State of Maine Master Score Sheet

RFP# 202401014							
Highway Data Collection Vehicle System							
Bidder Name: Fugro USA Land, inc. International Cybernetics Company, L.P Mandli Communications Inc							
P	roposed Cost:	741,358.00	1,496,260.00	896,000.00	936,320.00		
Scoring Sections	Points Available						
Section I: Preliminary Information	N/A	N/A	N/A	N/A	N/A		
Section II: Organization Qualifications and Experience	20	4	5	8	19		
Section III: Proposed Services	55	14	6	6	45		
Section IV: Cost Proposal	25	25	12	21	20		
TOTAL	100	<u>43</u>	<u>23</u>	<u>35</u>	<u>84</u>		

Award Justification Statement RFP# 202401014 - Highway Data Collection Vehicle System

I. Summary

The Department was seeking a Highway Data Collection Vehicle System (HDCVS), consisting of hardware, SaaS, implementation services and related professional services. This vehicle-mounted system must collect pavement data and images as it is driven on the roadway, produce data products about pavement condition and curves with accurate location, accuracy, and precision for compliance with Federal reporting standards, and support our QA and reporting needs. Services include systems integration with our pavement management system (dTIMS), our Location Management System (LMS), and our in-house GIS infrastructure. The data is used in producing the annual federal report that drives our federal funding eligibility, and in producing key performance measures by which we are required to manage the system by State law.

Pathways Services Inc was selected.

II. Evaluation Process

This was scored by consensus scoring as described in the RFP and Procurement training materials. In addition to the proposal, all bidders presented a timed clarifying presentation/Q&A with the team, references were contacted, and team members shared their own knowledge of these bidders. Any clarifying information presented by the bidders that conflicted with their written proposal was disregarded in evaluation.

Key evaluation team qualifications and expertise:

- 1. A senior pavement engineer pavement analysis and HDCVS hardware, software, and data subject matter expert (SME), has participated in other RFPs.
- 2. A pavement engineer pavement analysis, HDCVS software and data SME, and dTIMS system expert, has participated in other RFPs.
- 3. A HPMS technician HDCVS hardware and data collection SME.
- 4. A (OIT) IT manager, GIS and HPMS systems/data SME.
- 5. An (OIT) Systems Team Lead who has 25 years of experience leading DOT's IT procurements provided technical, financial, and RFP process expertise.

All members participated in the RFP development as well.

III. Qualifications & Experience

With consistent high praise from references for hardware, software, and all aspects of their services, Pathway's system is used by 25 US DOTs, including several New England states. FHWA called them out as the best system, which is extremely

unusual. Iowa tested all competitors to their RFP on a 74-mile test data collection loop that only two vendors collected successfully – and only Pathways had 100% data present. They have a strong quality program, certifying their equipment with all available certifiers; innovate; and are strongly engaged in the industry. They are highly experienced with all aspects/challenges of collection, data processing, and quality assurance due to the high volume of collection and data processing work they perform (1/2 million miles annually).

IV. Proposed Services

Well built, well supported hardware that can collect at highway speeds. They offer extensive data processing and report production services, and a staging Pathweb environment for our QA, rather than provide the desktop Pathview as a SaaS. References reported high quality timely data and reporting with this model, and praised their communication and responsiveness. This significantly reduces our labor, as desired, in the production of the data. According to FHWA, they produce best in class pavement condition data. They provide sufficient curve data and reporting with a good dashboard. Historical image support in the Web Visualization Viewer, Pathweb, is unlimited by years or storage capacity. Although we cannot display their images in our custom MapViewer, our users will be able to meet their needs in Pathweb. The implementation plan is reasonable, customer support is impressive. The software and hosting are well managed.

V. Cost Proposal

Pathways came in with 20/25 points.

Bidder Name:	Proposed Cost:	Points (out of 25)
Fugro USA Land, inc.	741,358.00	25
International Cybernetics Company, L.P	1,496,260.00	12
Mandli Communications Inc	896,000.00	21
Pathway Services Inc	936,320.00	20

We will also purchase the 2 optional bid items (2 years of history for PathWeb, and some Data Collection services).

VI. Conclusion

Pathway Services offers the best value for the Department by offering high quality hardware, best of class pavement condition processing, a robust well-managed system, and extensive data processing, QC, QA, and report generation professional services. They have captured a large market share of the US DOTs with their attention

to quality, innovation, customer service, and immersion in the industry, and receive consistent praise from references.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



Bruce A. Van Note Commissioner

8/27/2024

Michael Robson, Business Development Manager info@fugro.com
3104 Northside Ave
Richmond, VA 23228

SUBJECT: Notice of Conditional Contract Award under RFP # 202401014, Highway Data Collection Vehicle System

Dear Mr. Robson,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Highway Data Collection Vehicle System. 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:

Pathway Services, Inc.

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).

Page 1 of 3 rev. 3/5/2018

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

Systems Team Lead, IT Planning at MaineDOT

Jennifer.chisum@maine.gov

207-620-2077

Page 2 of 3 rev. 3/5/2018

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).

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STATE OF MAINE DEPARTMENT OF TRANSPORTATION



Bruce A. Van Note Commissioner

8/27/2024

Michael Nieminen, CEO mnieminen@internationalcybernetics.com 10630 75th Street Largo, FL 33777

SUBJECT: Notice of Conditional Contract Award under RFP # 202401014, Highway Data Collection Vehicle System

Dear Mr. Nieminen,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Highway Data Collection Vehicle System. 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:

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Page 1 of 3 rev. 3/5/2018

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Sincerely,

Jennifer Chisum,

systems Team Lead, IT Planning at MaineDOT

Jennifer.chisum@maine.gov

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Page 2 of 3 rev. 3/5/2018

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STATE OF MAINE DEPARTMENT OF TRANSPORTATION



Bruce A. Van Note Commissioner

8/27/2024

Sam Skog sskog@mandli.com 2655 Research Park Drive Fitchburg, WI 53711

SUBJECT: Notice of Conditional Contract Award under RFP # 202401014, Highway Data Collection Vehicle System

Dear Mr. Skog,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Highway Data Collection Vehicle System. 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:

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Page 1 of 3 rev. 3/5/2018

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

Sincerely,

ennifer Chisum,

Systems Team Lead, IT Planning at MaineDOT

Jennifer.chisum@maine.gov

207-620-2077

Page 2 of 3 rev. 3/5/2018

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STATE OF MAINE DEPARTMENT OF TRANSPORTATION



Bruce A. Van Note Commissioner

8/27/2024

Paul Constable, Communications Coordinator pconstable@pathwayservices.com 2701 North Hemlock Court Broken Arrow, Oklahoma 74012

SUBJECT: Notice of Conditional Contract Award under RFP # 202401014, Highway Data Collection Vehicle System

Dear Mr. Constable,

This letter is in regard to the subject Request for Proposals (RFP), issued by the State of Maine Department of Transportation for Highway Data Collection Vehicle System. 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:

Pathway Services, Inc

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Page 1 of 3 rev. 3/5/2018

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Sincerely,

Jennifer Chisum,

systems Team Lead, IT Planning at MaineDOT

Jennifer.chisum@maine.gov

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Page 2 of 3 rev. 3/5/2018

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

SUMMARY PAGE

Department Name: Transportation

Name of RFP Coordinator: Jennifer Chisum

Names of Evaluators: Casey Nash, James Havu, Brady Foster, Tom Lynch, Jennifer

Chisum

Pass/Fail Criteria	<u>Pass</u>	<u>Fail</u>
Section I. Preliminary Information (Eligibility)	N/A	
Scoring Sections	<u>Points</u> <u>Available</u>	Points Awarded
Section II. Organization Qualifications and Experience	20	4
Section III. Proposed Services	55	14
Section IV. Cost Proposal	25	25
<u>Total Points</u>	<u>100</u>	<u>43</u>

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

OVERVIEW OF SECTION I Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

EVALUATION OF SECTION II Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	20	4

Evaluation Team Comments:

Appendix C – Qualifications and Experience Form: Overview/Qualifications

- Decades of experience in pavement collection system provision, including many vehicles delivered
- DOT experience 6 State DOTs (including Maine) -- fewer US DOTs than in the past.
- No current innovations or industry leadership initiatives highlighted.
- Not proactively addressing US government standards. We had to approach them on the tire width issue to stay in compliance with FHWA (Federal Highway Administration)
- We are not aware of any customer using the proposed architecture.
- They have data collection experience.

Litigation –evasive, not a clear *none*

Subcontractors - no

References - negative reviews on hardware, support; positive on the data processing capabilities . Maine's experience is similar.

In our experience, Fugro has overpromised and underdelivered, and has lost our trust. The services and software described in this proposal *appear* to be much improved, but we were not able to confirm these improvements through any references or direct experience.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

EVALUATION OF SECTION III

Proposed Services

	<u>Points</u> <u>Available</u>	Points Awarded
Section III. Proposed Services	55	14

Appendix F – Proposed Services Form:

- System Overview/Collection Vehicle System Proposed
 - Basically similar to prior ARANs, will meet or exceed the expectations.
 - They have made nice safety improvements to the controls.
 - LCMS2 hard to collect at safe highway speeds.
 - Camera image stitching is needed image overlap breaks some of the image analysis.
 - We were not real impressed with the build quality of our last vehicle. We experienced repeated hardware issues.
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - We like that we can use Vision with multiple monitors.
 - Our current system has the automated QC proposed- but they have never been able to get it to work.
 - Complicated multiple step process to process from raw data to reports. UI does not support the workflow.
 - Will need to do manual work to prevent a cycle's data getting deleted for routes not collected every other year
 - Location Reference Integrations
 - Post-processing in Applanix POS LV is required for the GIS post-processing to meet our survey-grade location requirements. This software is not included in the proposal.
 - Can easily provide the basemap image for the vehicle in this version
- Pavement Conditions Data
 - Pavemetrics detection library upgrades are explicitly excluded in Support Agreement. Without these library upgrades, we cannot get full functionality out of our LCMS-2 investment. A reference notified us to check for this – as they could not upgrade Vision without them either.
 - The crack seal detection is not usable, although they clearly believe that it works. We have the Al proposed already, and have not seen improvements.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

- Event flags must be identified manually in data processing
- Critical Curve and Safety Data
 - The system can produce simple and advanced curves with aggregation. We could never get it to produce valid spiral curves.
- Reporting and Analytical Functionality
 - Meets or requirements
 - They have added location reporting as Route, X,Y.
- Web Visualization Viewer
 - Meets our requirements
 - Limited to 2 years of data plus the converted historical data, not ideal.
 - GIS Webviewer Integration
 - Doable API now available.
 - The iVISION gateway tool which can be incorporated into an ARCGIS online application is a nice new feature
- DTIMS integration
 - already built and in use.
- Implementation Services.
 - Implementation plan is focused solely on provision of vehicle, not implementing the new SaaS or getting the software delivering the improved outcomes they claim they are capable of.
 - Fugro Customer Support said their assembly facility in VA is their less desirable build location. Their system experts are located in Ontario
- Customer Support
 - The Department has experienced, for a long time, slow hardware support and software customer support. All MaineDOT support requests, except scheduled PM, have required repeated contacts and escalation to their management for several, including during this RFP evaluation period.
 - Currently, we approved a DMI purchase but they have failed to place the order.
 - Our Preventative Maintenance report due in April has NOT been delivered yet in June. When we ask about it - 'oh yeah, we'll have a meeting...' then no follow through.
 - The Department has experienced a lack of available expertise, such as only 1
 person from Fugro qualified to do the calibrations.
 - The Department has experienced extremely high turnover in our contacts/support team for several yrs

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

- Reference notes "really weird IT support issues, they were really struggling and the code seemed piecemeal and not understood. We gave up on getting software support from them."
- Systems Maturity
 - Systems architecture kept current.
 - o Customizations are not maintained during upgrades.

IT Hosting Provision – no issues

Optional Data Coll Services/historical image conversion

• Both offered

Appendix H IT Policy- no issues

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Fugro USA Land, inc.

DATE: 6/7/2024

EVALUATION OF SECTION IV Cost Proposal

Lowest Submitted Cost Proposal	د	Cost Proposal Being Scored	Х	Score Weight	=	Score
741,358.00	5	741,358.00	X	25 points	=	25

Evaluation Team Comments:

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

SUMMARY PAGE

Department Name: Transportation

Name of RFP Coordinator: Jennifer Chisum

Names of Evaluators: Casey Nash, James Havu, Brady Foster, Tom Lynch, Jennifer

Chisum

Pass/Fail Criteria	<u>Pass</u>	<u>Fail</u>
Section I. Preliminary Information (Eligibility)	N/A	
Scoring Sections	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	20	5
Section III. Proposed Services	55	6
Section IV. Cost Proposal	25	12
<u>Total Points</u>	<u>100</u>	<u>23</u>

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

OVERVIEW OF SECTION I Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

EVALUATION OF SECTION II Organization Qualifications and Experience

	Points Available	Points Awarded
Section II. Organization Qualifications and Experience	20	5

Evaluation Team Comments:

Appendix C – Qualifications and Experience Form:

Overview/Qualifications

- developer and manufacturer of pavement test equipment since 1975.
- New to pavement data collection systems None of the software predates 2019
- Only 32 vehicles deployed to customers, plus only 8-9 collection vehicles in their fleet which limits their real-life operations/maintenance experience with these systems as well.
- Experience in this area with at least 3 DOTs
- Industry presence in innovation
- Did not discuss experience keeping up with standards.
- Little experience with performing data collection
- Limited experience with data processing/QC
- Litigation
 - none
- Subcontractors
 - none
- References had mixed reviews.
 - None use cloud-hosted pavement processing or ethernet data transfer.
 - Reference stated "try their best, seem kind of new at this"
 - Reference warned we must be careful to require *accurate* data in contract

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

EVALUATION OF SECTION III Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	55	6

Evaluation Team Comments:

- . Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Complex controls 3 screens, special 24-key event keyboard seems excessive
 - LCMS2 cannot collect at safe highway speeds.
 - Two profilers seems excessive, a lot of overhead
 - Swappable primary drives require swapping midday after 200 miles acc to presentation. "8 hrs of collection in one day is impossible" with this system. We collect upwards 400 miles some days, and put in some long collection days.
 - Reference did not believe the pavement collection vehicle system was well developed
 - Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Described as fully automated from upload validate, data processing, and Inform load. However, references agree it's not there yet -manual data processing and QA are needed, in some cases extensive manual data processing.
 - They are not offering any manual data processing or QA services.
 - Location Reference Integrations.
 - Standard, although they use unfamiliar terminology
 - Pavement Conditions Data
 - Events can be captured many ways.
 - Crack seal detection is insufficient to avoid workaround. In presentation, they stated that they do not trust the results of their automated process. References agree.
 - Critical Curve and Safety Data
 - Can't handle complex curves, spiral curves, aggregation. Seems very poor in the curve area based on presentation. Their approach for computing seems rudimentary and very manual. Only one

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

parameter (reporting interval) available; they don't split the road into tangents/curves.

