2017, and in 2018 the first version was released. The current version of ServiceMaestro is 10.0.

3. **Transportation Network and Asset**
   Non-responsive; Did not elaborate network organization and limitations.
   Non-responsive; Did not answer on separate attributes, element, analysis, and optimization.

4. **Inputs**
   Data model is customizable at implementation or at later stage within contract.

5. **Condition Index Values**
   System is configurable and customizable to integrate calculations.

6. **Analysis and Deterioration modeling**
   Non-responsicve; Did not address analysis and deterioration modeling.

7. **Optimization**
   Non-responsive; Did not demonstrate an optimization approach.

8. **Mapping**
   Customizable report features where users can map.
   API integration with Google Maps

9. **Reporting**
   Customizable reporting tool with pre-built reports.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

10. NBI Data Compliance

User can create/edit any number of maintenance, inspection, and safety templates.

11. Implementation Services

four months for implementation and go-live; training duration 30 days.
Post UAT, changes to platform that are not more than 2 weeks of implementation team effort.

12. Customer Support

Support provided during business hours; email, phone, online tools; Jira Service Desk to submit a ticket. Training modules offered.

13. IT Hosting Provision

14. Caveats and Limitations

APPENDIX G

13. While our current platform, in its out-of-the-box configuration, lacks the ability to create a new road segment by consolidating shorter segments based on defined homogeneous parameters, we are confident that with modifications and inputs from MDOT, we can enhance the platform to provide this capability within the agreed timeframe.
15. export tables to .accdb files based on user preference may necessitate some modifications.
18. Non-responsive
19. There is some work required to meet the specific needs outlined by MDOT.
20. There is some work required to meet the specific needs outlined by MDOT.
21. There is some work required to meet the specific needs outlined by MDOT.
25. Non-responsive
31. There is some work required to meet the specific needs outlined by MDOT.
32. There is some work required to meet the specific needs outlined by MDOT.

SLA and Uptime and Unplanned Outage Report

No response.

IT Policy Form (File 4)

Overuse of "Federal projects" and "Federal environments". Did not see a Federal Agency listed as a direct client of Agelix.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
Agelix Consulting is a privately held business consulting company with over 17 years of experience delivering innovative solutions to over 65 clients & 15 partners in various industry sectors like federal & local governments, oil & gas, manufacturing, auto, supply chain & distribution, real estate & infrastructure, telecom, financial services & technology.
Service Maestro was implemented at over 32 customers from the business domains mentioned above.
Agelix has a deep understanding in the transformation lifecycle, pitfalls such as misalignments between functional and technical requirements, integration, and data quality challenges.

Implementation of ServiceMaestro Linear Asset Management platform for Union Pacific Railroad in 2017. Result – significant cost savings and improved operational efficiency.

Collaborated with Norfolk Southern Railroad in 2017 to streamline their linear asset management processes. Result – helped reduce downtime, enhance safety, and extend the life of critical infrastructure assets.

Appendix C – Litigation
None

Appendix C – Subcontractors
Not applicable

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Appendix C – References

The Lanco group of companies – uses ServiceMaestro to manage the asset lifecycle to over 3,000 customers worldwide.

Indorama Corporation – one of the largest manufacturers of ammonia-based fertilizer and uses ServiceMaestro for its plant maintenance.

Broderson Manufacturing – one of the major manufacturers of long and short-boom telehandlers – asset uptime increases with ServiceMaestro implementation.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

Did not find any information on it in the RFP response.

PROPOSED SERVICES

Appendix F

1. **Software Proposed**
   ServiceMaestro – an intelligent full-cycle asset service and contract management SaaS platform. A robust feature set including service monitoring, field service, safety, inspection, and more. Used by 32 organizations.
   5 users included in pricing.
   Asset count 11,800 (3,000 bridges and 8,800 miles of linear assets). Subscription model considers 1 linear mile as an asset.
   Required 3rd party software – Google Earth license to track the asset in real time and Weather Channel License for predicator of scheduling (optional).
   Will provide four environments – production, working, reporting and test.
   Errors are logged and can be retrieved under admin portal.

2. **System Maturity**
   First version of ServiceMaestro in 2018. Current version is version 10.0 (service contract version 8 in February 2021, RMA and warranty module version 9 in June 2022 and monitoring and control version in June 2023).

3. **Transportation Network and Asset**
   Describe proposed system's base network – we can integrate with Departments LRS and ALIM platforms to receive real-time or frequent updates to keep AMS up to date.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

ServiceMaestro supports all types of assets like bridges and linear assets like highways and railway lines.

4. Inputs

As part of implementation Agelix will convert data into new AMS platform and connectivity to LRS and ALIM platforms. Platform will be up to date on an ongoing basis. Data model is customizable to fit Department's needs.

5. Condition Index Values

5.1. The proposed system must calculate Condition Index Values for International Roughness Index (IRI), Rutting, Percent Serviceability Rating (PSR), and Percent Cracking as required by FHWA for the HPMS submittal – the current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

5.2. How will the system perform Percent Cracking computation – the current system does not calculate. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

5.3. How will the system perform Pavement Condition Rating (PCR), functional, and structural cracking index computation – the current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

5.4. System must combine Condition Index Values to an overall condition rating Good, fair, and Poor to generate the Maine PM2 Targets – the current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

6. **Analysis and Deterioration modeling**
   Pavement Condition Data Analysis – the current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

   Bridge Data Analysis – the current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. Agelix plans to incorporate these index calculations as part of customization process during the implementation phase.

7. **Optimization**
   The system has a cost factor for the job and each job can be divided into multiple tasks. The budget can be calculated based using historical data and based on current labor and material rates.
   The system can trigger the job from inspection data or real-time monitoring data – if outside the tolerance limit then the workorder is created to attend the asset – or integrate with drone.

8. **Mapping**
   The platform has customizable report features where users can map the database table, attributes, and results. The map is produced by API integration with Google maps.

9. **Reporting**
   The platform has a customizable reporting tool to generate ad hoc reports and 40+ pre-build reports. Inbuilt reporting tool allows multiple search criteria.

10. **NBI Data Compliance**
    In ServiceMaestro user can create/modify/copy any number of maintenances, inspection, and safety templates.

11. **Implementation Services**
    Proposed is a high level 4-month timeline for implementation, conversion and go-live.
    Month 1 – stakeholder interviews, assess the pain points and limitations, create requirements traceability matrix, identify platform usage scenarios, and develop an RFP outlining functional and technical requirements.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Month 2 – detailed design of the chosen AMS including customization to align with MaineDOT workflows; configuration of the AMS to match MaineDOT needs and integration with relevant existing systems; reporting and analytics capabilities enhancements and customizable reports.

Month 3 – complete implementation of selected platform; complete integration with required MaineDOT platforms; complete security, unit, integration, scalability and UAT testing for functionality, usability, and alignment to requirements.

Month 4 – complete the implementation and get user approvals; approvals from stakeholders for program communication to wider internal and external audience; collate support documents of various platforms and identify any additional support documentation is needed; train the trainer model and end user model.

Post UAT, both old-AMS platform and ServiceMaestro platform can run in parallel to identify the differences and make necessary changes or keep the new functionality /calculations as is in new platform if required by stakeholders. Agelix will make required changes if they are needed as long as the changes are manageable.

12. Customer Support

Will provide support during the business hours of the Department. Any blocker or Critical issue will be addressed after business hours too. Any support outside the business hours will be charged extra.
Support modes of contact – email, phone, online tools like Microsoft Teams, WebEx, and Zoom.
Jira Service Desk which provides access to customers to submit a ticket for an issue – configured for auto-routing based on issue type.

Post implementation training – comprehensive training plan that can be customized to meet specific needs of the MaineDOT training requirements.

13. IT Hosting Provision

Preferred providers – Azure Gov Cloud or AWS Gov Cloud.
Uptime of hosting platform and SaaS is 99.97%

14. Caveats and Limitations

None

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

APPENDIX G

13. Able to create new road segment by consolidating shorter segments of related data into contiguous segments based on defined homogeneous parameters, such as collection routes, built status, and last treatment – **will meet with modifications** – while the current platform lacks the ability to create a new road segment by consolidating shorter segments based on defined homogenous parameters, we are confident that with modifications and inputs from MDOT, we can enhance the platform to provide this capability within the agreed timeframe.

15. Able to export tables to .accdb, .xlsx, and XML files based on user preference – **will meet with modifications** – while our current platform excels in generating reports in various formats, the specific requirement to export tables to .accdb may necessitate some modifications.

18. Allows users to define number of levels for generations of treatment strategies. Please state the maximum number of levels in the comments – **will meet with modifications** – there is some data required to meet the specific needs outlined by MDOT. Additional work is to identify and integrate with source date for treatment strategies.

19. Allows users to set a budget for optimization to $0 investment on an asset to run a "do nothing" strategy and compare it to other budget level optimizations – **will meet with modifications** – there is some data required to meet the specific needs outlined by MDOT.

20. Allows users to run an optimization with no budget constrains – **will meet with modifications** – there is some data required to meet the specific needs outlined by MDOT.

21. Offers filter that would apply the optimization to the selected subset of assets in the analysis – **will meet with modifications** – there is some data required to meet the specific needs outlined by MDOT.

22. Allows users to stop the optimization process after it has started – **will meet with modifications** – there is some data required to meet the specific needs outlined by MDOT.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11-27-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

25. Able to generate budget chart with various treatment lengths for given analysis set and budget scenario – **will meet with modifications** – the platform boasts robust reporting and charting tools capable of generating various charts and graphs based on selected or configurable data attributes.

31. Able to perform Asset Valuation calculation based on age, condition, and replacement values of assets to generate a dollar value of assets – **will meet with modifications** – there is some work required to meet the specific needs outlined by MDOT.

32. Able to calculate the remaining useful service life of assets – **will meet** – there is some work required to meet the specific needs outlined by MDOT.

SLA and Uptime and Unplanned Outage Report
Uptime of hosting platform and SaaS is 99.97%

IT Policy Form (File 4)
Leveraging our vast experience in overseeing projects for Federal, State, Financial Services, and large corporate entities, we precisely tailor our security practices to match the sensitivity of data, as stipulated by MaineDOT.
Regularly perform compliance audits and assessments, ensuring a steadfast adherence to the benchmarks set forth in NIST 800-53 Rev 5.

ServiceMaestro's cloud-hosted platform ensures that data centers comply with stringent physical security standards. Access to data centers is strictly controlled, employing measures such as biometric authentication, access cards, and 24/7 surveillance. This approach is fortified by Agelix's extensive experience working on Federal projects, where the highest levels of physical and environmental protection are mandated due to the sensitivity of the data involved.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C – Qualifications and Experience
17 years as a company, 5 in linear asset management. Experience with oil and gas, chemical and fertilizer, and pipeline. Linear asset management experience with two major railroads.

Appendix C – Litigation
None

Appendix C – Subcontractors
N/A

Appendix C – References
Railroad asset management, fertilizer plants, telehandlers, and finance platforms

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   ServiceMaestro, 5 users included +$50/month extra, 32 orgs, will need Google Earth, Saas, 4 environments (production, working, reporting, test), errors are logged

2. **System Maturity**
   Developed 2017, deployed 2018, two major and two minor releases per year.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

3. **Transportation Network and Asset**
   Can integrate LRS and ALIM for real-time AMS updates. Software supports all asset types.

4. **Inputs**
   Team will convert data to AMS. No mention of input procedures. Fields can be added within contract timeframe.

5. **Condition Index Values**
   The current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. During the implementation phase, we plan to incorporate these index calculations as part of the customization process. Our strategy involves identifying and capturing the necessary source data within the system, a task slated for completion during the requirement refinement and business process mapping phase.

6. **Analysis and Deterioration modeling**
   The current system does not calculate any of the indices highlighted. Nevertheless, the system is designed to be configurable and customizable to integrate these calculations. During the implementation phase, we plan to incorporate these index calculations as part of the customization process. Our strategy involves identifying and capturing the necessary source data within the system, a task slated for completion during the requirement refinement and business process mapping phase.

7. **Optimization**
   Able to use cost factors, can trigger jobs and real-time monitoring with maintenance notifications.

8. **Mapping**
   Has customizable reports where tables, attributes, and results can be mapped. Maps can be produced by API integration with google Maps.

9. **Reporting**
   There is an inbuilt customizable reporting tool.

10. **NBI Data Compliance**
    The user can create/modify/copy and number of maintenances.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix Consulting
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

11. Implementation Services

Four month implementation with training, and option for both platforms to run in parallel to identify changes.

12. Customer Support

Support during business hours, outside business hours will be charged extra. Use email, phone, Teams, WebEx, Zoom, and Jira. Training is customized including a guide and modules, on site or virtually.

13. IT Hosting Provision

AZURE Gov Cloud or AWS Gov Cloud with 99.97% uptime.

14. Caveats and Limitations

None

APPENDIX G

21/10/0. Not fully capable of rollup, .accdb exports. Did not understand levels of generation, do nothing, no constraints, optimization filters, stopping optimization, asset valuation, or RSL.

SLA and Uptime and Unplanned Outage Report

IT Policy Form (File 4)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience

Been around awhile

- 17 years experience business consulting "asset management domain"

No real idea how big or small/personnel depth

- Located in Kansas, India, UAE
- 15 partners and 65 clients many different types
- Personnel experience in IT coding is stressed

Software specialization

- ServiceMaestro with >32 clients COTS will be leveraged by extending capabilities and using modern coding technology
- They have extensive project/implementation experience

Not sure how important this product is to the company

Very Low Highway/Road Asset Management experience/expertise

Our journey in Linear Assets Management Services began over five years ago 2017 w 2 RR's

- No other transportation experience described
- No DOT experience described

Appendix C – Litigation x

Appendix C – Subcontractors x

Appendix C – References – No project dates provided.

- LANCO – manages asset life cycle for 3000 customers inc RR, EPC, Oil, Rental, Gov't. 750 users. Did not highlight any similarities.
- INDORAMA - manufacturers of ammonia-based fertilizer uses it for plant maintenance. Did not highlight any similarities.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- Broderson MFG - manufacturers of long and short-boom telehandlers. Did not mention any similarities.
- Change reference – Indorama – from SAP to ServiceMaestro

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – Snapshot or similar not provided. Accord paperwork included.

PROPOSED SERVICES

Appendix F -

1. Software Proposed

- SERVICEMAESTRO (.io is British Indian Ocean domain) Modules list seems like a different type of software, more like our Fleet or Bridge asset management systems.
- User seats: 5 (Five) users 3,000 bridges and 8,800 miles of linear assets. Stricted to USA Our subscription model considers 1 linear mile as an asset.
- 32 current using organizations
- Google earth license to track assets in real time?
- For use IN USA continuous operating except for planned downtime
- Has a mobile app we should not need.
- Does not show how the logical modules to be provided are related to each other.
- Environment response is confusing, appears to include 1 extra environment as the Analysis/Reporting environments must be production environments.
- Does not describe the scope of the error logging for data uploads/processing. Just where to find them.

System Maturity

- Started 2017 and 2018 first version released/used. Now 10.0. 2 major/2 minor releases per year. 5 yrs old. Building out new modules over the last 3 years.

2. Transportation Network and Asset

- LRS would integrate in realtime or frequent intervals. don't describe how.
- Response on Bridge/Linear asset separate is non-responsive.

3. Inputs

- Non responsive just says they can/will

4. Condition Index Values,

5. Analysis and Deterioration modeling

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- They would have to learn/build it out. We stated that we want a COTS solution already in use, one that does not already have the core functionality hardly meets that requirement.

6. Optimization

- The system can trigger the job from inspection data or real-time monitoring data. The tolerance limit is configurable within our monitoring module. If the real-time monitoring data or manual inspection data is outside the tolerance limit, then the workorder is created to attend the asset. – I believe they misunderstand -- describing Work Order functionality than Scenarios.

Mapping

- Non-responsive "The platform has customizable report features where users can map the database's table, attributes, and results"
- Barely responsive "The map is produced by API integration with google Maps."

7. Reporting

- Nonresponsive – we have"inbuilt" "a customizable reporting tool" and 40+ prebuilt reports. "can filter using multiple search criteria" Does not describe analytics capabilities, toolset, limitations on data…

8. NBI Data Compliance

- They do not seem to know what we are talking about . They say our authorized users can do it which would be highly undesirable approach.

- Their citation of maintenances, inspection and safety template – they definitely don't understand our requirements.

9. Implementation Services

- Not Responive. COMPLETELY generic. Does not address Provider and State roles, effort (days), key assumptions, and risks. Timeline of 4 months Not believable considering that they claim current system is missing the analysis functionality.
- The data discrepancy response is generic and unworkable for this situation and unacceptable to limit work to fix data issues to 2 weeks.

10. Customer Support

- Do not state their normal working hours for support
- Email/phone/Team or Zoom; JIRA with customer access; autorouting
- Do not provide their customer support response standards – just say they have strict enforcement of them.
-

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Agelix
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- The training description emphasizes that they do not understand what we are looking for, this looks like our Fleet or Bridge system requirements - "Asset inventory, Service Call/incident report and routing, parts/warrantiesworkorders/inspection/maintenance/safety/ labor management/leave management/ schedule management.

11. IT Hosting Provision

- Azure or AWS, haven't picked – how did they price it?
- 99.97% up, no RTO or RPO provided.

12. Caveats and Limitations

- None provided here.

APPENDIX G

- 10/27 business requirements would not be met out of the box (if they understood what we were after)

- SLA and Uptime and Unplanned Outage Report
- Not provided

IT Policy Form (File 4)

- understand the IT part.
- No response to hosting policy compliance

COST SHEET NOTES

- Did not provide rates as requested in section 1.
- (Earth Engine Pricing | Google Cloud) based on current charge per month. So 9 yrs x 12 mths = 108 mths x $500 / mth = $54,000

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:<</<
Organization Qualifications and Experience

Appendix C - Qualifications and Experience

44 years experience; 30 years asset management work (AssetFox).
over 2000 employees, most of whom have advanced degrees in engineering and the physical sciences

Appendix C – Litigation

None.

Appendix C – Subcontractors

N/A

Appendix C – References

PennDOT: BMS and PMS; Each implementation is separate.
San Antonio, TX: Pavement Condition Assessment
Illinois State Toll Highway Authority: Pavement Management Consultant

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

D&B Report = low risk; Certificate of Liability Insurance

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   AssetFox v3.0 (and the upcoming v3.2) are fully web-based – currently used by three agencies; former desktop version used by 30 agencies.
   Based on the requirements presented in the RFP, there will be two deployments of the software: one for pavements and one for bridges. The only cost this would add is additional hosting and the maintenance to ensure all four (as opposed to two) instances of the software are working correctly. Costs provided in Appendix D assume that only one production server will be required for each implementation.
   The second option is to use AssetFox's Networks feature. AssetFox can store multiple networks in a single database.

2. **System Maturity**
   In the early 2000s, it was rewritten from the ground up as RoadCare.
   In 2018, AssetFox v1 was created as a web-based translation of the RoadCare desktop software. 2023, ARA lead the release of v3.0 of the software.

3. **Transportation Network and Asset**
   Create multiple implementations of the AssetFox software.

4. **Inputs**
   AssetFox uses the concept of Data Sources to import data from external sources. Each Data Source can be a relational database, such as SQL Server, Oracle, or a Microsoft Excel file.

5. **Condition Index Values**
   AssetFox's Calculated Attribute feature can be used to perform these calculations.

6. **Analysis and Deterioration modeling**
   Deterministic performance models can be used for any attribute in the system.
   These models are deterministic and provided either through an equation or through a piecewise model; with NBIS ratings tracking a value called "time in rating."
   Have not developed an element level model.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

7. **Optimization**
   IBC optimization; constraints can include Available Budgets, Average target conditions, Minimum deficient condition, or a combination of deficient conditions and target values. Optimal benefit only and Optimal remaining life can also be used. Benefit is calculated based on the change in a specific benefit attribute when compared to a "do nothing" strategy. Provides ability to override the default analysis through its Priority Levels.

8. **Mapping**
   ARA suggests that the State should use its own GIS system for the mapping functions.

9. **Reporting**
   A report can be created for data in AssetFox in Excel or HTML format, or JSON format for simulation result exports. Power BI could be used to support advanced charting and ad hoc reporting capabilities.

10. **NBI Data Compliance**
    AssetFox will not have issues making the transition from NBI-based data to SNBI-based data. However, a transition plan will be required to alter reports and the attribute list as required during this transition period.

11. **Implementation Services**
    Ten months to Go-Live deployment
    Training will occur in two phases: system implementation and post implementation formal training.

12. **Customer Support**
    Support provided by engineering and development teams during normal business hours by direct contact. Documentation and revised manuals will be made available.

13. **IT Hosting Provision**
    RPO with Azure services can range from 15 minutes to a few hours.
    RTO, a realistic average is between 2 to 4 hours.

14. **Caveats and Limitations**
    No additional caveats or limitations

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/27/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

APPENDIX G
15. Our raw analysis output is currently structured in JSON format with the ability to convert to a relational database format.
23. ARA staff will customize reports to meet State's specific goals and needs.
24. ARA staff will customize reports to meet State's specific goals and needs.
25. ARA staff will customize reports to meet State's specific goals and needs.
26. ARA staff will customize reports to meet State's specific goals and needs.
27. ARA staff will customize reports to meet State's specific goals and needs.
28. ARA staff will customize reports to meet State's specific goals and needs.
29. ARA staff will customize reports to meet State's specific goals and needs.
31. could be performed through reporting or calculated attributes

SLA and Uptime and Unplanned Outage Report
99.95% uptime (Azure)

IT Policy Form (File 4)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
ARA is an international research and engineering company recognized for providing technically excellent solutions to complex and challenging problems in the physical sciences. In the transportation community, this focus translates into providing innovative technologies and services in the areas of transportation asset management with a focus on data collection, software development, and system implementation & maintenance. Our expertise in these areas allows agencies to better address the challenges they face in cost-effectively designing, building, maintaining, and preserving the capital transportation assets under their maintenance.

We have two long-running software projects that may be of interest to the State:

- AssetFox, formerly iAM, which is the system that is proposed in this RFP.
- PMED, which is developed for AASHTO as their AASHTOWare Pavement ME Design product.

The proposed project manager for this work is Jacob Walter, P.E., who has over 25 years of experience in transportation engineering, software development, and asset management at both the municipal and state level.