- Reference can't get accurate cross-slope.
- Reporting and Analytical Functionality/
 - Reporting features are not clear, although many output file formats available.
 - The dashboard for monitoring the collection process is nice
 - Can't compare deviations from year to year.
- Web Visualization Viewer
 - Appears to meet our requirements
 - Limited to 2 years of data plus the converted historical data, not ideal.
- Downstream Systems Integrations
 - Both seem doable
- Implementation Services/Customer Support
 - SaaS is not available for months after truck is delivered which is not ideal for validation and training.
 - Limited to 80 hours of customer/technical service support per year then added costs kick in
 - References

 customer support changing constantly never know who
 to contact, slow to respond on vehicle issues, sometimes
 argumentative. The satisfied reference finds their weekly support
 meetings very effective, but those are not offered to us and not
 feasible with an 80 hour limit.
- Systems Maturity
 - very new software, being built out still. References mentioned constant updates and new releases.
 - They will "assist" with environment migrations in their SaaS system, unclear on State effort required
- IT Hosting Provision
 - Azure and ICC hosting services
 - Although Appendix F says 99.9+% uptime guarantee, their service agreement states 99% which is below our minimum expectation.
- Optional Data Collection Services/Historical Image Conversion
 - Both offered
- Caveats

Appendix H – no issues

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System BIDDER: International Cybernetics Company, L.P

DATE: 6/6/2024

EVALUATION OF SECTION IV Cost Proposal

Lowest Submitted Cost Proposal	5	Cost Proposal Being Scored	Х	Score Weight	=	Score
741,358.00	5	\$1,496,260	x	25 points		12

Evaluation Team Comments:

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

SUMMARY PAGE

Department Name: Transportation

Name of RFP Coordinator: Jennifer Chisum

Names of Evaluators: Casey Nash, James Havu, Brady Foster, Tom Lynch, Jennifer

Chisum

Pass/Fail Criteria	<u>Pass</u>	<u>Fail</u>
Section I. Preliminary Information (Eligibility)	N/A	
Scoring Sections	<u>Points</u> <u>Available</u>	Points Awarded
Section II. Organization Qualifications and Experience	20	8
Section III. Proposed Services	55	6
Section IV. Cost Proposal	25	21
<u>Total Points</u>	<u>100</u>	<u>35</u>

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

OVERVIEW OF SECTION I Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

EVALUATION OF SECTION II Organization Qualifications and Experience

	<u>Points</u> <u>Available</u>	Points Awarded
Section II. Organization Qualifications and Experience	20	8

Evaluation Team Comments:

Appendix C – Qualifications and Experience Form:

Overview/Qualifications

- Only 25 data collection systems delivered since 1983
- At least 5 DOTs
- Some industry presence engagement with NCAT in software development
- Experience with industry standards Sole vendor to certify the LCMS for IRI at the NCAT.
- Plenty of data collection and data processing experience

No litigation

No subcontractors

References

- Strongly negative references on equipment and customer support– and these are presumably their success stories.
- References satisfied with the vendor- collected and processed data
- No references were using the data processing software over the cloud or ethernet uploads.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

EVALUATION OF SECTION III Proposed Services

	<u>Points</u> <u>Available</u>	Points Awarded
Section III. Proposed Services	55	6

Evaluation Team Comments:

Appendix F – Proposed Services Form:

- System Overview/Collection Vehicle System Proposed
 - Must dissemble LCMS-2 annually and ship it back to manufacturer for calibration/maintenance. This is the most expensive and fragile piece.
 - LCMS2 hard to collect at safe highway speeds.
 - In presentation, they said they have to wipe dust off the optical DMI multiple times a day during collection.
 - Reference notes
 - "The vehicle still cannot successfully pass a bounce test" (a required federal test)
 - One was initially provided with obsolete equipment on their vehicle without being informed. Discovered when it failed -- Mandli passed it to the manufacturer who would not provide support.
 - Another was unable to upgrade EPU due to age of equipment initially provided
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - The one monitor limitation on the RDP to access the data processing software packages is a huge impact.
 - no unified UI or workflow references track workflow outside the system
 - Reference notes
 - it takes over a week to process a week's data that would put us in a hole.
- Location Reference Integrations
 - Although they state they can meet the requirements we are unclear on how they do
 it.
- Pavement Conditions Data
 - We are uncomfortable with using the LCMS-2 with RoadInspect rather than Pavemetrics. The Pavemetrics standard software is understood in the industry and accepted as the standard, this software is not as well understood.
 - Unlimited event flag types is nice
 - They do not provide data QC

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

- Crack seal detection is insufficient to avoid workaround
- Critical Curve and Safety Data
 - They can handle simple curves, unclear about anything else or how much effort involved.
- Reporting and Analytical Functionality
 - We have only a very generalized understanding, but it appears can meet our requirements. On the other hand, reference – "after 2 years could not get the right reports and moved to a different vendor."
 - Only CSV or shapefile outputs.
 - Nice command center dashboard for project status.

Web Visualization Viewer

- Nice webviewer graphics. The rut measures overlaid in the image flow is very convenient.
- Limited to 2 years of data plus the converted historical data, not ideal.
- Downstream Systems Integrations.
 - Not sure whether Mapviewer can be integrated. Solution in proposal would not work; they suggested a potential API-based solution alternative in presentation but insufficient info to assess.
 - dTIMS integration unclear but probably can do it
- Implementation Services
 - looks reasonable
 - requires software customizations

Customer Support

- No support triage all issues are worked in order received
- LCMS-2 Warranty is insufficient. Basically no warranty.
- VIII exclusion of support of issues is broad, could leave us with unusable system.
- Azure systems administration is State responsibility, not desirable; also clouds support responsibilities.
- Reference notes "Tech support is terrible"; slow to address major parts failures; long silences; argumentative; hardware support passed through to manufacturers some equipment sent overseas; struggle to support older equipment; often have to reset all their settings after fixes to hardware and software;
- Systems Maturity
 - No major architecture modernization mentioned in history or plans
 - They did not address their process of preserving customizations during upgrades, but are proposing customizations.
 - Reference mentioned software upgrades have introduced changes that don't fit their operations & must be rapidly backed out of Prod
- IT Hosting Provision
 - No issue with Appendix F response, however their "SaaS Service Level Agreement" has no description of support services or service level commitments
- Optional Data Collection Services

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

- Would be collected better technology than our van would have
- This data is stored in separate dataset We are not clear on whether we can integrate our collected data for the year with theirs

Historical Images Conversion

Offered

Caveats and Limitations

Appendix H - Mandli did not respond to the IT Security section.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Mandli DATE: 6/3/2024

EVALUATION OF SECTION IV Cost Proposal

Lowest Submitted Cost Proposal	٤	Cost Proposal Being Scored	Х	Score Weight	=	Score
741,358.00	5	896,000.00	x	25 points	=	21

Evaluation Team Comments:

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

SUMMARY PAGE

Department Name: Transportation

Name of RFP Coordinator: Jennifer Chisum

Names of Evaluators: Casey Nash, James Havu, Brady Foster, Tom Lynch, Jennifer

Chisum

Pass/Fail Criteria	<u>Pass</u>	<u>Fail</u>
Section I. Preliminary Information (Eligibility)	N/A	
Scoring Sections	<u>Points</u> <u>Available</u>	Points Awarded
Section II. Organization Qualifications and Experience	20	19
Section III. Proposed Services	55	45
Section IV. Cost Proposal	25	20
<u>Total Points</u>	<u>100</u>	<u>84</u>

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RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

OVERVIEW OF SECTION I Preliminary Information

Section I. Preliminary Information

Evaluation Team Comments:

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

EVALUATION OF SECTION IIOrganization Qualifications and Experience

	<u>Points</u> <u>Available</u>	Points Awarded
Section II. Organization Qualifications and Experience	20	19

Evaluation Team Comments:

Appendix C – Qualifications and Experience Form:

Overview/Qualifications

- Decades of experience in pavement data collection systems and vehicle provision.
- Their system is used by about 25 State DOTs, including locally (NH, MA, RI)
- Very strong industry presence
 - They placed first in the cross-comparison event. FHWA (FEDERAL HIGHWAY ADMINISTRATION) actually called them out as best in class, which is extremely unusual.
 - lowa tested all competitors to their RFP on a 74 test mile loop that only two vendors collected successfully (based on data collection).
 Only Pathways had 100% data present.
 - Both MinRoads and NCAT, the nationally renowned test facilities, have purchased them.
 - We have observed a strong presence at conferences, events, including RPUG committee membership.
- Very proactive with compliance national standards -- participates in development of the national standards.
 - Profilers have been certified by ALL the certifiers.
 - They guarantee the equipment provided will be certified by the certifier of our choice.
 - Allspeed profiler is ready to certify and will exceed the updated R56 certification requirements when released by AASHTO.
- Highly experienced with all aspects/challenges of collection, data processing, and Quality Assurance due to the high volume of collection and data processing work they perform. (1/2 million miles annually)
- As it's all their own hardware and software they fully support all situations, no passthroughs to other vendors.
- o Litigation no
- Subcontractors
- References
 - Many DOTs are using the proposed architecture and services successfully.

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BIDDER: Pathway Services Inc

DATE: 6/6/2024

 Consistent strongly positive reviews on their hardware, the quality and timeliness of data produced, and customer service increases our confidence that they will perform as they described in their proposal and can address any issues that arise.

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

EVALUATION OF SECTION III Proposed Services

	Points Available	Points Awarded
Section III. Proposed Services	55	45

Evaluation Team Comments:

Appendix F – Proposed Services Form:

- System Overview/Collection Vehicle System Proposed
 - The collection operators really like the controls
 - We've been impressed with the build quality of the Pathrunners
 - Pathways can service their laser cracking detection equipment rather than passing it to a different vendor, which is a huge advantage.
 - Can collect at 70 MPH safe on the interstate.
 - There may be a challenge to storage management given that there are 3 separate systems with different timeframes for filling their storage drives, and RAID arrays to manage.
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Instead of SaaS access to the Pathview software, they will do all Pathview work for us, including data processing, quality control, and reporting. They provide us with a controlled-access staging Pathweb for our own QA. They fix the issues we reject. They reassured in presentation that this includes our project verification collections. Frees our staff to perform more analytics which we consider a fair trade-off to loss of direct access. References reported high quality and timeliness of the data produced through their vehicle collection and data processing services, and confirmed they really do all these things. They ensure that data is available to the references in time to allow them to file their federal reports on time;
- Location Reference Integrations
 - Easy routing with multiple routing files and able to swap between routes easily.
- Pavement Conditions Data
 - Based on testing results of references / FHWA (Federal Highway Administration), we can get good data – and better support - with the use of Pathway's equipment rather than the industry standard LCMS2.
 - We have to flag several events in the field, they do the postprocessing of the flags
 - They will manually fix crack seal as needed
- Critical Curve and Safety Data
 - Meets all curve data requirements including the nice-to-haves.
- Reporting and Analytical Functionality

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BIDDER: Pathway Services Inc

DATE: 6/6/2024

- The Project Management Portal to track the collection and data processing processes is nice
- We have to request most reports and data exports from their project manager. Requires close collaboration but it's working well for the references.
- They will add custom reports to their standard reporting suite for us for automatic delivery
- They can export out all the flagged data for us to perform our QA and update the LRS
- The variance report will be useful for QA and updating LRS as well.
- Web Visualization Viewer
 - Historical image support is not limited by a number of years or storage capacity.
- Downstream Systems Integrations
 - Probably cannot integrate the webviewer as the URLs are not publicly available.
 This is not a deal breaker as Pathweb can be integrated with our systems to meet those user's needs.
 - dTIMS integration doable
- Implementation Services/
 - Reasonable
- Customer Support
 - Weekly meetings with CSR are valuable
 - They have already set up training videos, tutorials, training programs
 - They require their data processing and data collection people to pass their training program.
 - Reference notes Rave reviews. They regularly exceed the reference's customer service expectations.
- Systems Maturity
 - Modern architecture, maintaining and building out new features.
 - We control timing of software upgrades
 - Does not address how customizations handled during upgrades, and we will be getting some customizations.
- IT Hosting Provision
 - No issues
- Optional Data Collection Services/Historical Image Conversion
 - Both offered
- Caveats and Limitations
 - none
- Appendix F IT Policy
 - They provided in-depth informative responses clearly demonstrating that they fully understand the State's requirements.

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

• Their redundant hosting facility is not currently 100 miles+ from their primary site. We are confident that this can be readily addressed or waivered as appropriate for the State's risk assessment.

• They do not routinely do annual disaster recovery exercises on their web-hosted image viewers but state it can be implemented if required.

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER: Pathway Services Inc

DATE: 6/6/2024

EVALUATION OF SECTION IV Cost Proposal

Lowest Submitted Cost Proposal	د	Cost Proposal Being Scored	Х	Score Weight	=	Score
741,358.00	5	936,320.00	X	25 points	=	20

Evaluation Team Comments:

REV 4/4/2023 8

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro USA Land, inc.

DATE: 5/15/24

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Over 5 decades of experience
 - Been with MDOT since 1987
 - First ARAN built in 1997
- Litigation
 - Questionable wording: states "no litigation problems that would interfere with deliverables.
- Subcontractors
 - N/A
- References
 - Manitoba: Own their vehicle and do their own collection. Still working with LCMS1 and intend to upgrade after 10 year cycle (on Fugros suggestion). State that Pathways will not go to Canada.
 - Manitoba: Just accepts that the hardware isn't supersensitive to cracking and do no further analysis of that data.
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Q Al software (Dashboard) stating end of day QC. Is there any QC happening during collection itself and how does that look?
 - Q Proposed speeds for data integrity 62 MPH for 1mm or 75 MPH for 5mm accuracy. Is that a Fugro guideline or a Pavemetrics guideline.
 - I Computer being located outside the vehicle on a waterproof case.
 Would like more information on what that looks like and how its vented/cooled.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro USA Land, inc.

DATE: 5/15/24

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- Q When data is uploaded and gone through its QC. Does that just mean the health of the file itself or is it a QC of data accuracy (expected distance, image quality, speed)
- Q I didn't see a line for cloud storage of information on bid, where is that located?
- o Data Processing SaaS Proposed/Collected Data Management and Transfer
 - 10 full licenses for data processing including 2 system administrators
 - Amazon WorkSpaces Client used for accessing SAAS
 - Data is uploaded to 2 hard drives as collection is taking place, the system is checking for completion, data is checked again in the End of Day Report feature.
 - Automated Image checks done with Machine Learning make sure image quality is suitable.
- Location Reference Integrations
 - Routes are uploaded onto the system. Data points and begin/end are used.
 - Routed segments allows for manual input of roads on the interface.
 - Can use either ESRI-based or MbTiles map
- o Pavement Conditions Data
 - Bridge deck flag and construction flags are done manually during collection.
- Critical Curve and Safety Data
 - Existing curve data worksheet.
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Uses data collection layers (not collected, partial, collected, unable to collect)
 - Spacial data can be reported
 - iVision5 web viewer looks complete and user friendly
 - iVision5 is also mobile device compatible
- Downstream Systems Integrations
 - Refer to James and Tom
- Implementation Services/Customer Support
 - MaineDOT is in charge of delivering the vehicle (Richmond, Virginia)
- Systems Maturity
 - ARAN Control System (ACS) has been in use since 2008. The current ARAN suite includes this.
 - iVision5 first released in 2020
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro USA Land, inc.

DATE: 5/15/24

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

All FUGRO ARAN 9000+ are NCAT certified

• Appendix G – Proposed Services Requirements Worksheet

All answered appropriately

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: ICC – International Cybernetics Company

DATE: 5/15/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Developer and Manufacturer of pavement test equipment since 1975.
 - Recent purchase of another company, expanding employees and capabilities
 - Known company in pavement testing
 - Software launched in 2019
- Litigation
 - N/A
- Subcontractors
 - N/A
- References
 - Florida: sometimes have software pieces they like but ICC doesn't build as a business decision. No maintenance agreement. Have had good support on LCMS. Want to transfer from van to truck. Like the idea of computer in truck cab with AC
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - IrisPRO Pave
 - 5 camera options
 - High speed and every speed profilers
 - Pavemetrics (LCMS2)
 - Omnistar for GPS
 - Every Speed Profiler to capture IRI under the allotted speed for the high speed profiler (usually 12-13 mph)
 - o Data Processing SaaS Proposed/Collected Data Management and Transfer

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: ICC – International Cybernetics Company

DATE: 5/15/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- Uses "Connect" software 10 users 2 admins
- DriveReview enables collection technician to upload day(s) of information
- Upload expectations of 6.3 hours for a day of collection
- Location Reference Integrations
 - Supports both GIS and LRS systems
 - Suggest oploading a GIS network onboard (optional)
 - Each year given its own database
 - Supports ESRI-base mapping
- Pavement Conditions Data
 - Can create a GIS layer to exclude data that is flagged during collection
 - ESP measures longitudinal profile and creates an IRI based on the data
- Critical Curve and Safety Data
 - Refer to Tom
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Diagram shows a personalized dashboard. Will this also be offered in our contract?
 - "Inform" is their Data visualization software
 - Unlimited licenses and accounts 2 admin.
 - Inform looks comprehensive
 - Data in the web viewer is accessed via REST Application
- Downstream Systems Integrations
 - Refer to James and Tom
- Implementation Services/Customer Support
 - 80 hours of customer support, billed after that
 - Uses online support portal
- Systems Maturity
 - Drive launched in 2020
 - Connect in 2019
 - Inform in 2022
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - Nine IrisPro Pave vehicles in fleet
- Appendix G Proposed Services Requirements Worksheet
 - All answered appropriately

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/6/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Established company with many years of experience (40)
 - One point of contact Rob Ellis
 - Worked with 23 other agencies
- Litigation
 - N/A
- Subcontractors
 - N/A
- References
 - Kansas: Good field tech relationship with operators. Can be difficult to figure out who to contact. Did not change a report type that they asked for. Increased annual maintenance costs due to Pavemetrics (LCMS2). Send lasers to them for annual maintenance. Completely Manual crack drawing.
 - Tennessee:Dynatest equipment. Mandli does little service on equipment. Software si sent overseas. 50k to send LCMS to Canada for calibration. Stated fine for collection but trouble with supplying equipment
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Uses a Kistler Correvit L-Motion Optical DMI. Where is it located? Hard to clean? Accuracy compared to currently used hub mounted rotary DMI.
 - Uses LCMS2

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/6/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- Single camera to capture 145-degree FOV
- Status Page during collection
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Roadview Processing suite -10 licenses
 - Roadview Workstation 10 licenses
 - Roadview Explorer Unlimited licenses
 - Continuously copying data to two separate hard drives (one backup)
 - Verifier App makes sure upload via Azure was complete
- Location Reference Integrations
 - Shapefile or manual entry
 - Esri-base basemap
- Pavement Conditions Data
 - I − 70 MPH collection with 100% integrity
 - Q I see there are on board 8GB hard drives and mention of cloud storage. How often is data uploaded from the vehicle? How often will hard drives need to be switched out? How can we ensure we do not lose historical data?
 - Q Mentioned "feature tagging". How does that show up in the data for post processing? Is this something that'll need to be manually removed?
 - I 16 to 70 MPH data effective collections.
 - Bridge/Construction flagging done manually.
- Critical Curve and Safety Data
 - Refer to Tom
- Reporting and Analytical Functionality/Web Visualization Viewer
 - WVV can be added as an extension and accessed by anyone
 - Compatible with iOS, Android and Windows
- Downstream Systems Integrations
 - Refer to James and Tom
- Implementation Services/Customer Support
 - Q The schedule provided for delivery of vehicle/training of collection technician shows a December date. As we are in a snowy state, please describe a secondary plan of implementation is the weather does not allow this initial one.
 - Mandli employee will transfer vehicle to Wisconsin
 - 3-day training on delivery
 - Supply video guides, detailed manuals and accessible online training
- Systems Maturity
 - Webviewer introduced in 1998

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/6/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - Pilot collection done to ensure data lines up to Maines current.
- Appendix G Proposed Services Requirements Worksheet
 - All answered appropriately

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: 5/15/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Established 1996
 - Designed, Engineered and manufactured in same place (Oklahoma)
 - Currently collecting in 24 US states including FHWA (Federal Highway Administration)
 - In 2023 alone responsible for 500k miles of pavement condition data
- Litigation
 - N/A
- Subcontractors
 - N/A
- References
 - Wisconsin Customer service very responsive. Reliable equipment.
 Overnight new equipment. Pathview2 has had some issues.
 - New Hampshire all specific needs were met (running boards).
 Issues with pathview but with pathweb not as important. IT has minimal involvement besides maintenance of the server. Plan to extend current contract.
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Q Limitations of speed with which system? With high or low speeds over threshold what happens to that data (flagged/not collected) (70 MPH full integrity)
 - Q Location of the Inertial Profiling System to collect IRI on the proposed chassis, any expected problems with debris.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: 5/15/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- IRI collected with Gocater lasers in wheelpaths (multi-point about the width of a tire)
- Real-time software checks of data completeness
- Start and stops can be GPS initiated
- Uses own developed equipment for rutting, transverse and cracking data. (3D-PAS)
- Uses 3 cameras stitched together to get forward facing imaging
- Onboard voice animated sounds for upcoming events (start/stop)
- o Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Had initial reservations with transferring data nightly/weekly to cloud database via manual ethernet plug. Said they have tried this before and found the upload too slow. (We would upload daily – maybe often enough to make work)
 - Suggests a system in which we mail hard drives weekly to them so they can upload themselves (what their fleet does)
 - PathWeb is their web hosted data visualization software
- Location Reference Integrations
 - Suggests a shapefile created and uploaded directly onto equipment
 - ESRI-based basemaps are supported
- Pavement Conditions Data
 - Bridge/Construction flags are identified during collection via hotkey markings.
- Critical Curve and Safety Data
 - Refer to Tom
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Weekly meeting between Pathways and MaineDOT
 - Has own portal (which includes project tracking)
 - Q How will project reporting be done? Will we have access to create our own report outputs?
 - Unlimited users on PathWeb
- Downstream Systems Integrations
 - Refer to Tom and James
- Implementation Services/Customer Support
 - Provides 3, 5 day training sessions
 - Have own operator Certification
 - All references stated great and complete customer service
- Systems Maturity
 - System seems both matured and constantly updated

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: 5/15/2024

EVALUATOR NAME: Brady Foster

EVALUATOR DEPARTMENT: Transportation

- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - 44 collection vehicles in the fleet
- Appendix G Proposed Services Requirements Worksheet
 - All agreed services
- Other
 - o Portal has a training video library

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Cybernetics

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

Individual Evaluator Comments:

- Appendix C Qualifications and Experience Form:
 - Overview/Qualifications
 - Very recent merger of ICC = equipment & IMS is software/services acquired and expanded in 2022
 - New to this field
 - Software was launched in 2019 (5 yrs) and SaaS in 2022
 - Does not say how many of their systems have been deployed or are in use. Demo - "irisPro Pave - 32 in total" they have 8 in their own fleet.
 - DOT experience in this area at least the 3 DOT references. The other mentions of DOTs are for different kinds of services.
 - No discussion of AASHTO/FHWA (Federal Highway Administration) standards.
 - Not much experience providing providing data collection, data QA/QC, or data processing services
 - have invested to build advanced hardware/software and address industry challenges;
 - o Litigation no
 - Subcontractors no.

References – somewhat appropriate. None could speak to SaaS data processing.

- vehicle (mixed)
- o data collection/processing services (positive)
- data processing (low)
- software (mixed)
- o customer support (mixed);
 - Seems new to this; encouraged to break the software to find issues; software gets a lot of updates/buggy; Basically we do their LCMS beta testing;
 - Their Customer Support specific reference does not have a maintenance contract with them.
 - Would not use them for Hpms data processing/reporting, uses Pathways

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Cybernetics

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- must use 3rd party data processing software for pay adjustment reporting; slow;
- all agree the automated data processing does nt really work/lots of manual intervention
- 2 references mentioned we should be careful with contract language eg specify "accurate measurements"
- o AX ICC collection, software. Desktop data processing. Web Inform. Cant speak to HPMS, Vehicle, data upload, curves
- Low-Moderate \$ risk

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Cybernetics

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Appendix F Proposed Services Form:
 - 2 Vehicle Collection System
 - No license concerns (4)
 - IRISPRO DRIVE.
 - Unified no navigation between apps in truck.
 - Pavemetrics LCMS2 (with custom configuration)
 - OMNIStar differential GPS corr, annual subscription
 - Microsoft Azure Storage Explorer
 - Vehicle features of note
 - Noticed in demo that separate device is to be used for navigation of collection route. And a separate keyboard device is used to capture events. Is team concerned?
 - ICC Every-speed profiler and High-speed profiler do you use both?
 - HIGH storage low max miles per day.
 - Demo If they did 2 days w 300 miles of collection / day, we would exceed 12 TB? No because we assumed the redundant data on the primary drive rather than redundant drives. Or you can just collect on the removeable drives. they will provide sufficient storage for all the data that might be collected in our max collection regardless of camera setting.
 - Usually only need 1/ bu /drive day; might have to switch the drive during the day.
 - "8 hours of collection in one day is impossible".. (200 maximum miles per day) x (9 GB/mile average) = 1,800 GB max per day.
 - Upload process by ethernet cable from vehicle with automated QA, data processing, and even draft publication to web viewer Inform
 - Not novel to them, upload time looks feasible for typical days' load.
 But no references could speak to it. Reference data transfer has been a nemesis still transferring by disk, but they storing the data onprem.
 - publishes collection progress daily.
 - Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Summary:
 - Demo In general they provide the SaaS and the fully automated workflow to get the reports in the format we need.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Cybernetics

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

Data collection, upload, manual QA/QC is our responsibility, report generation is required.