AssetFox is an open-source asset management analysis software whose development has been led by ARA in various forms over the past 30 years.

Appendix C – Litigation
None

Appendix C – Subcontractors
N/A

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
Appendix C – References
PennDOT – development and deployment of the AssetFox (formerly iAM) software package for bridge and pavement management. Analysis is performed on the lowest life-cycle cost basis in accordance with guidance and requirements from the FHWA.

City of San Antonio, TX – currently utilized the Pavement Condition Index (PCI) method as defined by ASTM D6433 for assessing the condition of city-maintained roads.

Illinois State Toll Highway Authority (ISTHA) – ARA is serving as a consultant and is responsible for supporting the Tollway in the areas of pavement management.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
Overall business risk low-moderate. Stable condition. Likelihood of continued operations. Low potential for severely delinquent payments.

PROPOSED SERVICES

Appendix F

1. **Software Proposed**
   The proposed product is AssetFox (formerly iAM) an open-source asset management analysis software whose development has been led by ARA in various forms over the past 30 years. Proposed for two deployments of the software – one for pavements and one for bridge.
   Web-based software is being used by 3 companies – PennDOT, City of San Antonio (TX), and Illinois Tollway.
   AssetFox is based on a three-tier architecture. The system can handle/store multiple networks in a single database.

   From demo we found out that AssetFox Production Version 3.0.2 was released in May 2023 – does not have some of the features we are seeking. Latest Version 3.2.0 to be released in January 2024 – which is supposed to have some of the features we are seeking.

   AssetFox is an open-source software – allows anyone to view the code used to create the application.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

2. **System Maturity**
   AssetFox software has been around since the early 1990s in a series of different forms. In the early 2000s it was rewritten as RoadCare as a desktop software – this software was so flexible that it started being used for bridge management with PennDOT. In 2018 AssetFox v1 was created as a web-based translation of the RoadCare desktop software.
   Version 1.1 – May 2020 – initial conversion of RoadCare to AssetFox.
   Version 2.2 – December 2021 – ground up rebuild of analysis system.
   Version 3.0 – March 2023 – additional features and user interface redesign.
   Version 3.2 – December 2023 – next planned release – new features and updated development libraries.

3. **Transportation Network and Asset**
   AssetFox works with the concept called “Maintainable Assets”, each has a location (bridge ID, segment ID, or a route/start/end designation) and a list of known datum for that asset.
   Every implementation can have multiple networks – reporting network and working network. There are no restrictions on assets and the attributes. Updates are done through the creation of new networks.

   ARA suggest creating multiple implementations of the AssetFox software which would separate bridge and highway assets.

4. **Inputs**
   AssetFox uses the concept of Data Sources to import data from external sources such as the State’s ALIM and AssetWise platforms. Each Data Source can be a relational database, such as SQL Server, Oracle, or a Microsoft Excel file. ARA would expect a series of Excel files to be provided to populate the AsstetFox networks.

5. **Condition Index Values**

   5.1. The proposed system must calculate Condition Index Values for International Roughness Index (IRI), Rutting, Percent Serviceability Rating (PSR), and Percent Cracking as required by FHWA for the HPMS submittal – AssetFox has calculate attribute feature that can be used to perform calculations assuming that the appropriate raw data is provided.

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

5.2. How will the system perform Percent Cracking computation – AssetFox has calculate attribute feature that can be used to perform calculations assuming that area of fatigue cracking and pavement width are provided attributes in the associated network. User can choose to populate the attribute from a data source or use it as calculated attribute (calculated from other populated attributes). This calculation is user defined and can change based on the asset that the attribute is related to.

5.3. How will the system perform Pavement Condition Rating (PCR), functional, and structural cracking index computation – AssetFox has calculate attribute feature that can be used to perform calculations, given that the indices are provided or calculated.

5.4. System must combine Condition Index Values to an overall condition rating Good, fair, and Poor to generate the Maine PM2 Targets – overall condition ratings are calculated numerically through the calculated attribute field and provided in the simulation results and reporting system.

6. Analysis and Deterioration modeling

AssetFox allows performance models to be applied to any attribute in the system other than the calculated attributes described in Section 5.2. These models are deterministic and provided either through an equation or piecewise model. Since pavement condition are attributes, they can be modeled.

According to ARA the issue with NBIS ratings is that they are only provided as whole numbers that can remain the same over the course of several years. This issue was solved by ARA by tracking a value called “time in rating” – using both the time in rating and the inspected value, these integer values could be translated into a continuous value that could be modeled in the same manner as pavement conditions.

ARA states that this is different than the TPM process that Deighton uses, as that generates a probabilistic analysis as opposed to a deterministic one.

During demo it was stated that nobody has done bridge element level analysis. Deterministic model for bridges – allows for equations-based deterioration models (all the items gets configured).

To be able to do multiple treatments in a same year ARA would have to do some logical tricks – which is a supersede feature in the upcoming version 3.2.0

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

7. **Optimization**

AssetFox does not use generations of treatments to determine the feasibility of subsequent treatments. Instead, it performs an evaluation based on attributes for each year.

A simulation is created in AssetFox that is related to a specific network. It selects work using an incremental benefit-cost analysis based on the performance models, and constraints such as available budgets. When the simulation is run, it selects work using an incremental benefit-cost analysis based on these settings.

7.2 How does the proposed system address minimum tolerable condition requirement – minimum tolerable condition is proposed to be addressed through the minimum deficient condition analysis – multiple deficiency criteria can be used to define "poor" condition. AssetFox provides the ability to override the default analysis through its Priority Levels.

7.3 Does the proposed system generate one overarching project, as opposed to several different projects over a short period of time – dealing with small projects is proposed through network creation that avoids small pavement segment sizes (**this answer assumes that the treatment referenced in this question are pavements and not bridges**).
The network creation process allows the user to rollup data points into larger sections as appropriate.

8. **Mapping**

ARA suggests that the State should use its own GIS system for the mapping functions. This would allow access to all internal and external GIS features to use with the pavement data. Movement of the data between AssetFox and the State's GIS would be through direct connection to the AssetFox database or exported data from the system.

Mapping – GIS integration (JSON) – ARA is assuming that they would be connecting to our GIS integration.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

9. Reporting

The principal mechanisms for reporting in AssetFox are Microsoft Excel and HTML. Tools such as Power BI could be used to support advanced charting and ad hoc reporting.
The system is not locked down to *authorized* State users as it would be under a traditional SaaS approach. The databases for pavements and bridges will be separate but specific to the State. The only restriction is access to the supporting databases hosted remotely which will need to be controlled to maintain uptime.

10. NBI Data Compliance

AssetFox is a capital planning tool that is asset type
agnostic asset type agnostic and therefore will not have issues making the transition from NBI-based data to SNBI-based data. Transition plan will be required to alter reports and the attribute list.

No specific timeline for reaching compliance was mentioned.

11. Implementation Services

Implementing AssetFox will be done as a series of tasks.
Task 1 – Kickoff – no risks associated – 1/7/24 one month after or 2/8/24
Task 2 – Data specification – low level risk – 2/9/24 to 3/5/24
Task 3 – Initial System Build – risk associated is ability to access the State's authentication provider from an external service – completion estimated on 2/23/24
Task 4 – System implementation – document MaineDOT maintenance & rehabilitation processes, conversion of Deighton settings, creation of initial capital planning network (two databases – one for bridges and one for pavements), creation of HPMS reporting network – overall schedule for task 4 is 2 months (5/6/24)
Task 5 – Export System Enhancements – AssetFox is currently structured in JavaScript Object Notation (JSON) format – has no ability to provide data in XML and Access formats (.accdb) – no expected risks, but these reports could cause issues with the server hardware – this should be completed at the same time as task 4 (5/6/24).
Task 6 – pavement scenario report – Excel format – risk mostly involves issues that come up in the review – completed on 7/19/24
Task 7 – bridge scenario report – Excel format – risk mostly involves issues that come up in review – completed on 7/5/24
Task 8 – scenario comparison report – this task would add ability to perform reports on multiple scenarios – deliverable would be a report in Excel format that provides

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

the chart and supporting data – risk is unknown requirements – should be available on 6/21/23

Task 9 – Asset valuation report – tabular in Excel format – risk that some of the data might need to be developed – if the necessary data is available it is scheduled to be completed on 8/20/24

Task 10 – Migration checks & comparisons – compare results to those of the existing Deighton system (if possible) prior to Go Live – risk that the results are not comparable – completion on 9/20/24

Task 11 – Go Live – this task would deliver two production servers hosted at an external hosting service – training (virtual) and documentation – scheduled for 9/23/24 through 10/22/24

12. Customer Support

Support for the system will be provided by ARA's engineering and development teams – available during normal business day hours (Eastern Time) and based out of Camp Hill, PA office. Email, office phone and mobile number for the project lead as well us email for the full project team.

It was mentioned during demo that Customer Support 8-5PM EST.

13. IT Hosting Provision

Hosting on Microsoft Azure.

During demo there was a mention of local hosting, which is not what the RFP asks for.

14. Caveats and Limitations

No additional caveats and limitations.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

APPENDIX G

11. Able to roll up values and attributes from one segment length to different segment lengths when transforming data from one table to another – **will meet as stated** – value roll up occurs during the Network creation process.

12. Allows users to create and execute batch operations for blocks of calculations and data transformations – **will meet as stated** – AssetFox has a queue system for long running processes. It is possible to queue multiple simulation runs and/or report runs if required.

15. Able to export tables to .accdb, .xlsx, and XML files based on user preference – **will meet with modifications** – raw analysis output is currently structured in JavaScript Object Notation (JSON) format with the ability to convert to a relational database format. Using these two structures, we would need to add support for generating the outputs required in this item. The former JSON would be used to export to XML, and the latter (relational data tables) would be used to export to .accdb and .xlsx

17. Able to perform multi-objective optimization – **will meet as stated** – the system allows the user to specify average target values and minimum deficient levels.

18. Allows users to define number of levels for generations of treatment strategies. Please state the maximum number of levels in the comments – **will meet as stated** – AssetFox does not use generations of treatments to determine the feasibility of subsequent treatments. Instead, it performs an evaluation based on attributes for each year. Each treatment allows the user to enter the number of years before that treatment can be considered again or the number of years before any treatment can be considered.

23. Able to generate budget chart with total program costs over time for given analysis set and budget scenario – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

24. Able to generate budget chart with various treatment costs for given analysis set and budget scenario – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

25. Able to generate budget chart with various treatment lengths for given analysis set and budget scenario – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

26. Able to generate condition distribution chart that displays the percentage of good, fair, and poor assets overtime for given analysis set and budget scenario – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

27. Able to generate budget comparison chart that displays the average condition of assets given multiple budget scenarios for a selected analysis set – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

28. Able to generate construction program or future work report after executing the analysis set and optimizing for each asset over time – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

29. Able to calculate measures for condition ratings of good, fair, and poor based on the total number of bridges as well as based on the square foot deck area of bridges – **will meet with modifications** – ARA staff will customize the reporting to meet the State's specific goals and needs.

30. Authorized users able to customize charts and graphs such as adjusting the scale so that comparisons between different graphs can be made – **will meet** – *reports are generated and exported to .xlsx format.*

31. Able to perform Asset Valuation calculation based on age, condition, and replacement values of assets to generate a dollar value of assets – **will meet with modifications** – this could be performed through reporting or calculated attributes – in the cost we are assuming it would be a report.

32. Able to calculate the remaining useful service life of assets – **will meet** – the user is able to specify the parameters for remaining life of a particular asset class. This allows a scenario to define how remaining life is calculated based on the specific attributes instead of a fixed calculation defined by a vendor.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

SLA and Uptime and Unplanned Outage Report
AssetFox is an open-source product that uses Microsoft Azure, which has an SLA of 99.95% or more. Azure provides comprehensive mechanisms for outage reporting and response.

IT Policy Form (File 4)
ARA's IT infrastructure is compliant as one of their major clients is the Department of Defense.
ARA will use a hosting provider compatible with the State's IT policies.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience
Blue = demo notes
Appendix C - Qualifications and Experience

Been around awhile

- Est 1979
- AssetFOX – 30 yrs old / 25 years per demo

No concerns with company size

- 2000 employees mostly engineering and phys science adv degrees
- 500 could be pulled into the AssetFox team including 200 software developers. Demo – 130 people on the AssetFOX team across all the product skillsets.
- AssetFOX team= 11 developers and 31 engineers. **Civil Engineering and Software Focus**
- Not clear how important Assetfox is to the company – not in the website menu, and assetfox yields no search results on the website. Lots of other irons in the fire. Not even under the rebranded name.
- Noticed that they appeared to exaggerate slightly on the proposal vs demo.

Software experience

- "not a software development firm" we are transportation engineering firm. – that's just sales speak, we hope.
- Large developer staff
- Developed and maintains (AASHTO) PavementME as well.
- Each development is separate with customizations, even bridge/pavement at same state, which seems like a growing risk - maintenance/reliability

PM has strong control over product and access to resources

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- PM has 25 years with government, project owner for AssetFOX with 11 developers and 31 engineers

Appendix C – Litigation x

Appendix C – Subcontractors x

Appendix C – References (no project dates provided)

- PENNDOT – development and deployment of AssetFox (formerly iAM) software package. Separate bridge and pavement systems.
- SAN ANTONIO – suppemental analysis for another system.
- ILLINOIS Highway – uses Assetfox.
- CHANGE OVER – PENN - assisting the Department translate their pavement management system from Deighton to AssetFox

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – not actually the snapshot but seems to have the right information. Overall risk low-moderate.

Accord paperwork included.

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   - AssetFox formerly iAM.
   - Opensource asset management analysis software. public repository available to anyone. AGPL license v3 – someone could download it, fork it, and would not reflect future changes by other end users, stipulates that we must publish those modifications and not create a new branch that is not part of the open source codebase. How do you deal with hackers and poor quality code adds? They manage the additions to the software, you can suggest a change, but they examine the changes before committing it. They have automated testing coded in it as well. If it is a change to the simulation engine etc, they have to consider impact to all other users as well.
   - No modules, asset type agnostic. Demoing 2.0.2 and will release to 3.2.0 soon which is a big lift…they are bidding based on 3.2.0 "Structure Asset Management" (rebranding)
   - No license restrictions

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- No third party licenses required (but we might want a data analytics or ARCGIS license for analysis.) Does it meet all OUR RFP requirements without these add-ons? Demo - They believe they will meet requirements without those add-ons, but we should evaluate that for ourselves. They offer no mapping out of the box. They also think it would be insane to rely on their out of the box reporting rather than a BI solution.
- Workplace – network feature looks like it will work.
- error logging/notification look reasonable

Demo – Different approach overall: A typical proprietary system will assume all occurs within their software. …you have to transition your data into the applications' required data, and use premade reports/tables/processes. Instead, AssetFox uses whatever data points we want in their current data formats, they run an analysis and export EXCEL/HTML reports always custom built for the agency.

2. **System Maturity**
   - Rebuilt 2018-2021, adding features currently
   - 3 web implementations in use
   - Only PennDOT not internally hosted.
   - 30 agencies still using the older desktop version.

3. **Transportation Network and Assett**

Recc 2 implementations (completely separate, even different servers) bridge/highway -less complex. Separate PROD/TEST instances for each.

Must Define EVERYTHING - Organized as **Network** (multiple allowed) – each is a set of immutable assets (they are updated *in the result set* as a result of the analysis and we can update them at will for an LRS refresh) **asset- location – attribute = data value/date**. Every network is a fresh data load, doesn't reuse prior year's network automatically. Attribute list is global, not dedicated by network

CAN contain historical data in the network but would be very unusual. For example for HPMS we retain last 10 yrs of condition ratings.

The setting library is outside the individual scenario so we can reuse settings for a different implementation or network where appropriate, but there is no catalog system for finding these.

Multiple network versions which consist of a list of assets. –

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

1/10 vs 1/100 th mile reporting - aggregation – can define where an asset sits Rt Lg Mile or some other logical way, we take your subcomponents and aggregate into that highway asset such as total pavement area, or fatigue cracking. Might use average for a density. Attribute by attribute decision. Happens in the software not in the reporting. NOT EASY has to be coded, they have had to do it before, that becomes the Defined Network. Set up at finest level. You have to define every attribute for the network when you do the rollup you define the attributes (e.g. segment length of roadway) Aggregation type (ADD, AVERAGE, etc).

4. **Inputs**
   Excel. All data fields are custom.

5. **Condition Index Values**
   Coherent, a lot of setup
6. **Analysis and Deterioration modeling**
   All analysis scenarios are based on single network.

   Coherent – ALL IS CUSTOM COnFIGURED , although we do have access to libraries (description optional, very granular).

   PennDOT has **4000 models**. To create – copy, clone (except results), or manual copy.

   Can this system do bridge element analysis? – because we can set it up that way. No one is doing it yet in this system, so no library available. On pavement side, they handle individual pavement stresses, so they know they can do bridge elements.

   Remaining life – based on multiple attributes, whichever single attribute is hit first.
7. **Optimization**
   Little optimization functionality. Within this system, for 1 bridge, at the simplest level combine them as a single treatment, more complex allow multipe treatments in same year. They believe they understand that Chester would want the system to combine work in 4 separate years … roll into bigger project on the asset. Might be doable with additional customized code…add rules to tie treatments together in a certain year. “supercede” is a new rule, if doing a bridge replacement don’t select a prior year deck replacement…

8. **Mapping**

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

ARA suggests that the State should use its own GIS system for the mapping functions as it would not be locked away as in typical SaaS. Either connect direct to DB or export data. They assume one export of data for this purpose. They would generally do a JSON integration. This is how other States do it.

9. Reporting

They provide a JSON Simulation result export (very large).
Raw data format is actually JSON, hard to read, so they use excel to make it readable, they would build out those reports.

Within the system are Excel and HTML reports. Can be created to assist in data transformation or analyzing data. We have to design them for ourselves rather than reuse canned reports. They should include all the data we want so that we can do further filtering/aggregating/graphics in EXCEL. Can we manipulate anything you want after running the analysis. No just the output from a single Scenario. Can you compare budgets? You would be able to say what comparison reports you want built for you.

10. Most of the report are created in code custom for every client. All open source though, so we can take it on and they will add it to their code base.

Data access has to be controlled to maintain uptime.

They suggest a Data Analytics tool to support advanced charting and ad hoc reporting. Not desirable here as we do not have the capacity for the build out.

11. NBI Data Compliance

The system's attribute agnostic so we simply have to modify all the inputs, which would require a transition plan.

12. Implementation Services

Coherent and focused on THIS project

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

The start at the end objective then result is Cap improvement plan/conditions, then raw data needed follows (can use this for HTPM reports too),

Typical reports – summary, inventory, audit report (am I getting the RIGHT answer?) – can't show us. Huge excel sheet every year for every asset what the decision making process was.

Don't quite understand the reporting environment usage
Timeframes seem very optimistic. Approx. 9 months to go-lvie. How have references done at meeting initial schedule? Roles and timeframe of our staff is a little unclear during development/testing.
Assuming that we have sub 3day turnaround on all data requests.
First step – contact generally here is what I am asking for, does it make sense. Clear terminology? Then submit the formal request. We send the data. We then set up a bare-bones setup with most of the data missing, get feedback before continuing. In Reports, show example from other folks and get feedback to refine. It is all in the work system and code repository in Azure DevOps where we can see the template. They we provide feedback. Similarly training. 2 separate implementations, with some similarities. Same team does all the development, 2 separate teams on engineering with proper expertise.
"not the only line of quality control"
Logical training plan. Reasonable approach to Deighton data discrpencies although optimistic timeframe.

13. Customer Support

Continuity of support with the development team. Hours not provided, 8-5 EST at PA email/phone to project lead. Same day response. Updates do not need to wait on software releases but can be handled directly. Post-implementation resources are manuals and paid training **Not up to current standard**

We do not get a change log with upgrades due to the open source nature. they don't track the WHAT/WHEN for us.

14. IT Hosting Provision

Azure is assumed. Did not provide RPO, RTO, , they want to address that during the contract negoations as it impacts hosting costs. Assume 99.95 on Azure. They bid it based on NORMAL AZURE they will follow up..

15. Caveats and Limitations

None there. In Appendix G – asset valuation as report not attribute

APPENDIX G

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: ARA
DATE: 11/17/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

10. Able to calculate Condition Index Values using mathematical functions including standard deviation and logarithms. – the difficulty is doing any math operation on a dataset rather than a datum. Plan to figure it out.
11. Condition index value rollups only occur during network creation, this sounds like it will not meet our needs.
18 Cannot handle > 1 level of generation of treatments – you can do 1 year at a time for as many years as you wish.
23-30 Report customization to meet "specific goals and needs" then can be further customized without need for post-processing by staff – don't really understand what they have in mind.
30 - Looks like DOT build out any graphs/charts **from EXCEL exports.**
SLA and Uptime and Unplanned Outage Report
No SLA because the software is open source. BS – They should be providing their customer support Service Levels and information on they will address any software (vs configuration issues)
No downtime SLA or unplanned outage to provide without selection of a host contract.
IT Policy Form (File 4)
NIST – relatively nonresponsive. Not clear how applicable their internal infrastructure/DOD clients is to THIS implementation using open source and a vendor hosting environment. They plan to figure it out as they go. CSO would not find this response sufficient.
Lazy response - N/A as they have not selected a host, so we can worry about that. However if they read it, they could have responded to the vendor responsibilities they will still be responsible for. E.g. How are they going to feel about deployment testing based maintenance of the open source application?\

They will discuss authentication in demo. External authentication with OIDC (was Azure AD), or Azure Business to Consumer
Authorization –configure each role feature access by configuration and further restrict data access by user in UI; then MUST assign users to roles based on AD ROLES within the User Authentication. Not overrideable.
They will rely on the RFP explicit requirements for the reports and graphics to be provided, or too many change requests to initial report.

COST PROPOSAL notes
I get a little worried when they list admin support rates and operations managers. Are they one of the companies that will send a bill for their invoice development, and correcting issues in their timesheets? There are situations at times, to coordinate with hosting for example. There would likely be need for a good deal of ad hoc reporting given their approach

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C – Qualifications and Experience
44 year company, large, over 2000 employees. Has experience with highway asset management with AssetFox and PMED. Highway team of 43. Provides software as well as PM expertise, but not really a software developer. No bridge management experience mentioned.