- Connect[™] Data processing software 10 Azure virtual desktop workstations or application instances for DOT users (including 2 admins). Reference –this software is only used by them to view photolog and laser scanned images. Reference - uses SQL, Connect, and ArcMap for QA. References – requires manual data processing and QA; Not really automatic; They process 10 miles of data per hour;
- They are not offering us any manual processing services
 - POSPAC MMS for GPS post-processing.
- Location Reference Integrations
 - Reference A lot of manual processing needed to get things into right location
 - Network matching in CONNECT service based on Dept defining PMS bins in the GPS for consistency over time.
 - Unify™ is not intended to manage the GIS or LRS and to track all changes over time. Rather, it uses the GIS and LRS data based on snapshots in time, and intelligently allows updates to the snapshots in case of changes during a cycle, and it allows intelligent comparisons between these snapshots Demo we give you the reporting. Potential development needed as they would have to be able to import last years data. But you can't do that where there were road alignment changes same coordinate to same coordinate.
- Pavement Conditions Data
 - Collection routes are optional
 - Demo We can handle any change -modify and reprocess as long as you store the raw files -Stored for 1 year
 - Reference uses Pathway for network reporting.
 - Reference Took 3 years to get it automated up to 89% agreement between LCMS2 vs manual assessment.
 - Sealed cracks not detected well
 - Demo The LCMS detects cracks, do we have a parameter set for sealed crack sections? We might be able to address it that way but we don't have it now. They are a manually inputted event span in their system now.
 - Reference manually draw each sealed crack .
 - Reference not detected. found a different solution so would not have to manually draw them

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Cybernetics

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

Events

Many options to capture them ;many events can be created
 Critical Curve and Safety Data

- Connect™ can calculate, produce, and publish a horizontal and vertical curvature report with all the fields listed in Appendix L. with the POS/LV and LCMS-2
 - Demo Are you producing superelevation data on the curves?
 Yes, and grade and cross-slope.
 - Reference Cant get accurate cross slope
- 7.3 cannot handle complex curve types, spiral curves.
- Connect's Geometric Design processor only accepts one parameter, and that is the calculation and reporting interval. Our approach is to calculate the geometric properties on a fixed interval rather than splitting the road into tangents and curves. We believe that our approach is more consistent and repeatable
- Cannot aggregate curve data. Demo what do you mean you cannot aggregate it? Continuous sections of similar characteristics what are you looking for...as you go around a curve is it 1 curve as a segment, or it changes into here's this section with radius X and then this is Redius Y with next length. Or is it all kept in 100th mile separate curves. It works on a fixed interval basis you define short or longer interval (loses precision). EG radius every 50' or 100'. We might be able to come up with the way to do it since it must be in the raw data.
- Reporting and Analytical Functionality
- WVV Inform[™] Data visualization software. unlimited licenses and accounts for Department staff (including 2 admin accounts).
 - Reference Can only see 1 profile/run at a time, have to use PROVAL instead. Slow
 - Reference cannot search in web viewer by records id just route name, direction, and reference marker limits
 - HTML5 Web software
- o Downstream Systems Integrations can be done
- o Implementation Services/
 - SaaS not available til end of January so it will not be available to start upon delivery of vehicle, so we will not be able to really do the testing as scheduled. Confirmed in demo
- Customer Support

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- LIMITED TO 80 HRS OF CUST/TECH SUPPORT PER YR THEN BILLABLE Demo –" correct. That is plenty for the vehicle. The SaaS element is non-standard and it will have full support it comes out of the software licensing cost. " However this may be a change to the proposal given the use of term "customer/technical support"
- References LSMS2 support slow and arugmentative,
- References
 — customer support changing constantly never know who to contact, slow to respond on vehicle issues.
- 1 Reference Good listening, takes it a step further to warn of issues we were not aware of. Worked to remove the admin access requirement for installs. Find weekly meetings very helpful. However we are not offered a standing meeting, would eat up our 80 hours rapidly.
- Can remote directly into the vans
- 8-5 est, FIRST RESPONSE WITHIN 8 BUS HRS. But Service Agreement states 24 hours to first response regardless of severity level and provides not further info on severity levels/response)
- Updated user manuals and videos (as required) are provided with each version of released software. No other refresher training included.
- Systems Maturity
 - Young software getting actively built out.
 - 13.3 they will "assist" in migrations between their SaaS environments
- IT Hosting Provision
 - MS Azure and ICC. Both appear to meet SOM hosting standards.
 Demo- ICC hosts the SQLServer DB
 - Service Agreement states 99% not 99.9+% uptime stated in Appendix F
- Optional Data Collection Services/
 - 9 similarly equipped vans (best camera option); fully integrated data.
 Demo- If they collect the data, they fully process it
 - Historical images supported, done it before. However they also stated they will delete our data after 1 year. And in cost section they limit us to retaining them for 2 cycles. They are inconsistent in their assumption about how long we would retain data and images. 1 year

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

/ 2 cycles. And that assumption conflicts with our historical data analysis / display requirements.

Caveats and Limitations

- None stated but there are in cost section:
 - ARAN Images Hosting Cost Per Year as long as the 2 Cycles are Retained— Demo - what does that mean? They assume that we would drop them after 2 cycles.
 - They said "not applicable" on rates although they stated in this section that there would be additional costs for >80 hrs customer/tech support per year, storage of data over 1 year, storage of images over 2 cycles, ad hoc work but in cost proposal said "not applicable".
- Appendix G Proposed Services Requirements Worksheet and Appendix H IT
 No issues.

SERVICE LEVEL AGREEMENT
Made notes above
APPENDIX H
No concerns

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- COST PROPOSAL NOTES
 - Rates for Ad hoc costs are "N/A"
 - LIMITED TO 80 HRS OF CUST/TECH SUPPORT PER YR THEN BILLABLE but they failed to include any rates
 - They had mentioned some work could possibly allow us to meet more requirements, but not included as proposed and no rate supplied
 - No rate for a repair visit
 - No rates for data/images stored longer than their assumed 1 year or 2 cycles.

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: FUgro

DATE: 5/1/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

Individual Evaluator Comments:

- Appendix C Qualifications and Experience Form:
 - 1 Overview/Qualifications
 - Established with proper specialization
 - 100s of systems deployed
 - DOT experience 6 State DOTs currently
 - No mention of government standards
 - Pavement data collection experience
 - No mention of providing QA services
 - Demo Lutril in charge of builds; Michael client advocate for several DOTs; Matthew software product managment, Eric – process; Affan – auto tech
 - do they have other SaaS Customers?
 - 2 Litigation Yes ." There are currently no claims, conflicts, judgments, or litigation decisions and no previous obligations that would interfere with our ability to perform the required services"
 - 3 Subcontractors no.
 - 4 References could not really evaluate appropriateness of the references as Fugro focused tightly on the hardware to be provided in the proposal. References reached could not address upgraded software or hardware, cloud delivery of data processing, ethernet data transfer.
 - 5 Low-Moderate overall risk

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: FUgro

DATE: 5/1/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Appendix F Proposed Services Form:
 - 2 Vehicle Collection System
 - ACS 2.0 Collection Suite and Vision Processing Software 1 UI, no license concerns
 - Ruggedized powerful gaming type PC
 - 2 4 TB drives for data storage for 6 days of collection to be stored before deletion. (6 TB seems typo)
 - Reference Pavementrics detection libraries were excluded from their service agreement so could not upgrade Vision or use full LCMS2 capabilities -- it's in OURS too!!!
 - 3 Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Uploads at end of day process if hooked up, file integrity is checked, and transfers are automatically retried if they fail. Notifications of OK or not.

3 day max to transfer in	1 day max to transfer in
GB	GB
Based on vehicle storage	Based on estimate of a 8
requirements statement	hr collection
2402 GIG 5.75 hr?	534 GIG at 50 mph day
	1.25 hr ?

- Demo what happens if >1 day of collection on the vehicle? Expands the transfer time. You will struggle with the 1 GB connection if you wait too long.
- 4 VISION 2.0 10 full data processing licenses inc 2 SA
 - Desktop software we will access through Amazon Workspaces Windows client. Demo - a little bit like RDP...each person has their own virtual machine to access, so no performance impact. Can use multiple monitors? YES. They can use MS One Drive and tie that to our DOT workstation. Multi-monitor setups with resolutions up to 4K are supported. How robust is the machine provided? It's a Service ...built in redundancy and failover.

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

 Duplicate data can be deleted during collection; or Any overlapping data due to multiple collections can be resolved during the data segmentation QC phase where multiple collections can be trimmed and aligned to create one homogenous data product.

5 Location Reference Integrations

- No license for PLANX <u>required</u> to meet GIS survery-grade location requirements via post-processing. Doublechecked with team – it is not built into Vision or automated. Demo- yes postprocessing of GIS is a standard part of the process.
- Demo = How do you keep the routing in sync with the LRS? You can import the routing to ARAN and VISION simultaneously or import it from ARAN. They prefer to put in both systems and match it up when the data comes in which Tom prefers.
- Demo Routing table in relationship to geometric routes with the measures...they work off routes/nodes with LRS values (landmarks(. Along with polylines if we load them). It is assigning the attributes from LRS to the collected data as it is brought in from VISION then use logic to get them onto the LRS network. Depending on our preference we can chose to keep the LRS length measures or the actual measured length from the collection between each nodes. For reporting we break it into 1/10th mile intervals and interpolate between the nodes. They don't use the measures on the vertices, based on the nodes (tom likes).

6 Pavement Conditions Data

- Exclusion of Pavementrics library updates is a major issue.
- Fugro's ARAN 9000+ data acquisition system and Vision data processing solution both support flagging of data to be rejected, to identify it for recollection, reprocessing or to discard it. This concept can be applied to an individual data point, a range of data, or an entire data collection depending on the need of the client. Vision supports reprocessing of data through automated algorithms with adjusted
- Demo pavement condition data bridge and const flags have to be done manually – please desc the process. Bridge – if we know where they are we can build it into the routing and can easily exclude from reporting...or if you have 2 people you can flag it in real time on the ARAN but accuracy is based on the users reaction time. In Vision, you

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can add an event based on what you see in VISION data/images. Geospatially is option as well. With construction we presume we don't know the location so must flag in the vehicle or inside the vision software. They would perform that service for all our collection. Can you export all the events and wanted to use it to update LRS, can we do that – yes through regular reporting, shape file, or custom report. They have done it for LRS with collected lengths; bridge locations; lanes.

7 Critical Curve and Safety Data

- 8 Reporting and Analytical Functionality
 - Demo When we have these reports, such as curve report, we need to make sure can pull tabular data that always has a ROUTE ID, X, Y.
 Response - Anything we have we can report out as shapefule or tabular with that data.
 - Demo What data is required for the segmentation...jurisdiction, HCP, fx class, etc. If it exported as a shape file any attribulte can be added to the routing table in ARAN and View. Then they report them along with the collected data.
- 9 WVV
 - Current one meets our requirements, this one has some new features
 - ARCGIS online widget for dynamic conn between roadway condition data and ArcGIS online.
 - iVISION gateway based on their APIs web presentation of the data with fewer links to the deep dives.
 - "2 most current years". Demo They host as many years as we wish, no technical limitation just the pricing limitation. They "glacier" past data for duration of the project, can access but will take time. They can control which data to glacier such as raw data vs ROW images.
- 10 Downstream Systems Integrations
 - Already built and in use.
 - Demo API related -- We currently link to views in the DB and pull data and update nightly to keep it in sync w LRS and feed other systems from there, will it be possible to access some of these reports programmatically/automated or would we have to move manual generation of the reports? Via an API or some other method in the web

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

software. What data are you accessing? Curve data...camera images...standard access points that we go to. Not sure if there are cuviture APIs...we are losing some things we need to do our current process so trying to understand how it impacts our processes.

Demo - Could we get the API documentation for integration with our internal systems? We don't use webbuilder and have our custom viewer to get ROW imagery...wanted to replicate it with offsite storage (thumbnail and fullsize images) Yes you certainly can for imagery access, published reports. Some of the raw data is not available.

11 Implementation Services/

Part 1 D of RFP has a start date of Sept 1

Implementation plan focused solely on provision of vehicle. .but risks are in getting data processing SaaS, ethernet communications set up, getting the new version of software(s) to work as promised, whatever is involved in that historical image conversion...

12 Customer Support

- Manitoba their tech support was not up to par, slow response. Not able to upgrade their pavementrics library.
- in the SLA, the Pavementrics detection libraries are excluded which would require a separate major sole source purchase to upgrade to continue to leverage the full capabilities of the LCMS2 over its life cycle. They clarified that it was included under the annual service fee because it's incorporated into their Vision Software. Would want that crystal clear in a contract however that is very clearly a change to the proposal. ""Pavemetrics processing libraries integrated into Vision are not included into software upgrade. It needs to be purchased separately. Contact Fugro specialist for more details"
 - Vehicle testing in Nov, delivery w/ commissioning on-site, training at least 1 week, acceptance done by Dec 1
 - No customizations required.
 - Demo What is the required roles/responsibilities to using the software? Who manages database and moving files?. Tech Support, file movement limited to us exporting data. Who creates a view for a specific report we need? Support. we don't allow users in the DB. No State tech user should be required for this.

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- 5-8PM EST. phone and email. Optional collection would have a PM. 24 hrs response any issue in Appendix F. According to their Support agreement major issue, 1 day response to even critical issues; and up to 3 business days for response 10 fox fix or workaround
- proactive in staying in alignment with AASHTO standards based on Aashto memberships – not proven by our experience
- 12.8 , in the unlikely event of inadequate data processing Fugro will conduct a 100% review of the sections in question and adjust appropriately. Additionally, Fugro will utilize the corrected sections to further enhance its AI Distress Model.
- "really weird IT support issues, they were really struggling and the code seemed piecemeal and not understood. We gave up on getting software support from them.".
- Optional software support is weird for a SaaS —" Starting from the second year and each subsequent year, each software package is subject to an annual maintenance fee under a continuing agreement. This fee ensures comprehensive coverage for all software updates, including bug fixes and enhancements. In the event that the DOT chooses not to enter into an annual maintenance agreement, access will continue for the DOT, but no software support, updates and/or bug fixes will be provided."

2 Systems Maturity

- Mature software packages, iVision architecture modernized 2020, receiving regular maintenance and feature improvements. A little hard to understand as Vision 2.0 is not referenced..
- Did not address maintaining customizations during upgrades, only developing them. One reference still on old version of Vision because their custom reports must be rewritten - they are not included in the upgrade process.

3 IT Hosting Provision

- Amazon no issues
- Fugro owns the raw data collected according to Software Agreement which conflicts with our IT Policy.
- 4 Optional Data Coll Services
- Data Collection offered
- Historical images in WVV offered

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BIDDER NAME: FUgro

DATE: 5/1/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Caveats none but the price proposal is strange
- Appendix G Proposed Services Requirements Worksheet
 - No issues.
- Other no issues
 - 1 IT POLICY no issues

COST PROPOSAL NOTES

- Omitted all costs after year 2, which impacts contract negotiation although not scoring.
- Demo What was the thought process in not providing the rest of the years costs?
 "we misunderstood the directions but ad hoc fees were covered" (no they were not, except iVIsion hosting).
- Waived iVision hosting fees for the first 2 years which throws off the cost comparison in scoring by a few points. iVision hosting is based on mile – not clear if that is limited to active miles or includes historical miles as well. Demo - is that all active miles and our history "YES".
- Costs proposed also do not map to the costs in the SLA. Seems lower with one \$100 exception, and two costs in SLA (Hardware maintenance, Omnistar) are missing.
- Demo where are the Vision hosting costs? Built into the vehicle cost, then the service for 1st 2 yrs, then folds into the maintenance and support; --- Weird, likely another cost score manipulation.
- They claim in demo that contrary to the SLA, the cost of updating pavementrics libraries is built into our Vision software price. That doesn't pass straight face test given the explicit wording in the SLA

OPTIONAL

- Collection offered
- ARAN images in WVV offered

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro USA Land, Inc.

DATE: 5/31/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - 5 decades of experience, first ARAN in 1997
 - Deployed hundreds of ARANs
 - Several agencies in the US and Canada
 - Lack of continuity and expertise in personnel
 - Issues with timely equipment repairs and replacement, to include failure to process purchased warranties and getting warranties that didn't cover our equipment and use case.
 - Proposed software was never mentioned in the past years we were under contract with them.
- Litigation
 - Non-answer,
- Subcontractors
 - None
- References
 - Connecticut DOT, how many years and how many vehicles?
 - Manitoba Infrastructure, since 2017
 - Maryland SHA, one ARAN and supplemented with vendor collection of 2700mi, over 20yrs
 - Ontario MTO, over the last 40years, several configurations
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - LCMS2, BEI DMI Encoder, Dual Wheel path laser roughness system, POS LV220 GNSS receiver
 - ARAN 9000+, ARAN Collection Software (ACS), Vision 2.0 Software
 - Enclosed truck bed option with it's own air conditioner, 9.5ft tall

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro USA Land, Inc.

DATE: 5/31/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- ATOM 4K camera enclosed in protective housing
- Audio and visual collection notifications
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Automated start/stop of collection, automated video QC. Current vehicle has never been able to do the auto-start stop but was claimed it could during acquisition.
 - On the fly down-sampling of 4K to 1080P (or any other image size)
 - Unified UI for processing of data through Vision.
- Location Reference Integrations
 - The auto-start capability has never worked on our system so we have not been able to go from our LRS to a file in the ARAN9000 that can auto-start and auto-stop as collection segments are travelled.
 - RouteID and Milepoint aligned with Spatial data in client LRS.
- Pavement Conditions Data
 - LCMS-2 1mm up to 60mph and 5mm accuracy up to 70mph. FUGRO recommends the 5mm collection on all systems.
 - Low-speed IRI is handled through a 3D geospatial element to remove the movement of the vehicle and moving away from the South Dakota method. IRI is calculated in real-time.
 - Pavemetrics is not included in contract so licensing and issue resolution would be through an entity we were not contracted with.
 - IRI values are calculated in real-time and go through post-processing refinement
- Critical Curve and Safety Data
 - Separate piece of software but they have some integrations to postprocess and re-integrate back into the database. Post-processing refinement will be part of the standard process.
 - Stated spiral curves were possible but we have not had success with their processor in our experience, even with customer support's help.
 - Processor fits arcs and tangents to the corrected alignment based on entered deviation parameters.
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Current iVision does not meet our requirements but iVision5 looks like it has the integrations we required.
 - Crack Seal detection algorithm is currently inadequate and vendor agreed it is an issue.
 - In order to get accurate elevations in the context of Mean Sea Level or Orthometric height, we need to export the data and process using a

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EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

separate application, and the re-integrate it back into the Fugro Database.

- Downstream Systems Integrations
 - API framework for integration with other systems.
 - Report generator allows the creation of any number of pre-defined reports to run during the processing stage.
- Implementation Services/Customer Support
 - Still waiting on our preventative maintenance report for this year, 3 months later.
 - We regularly have to escalate issues in order to get reasonable timeline resolution.
- Systems Maturity
 - We recently went to an IRI certification course in Massachusetts and MaineDOT had the only DCV out of approximately 20 different groups that was Fugro.
 - Stated Saas has been available since 2016 but the Department was not made aware of this option until we required it as part of this RFP.
 - Geocollect for auto-start and stop has never worked, machine learning crack detection has never been seen, and macrotexture measurements did not report viable results in the years we have been under contract with Fugro.
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - Significant impact to bring our current data into the new system.
 - There was vagueness about how many years of data could actually be stored because full network isn't collected every 2 years and we would have to figure out how to keep segments that weren't collected in the last 2 years.
- Appendix G Proposed Services Requirements Worksheet

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Other

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro **DATE**: May 8, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

Overview/Qualifications

-

o Litigation

N. – There appear to be litigation issues.

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Subcontractors

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References

We did not find a reference using the proposed architecture. Some did have a newer version of the iVision software than our current implementation and seemed satisfied with it and some were dealing with the same issues we currently have with our version. There was no reference using the full SaaS implementation though.

-

- Appendix F Proposed Services Form:
 - o System Overview/Collection Vehicle System Proposed
 - Q. 2.8 Did you mean to say +- 0.1 degree of accuracy for lat and long?
 - Response: They provided the proper accuracy during the Q&A. Didn't write what it was but it was within our accuracy needs.

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BIDDER NAME: Fugro **DATE:** May 8, 2024

EVALUATOR NAME: Tom Lynch

- P. 2.9 They have an informative answer to the loss/degradation of the GPS signal.
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Q. 3.1 Are reports not available in the iVision web based software?
 - Response: Reports come from the Vision software.
 - P. 3.4 The Vision data processing SaaS setup sounds relatively easy without the need for cloud administration. The multi-monitor setup is a plus too.
 - Q. 3.4 Does a user login to a Windows machine or the Vision processing software?
 - Response: It opens the application deployed using the new Windows remote desktop software.
 - Q. 3.4 If users log into a Windows machine what are the responsibilities of the users? Do they need to setup SQL Server or any other database software? Do they need to move files around in the storage? Are there other IT functions that are required?
 - Response: Users would not need to get into the database or move files. This would be done in the user interface of Vision.
 - Q. 4.1 Is there a visual interface available for the upload process? If so, is it only available in the ACS software?
 - Response: It is only available from the ACS software.
 - Q. 4.4 How intensive is the manual process to address overlaps in recollections?
 - Response: Works the same as the process we have now.
- Location Reference Integrations
 - Q. 5.2 How does the routing data get to Vision? Is it sent from the ACS after importing there? If not, how do they stay in sync?
 - Response: Didn't get to ask question. Not critical.
 - Q. 5.2 Can you provide an example of a routing table format?
 - Response: They showed us the user interface which helped clarify how it works.
 - Q. 5.2 When a routing table changes, how does that impact older collections? Does it keep historical routing tables?
 - Response: Historical routing tables don't change but there are ways to compare over time.
 - Q. 5.3 How many systems does a user need to import the collection route data into? What happens if the vehicle software and the processing software get out of sync? How does a user get data to the Vision Processing software in the SaaS?

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BIDDER NAME: Fugro **DATE**: May 8, 2024

EVALUATOR NAME: Tom Lynch

- Response: There are wizard driven import tools that help users bring the shapefiles and roadway metadata into the system and keep in sync.
- Q. 5.5 You mention ESRI-based basemap formats, but can you be specific about whether or not you support loading the ESRI compact cache format? Can you load that on the vehicle? If there is no internet connection what are our options for loading basemap tiles to use as part of the ACS? You only mention "stored as Map tiles". We would like to avoid making custom tiled caches in the new system.
 - Response: They did say they can support ESRI compact cache format. They even mentioned using vector tiles in the response.
- Q. 5.5 Are you using ArcMap as the mapping platform? ArcMap is in the final stages of being retired. Do you have plans to move to ArcGIS Pro?
 - Response: They were going to check on this and get back to us. If they are licensed it won't impact us now but at some point they would need to upgrade.
- Pavement Conditions Data
 - Q. 6.6 Where does a user access this report?
 - From the Vision software.
 - Q. 6.9 Can you elaborate on the process and format to add flagged segment references for bridge extents? Can we load a file with measure references?
 - Response: We can load a file with references and/or edit manually.
 - Q. 6.10 Is there no way to flag construction during data collection?
 - Response: It can be flagged during collection but it is more accurate to update during the processing stage.
 - Q. 6.12 Can other "events" be added to use in aggregating and if so is there a way to load them in via a file?
 - Response: Other events can be added during the processing. It can be loaded via a file if needed like a bridge flag.
- Critical Curve and Safety Data
 - N. 7.1 This answer is confusing. Not clear why there is a reference to a routing file and not clear if they can really provide the data we requested.
 - Q. 7.1 What does the routing file have to do with the curve data outputs? Can you clarify what fields will be available in the outputs and

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EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

what steps are required to generate this information (e.g. additional processors)?

- Response: They confirmed we could get the required curve data outputs and explained how the processor works.
- Q. 7.2 Can you really go 500 miles per hour?
 - Response: It was a typo and obvious mistake.
- Q. 7.5 What additional support and documentation is provided when configuring the algorithm for automated data processing? Are there best practices?
 - Response: They said they would help with configuration and ongoing support to refine the values used.
- Q. 7.5 Can the output include RouteID, measure, and start and end XY's?
 - Response: Yes, they can.
- Q. 7.9 Where does a user access the Applanix POSPac software?
 Can a user maintain the attributes exported after post processing?
 - Response: The data would be integrated back into the system, but it was not written up that way in the proposal.
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Q. 8.3 How does a user get the exported data off of the SaaS and onto the State network?
 - Response: This is part of the setup with the Windows Remote Desktop software.
 - P. 9.4 They allow publicly available ESRI basesmaps including vector tiles. This allows us to use existing resources for the mapping components.
 - Q. 9.4 Is it possible to bring in hosted feature layers into the map components as well as basemaps?
 - Response: Yes, this is possible in the system, but not clearly stated in the proposal.
 - N. 9.7 They do not clearly answer the question asked about displaying other department data that can be linked to the LRS?
 - Q. 9.7 Can a user see other department data and if so how is it loaded? Using locators?
 - Response: Data can be visualized but not utilized for querying and locating. It seems like it is just a graphic.
 - P. 9.7 The iVision Viewer can be initialized to open at predefined location and with particular settings. This is a plus for URL integrations directly into the system.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro **DATE:** May 8, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

- Downstream Systems Integrations
 - P. 10.3 There seems to be a Rest API available with the iVision 5 software. The iVision Gateway could also be a valuable tool for integration.
 - Q. 10.1 Please provide a clear answer about whether or not the system can provide the standard columns requested. It is important to get RouteID, measure and XY locations for every record reported. Having a shapefile does not meet the requirement.
 - Response: They said they could provide this on every report as needed.
 - Q. 10.3 Can you please provide the API documentation? Can we see an example of the iVision Gateway implementation?
 - Response: They said they would send the API.
- o Implementation Services/Customer Support

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- Systems Maturity
 - The system proposed seems like an entirely new system compared to what we currently have from Fugro now. It is surprising we don't have any of this currently implemented in the MaineDOT architecture. We did not find a reference using the proposed architecture.
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations

-

Appendix G – Proposed Services Requirements Worksheet

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Other

Q. – It is not clear the type of work that may be required by users of the Vision SaaS offering. Can you please explain all roles and software that is required to work with the system and what level of expertise is needed? If a user needs to move files, manipulate a database with additional software, administer the environment or perform any other task outside the Vision software, please describe in detail so we can assess the staffing requirements and skills needed.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro **DATE**: May 8, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

 Response: End users are not required to administer the software, VM or cloud environment.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE:** May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

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:

Appendix C – Qualifications and Experience Form:

Overview/Qualifications

P - There was an experienced and dedicated PM assigned.

- Litigation
- Subcontractors
- References
 - N There were complaints (some strong) about support and not being upfront about equipment being refurbished.

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - N. 2.1 The optical DMI requires ongoing cleaning to work properly. Came up in the presentation.

- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Q. 3.1 Can we get more details on what the LRS correlation software does and the associated data available when exporting route referenced data?

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE:** May 2, 2024

EVALUATOR NAME: Tom Lynch

- Response: It sounded like a standard implementation approach. They can export have Route, X, Y and Measure data.
- Q. 3.1 There is a reference to two administrator accounts for cloud, management, database setup and access and data movement. Is there an expectation that Maine staff will need to setup and maintain the database? What would Maine staff do in terms of cloud management? Are only administrators allowed to move data and why would they need to move data? Are administrators the only users allowed to check-in data?
 - Response: They mentioned that they would handle all the cloud administration but wanted us to have the option. It wasn't clear what the benefit would be for us to manage that.
- N. 4.1 The timing of uploads is problematic. It doesn't seem to make sense with the file sizes and proposed bandwidth.
- Location Reference Integrations
 - Q. 5.1 It is not clear that they can provide Route XY output in addition to the Route and Measure standard they provide. Please provide a clear response if we will be able to get a Route XY output as part of the data exporting process. Would this be part of the custom LRS export implemented after an engagement?
 - Response: The columns can be exported. We wanted to be clear we didn't just want a GIS dataset as an export.
 - N. 5.2 The write-up for this section is not clear and should have more detail.
 - Q. 5.2 What is the beginning and ending location referenced in the input format preference? Is this a landmark and if so does an additional input of landmarks need to be included.
 - Response: They can include referenced location or more likely we can use the measure enabled shapefile. We would likely use this approach. It seemed like there were numerous options and that is what was confusing.
 - P. 5.3 Updates can be provided at any time during the collection cycle.
 - Q. 5.3 Is historical data referenced to the collection route it was originally collected against or the current collection data?
 - Response: It sounded like it is referenced to the route data it was collected and processed with but there were ways to compare across collections.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE**: May 2, 2024

EVALUATOR NAME: Tom Lynch

- N. 5.4 There are no details on how intersections are integrated. It sounds like it is part of a manual route planning process. The reference to create a segment in the Roadview Workstation is confusing.
- Q. 5.4 Is a user required to enter intersection data? If so what software are they using?
 - Response: It sounded like there are ways to import data to define intersections and they can be added manually. Still wasn't clear on what the inputs were.
- P. 5.5 They can use our existing basemap in their data collection and processing systems which is not possible in our current system.
- General Response: They explained how data would be incorporated and it sounded like it was workable. Concerned they don't have it documented properly.
- Pavement Conditions Data
 - N. 6.6 Not sure the question was understood. Why would ESRI field Maps be referenced for recollection of data?
 - Q. 6.6 What is the purpose of Field Maps in the recollection process.
 - Response: It's just one possible workflow. It really did not make sense but it is not needed for our purposes.
 - N. 6.7 Not clear what the actual steps are and how much is automated or requires manual intervention.
 - Q. 6.9 It is not clear if bridge flags are detected automatically or require tagging be completed manually using the Roadview Workstation software. Please be clear on what manual steps are involved.
 - Response: They can be identified in processing but it sounds like we would want to manually review and modify as needed.
 - P. 6.11 It sounds like once flags are manually entered, they can be used throughout the reporting environment and brought forward into each collection cycle.
- Critical Curve and Safety Data
 - N. 7.1 They do not say whether they can produce the critical data fields and whether they can be utilized in the reports for simple curves and grades.
 - Q. 7.4 Need more clarity on why these steps are needed. It sounds like an end user would need to use the standard ESRI tools to create them? Is nothing automated?