Appendix C – Litigation
None

Appendix C – Subcontractors
N/A

Appendix C – References
PennDOT bridge and highway asset management, which was changed over from Deighton. City of San Antonio used PCI then full software, ISTHA uses full suite for full asset management.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   AssetFox with separate deployments for pavement and bridge, web-based software currently used by three agencies (with different hosting styles) (one state), 30 on desktop version to be upgraded. Excel is needed, Power BI and ArcGIS may be

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

useful tools, Saas, could be configured in different environment or one environment with different “networks”, error logs are maintained

2. **System Maturity**
   Developed in early 1990s, web based in 2018, v2 rebuild 2021, v3 2023. Demo 3.0.2 (May 2023), but latest is 3.2.0. Rebranding underway. 3.2.0 contains supersede feature.

3. **Transportation Network and Asset**
   Maintainable Assets have locations and associated data and are maintained in “networks”. The different asset types could be implemented in two different ways, either as separate assets or as different attributes on the same network. Bridge and Highway would have different base servers and would be hosted independently with their own networks.

4. **Inputs**
   Data sources can be imported from external sources, including Excel, but must have an associated date. Attributes must be provided at implementation but are configurable.

5. **Condition Index Values**
   Use the Calculated Attribute feature to make calculations according to user defined rules as long as the data is provided. Aggregation takes place as normal.

6. **Analysis and Deterioration modeling**
   Deterministic models through an equation or piecewise model.

7. **Optimization**
   Uses incremental benefit-cost analysis using budget or target condition constraints compared to a do-nothing strategy. MTC through deficient condition analysis, which has criteria for levels of poor, or committed work. For consolidation, recommended an analysis network.

8. **Mapping**
   Mapping not currently enabled in app, but fully open for integration of download to department GIS system for mapping. Possibly export at JSON file for mapping import.

9. **Reporting**

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Applied Research Associates, Inc. (ARA)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

Most reporting is done via Excel and HTML. Power BI could support advanced reporting.

10. NBI Data Compliance

As it is asset type agnostic, the software will not have issues, but will require a transition plan.

11. Implementation Services

Implementation should start 1/8 and finish go live on 10/22. The schedule is very comprehensive and detailed and includes training and changeover.

12. Customer Support

Support during business hours by engineering and development teams. Contact includes email and phone of project lead and full project team. Responses will be same day, with time to resolution as quick as possible. Training via documentation, and charged the same as new development.

13. IT Hosting Provision

Any, but cost assumes Microsoft Azure. Goal is to minimize unplanned downtime.

14. Caveats and Limitations

No additional caveats or limitations.

APPENDIX G

22/9/0. Interesting lack of need of levels of generation. (7) cases where staff will customize reports to meet specific goals. Don’t have a report for valuation, but multiple ways to report it.

SLA and Uptime and Unplanned Outage Report

Cannot make an SLA for open-source product, but hosting provider can provide SLA for their services. Microsoft Azure strives for 99.95% availability. ARA is working to methods to report that.

IT Policy Form (File 4)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/30/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments: <</<
Organization Qualifications and Experience

Appendix C - Qualifications and Experience

Deighton's incorporation in 1986. Deighton is proud to have more than 100 agencies throughout the world using dTIMS. Among these are 25 US state DOTs. dTIMS is a proven COTS solution that has been implemented many times at the state level as an effective bridge management system and has been templated to accept National Bridge Institute (NBI) data attributes for structures.

Appendix C – Litigation

Deighton Associates Ltd. has not had any claims made by clients.

Appendix C – Subcontractors

N/A

Appendix C – References

INDOT: 11,500 centerline miles of INDOT's state highway network. 5800 of INDOT's state highway bridges.
NHDOT: PMS since 1995, BMS since 2015.
WVDOH: PMS since 1992, BMS since 2018

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/30/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   dTIMS BA SaaS; includes 5 named users; no limitation on asset classes or asset counts. 100 companies/organizatons globally using the dTIMS BA system; 25 US State DOTs.
   The solution utilizes Microsoft's PowerBI Platform to deliver reporting and dashboards; Microsoft Power BI license to view all custom dashboards.
   Hosted in MS Azure
   In the Staging database, no new configuration changes will take place. All configuration development and testing will remain in Development. Staging will be used to load the current year's data and perform the current year's analysis. Production will be a stable environment where no configuration, data or analysis changes take place. Production will still hold the previous year's data and continue to be used for reporting.

2. **System Maturity**
   dTIMS initiated in 1990, became Windows based in 2000, incorporated SQL Server database in 2008, first offering as SaaS in 2019.

3. **Transportation Network and Asset**
   Each asset class can have its own analysis and optimization strategies respectively. Various budget scenarios can be created to optimize for different assets classes independently.

4. **Inputs**
   users will be able to easily update condition data through the dTIMS import function. Popular file formats are accepted for this. users will have the ability to alter the table schemas.

5. **Condition Index Values**
   dTIMS is completely configurable in the number and types of index values used as well as the calculation method to derive index values from the collected distress data.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/30/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

6. **Analysis and Deterioration modeling**
   dTIMS can accommodate deterioration modelling at whatever level the Department desires. dTIMS can accommodate a bridge analysis based on element level data and can accommodate deterioration based on Transition Probability Matrices (TPM). Historic and current condition data are imported into dTIMS and are used to derive the future state of the asset over the desired analysis period.

7. **Optimization**
   LCCA using IBC. dTIMS employs a Heuristic Optimization method (Efficiency Frontier method).
   There is a process in dTIMS called dFRAG auto programming which is done after the LCCA. You would define a set of criteria but in this case, it would be to combine smaller sections and work programs into larger ones

8. **Mapping**
   All mappable content in your database can be displayed on the dTIMS map (for example, tables, atributes, and expressions).
   A table must have the geometry feature enabled to be able to export to a SHP or KML file.

9. **Reporting**
   The Hub is a centralized view of all the assets the Department manages. Each asset will then be connected to its specific reports & dashboards. The summary page is where the Department will be able to get a clear overview of the asset, displaying inventory data, distributions, or historical data. The Key Insights page will display statistical data about KPIs and provides the ability to drill down into the detailed data behind. Lastly, the funding page will display information related to the budget analyzed along with the impact on the assets.
   dTIMS has extensive reporting capabilities.

10. **NBI Data Compliance**
    dTIMS will comply with the proposed FHWA changes for SNBI.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/30/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

11. Implementation Services

Deighton will perform a system audit and evaluate the Department's current systems against current best practices and make recommendations to address any gaps between the two. There are hours allocated in pricing table to implement as many recommendations as possible.

12. Customer Support

Premier Support Plan includes Support Portal and Deighton University.

13. IT Hosting Provision

Refer to Deighton's SLA Hosted Level III.

14. Caveats and Limitations

Deighton utilizes the high-availability and georedundant public Microsoft Azure Cloud hosting services. Included in our higher level SLA (not in SLA Level III), we do provide an availability report / dashboard including unplanned outages.

APPENDIX G

Will meet req. as stated.

SLA and Uptime and Unplanned Outage Report

Deighton will provide two nines (99%) availability to the hosted services during agreed business hours.
RTO: 10 min. to 8 hours
RPO: Last Backup

IT Policy Form (File 4)

Deighton does not currently do a full Disaster Recovery Exercise within 1year of go-live and repeated annually thereafter.

Deighton currently does not fully comply, but, do complete regular background checks on all new employees.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
Deighton started developing and marketing its Asset Management Software (AMS) as early as 1983, a few years before Deighton's incorporation in 1986.

Today, Deighton is proud to have more than 100 agencies (including Maine Department of Transportation) throughout the world using dTIMS (Deighton's Total Infrastructure Management System) to manage their roads, bridges, and other assets such as culverts, guard rails, signs, sidewalks, underground utilities, and more.

Among these are 25 US state DOTs (the largest market share of any asset management software vendor in that market segment) and dozens of North American cities and counties.
Deighton is a team of international experts in asset management best practices with offices in North America, Ireland, UK and Australia.

dTIMS uses a relational database which allows users to configure agency specific parent-child relationships between an asset and its corresponding components.
dTIMS allows users to run agency specific analyses to predict the deterioration of assets and develop treatment strategies to ensure conditions are kept at the desired level of service.

dTIMS is a proven COTS solution that has been implemented many times at the state level as an effective bridge management system and has been templated to accept National Bridge Institute (NBI) data attributes for structures. Furthermore, dTIMS is currently able to be configured, out of the box, to meet the requirements of 23 Code of Federal Regulations (CFR) Parts 490, 515, and 667.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

dTIMS inherent functionality addresses most of the requirements listed in the Request for Proposal and utilizes Microsoft PowerBI for customized dashboards and reporting.

As a fully configurable solution, dTIMS will help the Department improve their Asset Analytics and Forecasting capabilities by enabling the Department's engineers to continue to configure and expand the solution to meet the specific needs of the Department. All models and asset management methodologies configured during the Initial Configuration can be refined as the Department continues to enhance their asset management processes.

Deighton will help the Department continue to build upon their existing PMS and BMS within dTIMS with a fresh approach. The Solution Design along with the System Audit as described in the Implementation Plan will allow Deighton and the Department to refine the PMS and BMS practices currently in use and build upon pavement and bridge management capabilities in the same software package.

Deighton has been working with the Department for over 30 years and has developed a unique set of skills that will be required for this project to be successful. Coupled with our immense understanding of how the Department operates and the challenges it faces.

Deighton has seen a rapid growth – about 120 employees now. The key players who know MaineDOT's system are close to retirement age.

Appendix C – Litigation
Deighton Associates Ltd. has not had any claims made by clients since incorporation in 1986.

Appendix C – Subcontractors
Not applicable, no subcontractor required.

Appendix C – References
INDOT – Deighton first implemented INDOT's PMS in the early 1990's. This system was configured to manage all 11,500 centerline miles of INDOT's state highway network. The PMS has been continually updated and kept current since that time. In the early 2000's, Deighton implemented the models from INDOT's Indiana Bridge Management System developed jointly with Purdue University. This system has since been replaced and simplified and dTIMS is currently being used to manage all 5800 of INDOT's state highway bridges. In 2015, Deighton began an integration project with Esri

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
Roads & Highways. Deighton is now an Esri Business Partner because of this project. INDOT has used the Statewide BMS at the District level as well to enable the district bridge engineers to generate their own work program.

NHDOT – Deighton has worked with the New Hampshire Department of Transportation since 1995 for pavement management and since 2015 for bridge management. NHDOT uses dTIMS BA for meeting TAMP Requirements for strategic planning for the pavement and bridge assets and recommendations coming from dTIMS influence preservation, rehabilitation, and reconstruction tactical plans.

WVDOT – Deighton has worked with the West Virginia Department of Transportation since 1992 for pavement management and since 2018 for bridge management. WVDOT uses dTIMS BA for meeting TAMP Requirements for strategic planning for the pavement and bridge assets and recommendations coming from dTIMS influence preservation, rehabilitation, and reconstruction tactical plans.

GDOT – in 2018, the Georgia Department of Transportation (GDOT) contracted with Deighton to help migrate their current legacy PMS to dTIMS BA. At the same time, GDOT was switching from manual pavement distress collection to automated. The current system used by GDOT was a homegrown PMS that had reached the end of its useful life. GDOT wanted a COTS solution that was more modern, flexible, and able to accommodate the new automated pavement distress data. GDOT and their local consultant selected Deighton's dTIMS BA system as their new PMS. Deighton began with a system audit of the legacy system and from that created design documents that helped frame the configuration of the PMS. Automated data was incorporated, and new indices were derived from that data to help build a pavement works program.
In 2021, GDOT used dTIMS BA to manage their pavement striping program using the recently collected marking reflectivity data. This data was not being used to its fullest extent, and Deighton, GDOT and a local consultant built a pavement striping program in dTIMS. This highlighted the flexibility of dTIMS and showed how data can be turned into information.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
Deighton subscribes to the rating service of Dun & Bradstreet and can make a copy of their Comprehensive Report upon request.
Overall business risk low-moderate. Stable condition. Likelihood of continued operations. Low potential for severely delinquent payments.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F

1. **Software Proposed**
   The software that Deighton Associates Ltd. (Deighton) is proposing to Maine's Department of Transportation (the Department) is dTIMS Business Analytics (BA) SaaS.

   The proposal includes dTIMS Business Analytics for 5 named users, if required the number of named users can very easily and quickly be increased to desired levels. There is no limitation on asset classes or asset counts with dTIMS BA. You can add as many assets or asset classes as you desire. This gives you the opportunity to manage many of your infrastructure assets in the same asset management software.

   Deighton is proud to have more than 100 agencies of all sizes throughout the world using dTIMS (Deighton's Total Infrastructure Management System) to manage their roads, bridges, and other assets such as culverts, guard rails, signs, sidewalks, underground utilities, and more. Among these are 25 US state DOTs (the largest market share of any asset management software vendor in that market segment) as well as several US Cities and Canadian provinces & cities.

   The Department will require a Microsoft Power BI license to view all custom dashboards.

   Deighton will continue to offer dTIMS BA to the Department as a SaaS solution hosted in MS Azure in the US. No client-side installation required; access to the solution is via a web browser.

   The architecture diagram depicts the 3-tier nature of the dTIMS application and the superior integration features that have been built into the system. dTIMS is a fully web-based solution. As such, users will only require an internet connection to access the system.

   The solution utilizes Microsoft's PowerBI Platform to deliver reporting and dashboards, as well as an external, cloud-based authentication solution to handle authentication and authorization.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Deighton incorporates new features and enhancements as part of our ongoing product development life cycle and maintenance program.

Deighton has currently set up the Department in two environments: a Development or Work environment (DEV) and a Production environment (PROD).
DEV environment is a working place for authorized users to work on all the configuration parameters of dTIMS for both the PMS and the BMS. This is where new data is loaded and validated, new models are tested, any annual updates are performed, and general testing is performed. All custom configurated tables, attributes, models, life cycle cost analysis and any other configuration required to complete the Asset Analysis and Forecasting system is presently performed will remain in the current development environment.

Deighton and the Department have set up several Bridge and Highways SQL Server Reports (SSRS) that access the latest results from PROD.

Deighton suggests one environment with three databases: Development, Staging and Production.
The current-year analysis work that is presently taking place in the DEV environment will instead take place in “Staging”. This is the Work Environment described in the question. In this new database, no new configuration changes will take place.

All configuration development and testing will remain in Development. This is the Test Environment described in the question. Staging will be used to load the current year’s data and perform the current year’s analysis while Production will still hold the previous year’s data and continue to be used for reporting since it will be a stable environment where no configuration, data or analysis changes take place. It will be used to report on the previous year’s data and analysis results once signed off by the Department. This is the Reporting Environment described in the question.

Deighton is open to amend this proposed design based on Maine DOT business requirements.

In dTIMS BA, we have data import/integration and data transformation functions available for data uploads and data processing respectively. The status will be reported on the Execution Requests page. Errors will also be displayed on this page and a detailed error log can be found on the data import page. The error can also be exported into an excel file.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

2. System Maturity

Deighton initially entered the asset management marketplace in 1986 with a product called dROAD. dROAD answered the need for agencies to manage the data that described their linear infrastructure by providing innovative techniques for the integration of data from disparate sources. The unique feature introduced by Deighton to the industry with the advent of dROAD was the concept of data transformation. dROAD was initially created to manage pavement assets, the open nature of the software allowed users to define and manage the data for any linear asset. Soon the needs of users expanded to include point assets and Deighton responded with accommodations to incorporate point assets such as signs and bridges.

In the early ‘90s the attention of asset managers turned to the management of the actual assets that were described in dROAD. This need gave rise to a product called dTIMS (Deighton’s Total Infrastructure System) that took aggregated asset data from dROAD and allowed users to produce, recommended, optimized, long-term maintenance and rehabilitation strategies for their assets.

Up until the late ‘90s, both dROAD and dTIMS were DOS based desktop asset management solutions. At the request of our user base, at the time, our development focused on the capability of the software tools rather than the migration to a Windows platform.

In 2008 the new SQL Server database allowing the expansion of the dTIMS database to accommodate the demands of managing multiple assets on one dTIMS platform and the arrival of cross asset analysis that was the desire of our users wanting to break down the siloed nature of their asset management practices.

The corporate structure of Deighton Associates and the ownership of the IP that defines the essence of dTIMS have remained intact since the Company was incorporated in 1986. At the core of the evolution of dTIMS is the needs and suggestions of its users. Each step in the progression of dTIMS, from where it was imagined in 1983 to where it is today, came from a global perception of what our users needed and their collective suggested enhancements along the way. Deighton’s ability to synthesize these individual ideas and return a product that meets the needs of our collective user group has resulted in benefits to dTIMS users around the globe.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Type of releases:

- Service release – several tickets grouped together to form a global availability release where several issues are addressed for multiple clients.
- Full release – new enhancements/features with low priority tickets for global release to clients.

Version 2020Q3.20210514.1 – full release – 5/14/2021
Version 2020Q3.20210831.1 – full release – 8/31/2021
Version 2022R1.20220211.1 – service release – 2/11/2022
Version 2022R1.20220303.1 – service release – 3/03/2022
Version 2022R2.20220603.1 – service release – 6/03/2022
Version 2022R3.20220823.1 – full release – 8/23/2022
Version 2022R4.20230104.1 – full release – 1/04/2023
Version V1.R0.20230411.1 – full release – 4/11/2023
Version V1.R1.20230628.1 – service release – 6/28/2023
Version V1.R1.20230630.1 – full release – 6/30/2023

3. Transportation Network and Asset

dTIMS BA stores the Base network information in a table. All relationships between other tables, based on location are made through this table. The Base table contains the name of the route, from/to position, length and temporal attributes like ValidOn and ValidTo as well as CreatedOn and EndedOn. If the map-based features are used, the Base table can store the geometry data.

dTIMS BA has integration capabilities to external data sources. Many agencies have made use of this feature to be able to consume data from external sources such as an agency's GIS. Integra□on can be established from dTIMS BA to the Department's LRS and/or ALIM. Ideally, dTIMS' LRS is integrated to the Department's LRS.

dTIMS BA supports the creation of any individual asset classes including pavements and bridges. Each asset class can have its own analysis and optimization strategies respectively. Various budget scenarios can be created to optimize for different assets classes independently.

Deighton proposes an audit on MaineDOT's system – general operational review of PMS and BMS to identify where and how current asset management practices could be improved based on the best practices within the global Deighton user community.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

4. Inputs

Once the infrastructure assets have been configured within dTIMS to the specific network requirements of the Department, users will be able to easily update condition data through the dTIMS import function. All errors are reported so that the user can correct them in the external file and try the import again.
Department users will have the ability to alter the table schemas via the user interface under the “database configuration page”.

5. Condition Index Values

5.1. The proposed system must calculate Condition Index Values for International Roughness Index (IRI), Rutting, Percent Serviceability Rating (PSR), and Percent Cracking as required by FHWA for the HPMS submittal – dTIMS is currently set up in the Department’s environment to calculate all the desired index values used by the Department. dTIMS is completely configurable in the number and types of index values used as well as the calculation method to derive index values from the collected distress data. If the Department wishes to modify these calculations or the indexes, this can be done using the database configuration area of the software. In addition, the index values can be calculated for any set of sections desired. A common scenario is to calculate the index values based on the pavement set of sections used for data collection and then transform these values to management sections.

5.2. How will the system perform Percent Cracking computation – dTIMS is currently set up in the Department’s environment to calculate Percent Cracking according to the Department’s requirements. dTIMS can continue in this manner or if the Department decides to change this requirement, then dTIMS can be configured in various ways to perform custom calculations. dTIMS formula transformation object and expressions can be used to perform any custom calculations.

5.3. How will the system perform Pavement Condition Rating (PCR), functional, and structural cracking index computation – dTIMS is currently set up in the Department’s environment to calculate the Pavement Condition Rating according to the Department’s requirements. dTIMS can continue in this manner or if the Department decides to change this requirement, then dTIMS can be configured in various ways to perform custom calculations. dTIMS formula transformation object and expressions can be used to perform any custom calculations.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

5.4. System must combine Condition Index Values to an overall condition rating Good, fair, and Poor to generate the Maine PM2 Targets – dTIMS is currently set up in the Department's environment to calculate an overall Condition Index Value according to this requirement. dTIMS can continue in this manner or if the Department decides to change this requirement, then a new calculation method could be adopted. dTIMS can quantitatively calculate each individual metric and then transform the quantitative measures to a qualitative measure using formula transformations.

6. Analysis and Deterioration modeling

6.1 Pavement Condition Data Analysis – dTIMS can accommodate deterioration modelling at whatever level the Department desires. Modelling can be done at the family level where segments are grouped into families based on the criteria that is important for predicting future condition, such as, traffic load, pavement type, climate, soil, pavement strength, etc. Modelling can also be done at the individual segment or project level if desired and if there is sufficient historical condition data to support this. Deterioration models are the core component of dTIMS. Historic and current condition data are imported into dTIMS and are used to derive the future state of the asset over the desired analysis period. dTIMS is extremely flexible when incorporating exiting models and generating new models.

6.2 Bridge Data Analysis – dTIMS can accommodate a bridge analysis based on element level data and can accommodate deterioration based on Transition Probability Matrices (TPM). dTIMS can store element level bridge inspection data for each structure in the network. Each element can be represented in the database schema along with its condition state inspection data. This data can be used in this manner or alternatively, can be transformed to the structure level. Either the element level or the hybrid approach is feasible in dTIMS. Regardless of the method, the condition state data can be predicted into the future using TPMs.

7. Optimization

Life Cycle Cost Analysis or LCCA is widely used to compare different policies for building, maintaining, or improving assets by estimating the future costs resulting from alternative policies. The process of LCCA will help support the Department in making effective purchasing, maintenance, preservation, and replacement decisions by weighing the costs and benefits of these decisions against one-another. An agency with many assets under the agency's jurisdiction must consider using an LCCA approach to manage its assets to reduce costs and provide sustainable infrastructure management.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

LCCA is concerned with predicting the future. It is a premise, when evaluating alternative maintenance policies, that assets deteriorate over time and most LCCA require some means of predicting this deterioration and the effects of maintenance actions on the rate of deterioration.

In pavement management, the service level of a pavement (as experienced by road users) is expressed by some form of index which changes with time, traffic, and applied maintenance and rehabilitation. The owner has control over the level of service (by spending money) while the user is also affected by it (and incurs different costs depending on the service level).