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE:** May 2, 2024

EVALUATOR NAME: Tom Lynch

- Response: They mentioned having to use ESRI tools to create spiral curves. It did not seem like a solution integrated into the application and requires using additional GIS software.
- N. 7.6 There is a theme in this section of end-users utilizing other software with the points locations during image collection to process manually.
- N. 7.9 There are no details here about how elevation is derived besides using "GIS elevation software".
- o Reporting and Analytical Functionality/Web Visualization Viewer
 - Q. 8.1 Is this using ArcGIS Online or Enterprise? Will the dashboard be public and if not are user accounts required?
 - It is using ArcGIS Enterprise and does not require user accounts.
 - N. 9.2 The RoadView and Workstation components really do not feel like a SaaS. It's sounds like it's just a VM for the software to be loaded on. It sounds like everything else is up to the users.
 - Response: They will allow the State to maintain the entire VM environment but they priced to have Mandli administer the VM, OS, DB and Mandli software.
 - Q. 9.2 Who handles software updates on the VM? Is it the responsibility of the vendor or the users. This includes all software (OS, DB, etc).
 - Response: They will allow the State to maintain the entire VM environment but they priced to have Mandli administer the VM, OS, DB and Mandli software.
 - Q. 9.8 Do the images need to be georeferenced?
 - Response: We need to provide a way to reference them to the LRS. We can provide different file formats that they can consume as long as we have the appropriate information in the files.
- Downstream Systems Integrations
 - Q. 9.1 You said that the system meets this requirement by exporting a shapefile. Can you provide the Route ID, milepoint, and XY coordinates (XY's for points and begin and end XY's for lines) as tabular output? The goal is to map the data against our current LRS data.
 - Response: They can provide the required columns as part of the reports as well.

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE:** May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

- Q. 9.3 Can you provide the API documentation for us to review?
 - Response: They offered to send the documentation.
- Q. 9.3 We anticipate pulling thumbnail images for paths along the roadway to allow users to "drive" down the road. It sounds hard to replicate what we have based on the API call you referenced and even if we could the performance may be a problem. Do you have any way to pull more than one image at a time and can we pull thumbnails or full images?
 - Response: They didn't commit to being able to do this but offered to work with us on the API calls and come up with others solutions if needed.
- o Implementation Services/Customer Support
 - Q. 11.1 There is a three day administrator training. Will this require specific IT skills? How technical are the administrative functions.
 - Response: There are parts of the administrator training that are specific to the software. The other administration training for the cloud and IT functions may not be needed if they are maintain this for MaineDOT.
 - N. 11.3 It sounds like the system will require an IT or very technical administrator of the Azure environment. They did not mention databases here as well but it is referenced as an administrative function in 3.1. Again, this sounds like a cloud VM solution and not a SaaS.

Systems Maturity

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- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - Q. It is not clear the type of work that may be required by users of the RoadView Processing Suite and RoadView Workstation SaaS offerings. It really just sounds like a virtual machine with the software installed. Can you please explain all roles and software that is required to work with the system and what level of expertise is needed? If a user needs to move files, manipulate a database with additional software, administer the operating system or cloud environment or perform any other task outside the RoadView Processing and Workstation software, please describe in detail so we

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli **DATE:** May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

can assess the staffing requirements and skills needed. Do we need IT staff to administer the SaaS?

 Response: They will allow the State to maintain the entire VM environment but they priced to have Mandli administer the VM, OS, DB and Mandli software.

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- Appendix G Proposed Services Requirements Worksheet
 - o P. They will meet all requirements as stated.

- Other
 - N. I notice SaaS consulting as an ad hoc service in the price list. It sounds more and more like they hand over a VM and only provide support on a time and material basis?
 - O Q. Do you have an API for reports?
 - Response: Not directly, but they are tables in the DB so many options.
 Not a requirement regardless.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

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Individual Evaluator Comments:

• Appendix C – Qualifications and Experience Form:

Overview/Qualifications

•

- Litigation
 - P. None

.

- Subcontractors
 - -
 - •
- References
 - P. Very strong references. Service, project management and data quality were all glowing. We did not get any negative feedback and many remarked on how proactive they are with national standards.

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Q. 2.2 What data is required to be on the State network in order to use the desktop PathView processing software? Does this mean the data is stored at Pathways servers and internally? Is there a DB involved or is it just files on a file system?
 - Response: In order to use the PathView software on the State network we would need to load data on the State Network as well. The proposed service solution does not require us to install the PathView software on the State Network though.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: May 2, 2024

EVALUATOR NAME: Tom Lynch

- Q. 2.3 Where does the data reside that is displayed in the PathWeb application? Can data processed on a desktop environment also be accessed from PathWeb and if so what is the process?
 - Response: Data would need to be sent to the SaaS environment for PathWeb. We are not using PathView locally though so it is irrelevant.
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Q. 3.1 Can you please elaborate on how PathView is a SaaS product?
 - Response: They are proposing a service-based solution that does meet all the requirements. PathView is not required but offered as an additional option if needed. We are not considering this option in our decision-making process though.
 - N. 3.4 They reference any project-level data processing and reporting will require PathView which is not a SaaS product and require a local installation.
 - Q. 3.4 Please provide all services and products that are covered by Pathways Services. How many reports can be requested? How many miles are covered? What exact data products will be available. We need to have a clear distinction on what requires PathView desktop client and what is covered by Pathway Services.
 - Response: They said they would include project-level processing as needed as part of the service solution. They did not say there was a limit.
 - Q. 4.1 Can we only update the data collection shapefiles annually?
 - Response: We can update at other times but that is the recommended process.
 - Q. 4.1 (Step 9) How are the reports delivered? Are they physically mailed on a storage device or made available digitally online?
 - Response: It is a mix but data is available to download in the project management dashboard and other data is packaged and displayed as part of the PathWeb software.
 - N. 4.4 There is not much information outside of recollect and trim routes. Expected more details on this common process.
 - Q. 4.6 How is the recommended approach of segmenting the data after data collection completed? What software is required and who would do this task?
 - Response: This is part of the data processing service proposed.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

Location Reference Integrations

- Q. 5.1 Please provide more details on how data is referenced to our LRS data? What options are available (ex. Routeid X and Y, RouteID and milepoint, etc)?
 - Response: They basically segment all the data coming in which makes sense with the terms they are using. The terms used were confusing to me but it made sense after the explanation.
- Q. 5.5 Can a MaineDOT Esri-based basemap be loaded into the HDCVS software for use offline?
 - Response: They offered to work with us to get an offline basemap integrated.
- Pavement Conditions Data
 - Q. 6.7 There is mention of using PathView for processing. Would this be required or a product from Pathway Services.
 - Response: It is part of the proposed data processing service. PathView is not required locally.
 - Q. 6.9 & 6.10 What software is used to identify and update bridge flags or construction flags that were not captured by collection personnel? Is there a way to load bridge extents referenced to the LRS into the system?
 - Response: Identifying bridge flags is part of the QA/QC process of the proposed data processing service. We would be able to download these extents for our use after processing as well which was a bonus.
- Critical Curve and Safety Data
 - Q. 7.2 & 7.9 Does the post-processing integrate into the system in anyway?
 - Response: Postprocessing is required and the data can be incorporated back in but it didn't sound automated and would have to be part of the service provided.
 - N. 7.6 It does not sound like superelevation is possible without the HD LiDar scanner?
 - Q. 7.6 Are you not able to collect superelevation with the proposed system?
 - Response: The do not collect superelevation as part of the standard processing without Lidar.
 - Q. General Is curve data production part of the offering from Pathway Services?

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RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

- Response: Yes, but it seems limited what we may be getting for curve data. The focus seems to be on federal HMPS reporting requirements and not the other more detailed curve data needs required for safety analysis. It sounded like they would work with us on extending our outputs but they did not commit.
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Q. 8.3 and 8.4 How does data get to the desktop PathView software to be reported on? Also, if a report is requested through the Project Manager is there a charge and if no, what is the limit on requests?
 - Response: This is not relevant since we are only evaluating the service offering and not using PathView locally. All reports would need to be provided by Pathways Services.
- Downstream Systems Integrations
 - Q. 10.1 Is PathView the only option? Do we have to load all data locally if this is the case?
 - Response: All reports and downloads created by Pathways services can be accessed via the project management dashboard and/or PathWeb.
 - Q. 10.3 Please elaborate on what the URL query consists of and what information is returned. Is this a Rest API? Are the URL to images referenced available publicly and can we have access to thumbnails and full-size images?
 - Response: They said they would work with us explicitly on allowing this integration. We have options to use reporting tools or still a direct query URL integration.
- Implementation Services/Customer Support
 - Reference Info Very strong references and our follow-ups were all glowing. Seemed like they build strong partnerships. People appreciated the standard weekly PM discussions to help keep things on track.
- Systems Maturity

•

- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - •

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathways

DATE: May 2, 2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

• Appendix G – Proposed Services Requirements Worksheet

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Other

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RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro

DATE: 5/13/24

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - First ARAN in 1997, deployed hundreds of ARANs globally
 - Clients include six state DOTs currently
- Litigation
 - None
- Subcontractors
 - N/A
- References
 - Connecticut, Missouri, Manitoba, Maryland, Ontario
 - .
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Option of components mounted in interior or bed of truck (truck bed version takes 10% more build time, but is removable with a forklift)
 - Three 55.6 degree cameras providing 135.6 degrees of front view, optional resolution – HD vs 4k
 - Over 300,000 miles collected annually
 - 2.11: can operate at 62mph with 0.04 inch resolution or 75 mph with 0.2 inch resolution, LCMS shutoff at 7mph in Fugro fleet and IRI at 12.5mph
 - Data Processing SaaS Proposed/Collected Data Management and Transfer
 - 10 licenses for processing, two for system administration, as required
 - Amazon WorkSpaces Windows client download is required to access Vision SaaS environment

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro

DATE: 5/13/24

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

- 8.5 TB truck storage (300 miles per day, 6 days = 1800 miles),
 1960*1080 image resolution
- .
- Location Reference Integrations
 - Routes can be loaded via shp or csv, are loaded by shp also support csv and xlsx
- Pavement Conditions Data
 - All pavement condition data is able to be computed, flags must be done manually by Fugro
 - Flags can be identified in processing. Bridge flags can also be preloaded in
- Critical Curve and Safety Data

- Reporting and Analytical Functionality/Web Visualization Viewer
 - ARAN 9000+ Control Software map visualization module
 - Can export with UI or with predefined templates
 - Spatial export with shp or kml
 - iVision5 no license cap, AD, all major browsers and mobile
 - Virtually drive with cameras, tabular data, graphs, previous years' data can be uploaded, \$23,500 for two years
- Downstream Systems Integrations
 - iVision5 employs API framework and can use iVision Gateway, an ESRI WebApp widget
 - Vision allows for predefined reports
- Implementation Services/Customer Support
 - 10 weeks from start of build to delivery. Build in Richmond, VA
 - No SaaS customization is required
 - Support is 8am-5pm via phone or email
 - Vision 2.0 uses Machine Learning AI to detect sealed and unsealed cracks, and if inadequate Fugro will conduct 100% review and adjust
- Systems Maturity
 - iVision5 is a rewritten software from 2020
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - AWS hosting
 - One ARAN on 2000 mile collection, one nearby in case of issue.
 \$85/mile year one, \$90/mile year two
- Appendix G Proposed Services Requirements Worksheet
 - o Y to all

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Fugro

DATE: 5/13/24

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

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• Other

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: International Cybernetics

DATE: 5/20/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

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Individual Evaluator Comments:

• Appendix C – Qualifications and Experience Form:

Overview/Qualifications

Since 1975, ICC-IMS combining in 2022, multiple state customers

•

- Litigation
 - None
- Subcontractors
 - N/A
- References
 - Florida, Nevada, Rhode Island, Arizona

.