The aim of the LCCA is to find a single strategy for each part of your asset network among the many that have been evaluated in terms of life cycle costs to owner and user. This is done using an optimization procedure in which two elements are considered:

- Something which one wants to maximize – objective function.
- Something which limits the choice of the objective function – resource constraint.

Where there is a resource constraint, typically in the form of a series of annual budgets, the optimization process becomes much more complex as strategies for one element are competing with strategies for other elements for the limited resource. When considering many elements, each with multiple alternative strategies plus multi-year resource constraints, the mathematical process is immense, and dTIMS will consider all the possible combinations of strategies that are available and find the best one that meets the resource constraint. To achieve this, dTIMS employs a Heuristic Optimization method (often called the Efficiency Frontier method).

The most popular heuristic optimization technique used by agencies is called Incremental Benefit Cost technique. This approach determines the most incremental benefits per dollar invested. The incremental benefit-cost ratio is defined as the ratio between the increase in benefit to the increase in cost between successive strategies.

dTIMS can assist with a life cycle cost analysis by allowing a comparison of more frequent lighter treatments that are less costly to less frequent heavier treatments that are more costly but provide higher benefit.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Every treatment in dTIMS has a decision tree that contains the business rules that an agency uses for the application of that treatment. Many of the rules are based on levels of service. These rules could incorporate a minimum acceptable level of condition such that the treatment is applied at or before minimum threshold is reached. All decision trees in dTIMS are completely configurable to accommodate a minimum acceptable level if desired and factors such as the HCP and Urban/Rural status can be incorporated.

There is a process in dTIMS called dFRAG that can be used in one of two ways:

- The first is called auto sectioning where you would define a set of criteria to generate a set of sections based on those criteria. This is done prior to running the LCCA.

- The second is called auto programming which is done after the LCCA. In this method, you would again define a set of criteria but in this case, it would be to combine smaller sections and work programs into larger ones to make them more economical and practical.

The Department is currently not using this feature in dTIMS, but it does exist in their version of the software and can be configured if desired.

Deighton's dTIMS BA will still use IBC (incremental benefit-cost analysis); however, supposedly multi-objective optimization is in the works and should be coming out in the next release.

Safety Index can also be a part of optimization, to level out the score between roads with low AADT vs. roads with high AADT.

8. Mapping

dTIMS BA supports the ability to map data and display values against network elements. dTIMS supports Bing (Aerial, Road, or Hybrid views) and OpenStreets maps. All mappable content in your database can be displayed on the dTIMS map (for example, tables, atributes, and expressions). Each of these objects can be displayed as a separate layer on the map. All maps are configurable and can be saved and shared.
In addition to the internal mapping capabilities, dTIMS allows users to display maps that have been created in ESRI by integration through ESRI's Web Feature Services that are published through ESRI's ArcGIS server. The Web Feature Service settings will enable dTIMS to read and query data that resides in the ArcGIS Geodatabase.

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Layers can be added by selecting the appropriate layer type in the Add Layer menu. Data that resides within dTIMS can be mapped by Attribute Range, Attribute Table Code, Construction Program, Table, and Unique Value.

Any table that has geometry can be exported to a shape file (SHIP) or a KML file. A table must have the geometry feature enabled to be able to export to a SHP or KML file. This feature is enabled in the database configuration part of dTIMS.

Microsoft Power BI is needed to be able to display maps in the dashboard.

9. Reporting

The Hub, along with its enhanced dashboards will empower the user to align all the pieces of their data and tell the story that is hiding beneath it. The Hub is the main page for all the assets. It displays a clear picture of the magnitude of the assets while also storing every piece of relevant information in one place. The summary page is where the Department will be able to get a clear overview of the asset, displaying inventory data, distributions, or historical data. Here the Department will be able to view all the information that categorizes the asset and sub-divides the information in it.

The Department will be able to analyze historical information and current distributions of traffic, condition, or previous treatments – this page is for anyone to understand. Each asset will be connected to its specific reports & dashboards. These are tailored to display the key information decision makers need without losing the ability of drilling down into the data to give insights to the Department.

The key insights page, aimed towards the Department, will display statistical data about KPIs and provide the ability to drill down into the detailed data behind.

The funding page will display information related to the budget analyzed along with the impact on the assets. In this page the Department will fully understand the relationship between the budget and KPIs.

dTIMS has extensive reporting capabilities. Built into dTIMS are Program Cost, Treatment Cost, Treatment Length, Condition Distribution, Travel Distribution, Budget Comparisons, Cross Asset Results, Review and Adjust, and the Strategic Analysis Module. Alternatively, dTIMS has custom pivot table functionality to build custom reports to suit the Department’s needs.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Budget Comparison – this chart allows to compare multiple budget scenarios.

Average Condition – this chart shows how the average condition of your network changes over time for each budget scenario. The average network condition is calculated using the weighted average at the end of the year of the condition of all elements in an asset.

Length in Backlog – this chart analyzes the two elements in the poorest condition (called the backlog) based on the condition distribution category ranges set for the analysis variable.

Cross Asset Optimization – is mainly used to distribute additional funds between different regions or assets. The basic allowance guarantees that every region, type of asset, or road category receives a basic amount of money.

The Strategic Analysis Module (SAM) automates the creation of several budget scenarios and provides necessary information for decision making on a strategic level. Funding is determined by the maximum, minimum, and number of intervals in between.

10. NBI Data Compliance

dTIMS BA does and will comply with the proposed FHWA changes for SNBI.

11. Implementation Services

Deighton uses a phased approach during any system implementation.

In this case however if Deighton is successful, dTIMS BA system is already in place for both PMS and BMS and hence, it does not need to be re-developed as bespoke system. Deighton is not recommending a complete re-do of the PMS and BMS system and our pricing reflects this.

Overall Approach – as the incumbent PMS and BMS provider, we recognize the current PMS and BMS are set up according to the Department's business rules and functioning since Deighton and the Department have been working collaboratively together for many years to develop the two systems.
However, a system is never perfect and never complete and to that end, Deighton is recommending taking a fresh approach to both systems. Deighton will use an experienced dTIMS and PMS/BMS subject matter expert (Guru) to perform a system audit.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

This audit in essence is to review the Department's system with a fresh set of eyes and compare the current PMS and BMS against the other 24 State DOTs that use dTIMS in the US as well as other leading global agencies. Deighton will document best practices used by these agencies and evaluate the Department's current systems against these and make recommendations to address any gaps between the two. There are hours allocated in our pricing table to implement as many recommendations as possible.

The pricing table does allow for an annual amount to attend DUC (Deighton's User Conference) or a regional Peer Exchange (PE). DUC/Peer Exchange DUC is Deighton's Annual Conference, and it is held in June/July of each year at Deighton's office in Whitby, Ontario. Deighton will continue with a hybrid model adopted during the 2020 Pandemic for the foreseeable future which allows for in person attendance and/or virtual attendance. DUC is approximately 4 days in duration. Deighton also typically hosts 4 Regional Peer Exchanges globally each year and one is always in North America – usually in the US. These are shorter in duration, usually no more than 2 days and the content are more specific to the Region it is held in. This allowance can also be used to allow for more attendees at DUC or the Peer Exchange. This allowance will cover reimbursements of flight, accommodations, registration, and transportation to and from the airport for attendance at DUC and/or regional peer Exchanges as the Department sees fit up to but not exceeding the amount in the pricing table.

Solution Design – the activities associated with this involve gathering business requirements, design documents such as functional and system design and developing sign-off criteria to indicate client acceptance. Key deliverables:

- Confirm Business Requirements – this is one of the first deliverables in this phase. This captures the goals and objectives of the project as well as the associated business processes to ensure Maine DOT's needs and desires for the project are in line with the intended system design and outcomes.

- dTIMS System Audit & Discovery – Deighton recommends that a PMS and a BMS system audit led and conducted by the Deighton dTIMS Guru occur during this phase. The intent of the Audit is to thoroughly evaluate the PMS and the BMS independently. Deighton also recommends that the system audit be repeated at the start of each 3-year cycle in the 9-year contract. Deighton has provided pricing for the first audit and for ad hoc hours for the first three years. Subsequent audits and ad hoc hours are not included in the price table.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

System audit consists of three levels:
Level 1 – this review level provides a general operational review of the systems. This review will look for unused objects (tables, expressions, etc.), lack of naming convention, lack of object documentation, any general inefficiencies, any underutilized software features, and this will be documented.

Level 2 – this review level looks at the maturity level of asset management for each asset class by comparing the current asset management practices against best practices within the global Deighton user community as well as the asset management industry at large. The aim of this review is to establish an Asset Management Maturity (AMM) score for the current PMS and BMS.

Level 3 – this review will take the results from the Level II review and build out a roadmap on how and when to implement the recommendations to increase the AMM scores and the overall efficiency and accuracy of the system results. Specific data sources and techniques will be outlined in this review. Each year, a new AMM score will be developed so that the Department can see their asset management practices increase and know exactly how to continually improve the system for their stakeholders.

- Functional Requirements – the outcomes of the above review and discovery activities in terms of dTIMS system functionality requirements to achieve the business needs for Maine DOT will be detailed in the Functional Requirements Document (FRD). The document serves the purpose of a contract so that the client can agree what they deem acceptable for the capabilities of dTIMS. The FRD will take the results of the BRD and Audit and capture the dTIMS BA system changes that may be required to implement the recommendations. This document becomes the blueprint for the dTIMS implementation team.

- User Acceptance Testing (UAT) Script – it is a phase of the software configuration in which the dTIMS setup is tested by its intended audience. The goal of UAT is to ensure the dTIMS BA configuration performs as intended to specifications and is carried out by client users.

Solution Implementation – the activities associated with this involve the implementation and configuration of any changes into dTIMS BA according to the design documents. It is during this phase that the previous design documents and the results of the audit are used to implement the recommendations up to the level

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

of ad hoc hours in the pricing table. If additional hours are required, the Department and Deighton will have a discussion on how best to accomplish this.

Solution Delivery – the activities associated with this involve the delivery and deployment of the final solution to the client, training, and user acceptance as well as project hand-off to the client. Final sign-off criteria are developed to indicate client acceptance. Since dTIMS BA is already deployed in Deighton's Cloud environment, there will be no or minimal deployment activities. The bulk of the activities in this phase will be training and UAT.

Deighton recognizes that clear and well-defined milestones and regular communication with the Department team will support the achievement of project deadlines and will be a key component of the success of the overall project. Upon award, and prior to the execution of an agreement, a project kick-off meeting will be conducted to confirm the scope of work, deliverables, and timelines, to review the proposed project methodology, and obtain any relevant data. Key factors that will have a significant influence on the success of the project such as budget, schedule, project risks, and risk mitigation efforts (as mentioned previously) will also be discussed during this meeting. Key team members will be introduced, and lines of communication established.

The project will be designed and implemented 100% by the Deighton Implementation Team. During the initiation meeting, the level of desired Department involvement in the project will be discussed.

As part of the agreement, training is provided to the team members who are groups of users employed by the Department. The development of engaging, interactive, and tailored training materials is the key to ensuring the Department's users are motivated and actively participating in the learning process.

Deighton believes that no two users will learn or retain training the same, so we utilize a blended learning approach to training. In a blended learning environment, users would participate in online instruction, often using digital technologies to complete assignments, interact with peers and trainers, and receive feedback.

The Deighton University is your gateway to dTIMS eLearning. Convenient and flexible access to learning is one of the key advantages of eLearning in the corporate training environment. Courses can be accessed anytime, anywhere from a mobile device, laptop, tablet, or desktop.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Deighton certainly hopes that the Department will once again select dTIMS as the software of choice for the PMS and BMS and thereby minimize any transition differences since there will be no significant application change. However, even if the Department continues their use of dTIMS, there may be changes in the configuration that may result in differences between the “before” and “after” system.

Deighton has found the best way to allow stakeholders to adjust to the differences is to first document both the “before” and “after” decisions and clearly explain the reason for the change, preferably with examples. Also, if the difference is too large to accommodate all at once, a staged approach might be the best option. Using this approach, the whole plan should be laid out so stakeholders are aware of what is coming but then each stage should be outlined along with the timing and proposed ramifications of each stage.

12. Customer Support

Deighton offers our clients multiple outlets to continue to learn and communicate with Deighton, as well as their fellow dTIMS users. Deighton offers online tools such as the Support Portal, virtual webinars/workshops, Deighton University, and Deighton Hosted Events.
The Deighton support portal provides user access to the dTIMS knowledge base and ticketing system. Here you can find articles and FAQs for all areas of dTIMS. It also has the Release Notes for new and previous releases.

13. IT Hosting Provision

Microsoft Cloud

14. Caveats and Limitations

Deighton utilizes the high-availability and georedundant public Microsoft Azure Cloud hosting services. Included in our higher-level SLA (not in SLA Level III), we do provide an availability report / dashboard including unplanned outages.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 12-01-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

APPENDIX G

Deighton responded "**will meet requirement as stated**" to ALL 32 questions in Appendix G (with no additional comments).

SLA and Uptime and Unplanned Outage Report
Deighton uses Microsoft Azure Web Services (Azure) to provide its Product via a cloud-based storage application and offers the possibility to store a virtually unlimited amount of data with guaranteed data durability of 99.999999999%.

Deighton will provide two nines (99%) availability to the hosted services during agreed business hours. If the average number of "Business hours" per week is 40. Then the server will be down for no more than 21 hours per year.

IT Policy Form (File 4)
Deighton Associates Ltd. has and still plans to adhere to all of the Department IT requirements.
Deighton does not currently do a full Disaster Recovery Exercise within 1 year of go-live and repeated annually thereafter. This is something that we (Deighton Associates Ltd.) can begin to do while meeting the Department's requirements.

Deighton currently does not fully comply with *4.2.7.3. Any CSP personnel (employee or contractor) with access to the data must have successfully passed an FBI fingerprint-based background check, signed a Non-Disclosure Agreement, and successfully completed the CSP's Security Awareness Training*, but does complete regular background checks on all new employees.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience
Purple from demo
Appendix C - Qualifications and Experience
Company has been around awhile

- 1983 product, (1986 incorp) – 40 yrs
- Ontario plus UK, N Ireland, Austrailia

No real idea how deep personnel coverage or expertise is

- Risk of losing a key person but 120 people, many are still learning the system

Infrastructure management systems specialization

- world leader in providing asset management systems
- AND asset management expertise/
- Government focus / Transportation focus / international pushes innovation/flexibliity
- dTIMS is a major product
- ESRI business partner.
- COTS not custom builds but some customizations incorporated

High experience in this sector

- >100 system dTIMS clients

25 US states (the largest market share of US DOTs) including all New England All 6 New England States use Deighton so knowledge sharing opportunities locally

- Roadway and Bridges cited
  - Of these Bridge management by approx. 7 US DOTS, another 5-6 out of US. (2 currently in Australia) = globally 12ish.
- Expertise in meeting FHWA requirements
- Familiarity with Department >30 years. Used here since 1990 with dROAD. 2018 dTIMS BA, 2019 added bridge, CLS Corridor analysis.
- highway and bridge engineering expertise
- ESRI Roads and highways experience

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

Appendix C – Litigation x
Appendix C – Subcontractors x
Appendix C – References

- **INDIANA –** the bridge rework was done in last 5 yrs, longterm customer, effort has similar needs.
- **NH –** Continuous relationship since 1995, effort has very similar needs. May not be a project within last 5 yrs**.**
- WV – continuous relationship since 1992. Very similar to MDOT needs May not be a project within last 5 yrs**.**
- Change reference – Georgia for pavement striping legacy system to dTIMS MaineDOT team– mostly satisfied, although can be slow to deliver fixes to major new features like Maps.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – provided exactly what was requested. Low-Moderate overall business risk. Accord paperwork included.

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   - dTIMS BA 5 named users. No limit on asset classes or counts.
   - 100 companies using it, mostly state or fed DOTs
   - **MS Power BI licenses will needed if we decide to use new reporting/dashboard HUB features --** due to change in MS Power Reporting**,** certain features now require added licenses. We experienced this with other projects too. These licenses are not needed to meet the RFP requirements.
   - **ENVIRONMENT CHANGE TO ADD A DEV ENV to meet our requirements-** The propose a change to current env setup, I think is important. . Dev (for testing/config), Staging (current year analysis), PROD (reporting). This gives them a better place to test than the current "sandbox" which is not using our data/configuration.

2. **System Maturity**
   Still growing and modernizing product

3. **Transportation Network and Asset**
   Base table, Ideally kept in sync with LRS

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

Asset agnostic – supports any asset class with its own strategies and budge scenarios

4. **Inputs**
   Import function, drag and drop or file upload. Manual or batch. Direct from an external file to DB. Various file formats accepted. Condition Index Values
   Data checks prior to data commit.

5. **Condition, Analysis and Deterioration modeling and optimization mapping**
   Already configured and working and understood by Dept. Will let them speak to fit.

   Multi-objective optimization in Appendix G – how do you address this? Currently we build an overall composite index with those objectives then optimize on the composite index (such as safety or risk based on multiple factors). Coming soon – a true multiobjective optimization where you put in your true objectives and dTIMS can handle that. Prerelease stage now.
   That causes its own issues as there are many different ways to satisfy multiple objectives, may end up with MORE infeasible solutions. For example constrain budget and constrain spend, and they then put out a less optimal solution as the constraints compete.

   If we decide to move away from IBC optimization would it be a change to BA? The Optimization in dTIMS **IS** IBC only. That will change with multi-objective optimization which is linear programming optimization.

8. **Mapping**
   Mapping – We have to import your ARCGIS into dTIMS. Then they can create the maps. We have frustration… no one could get it working- We want to filter assets by attribute such as CSL, HCP.

9. **Reporting**
   SQL access, and canned reports
   Dashboard HUB – Is the hub in Production? No…in development. Currently building out some pavement-based use cases for this technology

10. **NBI Data Compliance**
    Supported now. Does not address approach/timeline for the SNBI

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

11. Implementation Services

, Deighton is recommending taking a fresh approach to both systems. Deighton will use an experienced dTIMS and PMS/BMS subject mater expert (Guru) to perform a system audit. This audit is explained below but the essence is to review the Department's system with a fresh set of eyes and compare the current PMS and BMS against the other 24 State DOTs that use dTIMS in the US as well as other leading global agencies. Deighton will document best practices used by these agencies and evaluate the Department's current systems against these and make recommendations to address any gaps between the two. Then has blocks of hours for consulting and implementation of recommendations as desried.
Looks like approx. 10 weeks budgeted. Deighton has allocated ad hoc hours in our pricing for this effort. If the LOE is greater than the allocated ad hoc hours, the Department and Deighton will have a discussion on how to resolve this.. Configuration is in scope – but coding is out of scope, their history with slow delivery of map fixes is related to coding enhancements not configuration work.

Does the proposal include moving to the Hub? Report inventory analysis might propose use of the Hub as an enhancement option for a specific situation. Any BI licenses required for the enhancement would be based on your new report requirements and would have to be drawn down from the enhancement hours allowance.

DO THEY THINK THIS IS REALISTIC ESTIMATE OF THE WORK REQUIRED FOR ALL THIS WORK? The Days in Milestone table do not nearly match up to Gannt chart, Cost Proposal, or Tasks described. E.g Solution implementation – **approx. 6 weeks labor allocated by funding and 7 days in key milestones - . --** They confirmed KEY MILESTONE TABLE Level of Effort *is* wrong. They estimate 5 weeks labor.

12. Customer Support

24x7 support portal or email, clear SLA sever immediate response, resolution in 5 business days. Good in my experience.
We can enter tickets to request software enhancements but delivery can be slow.

13. IT Hosting Provision

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

MS azure Cloud.

Event	RTO SLA	RPO SLA
Host Failure	10 min.	Last backup.
Data Center Failure	2 hrs.	Last Backup
DR From D2D Backup	6-8 hrs.	Last backup.

14. Caveats and Limitations

No concerns

APPENDIX G

SLA and Uptime and Unplanned Outage Report

Provided, No issues.
License agreement – no issues.

IT Policy Form (File 4)

Although the response is a bit off on NIST, they have passed CSO review already. They noted their execeptions to the policy we can apply for OIT waiver for these items, esp as no confidential data or SOM system access involved..

COSTS

Looks like the re-audit after first time is at no added cost.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C – Qualifications and Experience
Founded in 1986, has 25 state DOT clients, as well as cities, counties, and foreign clients. Has done highway, bridge, and other assets for state DOTs. Ability to work with data from old and new truck.

Appendix C – Litigation
None

Appendix C – Subcontractors
N/A

Appendix C – References
IN – bridge and highway with ESRI integration. NH – bridge and highway for preservation, rehab, reconstruction, and TAMP plans. WV – highway and bridge, adding assets, also providing training and model enhancements to staff.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   dTIMS BA SaaS, no limit to users or asset counts, 100 agencies including 25 state DOTs, will require Power BI for custom dashboards, SaaS on MS Azure is web-based, suggesting Development, Staging, Production environments, errors are published and downloadable.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

2. **System Maturity**
   Developed in 1986, reworked in 1990s. SaaS in 2019. 1-2 releases per quarter.

3. **Transportation Network and Asset**
   A base table stores the network, and other tables are based on the base table. There are options to integrate with ALIM so that the base table would stay in sync. Pavement and bridge are each asset classes, allowing for separate analysis and optimization strategies.

4. **Inputs**
   Multiple import methods and file types supported, including error reports. New attributes can be added and defined by the user.

5. **Condition Index Values**
   Calculations done by formula transformations, also allowing for transformation between sections. Many of these calculations are already established.

6. **Analysis and Deterioration modeling**
   Deterioration modeling can be done at the segment, project, or family level. Support works with the Department to determine the best modelling to help achieve network targets.

7. **Optimization**
   LCCA analysis done using incremental benefit cost technique to find projects with most incremental benefit cost within budget constraints. Decision tree could be configured to include MTC as a parameter. dFRAG could be used before LCC and auto programming (not currently used by department) after LCC.

8. **Mapping**
   Supports the ability to map data on assets against network elements with defined geometry and is able to integrate with Esri Web Feature Services. Any table with geometry can be exported as .shp or .kml.

9. **Reporting**
   The Hub is a comprehensive built in reporting platform. Application can run budget comparisons of sections and defined parameters. Have some canned reports and will build out others in the implementation. Would prioritize and bill on ad hoc hours to build out.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Deighton Associates Ltd.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

10. NBI Data Compliance

Does and will comply with the changes.

11. Implementation Services

16 week implementation, but as it is already implemented, this would be a process of enhancing and improving on current setup, including comparisons of 24 other DOTs. An annual conference with peers is included. Multichannel online training available for different skill levels. Want to do an audit to cleanup, add best practices, streamline, underutilized software features, and innovate.

12. Customer Support

24 hours annually with ticketing, tutorials, courses, and more. Tickets are handled by the Deighton support portal. Uses Hosted SLA Level III.

13. IT Hosting Provision

Microsoft Azure Cloud hosting. 99% availability to hosted services.

14. Caveats and Limitations

Microsoft Azure Cloud hosting.

APPENDIX G

31/0/0.

SLA and Uptime and Unplanned Outage Report

Long attached document

IT Policy Form (File 4)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Decision Optimization Technology–United States (DOT-US)
DATE: 11/28/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments: <</<
Organization Qualifications and Experience

Appendix C - Qualifications and Experience

DOT-US is a partnership between Hanson Professional Services Inc. and Infrastructure Solutions (Software), Inc., established in 2021. DOT™ uses the result of more than 10 years of doctorate-level research on advanced large-scale optimization methodology. DOT™ optimization results are scientifically proven and mathematically guaranteed best possible solutions. combination of engineering and financial consulting backgrounds and having written hundreds of asset management plans for governments over many years

Appendix C - Litigation

None.

Appendix C – Subcontractors

Blank response.

Appendix C – References

Houston, TX: 16,000 lane miles of roadway and 1400 bridges.
Rockford, IL: 792 centerline miles of roads and 140 bridges.
Tallahassee: 700 centerline miles of roadway system and a Street Assessment
No changeover reference provided.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

No D&B report provided; Certificate of Liability Insurance (in Hanson's name)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Decision Optimization Technology–United States (DOT-US)
DATE: 11/28/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   DOT™ offers unlimited user licenses for State employees. The software modules provided to the State would be DOT™ Transportation and DOT™ Structures.
   70 systems are using DOT™ Transportation or DOT™ Structures
   DOT™ is a cloud-based software (SaaS) hosted at a US Microsoft data center

2. **System Maturity**
   ESL, Discrete Deterioration Modeling, Level of Service constraints, predictive analysis with nonlinear regression analysis, Feasible Relaxation, Data Gap Analysis

3. **Transportation Network and Asset**
   DOT™ is capable of consuming road network extracts from hosted feature layers through our API integration, or directly importing the road network and its attributes in various formats such as GIS shapefiles, Geodatabase, or Excel.
   Provides complete configuration and customization options to develop detailed asset registries and decision models for various asset classes.

4. **Inputs**
   easily importing data using Excel spreadsheets or a GIS shapefile. When exporting reports from the software, file formats such as PDF, Word, csv and Excel formats are available.
   User has the ability to customize and add new data fields and add new asset entry.

5. **Condition Index Values**
   If a Condition Index Calculation is essential, we will customize DOT™ as component of our continued enhancement program, without charge to the State.

6. **Analysis and Deterioration modeling**
   DOT™ offers element-level classification and analysis for bridge networks.
   DOT™ features a project bundling tool. This allows for grouping element-level interventions for specific bridges across the planning period.

7. **Optimization**
   Standard Optimization, Target Optimization, Budget Scenario, Levels for Treatment Strategies (LOS).

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Decision Optimization Technology–United States (DOT-US)
DATE: 11/28/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

"Operational Efficiency". The objective of this functionality is to build an actionable rehabilitation plan by considering the cost efficiencies gained by geo-bundling projects to minimize the movement of labor, equipment, and material.

8. **Mapping**
   Users can visualize Condition, Criticality, and Risk information using the GIS View page. Users can easily publish inventory or capital plan maps to the ArcGIS portal.

9. **Reporting**
   DOT™ provides a variety of reports that cover all key outputs and aspects of investment planning. DOT™ produces presentation ready reports, charts, tables and maps, because it doesn't matter how good your planning is if you cannot effectively communicate it to your stakeholders. Ability to filter reports.

10. **NBI Data Compliance**
    Users have the flexibility to update and adjust attributes themselves via our user interface.

11. **Implementation Services**
    Five months to Go-Live.
    Provide user manuals, webinars, video tutorials, one-on-one training sessions; Zoom training sessions and learning library.

12. **Customer Support**
    M-F 10 am - 6 pm Customer Services Support Desk communicates through email and phone. Ongoing training and support as part of our annual maintenance program.

13. **IT Hosting Provision**
    Microsoft Azure.
    RPO = 30 minutes - 1 hour; RTO = 2 hours

14. **Caveats and Limitations**
    Cost proposal limitation.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Decision Optimization Technology–United States (DOT-US)
DATE: 11/28/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

APPENDIX G
10. This will require some customization. A rough estimate suggests under two months of work, including testing. Our intention is to add this feature as part of our commitment to continue application enhancement, so it will be provided without charge to the State.

11. This will require some customization. A rough estimate suggests under six weeks of work, including testing. Our intention is to add this feature as part of our commitment to continue application enhancement, so it will be provided without charge to the State.

15. We currently export our reports in various formats, Excel (.xlsx), Word, CSV and PDF. DOT™ doesn't currently provide .accdb.

SLA and Uptime and Unplanned Outage Report
99.9% uptime

IT Policy Form (File 4)
No issues noted.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
Decision Optimization Technology – United States (DOT-US) is a *partnership* between Hanson Professional Services Inc. and Infrastructure Solutions (Software), Inc., *established in 2021*.

DOT™ uses the result of more than 10 years of *doctorate-level research on advanced large-scale optimization methodology*. It uses the latest innovations in optimization procedures, such as AI-inspired optimization methods and advanced mixed-integer programming techniques, within an optimization algorithm that is tailored towards analyzing large-scale combinatorial problems. The result has been an optimization technology with the capability of performing a true multi-constraint, multi-year analysis on various asset networks with thousands of assets and components within minutes based on *40 real-life government case studies.*

With DOT™, a user can not only specify a budget strategy, but also a multitude of other parameters such as unit cost and availability of many different treatments, minimum serviceability criteria and deficit thresholds, detail prioritization policies considering physical attributes and community benefits.

DOT™ software will take into consideration a wide range of physical or socio-economic attributes that incorporate relative importance and criticality assessment policy established uniquely by the user.

Unique to DOT™ software, the 'Mixed-Assets Optimization' enables users to consider the timing of interventions for a group of assets based on proximity and asset characteristics, to find the optimal coordinated timing for the interventions.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
Available in DOT™ software – model deterioration of assets individually and by configurable group of structures, forecast future needs of asset type, use deterioration models for life-cycle cost analysis, view condition rating, project design tools allow for manipulation of forecast models.

DOT™ software employs a unique operational efficiency analysis that refines treatment selection by considering the economies of scale and geospatial proximity relationships of assets with similar needs. DOT™ applies a unique geo-bundling process as part of its operational efficiency analysis (OEA) that results in significantly less fragmented operational plans that minimizes mobilization costs.

Ability to include socio-economic & community impact factors – the objective is that the planner can positively influence the analytical process to meet safety, impact to service, political or various stakeholder objectives in a workable and actionable plan.

DOT™ comes with a host of unique default built-in models for a variety of assets. The built-in models were created using information from client surveys, construction contractors, engineering companies, and literature reviews.

Element classification provides the ability to specify a hierarchy for various elements or components of an asset. This feature is extremely important to perform a realistic and detailed analysis of networks that include multiple components. DOT™ provides analytical and data access capabilities at different levels of asset hierarchy with the ability to perform a system-wide element- level analysis on very large-size data sets.

DOT™ Transportation Module:
In the design of DOT™, the objective was to build an intuitive analytical tool that used sound engineering principles and performance models rather than following the conventional path of relying on simple straight-line degradation and limited treatment options. Extensive research and development occurred, and professional pavement engineers worked for 3 years to develop a *multitude of road degradation models based on traffic characteristics, surface types, soil conditions, functional classes*, etc.

DOT™ Structure Module:
Primary focus is on bridge and culvert assets. The Bridge module can use various rating systems at bridge-level or detailed element-level inspection datasets. Default element classification and inventory attributes are implemented with compliance based on recording and coding guides for the structure inventory and appraisal. *The element classification functionality of DOT™ provides the ability to specify a hierarchy for various elements or components of a Bridge.*

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Appendix C – Litigation
None

Appendix C – Subcontractors
N/A

Appendix C – References
City of Houston, TX – implementation of Decision Optimization Technology Transportation and Bridge Modules to help maintain the City's 16,000 lane miles of roadway and 1,400 bridges. DOT™'s customizable platform enables Houston to easily analyze its life cycles, include social justice and community impact policies into its plans, reduce the risk of failure on vital assets and extend the service life of its road and bridge network. The software assists planners with decision-making, such as determining the right treatment at the right time and helps identify neighborhoods and street segments for consideration in a multi-year pavement management program that includes preservation, repair, rehabilitation, and reconstruction recommendations.

City of Rockford, IL – implementation of Decision Optimization Technology Transportation and Bridge Modules to help maintain the City's 792 centerline miles of roads and 140 bridges. Prior to implementing the DOT™ AIP solution for their road and bridge networks, the City of Rockford, Illinois' primary roads maintenance policy was resurfacing, with not much consideration for pavement preservation. The city used in-house staff to perform observations along with PCI to formulate their capital improvements plan.

City of Tallahassee, FL – implementation of Decision Optimization Technology Transportation Module to help maintain the City's 700 centerline miles of roadway system and complete a Street Assessment. The scope of work relating to the DOT™ software included pavement management software implementation, pavement condition survey and pavement condition data analysis.

Only one DOT is using the system – Florida DOT district 15 only (there are 7 districts in FL).

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
We have initiated the application process for it and the certificate will be provided as soon as it becomes available.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F

1. **Software Proposed**
   DOT (Decision Optimization Technology)™ Transportation Module & Structures Module.
   DOT™ offers unlimited user licenses for State employees. The software modules provided to the State would be DOT™ Transportation and DOT™ Structures.
   70 systems are using DOT™ Transportation or DOT™ Structures.
   No third-party licenses are required for the operation of either module.
   DOT™ is a cloud-based software (SaaS) hosted at a US Microsoft data center in closest proximity to the State of Maine. Service delivery through a Microsoft data center delivers 99.8% availability.
   DOT-US offers both testing and production environments, along with the development environment, for DOT™ software.
   DOT™ incorporates field validation mechanisms to ensure that the information being entered into the software is in the correct format. *The software also has a dedicated Data Validation page that ensures no critical errors are outstanding on the inventory data, and error logging capability.*

2. **System Maturity**
   Version 4.0 – February 2020 – improved functionality.
   Version 4.1 – August 2020 – improved functionality and performance.
   Version 4.2 – October 2020 – performance improvements.
   Version 5.0 – March 2021 – enhanced customization capabilities.
   Version 5.1 – June 2021 – improved functionality.
   Version 5.2 – October 2021 – improved functionality.
   Version 5.3 – January 2022 – new product, improved functionality, and security.
   Version 5.4 – March 2022 – improved security and accessibility.
   Version 6.0 – September 2022 – mixed asset optimization (advanced analytics).
   Version 6.1 – February 2023 – advanced analytics and customizations.
   Version 7.0 – September 2023 – streamline integrations.

3. **Transportation Network and Asset**
   DOT™ is capable of consuming road network extracts from hosted feature layers through our API integration, or directly importing the road network and its attributes in various formats such as GIS shapefiles, Geodatabase, or Excel.
   Very large networks may require special setups for optimal performance.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

The system can integrate any attributes from third-party application using one-to-many mapping feature and attribute configuration panel.
The system supports creation of separate asset types and provides complete configuration and customization options to develop detailed asset registries and decision models for various asset classes.

4. Inputs

Inventory data, including community benefit and repair history information through a full integration with Esri and come CMMS systems. DOT™ provides a format for easily importing data using Excel spreadsheets of a GIS shapefile.
For exporting from the software, file formats such as PDF, Word, CSV, and Excel are available.
DOT™ inventory data is assembled in a complete, comprehensive, and fully editable repository, with details for each individual asset.

5. Condition Index Values

5.1. The proposed system must calculate Condition Index Values for International Roughness Index (IRI), Rutting, Percent Serviceability Rating (PSR), and Percent Cracking as required by FHWA for the HPMS submittal – typically, the calculations have been completed externally, before being uploaded into DOT™ as part of the configuration or updating process DOT™ is design primarily as an advanced asset management and investment planning solution, not as a condition index calculator.

5.2. How will the system perform Percent Cracking computation – if provided we upload this calculation into the DOT™ database as part of our configuration or updating process. DOT-US is prepared to modify DOT™'s functionality to calculate percent cracking values.

5.3. How will the system perform Pavement Condition Rating (PCR), functional, and structural cracking index computation – DOT™ is designed primarily as an advanced asset management and investment planning solution, not as a PCR calculator.

5.4. System must combine Condition Index Values to an overall condition rating Good, fair, and Poor to generate the Maine PM2 Targets – DOT™ combines condition index values to an overall condition rating of up to 5 states, each of which is fully controlled and determined by the user.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

6. **Analysis and Deterioration modeling**
   DOT™ software provides advanced predictive modeling using a nonlinear regression analysis process. The outputs of the analysis include all polynomial coefficients and the coefficient of determination.

   Doesn't seem to calculate from one length to another – intervention on the segment level.

   DOT™ offers element-level classification and analysis for bridge networks. Default settings align with NBI bridge element classification, both component and element hierarchies within DOT™ are fully customizable. In addition, DOT™ features a project bundling tool – this allows for grouping element-level interventions for specific bridges across the planning period.

7. **Optimization**
   Application enables the user to define multiple scenarios with different budget and policy settings, perform multi-year, multi-constraint (objective) optimizations on individual scenarios, and compare results in order to determine the best possible capital plan.
   The user has two options for their optimization mode – perform standard optimization or perform target optimization.
   Budget scenario – enables users to set various capital and maintenance budget constraints.
   Levels for treatment strategies – this enables users to refine their minimum serviceability considerations.
   Network subset – ability to analyze the subset of their network based on any one or a combination of attributes.
   Stop optimization – optimization process is separate from core data, if initiated by mistake, it can be easily deleted once the process is finished.
   Treatments – users can choose between a comprehensive list of treatments to be used/activated in their scenario.
   Criticality settings – users can define various policy scenarios.
   Project alignment – allows users to coordinate an effective timing of interventions across various asset types.
   Capacity Limit – users can specify capacity limits for the size of projects based on any unit of measurement for capital projects, specific treatment types, treatment methods.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

DOT™ enables users to set an allowable percentage (maximum or minimum condition threshold) for any performance class that can be below/above a certain condition level for any performance indicator level.
DOT™ has an exclusive feature called "operational efficiency" – geo-bundling projects to minimize the movement of labor, equipment, and material.

DOT™ uses true optimization, which is mathematical optimization process vs. IBC (cost-benefit analysis) which requires super computing power.
True optimization – optimum combination – depending on the network size it can take days to find a solution.
Treatment expressions – DOT™ uses decision rules – family classes.
Treatment methods – come with the impact models.

8. Mapping

Network GIS view enables users to visualize, access, and modify data on a map centric interface. ArcGIS integration allows users to easily publish inventory or capital plan maps to the ArcGIS portal/online for external analysis.

Very strong mapping features, including filter on road class.

9. Reporting

DOT™ provides a variety of reports that cover all key outputs and aspects of investment planning. These reports are linked to the customizable dashboard and charts.
In the upcoming version of DOT™, we're introducing direct integration with tools like Power BI to further enhance our reporting capabilities.

During demo it was mentioned that there are 10 canned reports.

10. NBI Data Compliance

DOT™ default bridge data models are based on the NBI, integrating seamlessly with systems like the FHWA and Info Bridge database. Additional custom configurations can be effortlessly managed through our Attribute Configuration features.

Element data analysis for bridges – big plus.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

11. Implementation Services

DOT™ is a Limited Partnership company using employees from Hanson Professional Services and Infrastructure solutions (software) Inc.

Project Management – project updates – 2/1/24 to on-going

Kick-off meeting – establish State's objectives – 2/1/24 (one day)

Establish AM planning process and parameters – establish file transfer protocols, request data – 2/5/24 to 3/25/24 (6 weeks)

DOT™ software setup and configuration – setup hosting services & website, pilot and test the software, modeling review, set up deterioration models, set up treatment cost models, test scenarios and budget – 2/5/24 to 3/25/24 (4 weeks)

Data acquisition, review, and assessment – data gathering, transfer, data validation & gap analysis, data repository setup, quality control & data sign-off – 3/2/24 to 4/29/2024 (4 weeks)

Data gaps meeting – review data gaps – 5/6/24 (1 day)
Data gaps clean up – gather missing data, update missing data, test site – 5/13/24 to 6/17/2024 (2 weeks)

DOT™ permissions, orientation and training – train Maine staff – 6/17/24 (1 day)

Go-Live support and monitoring – support as needed – 7/1/2024 to on-going

In the event that stakeholders require adjustments to align the new system's outputs more closely with the former system, DOT-US is prepared to assist.
Our support team offers extensive training and assistance to help users adapt to the new system.

12. Customer Support

Support hours are 10am-6pm EST during Monday-Friday.
DOT-US customer service support desk communicates primarily in English through email and phone. Any software related issues are promptly addressed. No response time provided.

No customer support tiers proposed in the RFP but mentioned during demo.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

13. IT Hosting Provision

Hosting on Microsoft Azure

RPO: 30 minutes – 1 hour of granularity in data recovery
RTO: The expected downtime duration for a specific Protected Instance configured for Azure-to-Azure replication within a given timeframe is 2 hours.

It's important to note that this duration can vary based on the specific Azure configuration and setup, and efforts are made to minimize it further depending on those factors.

14. Caveats and Limitations

Our services are confined to the deliverables and tasks explicitly outlined in the proposal.
$$ value include everything that was mentioned in the RFP. Customization is part of the services and would be done simultaneously with the implementation.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

APPENDIX G

1. All web components compatible with current version of Edge or Chrome we browser – **will meet as stated** – recommender browser for optimum experience is any chromium browser such as Google Chrome or Firefox.

10. Able to calculate Condition Index Values using mathematical functions including standard deviation and logarithms – **will meet with modifications** – this will require some customization. A rough estimate suggests under two months of work, including testing.

11. Able to roll up values and attributes from one segment length to different segment lengths when transforming data from one table to another – **will meet with modifications** – this will require some customization. A rough estimate suggests under six weeks of work, including testing.

13. Able to create new road segment by consolidating shorter segments of related data into a contiguous segments based on defined homogeneous parameters, such as collection routes, built status, and last treatment – **will meet as stated** – DOT™ incorporates geo-bundling process in its optimization workflow, which groups adjacent road segments into a continuous project for more operationally efficient recommendations.

15. Able to export tables to .accdb, .xlsx, and XML files based on user preference – **will meet with modifications** – currently export reports in Excel, Word, CSV and PDF. DOT™ doesn't currently provide .accdb and XLM. A rough estimate suggests under four weeks of work, including testing.

18. Allows users to define number of levels for generations of treatment strategies. Please state the maximum number of levels in the comments – **will meet as stated** – we are not 100% sure we understand the question; however, DOT™ is unlimited as to the number of treatments strategies that can be generated for any asset class.

22. Allows users to stop the optimization process after it has started – **will meet with modifications** – the optimization process is separate from core data, so users can continue working without impact to their productivity. DOT™ would require minor modification – under one week of work, including testing.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11-28-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

SLA and Uptime and Unplanned Outage Report
DOT™ has maintained 99.9% uptime, two scheduled downtimes for software releases and zero unplanned outages for the year 2023.

IT Policy Form (File 4)
DOT™ is hosted securely on Microsoft Azure, with a primary emphasis on ensuring the physical and environmental protection of data. Microsoft Azure's advanced data centers come with robust security measures to prevent unauthorized access and protect against environmental risks. Our implementation includes security measures such as Single Sign-On (SSO) for user access, user role-based assignments, TLS 1.2 for secure communication, encryption at rest for data integrity, and the utilization of Azure Defender for advanced security controls.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience
Demo notes in purple
Appendix C - Qualifications and Experience
Company is very young, in a way

- partnership between Hanson Professional Services Inc. and Infrastructure Solutions (Software), Inc., established in 2021 – a company in itself or Hanson or ISS?
    - Limited partnership, both of them will sign the contract as DOT. Their staff act as the staff. How is insurance is handled individually by each company.
    - **Experience prior to 2021? Already collaborating?** Started in 2019. Hanson around 65 years, focused on asset management.
    - ISI – 2007 start up, by 2017 writing up to 60 asset management planning writeups so started looking at tools. Licensed some awful software, 2014 could not find anything meeting his requirements so started building 2015. So 8 years old software package.
    - Based on website Hanson is a big engineering firm, wide ranging domains including Transportation.
- Mission of partnership is to provide a high-quality asset investment planning (AIP) solution.
- FDOT, Indianapolis, ARKANSAW DOT Bridge,. Sweden national road system but not mentioned in the proposal???

THEY CANNOT FOLLOW WRITTEN INSTRUCTIONS.
No idea how deep personnel coverage or expertise is

-

government asset investment planning specialization
Some expertise in this sector based on the flyer they inserted in their form.

- Based on optimization expertise/innovations such as AI, and compares it to prioritization methods
- Roadway and Bridges cited
- Address some FHWA requirements

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- highway and bridge engineering expertise used in deterioration model building
- No information about number of implementations to date - in services they have 6 clients.

Do they customize rather than configure? **Both.**

Appdendix C – Litigation x
Appendix C – Subcontractors x
Appendix C – References - **no timeframes offered.**

- **Houston –** Transportation and Bridge Modules similar needs 16,000 lane miles of roadway and 1,400 bridges. They provided - data verification on asset attributes prior to import, review of existing database decision trees and treatment types and development of a budget and target scenarios for use in client training
- **Rockford, Ill. -** Transportation and Bridge Modules implemented 792 centerline miles of roads and 140 bridges. With the help of DOT-US, the city prepared and reviewed multiple funding, treatments, and target scenarios to determine their best course of action for their roadway network.
- **Tallahassee -** Pavement Management Program and Street Assessment module implemented. Road condition survey was provided through a partner they did the presentation reports/analysis. DOT implemented Pavement Management Program, performed a survey, and provided pavement condition data analysis.
- **Changeover reference** – None

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – applied but did not obtain in time. Acord paperwork for Hanson – will need to validate this is OK with Risk Management if they are first pick.