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - IrisPRO Pave
 - High Speed Profiler and Every Speed Profiler, LCMS 2 (up to 62 mph)
 - Five camera options that will meet minimum requirements, cost covered for whichever choice, and even with larger images storage is covered in SaaS
 - LCMS 2 determines operating speed cap 62 mph at maximum resolution, 75 mph at recommended resolution
 - Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Connect for data processing
 - ICC Unify Suite Drive, Connect, Inform 6.3 hours upload per day of collection
 - Connect publishes to Drive daily to track collection

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: International Cybernetics

DATE: 5/20/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

- Can collect 3 days of data on 12 TB assuming 1.8 TB per day with two copies and a factor of safety
- Location Reference Integrations
 - Network loaded with GIS, no nodes used
- Pavement Conditions Data
 - Recommend the department to include additional cracking metrics
 - Events can be point or span, loaded by GIS, entered in truck, or in Connect in editing
- Critical Curve and Safety Data

•

- o Reporting and Analytical Functionality/Web Visualization Viewer
 - Connect is used for processing and Inform displays reports. A dashboard can be created to track progress. Reports can be exported in many different formats
 - Inform is data visualization software. Unlimited licenses and two admin accounts. Usable on any modern browser
 - Recommend images every 0.005 miles, but configurable
 - Two year of ARAN images in WVV \$36,000 conversion, \$26,200 per year maintained
- Downstream Systems Integrations
 - Reports can be done in csv in different gueriable ways.
 - Geodatabase can be generated to get images to Map Viewer
- Implementation Services/Customer Support
 - 12 week build, installed in Largo, FL
 - Jira, email, or phone 8am-5pm. 80 hours per year included
 - Still struggling with sealed cracks and could work with Maine to improve automation of detection and classification of sealed cracks
- Systems Maturity
 - Drive launched in 2020, Connect in 2019 and SaaS in 2022, Inform in 2022. Over 30 systems on each
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - Hosting on Microsoft Azure
 - 2000 mile collection would used IrisPRO Pave with LCMS 2 and Ladybug 5+ 30MP 360 degree camera, \$95/mi year 1, \$98/mi year 2
- Appendix G Proposed Services Requirements Worksheet
 - All will meet requirements as stated

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Other

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: International Cybernetics

DATE: 5/20/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

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RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

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Individual Evaluator Comments:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Since 1983, 23 agencies in the past 5 years, sole vendor to certify LCMS for IRI at NCAT

-

- Litigation
 - None
- Subcontractors
 - N/A
- References
 - Tennessee, Kentucky, Kansas, Nevada

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - Optical DMI, LCMS-2, 145 degree jpeg images (high res in Demo, up for negotiation).
 - Extensive QC procedure with control site, 70 mph collection, error alerts, IRI shutoff is customizable around 16.7 mph, all others to 0 mph.
 - Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Roadview Processing Suite (5, 6), Roadview Workstation (8), Roadview Explorer(9), Microsoft Azure (two full cycles of cloud storage), two administrator accounts
 - 1 license of GPS, 10 of Processing, Workstation, and LCMS RoadInspect, unlimited of Explorer

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

- Two simultaneous hard drives, able to hold 1000+ miles
- Location Reference Integrations
 - LRS uploaded with manual entry or a shapefile

- Pavement Conditions Data
 - Unlimited flagged feature types, ghosting of bridges allows overlapping from previous year's data

•

Critical Curve and Safety Data

-

- Reporting and Analytical Functionality/Web Visualization Viewer
 - Command center dashboards for real-time updates of projects status
 - 0.005 mile precision for IRI and 1 foot for all others with the ability to aggregate up as requested
 - Whole, partial, and multiple route reporting using csv or shapefile
 - Unlimited Roadview Explorer licenses included, with AD integration, available with Chrome and Edge
 - Roadview includes two years of data with optional up to ten, including thumbnails that go full resolution when paused and IRI and profile measurements
- Downstream Systems Integrations
 - Setup batch reporting by region using Roadview Workstation
 - API available for Map Viewer WVV
- o Implementation Services/Customer Support
 - Build start 9/1 with delivery 12/4
 - Two weeks of SaaS customization and two weeks for testing
 - Support is 8-6 M-F excluding holidays via phone, text, or email
- Systems Maturity
 - Explorer launched in 1998, SaaS in 2017
 - LCMS + LiDAR allow for detection of features such as ADA and over height detection. Retroreflectivity is in development
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - 2000 miles better technology than Maine vehicle van with LiDAR and 360 imagery (\$112.5/mile), ARAN image conversion \$30,000
- Appendix G Proposed Services Requirements Worksheet
 - o All will meet

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

- o Can do 250 image frames per mile, can do up to 500, recommend 200
- Other

0

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathway Services

DATE: 5/14/24

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

Overview/Qualifications

 Since 1996, used by 24 states and territories, used by MnROADS and NCAT

.

- Litigation
 - None
- Subcontractors
 - None 175 internal employees
- References
 - Massachusetts, New Hampshire, Eastern Federal Lands, Oregon, Iowa, Wisconsin

.

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - PathRunner introduced in 1996, 7M miles collected, 500k/year, 150 systems produced over 25 years in Tulsa
 - Travel speeds of 13-70 mph
 - 3D-PAS single high-res 3D camera used to capture transverse profiles, removing the need to stitch two images together
 - Three forward facing and one rear HD+ roadway cameras, each 4112 x 2176 (front total 12,336 x 2176), 200 images/mi (customizable)
 - PathView (desktop data processing and reporting), PathWeb (hosted WVV)
 - Data Processing SaaS Proposed/Collected Data Management and Transfer

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathway Services

DATE: 5/14/24

EVALUATOR NAME: James Havu

EVALUATOR DEPARTMENT: Transportation

- All applications have unlimited users, but DOT can manage users
- Data Quality Control steps, processed data available within 10 business days, images weekly
- 100% of automated distresses reviewed by QC staff
- Location Reference Integrations
 - Prefer data to be uploaded via shp
- Pavement Conditions Data
 - Discarded data can be replaced with recollected data
 - Data collected above 13mph is acceptable
 - Flags are identified by collection personnel by hotkey and altered in post-processing
- Critical Curve and Safety Data

•

- Reporting and Analytical Functionality/Web Visualization Viewer
 - Project management portal
 - Export to shp, file geodatabase, or tabular reports
 - Single PathWeb license with unlimited seats for authorized personnel
 - PathWeb allows for importing of external data
- Downstream Systems Integrations
 - Report preconfigured as a single push button export for dTIMS
- Implementation Services/Customer Support
 - Assembled in Oklahoma
 - 90 day build from receipt of vehicle
 - Support M-F 7a-5P, excluding holidays
- Systems Maturity
 - PathView 1996, SaaS in 2021
 - PathWeb 2012, SaaS in 2017
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - 2000 mile collection \$98/mi year one, \$102.90 year two
 - Conversion \$53.000
- Appendix G Proposed Services Requirements Worksheet
 - Will meet all, comments on all

- Other
 - 0
 - 0

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company

DATE: 5/6/2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

- Appendix C Qualifications and Experience Form:
 - Overview/Qualifications

-

- Litigation
 - •
- Subcontractors
 - •
- References
 - There was a sense they had recreated themselves as a company and were selling new services that couldn't be used at this point in time. The biggest example being the non-certified every speed profiler. Otherwise, it was mixed reviews with none glowing.

.

- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - P They have experience with building on the Ford F150.
 - N We don't need an every speed profiler now and it's not certified. It's part of the costs. It is interesting to see the technology, but we don't need it now.
 - Data Processing SaaS Proposed/Collected Data Management and Transfer

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company

DATE: 5/6/2024

EVALUATOR NAME: Tom Lynch

- Q. 3.2 You mention two admins. Can you explain the roles and responsibilities of the admins.
 - Response: They are not needed but if we wanted more control
 we would need to have them trained. It seemed like there were
 administrative roles needed but they don't need to be IT related.
- Q. 4.1 It's hard to imagine a fully automated process. How much editing is typically required in the Collect or Inform software for other similar clients?
 - Response: It all depends on our approach and comfort level with the results.
- P. 4.6 There seems to be a number of good approaches here.
- Location Reference Integrations
 - Q. 5.1 Can you explain the bin process in more detail? Has any thought gone into a bin changing based on updates to the LRS data or even a reconstruction of the roadway?
 - Response: The explanation made sense as it relates to a segmentation process which is a standard design. There are ways to look at the data changes over time. Reconstruction changes could be identified potentially as well.
 - Q. 5.2 You mention loading the GIS network into Drive but it is optional. How does the GIS network data get to Connect?
 - Response: Different options are available including shapefiles. There are multiple options we can utilize that would work.
 - Q. 5.3 Can we update the GIS data during the collection process or does it need to be annually? Is the network matching done behind the scenes or is there a process that needs to be kicked off?
 - Response: It can be done but would make more sense to update on a scheduled timeframe before a collection season.
 - Q. 5.5 What format does an onboard basemap need to be in? Do you support the ESRI compact cache and/or vector tiles?
 - Response: They said an ESRI basemap could be added but I
 wasn't clear if they understood my question about a compact
 cache or vector tiles. Left feeling like there were options to get
 our basemap on the vehicle without a large effort.
- Pavement Conditions Data
 - N Crack seal isn't really an option. It sounds like a manual update would be needed and there MAY be some solutions down the road.
- Critical Curve and Safety Data

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company

DATE: 5/6/2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

- N. 7.3 & 7.4 The system cannot identify complex curves, including spiral curves.
- Q. 7.6 Is cross-fall the same as super-elevation?
 - Response: They said they could calculate supe-elevation.
- N. 7.7 They cannot aggregate curve data into continuous sections.
 The system uses fixed intervals and all the data seems to be reported at that level of detail.
- N. 7.9 Having elevation data at the fixed interval will be problematic for safety analysis..
- Reporting and Analytical Functionality/Web Visualization Viewer
 - Q. 9.7 Can we get a copy of the Rest API documentation. .
 - Response: They were going to send it along.
 - P. 9.7 Being able to initialize the Web Viewer at a location and to be able to customize the display with URL parameters was positive.
- Downstream Systems Integrations
 - Q. 10.1 To be clear, your system can report all reports with physical columns for RouteID, milepoint, X and Y for all begin and end sections reported on? What system provides the reports?
 - Response: They do support the outputs.
 - Q. 10.3 How often can the image table (FGDB) be updated?
 - Response: As often as we need. We really only need it after processing updates.
- Implementation Services/Customer Support
 - Q. 11.3 What roles do the administrators have with the software. Is it technical or require an IT skillset?
 - Response: They said it wouldn't require an IT person.
- Systems Maturity
 - N. The system seems very new even though the company has been around a long time. It seems to be changing quickly and this could be good or challenging depending on how well they handle change management.
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations

•

- Appendix G Proposed Services Requirements Worksheet
 - 0

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company

DATE: 5/6/2024

EVALUATOR NAME: Tom Lynch

EVALUATOR DEPARTMENT: Maine IT

• Other

0

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company, LP

DATE: 5/15/2024

EVALUATOR NAME: Casey Nash

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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - Since 1975, services division in 1985, new management in 2018, new end to end software in 2019, bought by ICC in 2022.
- Litigation
 - None stated
- Subcontractors
 - None stated
- References
 - FDOT has 4 IrisPro Pave platforms including 2 LCMS2.
 - NDOT has a DCV
 - RIDOT has a DCV
- Appendix F Proposed Services Form:
 - System Overview/Collection Vehicle System Proposed
 - IrisPro Pave
 - Every Speed and High-Speed Profiler
 - Pavemetrics
 - Multiple camera options
 - Multiple screens. One screen was determined not useful through our references.
 - Stated 8hrs of collection on one day isn't possible. But we will collect more than 8hrs some days.
 - Multiple cameras offered
 - Provides real-time voice and audio feedback
 - Data Processing SaaS Proposed/Collected Data Management and Transfer

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company, LP

DATE: 5/15/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- Data transfer is the biggest difficulty and most ship HDs due to transfer limitations. Data upload is expected to take up to 6.3hrs for one full day of collection with their assumption that it is not possible to collect valid data for 8hrs in a day.
- The Department would be responsible for post-processing with a separate PosPac software for better refinement of the coordinate data.
- Includes several checks during processing to validate that the data is valid.
- Assumed raw data would only be stored for 1 year and processed data for the duration of the contract.
- Location Reference Integrations
 - Supports loading of a shapefile
 - Can not compare year to year without exporting to a different software like ProVal
 - GIS and LRS integrations built throughout the system
 - Applies a spatial join of the alignment to the GIS polyline to avoid segmentation issues.
 - If an alignment has changed then the then they cannot be compared to previous data.
 - Lane Deviation and Construction Zones have to be manually flagged by the technician. The system doesn't have an automatic process to detect those deviations.
- Pavement Conditions Data
 - Not much confidence in sealed crack detection. One reference isn't even going to consider the sealed crack detection and try to collect the road before and after collection to determine the difference as sealed cracks.
 - Data collection by the vendor is prompt and efficient.
 - Roughness data is calculated in real time.
 - 0-62mph collecting at 1mm resolution and 0 to 75mph at 2mm resolution.
 - Manual QC is not part of their proposal and would have to be a separate contract to meet our expectations.
- Critical Curve and Safety Data
 - No complex curves and cannot aggregate without manual involvement
 - Geometric properties are calculated on fixed intervals and not automatically aggregated. Would require manual aggregation outside of the system.
- Reporting and Analytical Functionality/Web Visualization Viewer

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company, LP

DATE: 5/15/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- Can only look at one run at a time to see profiles in the Connect viewer. Some delay noticed in web viewer.
- Shared in image of an interesting dashboard but was not discussed as part of the proposal or shown during the presentation.
- Multiple different pieces of software for various purposes instead of on comprehensive product. For example one software to develop a report and one to view it.
- Can provide access to users through active directory or allowed domains.
- Downstream Systems Integrations
 - Connect application is able to bring in custom python script.
 - Can link to other applications by passing URL parameters
- Implementation Services/Customer Support
 - 80hrs customer service, anything extra will be billable.
 - Saas is not available for several months after delivery of the vehicle
 - Customer support constantly changing, not sure who to contact.
 - They have implemented some things recommended by the provided references but have not fixed some issues that were deemed to not be beneficial to the overall program.
 - Worked to make comfort and safety modifications to vehicle after received but you have to pay for it.
 - 4G mifi connection allows for tech support to diagnose problems on the vehicle in the field over the internet.
 - Sealed crack detection is a confirmed issue for the vendor.
- Systems Maturity
 - Nothing before 2019
 - Regular updates show they are resolving issues but also show that there are several updates needed.
 - ICC generally avoids customizations for customers but will consider if it makes sense to all users of the general application.
 - Delivered 32 systems to clients and they have 8 of their own vehicle for collection.
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations

-

- Appendix G Proposed Services Requirements Worksheet
 - 0

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System **BIDDER NAME:** International Cybernetics Company, LP

DATE: 5/15/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

• Other

0

0

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

- Appendix C Qualifications and Experience Form:
 - Overview/Qualifications
 - Established with proper specialization
 - Experience providing SaaS since 2017 and hosting on MS Azure for several DOTs
 - 25 data collection systems delivered since 1983.
 - "Several" DOTSs including Wisc, TN, KY, Nevada, Kansas (5).
 - Proactively keeps up with the Govt standards
 - Only vendor with LCMS IRI certified with NCAT
 - Plenty of pavement data collection services (100,000 miles annually)
 - Single PM, Rob Ellis, for all aspects of implementation and data collection. >8 yr experience – participated in proposal development and demo
 - Demo by Kevin Mandli, Larry Mattke (States put Larry Mattke clauses in, which seems like a bad sign to me), Rob Ellis
 - Demo 100+ employees in this area
 - Demo we go to NCAT, ICART, we help them design and develop new software. We know the science
 - · Litigation no
 - Subcontractors no
 - References those reached are somewhat similar to our proposed solution no data processing SaaS or ethernet uploads. HPMS usage limited.
 - Reference notes –Negative esp on equipment and support. Got a bit swindled w non-new parts, not getting needed training due to failure to be specific enough in RFP, poor support due to failure to "believe" the problems reports on deliver, plus vendor passthroughs. Give up and live w unresolved problems. Unexpected costs for LCMS maintenance

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

when contract renewed.. tight contract interpretations didn't communicate what would be best for the customer. Those more positive on support still cite slowness and vendor passthroughs for equipment support. More positive on data that was collected and processed by Mandli although their usage of the data is less extensive than ours.