PROPOSED SERVICES
Demo focused on FDOT
Appendix F -

1. **Software Proposed**

unlimited user licenses for State employees.
DOT™ Transportation and DOT™ Structures. With the license for these two modules, the State can manage the following asset types:: Transportation and Structures
70 "systems including 2 more underway (FL roads/water,ARK bridges)

Useless logical diagram
Missed the boat on the Work environment, they deal with user permission levels and test/prod/dev – they Offer 3 environments – Dev, Test, Prod. To completely separate and freeze the data we have to use Test vs PROD.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

Do not have error logging for uploads and data processing, just UI apparently. We do error logging during upload of data available in the UI, and detailed audit trails including status

2. **System Maturity**
   Actively maintaining and building out functionality inc base functionality.
   Completely developed over last 3 years.

3. **Transportation Network and Asset**
   How organized – not explained except his includes Route Name, Route Length (From and To), and Network Date
   We do not use ESRI LRS, will that be an obstacle?

   Restrictions on segments - >100,000 features cause perfmance issues
   Can integrate attributes with source systems.
   Can separate bridge/pavement fully, includes default configuration.
   - Data comes in from 100/mile, 10/mile, variable lengths, depending on source. This is typically done in pre-processing before data import. They can custom build a master GIS layer to rolls it into segment level data for example.
   - Any number of performance indicators. Condition data, community impacts, repair history. Crash rates, longterm plan factors, etc
   - Repair history – stores all work done on the system. The system utilizes historical repairs actively as part of the future recommendations and estimates of current conditions. So you can run a analysis that started in the past and utilitizes available history in it.
   - They have FULL HISTORCAL DATA MAINTAINED AT ALL TIMES. But that's the treatment it's not the historical asset data? Past condition data as well.

4. **Inputs**
   Integration with ESRI or CMMS systems, GIS shapefile or spreadsheets.
   Comes with default config which we customize
5. **Condition Index Values**
   We have to compute externally and load the system with them and they can build it in at no charge (just added risk). How do they project something that they can't compute?

   If a Condition Index calculation is essential, we will customize DOT™ as component of our continued enhancement program, without charge to the State

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

They can create the 2 condition ratings - DOT™ combines Condition Index Values to an overall condition rating of up to 5 states, each of which is fully controlled and determined by the user. Confusing.

6. **Analysis and Deterioration modeling**

   Treatment options - Out of the box models coud be good or bad.
   SETTINGS…no black box, all fully accessible to us to configure. They will configure for us in initial implementation.
   Analysis main factors are (Cost, level of service, performance and risk) went thru the options available.
   They can run a lot of scenarios in a single day, fast

BRIDGE – design type, design value, deck protections, etc. very detailed. Multiple condition indexes. Degradation modules – many available. For FL, bridge condition, deck condition, culvert condition. Can do analysis at element level.

7. **Optimization –**

True optimization engine = "does not allocate available budget purely based on asset condition, it looks at all the possible ways and finds the best possible combination of actions". Flexible planning horizons.
How different from IBC optimization – IBC is incremental cost/benefit analysis, they do not do that at all, and IBC has to be year to year. This takes EVERYTHING into account at once to find perfect combination of actions. This is highly sensitive to the size of problem, can get VERY complex quickly so it is too slow commercially til now. So it is focused on lowering the total cost of ownership.
Standard - Set up budget profile vs Target Optimization – e.g. eliminate all high risk bridges, and results in how much do I need to invest.
Computationally expensive. Can do it in MINUTES not DAYS. Few in marketplace because it requires large servers (cloud).
Studies over time to show how much better the value is to in terms of assets and costs. 8-16% improvement to network performance in condition ratings. So reduceds life cycle costs. Data driven budget.
Project Alignment – master plan requirements, like will do this road in 2025. Can ensure the output aligns with master plan requirements. So it will override optimizer recommendations for these. Can also exclude work in certain sections/timeframes. Can bulk load this.

For practicality –
Intervention coordination via 'Mixed asset analysis'. Unique geobundling of projects over a planning horizon, operational efficiency analysis for actionable and defensible plan more for linear assets. BRIDGES/Facilities handled by intervention coordination

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

feature esp element level analysis. Can set how close (e.g. 5 yrs of work). Would it look over the bridges too? Yes.

Result is Capital Plan, can mine in tabular or GIS or graphs. Will create work orders to another system if desired or other outputs for PROJEX whatever. Can fully consume work order data – costs, date of completion, etc. Directly linked to repair history. Can take over some of this work from other systems over time.

8. **Mapping**
   NetworkGIS feature, inventory or capital plan maps to the ArcGIS portal/online
   Direct integraton with ESRI ARCGIS platforms. Mapviewer-like. They can also dive into data repository of tabular data as well with a click. Saved queries, various layers inc asset, condition, criticality, risk. Risk maps by current condition or predicted condition so
   If you use the OTS ARCGIS integration, can export GIS data from tabular screens.
   Vision like UI with room for attachment of files.
   Can they add filters to the map views, such as Federal Class? Yes with the query filters.
9. **Reporting**
   10 Canned reports by the system and linked to charts/dashboards which have met nearly all user needs to date. includes ArcGIS based reporting as well. Nice tabular filters/manipulations and direct export. Showed us degradation analysis but can customize our own families. Some customers to go OTS for faster implementation.

   Intent to integrate with PowerBI in future.
   Can export mostly PDF, EXCEL, WORD.

10. **NBI Data Compliance**
    Any work to move from NBI to SNBI will be done by us, little to no support.

11. **Implementation Services**
    Waterfall -- 6 weeks deliver data they requested, 4 weeks set up and config inc testing, 4 week or more to address data still to be added, 2 weeks for resolving-discrepancies between systems, training 1 day, golive 7/ 1 so 6 months transition – seems very optimistic -- *Would implement before customizations were available*.

They estimate 3 months to build out the Condition Index value requirements listed. approx. 4-5 months for all added build work. This is not included in the implementation timeline; looks like the omitted 6 months in their timeline for the customizations? Very optimistic timeline.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
Planning/requirements analysis – "establish AM Planning process and parameters" fully described as a data transfer. 6 wks *No requirements definition*
Configuration 4 wks – no customization mentioned although they say there is 3-6 months worth. Tupically they estimate 1-2 months of customizations of logorythm etc. Part of the Phase 4 implementation. – we do each customization in parallel, entirely separate things. (*which would bring it to 3 months*)
No UAT

How much historical data is required to make this work – how many years of data?
Depends on what you want. There will always be errors in estimates maybe 70% good with a lot of data. We will need diverse data… Or use the out-of-the box models instead and transition later. The good number for more reliable are 3 points of historical data – 3 years. The more info the better. **Must have the work information as well or it will not work well.** There will be more outliers to be dealt with in any case.

Training described hard to fit in 1 dedicated day
They will collaborate to try to fix data gaps, and provide extensive training & assistance to help users adapt.

THEY DESCRIBED SOMETHING TOO DIFFERENT TO ACCEPT AS A "CLARIFICATON" in the DEMO:
Hybrid waterfall/agile – 1 phase at time. 1. Planning/initiation 2. Requirements analysis: talk our processes and establish key parameters using our requirements and their experts. (6 wks) 3. System Configuration, data migration/integration design, test plan design. (4 weeks) 4. Configuration/migration applied, custom development (3 months due to parallel development of each one?), unit/integration testing. 5. End user and admin training (1 day), UAT based on test plan we agreed to in advance; 6. GOlive support/stabilize (2 mo)

12. Customer Support

10:00 am – 6:00 pm Eastern Standard Time, Monday – Friday. Email to a person, phone not up to current standard.. Did not provide response standards .
Video tutorials, manuals, one-on-ones

How do they handle customizations – condition calculator mainly, the rest are configurations or standard customizations - For regular updates of software, they release for our testing, then transitioned to Production. Anything specific to us we would test.

13. IT Hosting Provision

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

azure RPO: 30 minutes – 1 hour of granularity in data recovery RTO: The expected downtime duration for a specific Protected Instance configured for Azure-to-Azure replication within a given timeframe is 2 hours. 99.7%. 99.9% actuals acc to demo

14. Caveats and Limitations

Our services are confined to the deliverables and tasks explicitly outlined in the proposal. Services or tasks not mentioned in the proposal are beyond the scope of this agreement and will require a separate discussion and agreement (and more I don't have issue with)– I am concerned that with the optimistic seeming approach and vagueness in roles and proposal deliverables, we could have scope/cost risks. The dollar values include everything described here. A lot more things that were not mentioned in the RFP we don't want caught off guard with substantial other requirements.

Very reasonable we would plan to cover one additional report, or other customizations they described in the proposal. A major integration would be extra.

APPENDIX G

They estimate 3 months to build out the Condition Index value requirements listed. This is not included in the implementation timeline - The customization for the condition calculator is included in the proposal.

Logrythms etc – custom developments are required for every agency, they will get the requirements, then build and develop.

Building XML/ACCDB approx. < 4 wk

Do not understand generations of treatments so may not be able to handlie it.- resolved in demo

SLA and Uptime and Unplanned Outage Report

SLA NO ISSUES. Offer discounts based on platform outages.

IT Policy Form (File 4)

No issues identified.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C – Qualifications and Experience
Collaboration of two companies, established in 2021. Tool created using a decade of PhD research, but experience was a bit vague on details of experience.

Appendix C – Litigation
None

Appendix C – Subcontractors
Blank

Appendix C – References
Three cites (16,000 lane miles, 792 centerline miles, and 700 centerline miles), one including pavement condition collection. Able to include social justice. No Changeover Reference.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   DOT Transportation Module (Asset Investment Planning) and Structures Module, licenses for state employees (allowing management of 19 asset types), 70 systems use DOT including at least four major American cities, Sweden, and two states currently with trials underway. No third-party licenses required, cloud based Saas,

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

testing, production, and development environments, data validation mechanism, but no mention of processing error notification.

2. **System Maturity**
   Section 2.1 was blank. In past three years: versions 5, 6, 7, and 8.

3. **Transportation Network and Asset**
   Able to integrate networks with API, shapefiles, or Excel, as well as attributes from third-part applications. Different asset types can be stored in separate customizable asset registries, with optional out-of-the-box default models.

4. **Inputs**
   Can import and export with Esri of CMMS, or excel or GIS if needed. Can edit data or fields without support or programmer involvement. Data can be exported as .csv or shapefile. Can attach files in data repository.

5. **Condition Index Values**
   Currently setup to import already index values calculated externally, but willing to modify functionality to calculate at no extra cost. Program is primarily an advanced asset management and investment planning solution. Currently setup to display condition ratings in up to five condition states. May deploy optimization before Index calculations are finished. May need to develop rollup still.

6. **Analysis and Deterioration modeling**
   Using degradation curves and detailed matrices, current condition can be accurately estimated. Provides advanced predictive modeling using a nonlinear regression analysis process, often using 4^{th} degree polynomial to determine polynomial coefficients and coefficient of determination. Deterioration curves can be based on the condition history of an asset.

7. **Optimization**
   Can choose standard optimization satisfying budget and policy or target optimization to achieve predefined level of performance regardless of budget. Has the ability to set thresholds for condition classes by year. Has a feature called Operational Efficiency that geo-bundles projects together. Mixed Asset Analysis allows for geobundling of projects of timing of multiple assets. Extensive community impact factors available. Annual construction limitations based on capacity limits available. Can use customized optimization objective function. Uses “true optimization” uses mathematical programing (combinatorial), able with cloud computing.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

8. **Mapping**
   As a GIS centric application, showcases network affects and condition distribution at different plan stages. Can also visualize criticality and risk. Able to visualize future degradation and get drill down by element.

9. **Reporting**
   A variety of reports are ready, including presentation ready reports. Can integrate with ArcGIS Insights, and soon Power BI.

10. **NBI Data Compliance**
    Support team will be able to help with compliance, or user is also able to make necessary updates without support as needed.

11. **Implementation Services**
    Kickoff February 1 and Go-Live on July 1 (5 month implementation). Training before and after using the software, including video tutorials. Able to assist with configuration and calibration to keep systems comparable.

12. **Customer Support**
    10am-6pm M-F EST. Support through direct phone and email (provided). Issues are promptly addressed. Ongoing training and support will be provided, including to new employees.

13. **IT Hosting Provision**
    Microsoft Azure.

14. **Caveats and Limitations**
    Services are confined to the deliverables and tasks explicitly outlined in the proposal. Delays in client response may result in adjustments to timelines and deliverables.

APPENDIX G

27/4/0. Not currently capable of index calculation, roll up, .accdb exporting, or stopping optimization, would take four to six weeks to two months, but as they are enhancing the system, they will be no charge. May not have understood rollup (dfrag). May not understand level of generation, but unlimited. Not functional yet for data rollup.

SLA and Uptime and Unplanned Outage Report

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: DOT-US (Decision Optimization Technology- United States, L.P.)
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

Maintained 99.9% uptime for the past year, with only two planned 30 minutes outages.

IT Policy Form (File 4)

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/29/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments: <</<
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
transportation asset management for 29 years
currently works with 24 U.S. state DOTs

Appendix C – Litigation
From time to time

Appendix C – Subcontractors
N/A

Appendix C – References
NYSDOT (EAMS), TXDOT (MMS, PMS), VDOT (PMS)

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
D&B Report = low-moderate risk; Certificate of Liability Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   AgileAssets® Pavement Analyst™, AgileAssets® Structures Analyst™, AgileAssets® LRS Gateway™ There are no usage limitations.
   1994 inaugural product offering. Globally 32 agencies, including 14 U.S. Departments of Transportation rely on our Pavement Analyst. Structures Analyst has been in use since 2018. Currently, worldwide, 10 agencies using Structures Analyst.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/29/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

Access to reports built through TIBCO JasperReports Server is embedded within the web application but is included in the price. SaaS platform provides 2 TB of egress data transfer per month, above which it is metered at a cost +10% over current rates, and 400 GB high availability disk, with 1 TB allocated storage.
Production, Development, and Test environments; non-production environments are customizable. User may toggle error logging.

2. **System Maturity**
   Pavement Analyst software-based pavement management system for nearly 30 years, launched as an enterprise SaaS solution in 2015. Structures Analyst has been helping agencies manage their structural assets since 2018. Structures Analyst was made available as an enterprise SaaS solution in 2015.
   Risk Assesment and LCCA feature in 2023; Bridge analysis was enhanced to support optimization analysis of AASHTO elements (or an aggregation of elements) by applying probabilistic deterioration models in 2020.

3. **Transportation Network and Asset**
   LRS Gateway

4. **Inputs**
   dynamic segmentation
   fully configurable

5. **Condition Index Values**
   users can employ groovy scripts

6. **Analysis and Deterioration modeling**
   Structures Analyst supports element-level deterioration models.

7. **Optimization**
   The solution utilizes advanced integer programming for optimization analysis. Risk Assesment and LCCA feature; supports optimization analysis of AASHTO elements (or an aggregation of elements) by applying probabilistic deterioration models; several objective options.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/29/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

8. **Mapping**
   AgileAssets products contain a powerful embedded GIS reporting capability.

9. **Reporting**
   ad hoc reports (CSV, PDF, DOC, XLS, HTML), Out-of-the-box reports, out-of-the-box dashboards.

10. **NBI Data Compliance**
    This is an active effort within the development teams.

11. **Implementation Services**
    Sixteen months to Go-Live

12. **Customer Support**
    Client Portal; email or phone; M-F 7 am - 5 pm

13. **IT Hosting Provision**
    RPO is 4 hours

14. **Caveats and Limitations**
    COTS

APPENDIX G

10. The solution uses multiple attributes, exponentials, logarithms, and other mathematical functions to calculate condition indices. At this time, the solution does not support using standard deviation or statistical functions within condition index calculations.

23. users will also be able to create ad hoc reports WYSIWYG

24. Analysis scenario results produce several summary graph reports, including budget charts

25. Analysis scenario results produce summary graph reports corresponding to the length of pavement

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/29/2023
EVALUATOR NAME: Chester Kolota
EVALUATOR DEPARTMENT: Transportation

26. The solution's reporting technology includes the ability to display charts that show the length and/or percentage of good, fair, and poor assets over a specified time period for different scenarios.

27. The solution's reporting technology includes the ability to report an asset condition trend comparison of various scenarios.

29. The solution's reporting technology includes the ability to display charts that show the number of bridges and percentage deck area that falls into good, fair, and poor categories over a specified time period for different scenarios.

31. The system will be configured to provide MaineDOT with an individual asset valuation based on agency provided logic for both pavement and structural assets.

SLA and Uptime and Unplanned Outage Report

99.99% of the time in any given month

IT Policy Form (File 4)

Trimble does not have any issues complying.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C - Qualifications and Experience
AgileAssets was founded in 1994 and acquired by Trimble inc. in 2021.
AgileAssets has been a global leader for nearly three decades in supplying enterprise software solutions to help transportation agencies deliver safer, longer-lasting road networks and maximize the return on infrastructure investments. AgileAssets users may better manage the full lifecycle of their infrastructure assets – from pavements, bridges, and roadway assets to fleets, facilities, and more.
Over 50 percent of state-owned lane miles in the U.S. are managed using AgileAssets solutions. Worldwide, we provide solutions to agencies in 12 countries on five continents.
AgileAssets has extensive knowledge of federal and state transportation-related legislation, and this knowledge has informed our development of robust capabilities within of our solutions. These capabilities have helped numerous U.S. state DOTs meet MAP-21 and FAST Act requirements, develop and implement Transportation Asset Management Plans (TAMPs), and qualify for National Highway Performance Program (NHPP) funds.
The Moving Ahead for Progress in the 21st Century (MAP-21) bill of 2012 and the follow-on bill, Fixing America's Surface Transportation Act (FAST Act) of 2015, established standards and federal funding (NHPP) for states to improve the management and performance of their transportation infrastructure.
First software company on the market to deliver an integrated asset management solution – one that has made possible the successful TAMPs of the state DOTs of Texas, North Carolina, Virginia, New York, California, and many other U.S. states.
According to legislative requirements, agencies must report on good and poor condition of the network.
Our solution provides simple, *out-of-the-box reports on good, fair, and poor condition* of the network based on 0.1-mile segments of roadway, as required by MAP-21.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

Did Trimble retain most of key employees from original AgileAssets buy out? – Yes

Appendix C – Litigation
From time to time, we are involved in litigation arising out of the ordinary course of our business. Other than ordinary routine litigation incidental to the business, there are no material legal proceedings that would affect our ability to deliver the offerings and services to which we or any of our subsidiaries is a party or of which any of our or our subsidiaries property is subject.

Vague, nonresponsive. During demo stated that these litigations wouldn't interfere with the proposed work.

Appendix C – Subcontractors
N/A

Appendix C – References
NYSDOT – began its partnership with AgileAssets in 2012 to implement an integrated Enterprise Asset Management System (EAMS). In 2015 launch of AgileAssets bridge inspection system. After success of the bridge inspection system, NYSDOT expanded the scope to include pavement management, bridge inventory and inspections, and bridge management systems. In 2021 maintenance manager module from AgileAssets was brought online. NYSDOT plans to transition to AgileAsset' AWS SaaS Solution in 2024.

TxDOT – since 2011 AgileAssets has been the asset manager system of record for the Texas DOT. As a result, TxDOT has improved its maintenance operations based on data-driven decisions by tracking accurate expenditures on Texas highways. In 2016, TxDOT implemented AgileAssets Pavement Analyst application as the State's PMS or record under SaaS delivery model.

VDOT – has been a client since 2008. VDOT operates a large state-maintained highway system, including 8,111 miles of primary (two-to-six-lane) roads and 48,305 miles of secondary roads. Pavement Analyst has been integral in aiding them to manage and maintain their network efficiently.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance
Overall business risk low-moderate. Stable condition. Likelihood of continued operations. Low potential for severely delinquent payments.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

PROPOSED SERVICES

Appendix F

1. **Software Proposed**
   AgileAssets® Pavement Analyst™
   AgileAssets® Structures Analyst™
   AgileAssets® LRS Gateway™

   Based on the licensing model – there are no usage limitations, additional users can be added at any time to accommodate MaineDOT's growing needs. *In the cost proposal it looks like there's a limit to the number of licenses.*

   AgileAssets has been providing pavement management solutions for nearly 30 years (1994). Globally 32 agencies, including 14 U.S. DOTs rely on Pavement Analyst solution to ensure safer, longer-lasting pavements.

   Structure Analyst has been in use since 2018 – worldwide 10 agencies make better investment decisions for the maintenance, preservation, rehabilitation, and replacement of bridges and other structures by predicting future performance and generating optimal work plans.

   For data, AgileAssets hosts its own configured instances of Oracle 19c within the Amazon Compute Cloud (EC2), leveraging pluggable (containerized) databases for proper isolation between environments on the same host. Database backups are run on a nightly job and are stored in Amazon's highly secure and encrypted S3 object container storage. We also maintain a separate database in a Disaster Recovery (DR) environment, which is kept in sync using Oracle Data Guard for DR/failover purposes.

   Our solution also uses TIBCO Jasper Reports Server. Access to reports built through TIBCO Jasper Reports Server is embedded within the web application but is included in the price.

   The proposed solution will be deployed in a cloud-hosted, subscription-based, software-as-service (SaaS) delivery model; therefore, there are no software or hardware requirements. In this model, application and hardware maintenance and support are all included, eliminating the expense of hardware acquisition, software licensing, and installation while reducing the burden on in-house IT staff. Other

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

benefits of a SaaS model include faster deployment, enterprise grade security, predictable and scalable costs, high availability with 99.9% uptime, and automatic and painless upgrades at no extra cost.

Our products are based on multi-tiered, browser-based architecture. The application follows the Java 2 Platform, Enterprise Edition (J2EE) standard, with a web browser-based presentation layer hosted by a standard web-application server. The application then communicates with the database layer. Postgres SQL hosted on AWS is our typical backend database. This architecture ensures easy scalability, dynamic adaptability to load, and provides very high availability. Our products leverage REST APIs for extensibility.

We interface with multiple Linear Referencing Systems (LRSs), including AssetWise Asset Lifecycle Information Management (ALIM) and Esri Roads & Highways. Our LRS Gateway™ solution ensures that your LRS data is continuously synchronized with the AgileAssets system.

For MaineDOT, AgileAssets is proposing deployment to the latest version of our software-as-a-service (SaaS) platform. This approach provides many valuable benefits, including:

- Reducing the overall length of the implementation project
- Providing access to the latest system features and functionality
- Seamlessly migrating existing data and client-specific configurations
- Reducing the training effort associated with deploying a new solution
- Retaining full ownership of all data

In addition, the SaaS platform provides:

- 2 TB of egress data transfer per month, above which it is metered at a cost +10% over current rates
- 400 GB high availability disk, with 1 TB allocated storage

This indicates limit on the storage data and data transfers.

We recommend that DOT agencies establish three essential environments to optimize their operational efficiency – Production, Development, and Test. Our pricing model includes these three environments.

During the data upload, the system will provide a report with a list of the records that were not loaded into the system. Error logging in the system may be turned on or off.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

2. System Maturity

Pavement Analyst was the industry's first software-based pavement management system and has been a leading solution for agencies for nearly 30 years. It started as a window-based application in the early 2000's, evolved to client-server-based architecture, and then launched as an enterprise SaaS solution in 2015.

Structure Analyst has been helping agencies manage their structural assets since 2018 and was made available as an enterprise SaaS solution in 2015.

Pavement Analyst:

7.7 release 2022 – The user interface elements of the login screens and the header and menu system of the application were refreshed. This change also brought the application up to date with the look and feel of a modern web application.

7.5 release 2021 – users can select to execute a pavement analysis scenario without including geometry and then select to add geometry for scenario results they would like to plot on a map. Users can now select on-demand – this allows for generating scenario results for reporting on 0.1-mile sections and generating scenario results for work plans using an agency's section segmentation. Optimization analysis was enhanced to support a treatment option that allows a delay of deterioration for a defined number of years, as a treatment improvement.

Structure Analyst:

7.6 release 2023 – new risk assessment feature allows users to assess and track the risk probability (%) and monetized risk value at the level of the individual structure and the network. Out of the box, the system has 6 risk categories and 18 events with the probabilities for each already defined.

7.7 release 2022 – the user interface elements of the login screens and the header and menu system of the application were refreshed.

7.4 release 2020 – optimization analysis on bridge NBI components enhanced to support optimization analysis of AASHTO elements by applying probabilistic deterioration models to a distribution of the four condition states.

3. Transportation Network and Asset

LRS Gateway™ provides users with an advanced interface between the AgileAssets asset management system and various Linear Referencing System (LRS) editing tools, including AssetWise ALIM, Esri® Roads and Highways, Bentley®, and even

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

client-specific tools like ALIM. LRS Gateway allows agencies to maintain a single source of truth while maintaining consistent roadway definitions across multiple business units and software applications.

For MaineDOT, we recommend leveraging the editing done in RIMS by using RIMS route modification logs to update both the LRS and the associated asset linear locations in the system. This option has the powerful advantage of using the edits already made in RIMS to do the work of LRS maintenance in our solution.

The solution supports various asset types for bridge structures (bridges, culverts, tunnels, retaining walls, overhead sign structures, etc.) and roadways (pavement segments with different pavement types). Each asset type has its own attributes and/or elements. Analysis and optimization use a combination of attribute data, a decision matrix, treatment types, and deterioration modeling to forecast future condition and recommend an optimal treatment plan for each asset type.

4. Inputs

Using data import tools provided in the solution, MaineDOT's legacy pavement and bridge inventory and condition data will be seamlessly imported into the Pavement Analyst and Structures Analyst modules from the corresponding systems which currently hold this data. Condition data will be checked and verified according to any thresholds and business rules provided by MaineDOT.

Pavement Analyst serves as the data repository for all pavement management needs. As such, it will house pavement inventory, distress, and location data, along with many other attributes users require for reporting and forecasting analysis. Using the raw condition data, it can calculate any pavement condition index or rating metric used by MaineDOT, and also dynamically segment the pavement network as needed to support any federal or state reporting requirements.

Structures Analyst uses inventory and condition data collected from field inspections to support component and element-level forecasting analysis on the bridge network and reporting as needed.

The solution is fully configurable and can be easily extended to support other structural asset classes as well as new fields or forms required by MaineDOT. As part of the discovery process between AgileAssets and the Department to start solution implementation, our team will identify and configure the additional MaineDOT-specific fields or forms.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

5. Condition Index Values

5.1. The proposed system must calculate Condition Index Values for International Roughness Index (IRI), Rutting, Percent Serviceability Rating (PSR), and Percent Cracking as required by FHWA for the HPMS submittal – Pavement Analyst can calculate the required various condition index values to support HPMS reporting, all of our current customers use the system to report HPMS requirements, along with any other calculated index values needed by MaineDOT.

5.2. How will the system perform Percent Cracking computation – Pavement Analyst supports this percent cracking calculation and can store it as an attribute for each pavement segment.

5.3. How will the system perform Pavement Condition Rating (PCR), functional, and structural cracking index computation – Pavement Analyst is versatile, accommodating everything from straightforward equations to intricate algorithms in its models. For more advanced modeling needs, such as the ASTM PCI, users can employ Groovy scripts. The PCR equation outlined serves as a foundational method for computing PCR.

5.4. System must combine Condition Index Values to an overall condition rating Good, fair, and Poor to generate the Maine PM2 Targets – the system will be configured to provide classes for condition ratings as defined by MaineDOT. The system will also provide the condition classes as defined by MAP-21 requirements.

6. Analysis and Deterioration modeling

6.1 Pavement Condition Data Analysis – The AgileAssets team will implement any client-developed performance models into Pavement Analyst. The solution can also contain many generic pavement deterioration models which can then be validated by MaineDOT using historical condition data, or otherwise adjusted by the user according to expert knowledge or engineering judgment to improve model accuracy. Pavement Analyst supports models of all types, from simple equations to complex algorithms, including various types of mathematical models such as Exponential, Hyperbolic, Linear, Sigmoidal, etc. Models are assigned to pavement segments based on specified criteria such as pave type, traffic volume, geographic region, etc. Deterioration models on individual pavement segments can also be assigned and adjusted as needed.

6.2 Bridge Data Analysis – Structures Analyst supports element-level deterioration models with an underlying transition probability matrix (TPM). Matrix values for each

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

year, along with the corresponding model curve, are viewable and adjustable in the interface (adjustability can be user-permissioned). Bridge elements can have model variations that account for such things as protective systems or high/low traffic volume, each of which can affect the deterioration rate of the element.

7. Optimization

Our solution is currently the only system on the market that provides true optimization. The user will be able to run optimization analysis scenarios. The solution utilizes advanced integer programming for optimization analysis, especially when addressing multi-constraint and multi-year evaluations, including those paired with committed work plans, offering the most effective solution for intricate asset management challenges.

The proposed solution has the capabilities to produce single and multi-year programs. These work programs will be based on given performance criteria objectives, budget constraints and selected analysis inputs, such as analysis period, inflation rate, etc.

Objectives are to – maximize “area under the performance curve” benefit; maximize network condition; maximize percentage of network above given condition threshold; minimize treatment cost; minimize user costs; minimize air pollution.

Constraints are to stop analysis when – annual budget amounts are reached; average condition is achieved annually; average remaining service life is achieved annually; specific percentage of the network exceeds a user defined condition threshold.

Rehabilitation selection methods are – decision trees resulting in one treatment per road section; decision trees allowing three alternative treatment options; multiple pre-defined strategies assigned to each section that are automatically calculated from the decision trees for a given analysis period.

Pavement Analyst can trigger pavement treatments based on specified thresholds or attributes. The treatment decision tree criteria can be adjusted to include a node for attributes such as Highway Priority Corridor and/or Urban/Rural status. In this case, the system proceeds through the decision tree criteria and checks these attributes as part of its decision process to make a corresponding treatment recommendation. Also, when setting up an analysis scenario, performance thresholds can be specified so that the system triggers treatments needed to maintain the performance of that highway system/corridor etc. at or above a specified level.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

The system will select the heaviest treatment for a specific section based on recommendations from multiple decision trees. The use of management sections will allow for recommending one overarching project for the section.

*Performance model tree to help define road segments – out of the box there are 470 performance models. Decision Trees are configured by AgileAsset based on the rules we provide. Treatments unit costs – are cost expressions customizable? – can be a complex expression, not just 'unit cost*lane miles'.*

8. Mapping

AgileAssets products contain a powerful embedded GIS reporting capability. Any geo-enabled data (including external AssetWise and Esri web mapping services datasets) can be shown, filtered, and stylized. *Map is fully Esri based.*

The solution allows users to print maps through print templates (customizable). Then the agency can publish printed maps as needed to external sites.

9. Reporting

Simple ad hoc reports: The system is designed to allow for each user to run ad hoc queries and filters via the user interface such that simple reports can be created at will. These simple reports, which are typically tabular, may be downloaded in any number of formats, including CSV, PDF, DOC, XLS, HTML, and others.

Out-of-the-box reports: The system comes with several out-of-the-box reports, screenshots of which may be viewed in this section. Reports will be configured and designed to suit MaineDOT's needs, including special headers and sections.

AgileAssets solution also provides out-of-the-box dashboards.

10. NBI Data Compliance

The system currently supports a portion of the updated SNBI data fields and will be in complete support in near term – active effort progressing towards full compliance.

No response on element data aggregation. Almost always the rules can be configured.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

11. Implementation Services

Agile Scrum is the implementation methodology that is used to deliver projects. Scrum methodology is an iterative approach that prioritizes delivery goals around providing the highest business value in the least amount of time.

- Project Planning: 4/8/2024 – 5/29/2024

  MaineDOT and Trimble project teams will conduct a project kick-off and formalize the implementation process, documents, communication, and status reporting. Following the kick-off, Product Owners will work with the agency to validate user stories and ensure consistent understanding of each system requirement and how our solution addresses the requirement.

- Implementation: 5/30/2024 – 5/16/2025

  Throughout the project, the team will focus on managing risks and issues, as well as appropriate handling of change management. During the implementation sprints, a collection of sprints will result in a software package to be made available to MaineDOT for familiarization. At the conclusion of the development work, a release candidate will be prepared and deployed for User Acceptance Testing (UAT).

- User Acceptance Testing (UAT): 4/3/2025 – 7/8/2025

  The schedule is traditionally prepared with an anticipated time necessary to mobilize testers, engage them in the system, and complete two rounds of UAT.

- Training: 5/1/2025 – 7/22/2025

  Training is expected to be scheduled over the duration of two consecutive weeks, covering the operation of the Pavement Analyst, Structures Analyst, and core functionality of the product.

- Production Deployment and Project Close: 7/2/2025 – 8/26/2025

  Once the system has been accepted by MaineDOT, the project team will agree on a scheduled date for production cutover. The process for cutover will be planned out, having been tested and validated through the UAT cycles. Following go-live, the project team will maintain coverage for one month to address any high severity issues.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

During the Project Implementation, users will be familiarized with the Pavement Analyst and Structures Analyst solution and will receive continued exposure to the software as the development and release cycle continues. When User Acceptance is engaged, it is anticipated that the future users of the system will have had continuous exposure to the system and will be proficient in the software capabilities. Prior to go-live, the project team will complete a comprehensive training course for the end users.

Transitioning to a new system inherently introduces risk and the potential for different outcomes compared to the old system. During the shift, Trimble will collaborate with Maine DOT to thoroughly document the agency's business processes, decision-making logic for selecting road segment treatments, standard treatments, and the performance models used to project the deterioration of pavement assets over time.

Omitted about 6 months' worth of work out of the implementation timeline.

12. Customer Support

Clients may use the general help desk support by submitting a request by email or calling the support phone line, which is available Monday through Friday, 7:00 a.m. – 5:00 p.m. Eastern time.
The Client Portal is available 24/7, 365 days a year.

Vendor shall respond within two hours to the initial request for assistance in correcting or creating a workaround for a services issue. For major issues, within twenty-four hours after MaineDOT first reports the issue, vendor shall provide a correction or workaround acceptable to MaineDOT.

We see training as fundamental to the success of this project. The goal of training is to enable knowledge transfer throughout the project as well as ongoing competency in using the solution long-term. To this end, the training team will provide training in multiple formats, supplemented by learning support resources that make users more proficient and self-reliant.

The end-user training teaches the various end users how to use the application for their designated roles and empowers them to gain competency in the workflows or actions needed to.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

The AgileAssets Learning Center is an online resource for information about our products. The Learning Center provides user guides, configuration guides, application workflows, as well as a comprehensive knowledge base and video tutorials that users will be able to access on-demand on any internet-connected device.

13. IT Hosting Provision

Amazon Web Services (AWS). Recovery Point Objective (RPO) is 4 hours.
No Recovery Time Objective (RTO) is mentioned.

14. Caveats and Limitations

Trimble's responses to this RFP are confidential and proprietary and based upon our good faith effort to understand and interpret the features and functionality requirements listed. No response in the RFP should be construed to create a binding contract contrary to the terms of the agreed upon final contract.

The Trimble offering(s) are commercial-off-the-shelf software, and the pricing being offered is based on certain assumptions. As such, Trimble takes exception to (1) any requirements contrary to the off the shelf specifications of the Trimble offering(s) and (2) any terms and conditions found in the Request for Proposal.

APPENDIX G

10. Able to calculate Condition Index Values using mathematical functions including standard deviation and logarithms – **will not meet requirement** – the solution uses multiple attributes, exponentials, logarithms, and other mathematical functions to calculate condition indices. At this point time, the solution doesn't not support using standard deviation or statistical functions within condition index calculations.

During demo – they brought Ting Wang on the call who stated it is not a concern.

11. Able to roll up values and attributes from one segment length to different segment lengths when transforming data from one table to another – **will meet as stated** – Pavement Analyst houses various data collected for pavement and transforms the data for different needs, such as aggregating the data into different sets of segmentations or calculating an aggregated condition index from the raw condition data.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

12. Allows users to create and execute batch operations for blocks of calculations and data transformations – **will meet as stated** – the solution allows for users to schedule optimizations to run at the time of their choosing.

13. Able to create new road segment by consolidating shorter segments of related data into a contiguous segments based on defined homogeneous parameters, such as collection routes, built status, and last treatment – **will meet as stated** – Pavement Analyst allows for dynamic aggregation of road segments, so the resulting sections are homogenous for a particular data parameter.

14. Allows users to customize analysis treatments, triggers, and allocate budgets that help generate all possible future treatments when users run analysis – **will meet as stated** – The different treatment types selected during analysis are user-defined in the system. The user can specify the treatment level, cost, and impact of the treatment on the pavement condition. The user can define generic treatments like preventive maintenance, rehabilitation, reconstruction, and so on or specific treatment types like chip seals, two-inch overlay, etc.

15. Able to export tables to .accdb, .xlsx, and XML files based on user preference – **will meet as stated** – Pavement Analyst supports exporting of data windows in: CSV, DFB, Excel (.xls and .xlsx, HTML, kml, Shape File (in data projection or reprojection).

16. Able to create budget scenarios for specific analysis set – **will meet as stated** – the solution has the capacity to produce single and multi-year programs, these work programs will be based on given performance criteria objectives, budget constraints and selected analysis inputs, such as analysis period, inflation rate, etc.

17. Able to perform multi-objective optimization – **will meet as stated** – our solution is currently the only system on the market that provides true optimization. The solution utilized advance integer programming for optimization analysis, especially when addressing multi-constraint and multi-year evaluations, including those paired with committed work plans, offering the most effective solution for intricate asset management challenges.

18. Allows users to define number of levels for generations of treatment strategies. Please state the maximum number of levels in the comments – **will meet as stated** – the solution provides the ability to run as many optimizations as needed to determine the most optimal work plan. The system steps through a decision tree using agency specified criteria such as pavement type, AADT, IRI, rutting values to

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

reach a specific treatment for individual road segments, or bridge components/elements.

23. Able to generate budget chart with total program costs over time for given analysis set and budget scenario – **will meet with modifications** – the AgileAssets solution provides extensive interactive reporting with drill-down and ad hoc data analysis capabilities. Using the solution's advanced analytics and reporting, users can transform data collected and generated in the system into insights, leading to operational performance improvements and better decision-making. The solution gives Maine DOT the flexibility to use both standardized reports and configured reports based on Maine DOT's desired fields and layouts.

24. Able to generate budget chart with various treatment costs for given analysis set and budget scenario – **will meet with modifications** – Analysis scenario results produce several summary graph reports, including budget charts that display how funds were spent each year over the analysis period. Reports can display budget spent on each highway system type or pavement type, and how much was spent on preservation, rehabilitation, and replacement, or other budget categories specific to MaineDOT.

25. Able to generate budget chart with various treatment lengths for given analysis set and budget scenario – **will meet with modifications** – Analysis scenario results produce summary graph reports corresponding to the length of pavement treated and how much was spent to treat that amount, for various pavement types or highway systems.

26. Able to generate condition distribution chart that displays the percentage of good, fair, and poor assets overtime for given analysis set and budget scenario – **will meet with modifications** – The solution's reporting technology includes the ability to display charts that show the length and/or percentage of good, fair, and poor assets over a specified time period for different scenarios.

27. Able to generate budget comparison chart that displays the average condition of assets given multiple budget scenarios for a selected analysis set – **will meet with modifications** – The solution's reporting technology includes the ability to report an asset condition trend comparison of various scenarios. One or many scenarios can be displayed on the graph report through the use of a filter which allows the user to specify which scenarios should be displayed on the report.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11-30-2023
EVALUATOR NAME: Dorota Schweier
EVALUATOR DEPARTMENT: Transportation

28. Able to generate construction program or future work report after executing the analysis set and optimizing for each asset over time – **will meet with modifications** – Each analysis scenario produces results which include a future recommended work plan consisting of various treatment types, costs, and treatment location/asset for each year of the analysis period.

29. Able to calculate measures for condition ratings of good, fair, and poor based on the total number of bridges as well as based on the square foot deck area of bridges – **will meet with modifications** – The solution's reporting technology includes the ability to display charts that show the number of bridges and percentage deck area that falls into good, fair, and poor categories over a specified time period for different scenarios.

31. Able to perform Asset Valuation calculation based on age, condition, and replacement values of assets to generate a dollar value of assets – **will meet with modifications** – The system will be configured to provide MaineDOT with an individual asset valuation based on agency provided logic for both pavement and structural assets.

32. Able to calculate the remaining useful service life of assets – **will meet** – Remaining Service Life (RSL) is a standard feature in the proposed solution. Where RSL is defined as the estimated number of years to the time when the pavement is providing the substandard service quality (controlled by a user-defined condition threshold).

SLA and Uptime and Unplanned Outage Report
The proposed solution will be deployed in a cloud-hosted, subscription-based, software-as-a-service (SaaS) delivery model. Benefits of a SaaS model include faster deployment, enterprise-grade security, predictable and scalable costs, high availability with 99.9% uptime, and automatic and painless upgrades at no extra cost.

IT Policy Form (File 4)
Entirely inherited from Amazon Web Services (AWS).

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience
Demo notes in purple
Appendix C - Qualifications and Experience

Company has been around awhile

- Founded in 1994
- acquired by Trimble Inc. in 2021

Sufficient personnel coverage or expertise?

- Can't tell. The AgileAssets team is now fully integrated as a Trimble team within the parent company's global workforce of 12,000 employees
- No idea if they were able to retain the AgileAssets key team members/institutional knowledge. Most of the workforce stayed on board…125 around 105 still technical/knowledge people. 1 on presentation team from AgileAssets.

Plenty of customers using this product?

- They are vague on these specific modules vs "agileassets solutions" – 10 for one module which is a little lower than ideal

Trimble - wide range of industry sectors and technologies with a lot of DOT engagement overall.- this is not their bread and butter (although it is on their webpage)

- 24 DOTs have some type of asset management relationship.
- AgileAssets was enterprise software solutions transportation agency asset management specialization
- AgileAssets team was recognized in the field of government transportation asset management

AgileAssets had deep expertise in this sector

- No idea if Trimble carried that forward successfully

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

- currently works with 21 U.S. state DOTs. Over 50 percent of state-owned lane miles in the U.S. are managed using "AgileAssets solutions"
- Very familiar with federal laws, proactive compliance
- very strong emphasis on TAMP compliance (network condition) how applicable is that to this proposal?
- LRS software integration familiarity

Appendix C – Litigation - yes but did not comply with requirement to reveal them "no material legal proceedings that would affect our ability to deliver the offerings and services" which is different than past customers unhappy with delivery of similar services.

Appendix C – Subcontractors x

Appendix C – References

Since maintenance relationships are ongoing they should be able to speak to the Trimble experience as well as prior AgileAsset experience.

- **NYDOT -** Enterprise Asset Management System 2102. 2015 launch of AgileAssets' bridge inspection system This culminated in the launch of a comprehensive Structures Management System in 2017, which was accompanied by the release of **AgileAssets' Pavement Analyst and Structures Analyst** tools. 39,000 centerline miles of roadway, 22,000 bridges, and 10,000 culverts some work in 2021. Uses most modules.
- **TXDOT** – 2011 Maintenance Management System (MMS) In 2016, TxDOT implemented AgileAssets Pavement Analyst as SaaS – project seems similar although pavement only,
- **VADOT** – fully engaged since 2008 They engage in several rounds of comprehensive scenario analysis annually, utilizing the solution to its fullest potential. 8,111 miles of primary (two-to-six-lane) roads and 48,305 miles of secondary roads. Pavement Analyst has been integral in aiding them to manage and maintain their network efficiently - the analyst part seems similar although pavement only,
- **Changeover reference** – limited similarity

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance – provided, low-moderate risk mostly low. Accord paperwork included.

bad at following proposal instructions, not clear concise or organized.

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   AgileAssets®Pavement Analyst™ for pavement

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

AgileAssets® Structures Analyst™ for bridges
AgileAssets® LRS Gateway™

Using just 2 modules of a bigger system can sometimes cause issues due to expectation of data stored in other places, is that a risk here? VA is pavement only, EX pavement, maint, NEV pavement, structures, NY, DEL etc…so not at all unusual.

NOT FORTHCOMING ABOUT LiCENSE RESTRICTIONS -- Unlimited, but in the Cost proposal it is based on 5 named users, not unlimited users. . Asked for clarification from vendor responded If more are added a per subscription cost is incurred. The costs vary by type of module. We asked for 5, we got 5, that's all we need to know. (I realized later that rates not included in cost form as we failed to request it, just professional service rates).

- Later: , the SaaS platform provides: ● 2 TB of egress data transfer per month, above which it is metered at a cost +10% over current rates Could definitely happen esp - we don't know how they measure it what the rate is. Asked for clarification from vendor – outgoing data to non-AWS networks. AWS subscription charge. only comes into play in an unusually large transfer. This can be better identified though discovery sessions prior to implementation of the SaaS instance
- They will provide 400 GB high availability disk, with 1 TB allocated storage – hard limit are we sure we can live with it? Currently our database > 1 TB. Magdy says at TXDOT has 20 years of data with 200K lane miles, so would not envision a problem. Plus they have large filesy created during analyses.

We use mostly open-source industry-standard development languages, such as Java, C#, Python, Groovy, and Bash. . – Groovy and Bash are considered slow, and is there risk they will be abandoned? Opensource code is becoming increasingly risky .

Oracle 19c then later says Postgres SQL DB postgres
(containerized) databases for proper isolation between environments on the same host - good.
Access to reports built through TIBCO JasperReports Server (Freeware) is embedded within the web application but is included in the price. –
Check for OIT Architecture heartburn on these products if on short list.

1.6 does not show how the logical modules relate to each other.
1.7 like now, use the test env for one.

2. System Maturity

Pavement analyst since 2000, SaaS since 2015
Structures analyst since 2018 SaaS since 2015

- Products are actively maintained

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

3. **Transportation Network and Asset**

   LRS system continuous synchronization a requirement? The network changes…so important to keep it updated…but how does that affect the analysis – optimization was done at X and now it's shifts, do you have to rerun the optimizations? Most agencies for pavement will update the network 1/yr because it does impact analysis/performance measures. It will be needed for any sync.

   Chester – does the Structure info come in through the LRS gateway? were Currently inputting it through GIS or access db. Can continue as you do it now.

   Conclusion – similar to current.

4. **Inputs**

   Using data import tools, nothing clearer. Do we build once and save or have to redo each import? Defined once and reused.

   dynamically segment the pavement network as needed to support any federal or state reporting requirements…10th of mile segment – how is the segmentation done in the system? As bringing it in, do you want to do it as you do currently? And you can adjust inside the system as described. Based on different lengths. Can create MANAGEMENT SECTOIN based on rules – break by district, county, pavement type, whatever criteria you wish. Or you can do it on 10th mile for Map21/TAMP. the system can do the segmentation based on your criteria. And you change the segmentation type for an analysis - Maine Default vs 10th Mile or Different setup.

   Structures Analyst uses inventory and condition data collected from field inspections to support component and element-level forecasting analysis on the bridge network, and reporting as needed.

   How do they get the historical data in this proposed solution? It can be pulled into the product through spreadsheets or a shape file.

   Predefined permissions -- ADMIN, BRIDGE ADMIN, BRIDGE ENGINEER< PAVEMENT ANALYST ADMIN, PAVEMENT or BRIDGE Read only. – will we fit comfortably?

5. **Condition Index Values**

   For more advanced modeling needs, such as the ASTM PCI, users can employ groovy scripts, users are not coders, we want a SaaS that does not require on-site programming staff **confirmed in demo, but then according to Ting Wang it is doable. Better not count on it.**

6. **Analysis and Deterioration modeling**

   Client-developed models – or use one they've already built

   Same models for pavement and assets.

   1. inventory --Asset/attribute and construction history

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

2. Performance analysis – condition and trend of the network. Project into future. Understand treatments by asset; chose best treatment for max performance. Cost to improve or maintain condition? Impact of changing budget for example. How do all the alternative strategies compare?

   Workflow – Same for Bridge and Pavement

   1. configuration **–** inventory data, deterioration models (they have ~470 to use or we can set up our own or edit theirs. Can vary by geographic area), decision trees for select treatment, treatment library..very deep trees allowed. On structures component or element based. A lot based on faulting, PCI, IRI.
   2. Scenario Objectives – Scenario Constraints - Optimization Analysis
   3. Optimized scenario work plan, network wide reporting based on the scenario; can push the work plan to work management system
   4. Notificatoins when an analysis finishes inapp and email options.

   Decision trees to select treatment…it's an exercise in ohw your engineers reach a specific treatment decision and modeling it graphically. We can replicate the current we use, plus we can add other decision trees that we want to try or evaluate. –

7. Optimization

How does the actual optimization occur – perado integer optimization protocols. So it's true optimization.

Structure Element aggregation. – is it predefined or configurable? Ting Wang -- says 99% the aggregation rules can be configured. We have solutions for every single situation that can arise. Most of the time we can handle the Odd Rules as well. Not really an answer.
For Element level analysis – when reporting out on the results, do you have a conversion function to translate them into general condition ratings? As long as someone can define the rule, then we will be able to configure it. We do not provide a rule within the application because it will vary by agency. For general condition or asset condition.

8. Mapping

LRS centric, natively used
Inapp mapping – right in dashboard, and screens next to the tabular data. Easy to filter in-screen.export from the screen.
The AgileAssets maps user interface, GIS Explorer, gives permissioned users the ability to create their own maps with available asset information to present data in various

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

layers, and to share the maps with relevant stakeholders. How much do we have to customzie for ourselves?

9. Reporting

The reporting section addressed the inspections product**.**
Dashboard configured to user or security role. Showed scenario comparison tools, slick looking. Ubiquitous Exports to PDF, EXCEL, Shape, XML et al. Can change the visual representation on the fly in dashboard. Structure vs Pavement analyst configured to topic.

How do they compute estimated remaining life of component – they do not know. Texas guy said based on current condition and deterioration models

10. NBI Data Compliance

will be in complete support in the near term, partly done.

11. Implementation Services

REQUIREMENTS, DEV, CONFIG, DEPLOY, DATA CONV/INT, TRAINING, MAINT& SUPPORT.
Did they allow for integration or loading of historical asset maintenance data?
SCRUM / user story based – every 2 weeks they do a piece and work with us on that piece, continue in small steps til complete, then deliver.
can start 4/8/2024- , somewhat negotiable
Planning – 6 wks to develop user stories then
● Project Management Plan ● Project Schedule ● Prioritized Project Backlog – so how realistic is the project schedule provided? We have no recent references to find out well they estimate.
1 year of implementation sprints with 2 rounds of UAT each.
PROD deployment and train-the-trainer training based on their curated materials – **only 1 prod deployment, at end** –, at the end we get our prod environment, til then there is only a working /test environment..
Change management/cost management can be very inflexible as described.
WHO BUILDS THE TREES? they configure the decision trees based on the information that we provide. True in general. you will work closely with the project team.

Data discrepancies between systems addressed as follows - Addressing these differences is best done in the final phases of the system implementation and during user training. So we ignore them in UAT and DOT training will allow users to fix this themselves. High risk to transition success.

12. Customer Support

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

Project team does not stay on for customer success after 1 month of prod depl, they like to do quarterly 2hr strategic business reviews with an executive team to help us leverage their product. Push a new one every 8 weeks once in support.
Email/phone Monday through Friday, 7:00 a.m. – 5:00 p.m. Eastern time. Client Portal is available 24/7, 365 tremendous detail provided, looks acceptable
Ongoing training - in-application tool tips, the AgileAssets Learning Center offers on-demand learning resources, including how-to videos, user guides, illustrated workflows, and a comprehensive knowledge base, DOT retention of train-the-trainer handouts . WalkMe provides taskbased walk-throughs using interactive pop-ups on screen .
Agencies should do UAT testing for each of the 8 week upgrades. It is the standard practice for instance in New York and TExas, esp on the DOT-specific stuff. You can chose to take every other release as well. It's more straightforward and simpler process for the Departments to test than for the vendor to test. We should not get more than 2 releases behind.

13. IT Hosting Provision

Aws, rpo rto – not provided, percentage unplanned downtime objective for the SaaS services –

% UPTIME - UNSTATED here, in Appendix G it's 99.99% of the time in any given **SLA says** AgileAssets / Pavement Express 99% and excludes "emergency maintenance". **Which is the actual?** The SLA is part of the signed contract and AWS provides so that is the one stands. **So they do not meet our State requirements.**

RTO – not provided explicitly -in SLA: Trimble will use reasonable efforts to restore lost or damaged Customer Data for Offerings deployed through Trimble hosting services or as Software-as-a-Service, as described in this paragraph, if the loss or damage was caused by Trimble. Trimble will consult with Customer and provide information to Customer regarding the availability of backups and the potential limitations of data restoration. Customer understands that some data loss may result upon restoration based on the frequency and availability of backups. If Customer Data loss or damage is not caused by Trimble, Trimble will provide support and technical assistance for data restoration subject to Trimble's availability and payment of applicable fees at Trimble's then-current hourly rates.

Caveats and Limitations –.

They do not stand by their RFP responses. We get what we get.
They require we use their standard terms and conditions, not ours, and reject all terms and conditions found in the RFP.– huge red flags. We have no way to know how well they responded to ensure they provided no bad answers. There is a lot of vagueness, conflicting statements. **they explained that the way this normally works, these statements are subject to overall controlling document**

- They inserted a 24 page CITYWORKS e-building order form full of terms as well. Asked for clarification to purpose by email -- *The order form is a standard multiple entity format that is used to authorize our initiation of the*

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

SaaS environments with AWS. It would be needed at the beginning of the project or slightly before

- None of these T&Cs will align well with State IT Service contract.

Pricing assumptions

APPENDIX G

5 - not sure they can do SSO as described

***Can't do 1*0** Not Able to calculate Condition Index Values using mathmatical functions including standard deviation and statistical functions – They cannot do statistics. Confirmed, they have a technical limitation within the system. (1 dissenter on their team) Our pavement condition rating is computed with standard deviation, (4 index values) are part of the computation how would you approach it to get same result – we can configure other types of equation instead - every DOT uses a different one.

23 -on ALL REPORTS REQUIRED – they won't do, we have develop it ourselves with their toolset. – Hm, they have line item in cost proposal for that work despite stating we will be responsible for it. Approx. 5 months FTE estimate it appears

31 Able to perform Asset Valuation calculation based on age, condition, and replacement value of assets to generate a dollar value of assets– no idea what their response means but apparently it will not do it out of the box. –There a cost in the cost proposal to cover it. will take approx. 3 months of 1 FTE

.I am relying on the business reps to determine if the "can do" responses make sense in this appendix.

SLA and Uptime and Unplanned Outage Report
And SLA info in the "order form"

I put some notes in the IT Hosting section on RPO/RTO/Uptime.

IT Policy Form (File 4)

No concerns stand out -- but their caveat that you get what you get regardless of what was proposed will not fly with OIT CSO.

COST PROPOSAL –

- COST PROPOSAL DOES NOT INCLUDE ALL potential COSTS (or rates) DESCRIBED IN SERVICES SECTION. They do not stand by the price should the potentialities occur they would raise it.

- The SaaS platform provides: " 2TB of egress data transfer per month, above which it is metered at a cost +10% over current rates" however, no such rate is

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: TRIMBLE
DATE: 11/18/23
EVALUATOR NAME: jennifer chisum
EVALUATOR DEPARTMENT: OIT

included in the cost proposal, and no estimate of that cost is provided. Can you clarify please, what is “egress data”, is it a reasonable assumption that we would never exceed it? What is the “current rate”?

. This is an AWS standard language which covers outgoing data to non-AWS networks. It is generally covered by the subscription charges and only comes into play in an unusually large transfer. This can be better identified though discovery sessions prior to implementation of the SaaS instance.

Cost proposal math was off, recomputed an increase of 3 cents.

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation
****

Instructions: *The purpose of this form is to record proposal review notes written by* ***individual*** *evaluators for this Request for Proposals (RFP) process. It is* ***required*** *that each individual evaluator make notes for each proposal that he or she reviews. No numerical scoring should take place on these notes, as that is performed only during team consensus evaluation meetings. A separate form is available for team consensus evaluation notes and scoring. Once complete, please submit a copy of this document to your Department's RFP Coordinator or Lead Evaluator for this RFP.*

****

Individual Evaluator Comments:
Organization Qualifications and Experience

Appendix C – Qualifications and Experience
Founded in 1994, acquired in 2021, 12,000 employees total. 21 state DOTs, including half of state DOT miles. Full bridge and highway asset management software capabilities, but talked very extensively about TAMP development.

Appendix C – Litigation
Occasional, but not affecting this RFP.

Appendix C – Subcontractors
N/A

Appendix C – References
NYS highways and bridges with new Saas in 2024, Tx highways, including for use in maintenance districts, and Virginia highways. Implemented a new system for Tx away from mainframe.

Dun and Bradstreet Business Information Report Snapshot & Certificate of Insurance

---

PROPOSED SERVICES

Appendix F -

1. **Software Proposed**
   AgileAssets Pavement Analyst, AgileAssets Structures Analyst, AgileAssets LRS Gateway, no license limit, 32 agencies including 14 DOTs for pavements and 10 agencies for bridges, AWS hosted SaaS and TIBCO JasperReports Server (included in price), LRS Gateway interfaces AgileAssets with AssetWise ALIM and/or ESRI

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

R&H, can establish production, development, and test environments, error logging for data uploads/ can be turned on or off.

2. **System Maturity**
   Pavements for nearly 30 years, SaaS in 2015. Structures since 2018, SaaS in 2015. V7 updates in the past few years.

3. **Transportation Network and Asset**
   LRS Gateway provides an advanced interface between software and LRS (ALIM, Esri, RIMS). Extensive discussion of RIMS integration. Allows for route geometry and other constant updates. Able to support various asset types, with each asset type maintaining their own attributes and/or elements, models, and treatment plans. Links to images and map sites can be linked within the dataset.

4. **Inputs**
   Data can be imported and segmented by the tool. The tool is configurable to extend new fields as required, or as FHWA requirements change.

5. **Condition Index Values**
   Capable of calculation index values with intricate algorithms to support HPMS reporting and store results. Able to provide condition ratings by Maine and/or MAP-21 requirements.

6. **Analysis and Deterioration modeling**
   Can implement any models, either client developed or validated generic models, using various mathematical models.

7. **Optimization**
   Highway examples of objectives, criteria, and constraints to select single and multi-year programs with no mention of optimization type. Uses decision tree criteria for attributes and can set performance thresholds. Uses management sections to find the best treatment for a section. Uses true optimization (using decision trees).

8. **Mapping**
   Esri ArcGIS JavaScript API enabled interface that can map any geo-enabled data and integrates with outside agency layers for added value.

9. **Reporting**

STATE OF MAINE
INDIVIDUAL EVALUATION NOTES

RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service
BIDDER NAME: Trimble Inc.
DATE: 11/20/2023
EVALUATOR NAME: James Havu
EVALUATOR DEPARTMENT: Transportation

Allows ad hoc and out of the box reports, can be downloaded in a variety of formats, and can be customized by different user functions. Very functional homepage dashboard.

10. NBI Data Compliance

Currently supports some SNBI and is in development for full compliance.

11. Implementation Services

Planning starts 4/8/2024 with Go-Live on 8/26/2025 (16.5 months). Comprehensive blended training based on experience. Differences will be addressed in final implementation and user training.

12. Customer Support

Support by email or support phone line 7am-5pm M-F. There is a client portal available 24/7/365. For issues, successive call can be made, with a response back in two hours, and for major issues a resolution with 24 hours. Customized training bases on experience has train-the-trainer training and end-user training.

13. IT Hosting Provision

AWS. RPO is 4 hours.

14. Caveats and Limitations

Responses are confidential and proprietary. The offerings are commercial-off-the-shelf software and prices is based off assumptions. The RFP should not be construed as a binding contract but will be negotiated in good faith.

APPENDIX G

22/8/1. Not setup to calculate standard deviation. May not understand levels of generation. Checked “will meet req. with mod.” on ability to create charts and reports, but all look sufficient. Will need to be configured to calculate asset valuation according to TAMP requirements.

SLA and Uptime and Unplanned Outage Report

Target 99% availability.

IT Policy Form (File 4)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce A. Van Note
Commissioner

AGREEMENT AND DISCLOSURE STATEMENT
RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service

I, Jennifer Chisum, accept the offer to become a member of the Request for Proposals (RFP) Evaluation Team for the State of Maine Department of Transportation. I do hereby accept the terms set forth in this agreement AND hereby disclose any affiliation or relationship I may have in connection with a bidder who has submitted a proposal to this RFP.

Neither I nor any member of my immediate family have a personal or financial interest, direct or indirect, in the bidders whose proposals I will be reviewing. "Interest" may include, but is not limited to: current or former ownership in the bidder's company; current or former Board membership; current or former employment with the bidder; current or former personal contractual relationship with the bidder (example: paid consultant); and/or current or former relationship to a bidder's official which could reasonably be construed to constitute a conflict of interest (personal relationships may be perceived by the public as a potential conflict of interest).

I have not advised, consulted with or assisted any bidder in the preparation of any proposal submitted in response to this RFP nor have I submitted a letter of support or similar endorsement.

I understand and agree that the evaluation process is to be conducted in an impartial manner without bias or prejudice. In this regard, I hereby certify that, to the best of my knowledge, there are no circumstances that would reasonably support a good faith charge of bias. I further understand that in the event a good faith charge of bias is made, it will rest with me to decide whether I should be disqualified from participation in the evaluation process.

I agree to hold confidential all information related to the contents of Requests for Proposals presented during the review process until such time as the Department formally releases the award decision notices for public distribution.

_____ 12//17/23

Signature **Date**

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce A. Van Note
Commissioner

AGREEMENT AND DISCLOSURE STATEMENT
RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service

I, Chester C. Kolota accept the offer to become a member of the Request for Proposals (RFP) Evaluation Team for the State of Maine Department of Transportation. I do hereby accept the terms set forth in this agreement AND hereby disclose any affiliation or relationship I may have in connection with a bidder who has submitted a proposal to this RFP.

Neither I nor any member of my immediate family have a personal or financial interest, direct or indirect, in the bidders whose proposals I will be reviewing. "Interest" may include, but is not limited to: current or former ownership in the bidder's company; current or former Board membership; current or former employment with the bidder; current or former personal contractual relationship with the bidder (example: paid consultant); and/or current or former relationship to a bidder's official which could reasonably be construed to constitute a conflict of interest (personal relationships may be perceived by the public as a potential conflict of interest).

I have not advised, consulted with or assisted any bidder in the preparation of any proposal submitted in response to this RFP nor have I submitted a letter of support or similar endorsement.

I understand and agree that the evaluation process is to be conducted in an impartial manner without bias or prejudice. In this regard, I hereby certify that, to the best of my knowledge, there are no circumstances that would reasonably support a good faith charge of bias. I further understand that in the event a good faith charge of bias is made, it will rest with me to decide whether I should be disqualified from participation in the evaluation process.

I agree to hold confidential all information related to the contents of Requests for Proposals presented during the review process until such time as the Department formally releases the award decision notices for public distribution.

Chester C Kolota
Signature

11/17/2023
Date

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce A. Van Note
Commissioner

AGREEMENT AND DISCLOSURE STATEMENT
RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service

I, _____DOROTA SCHWEIER_____
accept the offer to become a member of the Request for Proposals (RFP) Evaluation Team for the State of Maine Department of Transportation. I do hereby accept the terms set forth in this agreement AND hereby disclose any affiliation or relationship I may have in connection with a bidder who has submitted a proposal to this RFP.

Neither I nor any member of my immediate family have a personal or financial interest, direct or indirect, in the bidders whose proposals I will be reviewing. "Interest" may include, but is not limited to: current or former ownership in the bidder's company; current or former Board membership; current or former employment with the bidder; current or former personal contractual relationship with the bidder (example: paid consultant); and/or current or former relationship to a bidder's official which could reasonably be construed to constitute a conflict of interest (personal relationships may be perceived by the public as a potential conflict of interest).

I have not advised, consulted with or assisted any bidder in the preparation of any proposal submitted in response to this RFP nor have I submitted a letter of support or similar endorsement.

I understand and agree that the evaluation process is to be conducted in an impartial manner without bias or prejudice. In this regard, I hereby certify that, to the best of my knowledge, there are no circumstances that would reasonably support a good faith charge of bias. I further understand that in the event a good faith charge of bias is made, it will rest with me to decide whether I should be disqualified from participation in the evaluation process.

I agree to hold confidential all information related to the contents of Requests for Proposals presented during the review process until such time as the Department formally releases the award decision notices for public distribution.

Dorota Schweier
Signature

11-17-2023
Date

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Janet T. Mills
Governor

Bruce A. Van Note
Commissioner

AGREEMENT AND DISCLOSURE STATEMENT
RFP #: 202309195
RFP TITLE: Pavement and Bridge Asset Management Software as a Service

I, James Edward Havu accept the offer to become a member of the Request for Proposals (RFP) Evaluation Team for the State of Maine Department of Transportation. I do hereby accept the terms set forth in this agreement AND hereby disclose any affiliation or relationship I may have in connection with a bidder who has submitted a proposal to this RFP.

Neither I nor any member of my immediate family have a personal or financial interest, direct or indirect, in the bidders whose proposals I will be reviewing. "Interest" may include, but is not limited to: current or former ownership in the bidder's company; current or former Board membership; current or former employment with the bidder; current or former personal contractual relationship with the bidder (example: paid consultant); and/or current or former relationship to a bidder's official which could reasonably be construed to constitute a conflict of interest (personal relationships may be perceived by the public as a potential conflict of interest).

I have not advised, consulted with or assisted any bidder in the preparation of any proposal submitted in response to this RFP nor have I submitted a letter of support or similar endorsement.

I understand and agree that the evaluation process is to be conducted in an impartial manner without bias or prejudice. In this regard, I hereby certify that, to the best of my knowledge, there are no circumstances that would reasonably support a good faith charge of bias. I further understand that in the event a good faith charge of bias is made, it will rest with me to decide whether I should be disqualified from participation in the evaluation process.

I agree to hold confidential all information related to the contents of Requests for Proposals presented during the review process until such time as the Department formally releases the award decision notices for public distribution.

Signature 11/17/2023 **Date**