• Low-Moderate \$ risk

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Appendix F Proposed Services Form:
 - Overview
 - Vehicle Collection System
 - no license concerns. 2 Uls
 - DVX plus GPS and DELF INS;
 - LCMS server app
 - Quality risk Reference not believed about setup issues. References resists making layout adjustments. Reference - received used parts rather than new without notification.
 - LCMS2
 - Demo Road profiler in front of van is vulnerable to damage so they have the LCMS up high it's less vulnerable and it's also aware of the lane markings which makes it more repeatable/better wheelpath tracking of data
 - Demo They are the only ones with NCAT certified for class 1 profile by IRI. Done for FHWA (Federal Highway Administration) and 9 other states for 13 years. Great relationship with Pavemetrics through this effort.
 - LCMS has to be removed and shipped to Pavementrics for calibration.
 - No info on computer or monitor to be used was provided
 - Lowish storage requirements 8 TB drive plus backup at 1522 GIG / day
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Upload process runs overnight and into the next morning. = seems very SLOW for that amt of data "Weekly data shipments ensure consistent data flow, allowing swift turnaround for processing."
 - Is Ethernet data transfer unusual then? Demo They do ethernet data transfer for 15 states References – data shipped by mail or stored on site not ethernet - VERY UNCLEAR
 - Demo Upload takes about 24 hours or less for a week's collection of 1000 miles --- maybe 4 hrs/evening
 - To confirm a successful upload, the user executes the Verifier App on the uploaded data
 - Data Processing
 - not in a unified UI, and no unified workflow. Reference AWKWARD COMPLICATED. MUST keep a separate workflow process checklist.

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Takes Reference >1 week to process 1 week's data --- followed by quality checking and reporting steps, and they don't use much of the functionality available
- Roadview® Processing Suite (10 seats).
 - Process GPS data with Delph INS (1 license tied to sensors);
 - Process images, including producing equirectangular images, thumbnails, size reduction if desired.;
 - Process pavement data using RoadInspect (LCMS comes w sensors) demo - Not Pavemetrics because more efficient and more data checks and has a QC check.
 - and LRS correlation software. Demo- how integrated are these? I don't understand the answer.
- Roadview® Workstation (10 seats) (reporting/exports)
 - The tools above would be on virtual machines (10) no specs provided.
- Maine's Azure Cloud Storage capacity will be for two full cycles
 (approximately 14,000 miles based on our RFP- underestimated given
 image conversion and historical data retention Demo are they proposing
 to delete the older collection data or ROW photos?) it's a pay as you go,
 often customers find the value worth it..but we'll cover what is in the scope
 of the RFP.
- Microsoft Azure Storage Explorer (free download MS Office Extension but no client installaton) in 9.2 Additionally, you can mount it as a drive share for enhanced accessibility and convenience.
 - We not Vendor perform our own Azure Cloud Storage systems admin. Inc data check-in, cloud management, database setup and access, data movement in the proposal. Training includes 1. Moving Files 2. Configuring Virtual Machines 3. Creating Permissions 4. Status Checks 5. Creating Administrative Reports (Uptime, Usage, etc.) with Azure Monitoring Tools.
 - Demo AD hoc only not for each data update.
 - Demo Roles and responsibilities for managing the SaaS environment / VM environment?
 - Responsible for all portions, including desktop workstations.
 Every customer has their own preferences so they adjust.
 There is some pricing for their assistance with QC and virtual machines.
 - Then reversed a few customers prefer to set up and control it, but otherwise Mandli does VMs kept up-to-date,

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

SQLServer db management in Azure; set up the login permissions for the system and environment. Training is provided so admins can control user access/permissions Seems to be a modification of the proposal. –

- Demo Do you have clients that actually get into the DB?
 Only the powerusers, MS SQL Mgmt studio used to load
 the data. KY person builds stored procedures, etc but they
 figure out what we want them to do this in the project. Is
 accessing data not necc direct connect, but an export from a
 view? Yes and would usually do it from Roadview Explorer
 as CSV or Shape files although some go to DB.
- Microsoft Remote Desktop (free comes with Windows 10 & 11) –
 Demo: one monitor only.
- Location Reference Integrations
- Pavement Conditions Data
 - We do the QC - Demo who is going to do the data QC, what is that process / roles/responsibilites? RFP there is an option for them to do the QC for us (no), otherwise they would train us
 - Reference Crack seal completely manual.
 - 4.4 did not address how they deal with duplicate data collected.
- Critical Curve and Safety Data
 - can identify simple curves and spiral curves using Roadview®
 Workstation, focusing on one curve at a time. However, for compound
 curves, reverse curves, broken back curves, and spiral curves as
 specified in the MUTCD, additional post-processing is required. w
 Esri's Create Features
 - Demo Any other types of curves they will need to develop something
- Reporting and Analytical Functionality
 - Robust seeming incs spatial data
 - Demo -All reports done in the UI, the reports are loaded into a DB table
 - Demo- How is Aggregation handled say there's a road segment we collect...here's a curve with radius of 900' ft vs 900 minibits? Always does the curves the same way set up for HPMS reporting. Breaks out straight, simple, spiral and they leave it alone. It's all tagged with LRS data too. It chunks up by the intervals you give it...such as class A,B,C from this point to this point 1/10th mile for HPMS.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Demo We do get the attributes for a defined curve outside of HMPS for safety? Yes via table driven report.
- Web Visualization Viewer Roadview Explorer
 - AD integrated single signon
 - They will add fields to additional field elements for searching.
 - retaining the most recent two years of data, with options for customers to extend data retention up to ten years, including Roadware conversion data. This enables seamless year-over-year comparisons and comprehensive analysis within a unified platform. Really just 2 years are proposed.
 - References a bit slow.
- Downstream Systems Integrations
 - Web viewer proposal offered us a shapefile which will not work. Demo - they said they could do it with APIs and public-facing URLs ti images. They said they would send the API documentation for us to review, but did not. Told us that no one is currently integrating via the APIs Likely a proposal change.
 - dTIMS not clear.
- Implementation Services/Customer Support
 - Sept 1 Mid Dec
 - Vehicle testing in Nov, delivery within 2 wks of end.
 - Testing of software starts mid-Oct using some data from the HDCVS
 - 2 weeks customizatinos will be required (and 2 weeks to test them)
 Customer Support
 - Mandli Technical Support is available 8am-6pm EST Monday Friday (excluding holidays). Phone/text/email. – Hardware Service Agreement says 8:30-5 Wisc time which is 9 Ama - 6 PM EST.
 - No triage -- processes requests in the order they are received, ensuring fair and systematic handling. First response within 24 hours is only commitment.
 - Reference hard to keep track of who/how to contract. Slow to address major parts failures as they want the State to check EVERY possibility before shipping new part; long silences; No one is left that is able to support 15 yr old van) They tend to put all our settings to their settings when they do maintenance, hardware and software; Sometimes they get upgrades that don't fit their operational needs. Mandli will quickly revert the software for us until they have a new new release that addresses the issue.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- REference tech support is passed through to vendor providing the equipment like Pavementrics. Some stuff sent to india. The CSRs were clueless but tried, and in the end 1st one was treated badly by the vendor. The hardawre support people argued with them. They were provided with obsolete equipment that has to be replaced from used parts not new parts. The annual license send was delayed a couple of times, had to remind them.
- Post implementat training a bit weak –the original training materials ,an annual training customized to our needs, and cust support. No videos/online references for new employees. Reference – training weak. Improving lately
- Demo cloud administration training is that for our IT? Most technical people will pick it up.
- Fed compliance team proactive.
- Systems Maturity
 - Explorer Architecture established in 1998 no major architecture updates since. No discussion of desktop software components architecture.
 - Continued feature enhancements to keep it able to view new types of collected data. Aggressive future growth plans.
 - Minimal effort for Dept to migrate work to PROD or Prod to Test.
 - Did not address the process of preserving and testing customizations during upgrades. We will have some.
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations
 - MS Azure no issues.
 - SaaS service agreement has no SLA
- Optional Data Coll Services
 - Use 1 demo of their 10 vehicle (which do have additional features such as the 360 cameras and LIDAR), - same PM, Plan, Pilot of 20 miles, Approve data, kickoff, collect, process, demo - automated and human - QC, storage, Integrate into WWV, dTIMS, ALIM . apparently a separate dataset so 2 datasets for a single year - how does that impact use of data?
 - Demo They do 100,000 miles per year of collection
- FUGRO data/photo conversion...Demo they have done it before 3x
 - did not propose any costs to store more than 2 years of data so not very useful.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli

DATE: 5/3/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- NO CAVEATS but
 - Extension of the hardware maintenance and support agreement "extended support" is not offered in price proposal only ad-hoc work w/ fees that are undisclosed in \$.
 - retaining the most recent two years of data, with options for customers to extend data retention up to ten years --- but no such option described or rate offered Demo - We CAN leave up whatever you want, not just last 2 years. Would have to write something to prevent data overwrites. seems a modification of proposal.
- Appendix G Proposed Services Requirements Worksheet
 - No issues.
- Other
 - Hardware and support agreement...
 - Assuming we are NOT actually expected to return the vehicle to Mandli annually for maintenance visit given their visit here.
 - Customer is responsible for installing software releases on the hardware.
 - VIII of that hardware maintenance agreement is unacceptable, would leave us with unusable system.
 - LCMS warranty very weak.
 - Is "extended coverage" from Mandli after the 1st year the same coverage as described here?
 - Update and uptime report provided for only 1 of the 3 SaaS products offered.
 - IT POLICY Appendix H Mandli did not respond to the IT Security section.

COST PROPOSAL NOTES

- What is a "pavement quality data management" fee?
- Can they clarify "small handling fee" proposed for replacement parts?
- Onsite repairs "without extended support"— is extended support not included in this proposal?
- Virtual training
- SaaS "consulting" What is that?
- Did not include cost of expanding Azure storage. Did not describe how costs incurred from our Azure management activities are handled.
- Programming rates are not clearly stated although certain customizations have already been identified as necessary.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

<u>Instructions:</u> The purpose of this form is to record proposal review notes written by <u>individual</u> evaluators for this Request for Proposals (RFP) process. It is <u>required</u> 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:

• Appendix C – Qualifications and Experience Form:

- Overview/Qualifications
 - 40yrs in business
 - 5yrs collaboration with 23 different agencies,
 - 12yrs LCMS, PM w/8yrs experience will be our sole contact for all work.
 - Certifies LCMS for IRI at NCAT
 - Collects 100,000 miles annually, delivered 25DCVs including F150 Crew Cab
 - One reference stated "Tech support is terrible". Mandli supplied a vehicle from a different company so all vehicle related support had to go through a separate company that they were not contracted with.
- Litigation
 - None
- Subcontractors
 - N/A
- References
 - Tennessee DOT (TDOT), 5 vehicles, Collects 29,350 miles per cycle every 2 years
 - Kentucky Transportation Cabinet (KYTC), 2 vehicles in 2008, 1 in 2012, 2019 upgrade to all 3 with LCMS-2
 - Kansas DOT, 2 vehicles in 2008, 2012 added pavement collection systems, 2020 2 vehicles with LCMS-2, providing support and maintenance to KDOT
- Appendix F Proposed Services Form:

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- System Overview/Collection Vehicle System Proposed
 - Monitor mount between seats
 - Optical DMI +/-0.001mi accuracy
 - Kristler Correvit L
 - LCMS-2 mounted to the top rear
 - Uses LCMS-2 to get IRI
 - 3D pavement mapping capability
 - 145 degree camera with resolutions up to 45 megapixels with default to user specified level
 - Azure image storage in the cloud included so higher resolution can be selected at no additional cost
 - CPU storage rack installed in back seat of cab
 - On the fly collections can be merged with database
 - Verifier application for technician collection verification in the field after collection.
 - Tech can select what information to see on screen in vehicle
 - Can collect 16 to 70mph accurately
 - Limits based on IRI from Pavemetrics LCMS
 - No minimum speed for rutting or cracking
 - Real-time audio and visual error notification and plotted geospatially
- Data Processing SaaS Proposed/Collected Data Management and Transfer
 - Azure Cloud will be able to store approximately 2 years/14,000mi
 - Verifier software to confirm collection accuracy and upload accuracy
 - LCMS processing and QC application
 - Database management and role handling along with database backups will be managed
 - Connection to Azure cloud with Remote Desktop Connection to a virtual machine with a sequel server database. Single screen is very limiting.
 - Azure management would be performed by the Department
 - Images through URL are publicly available by default but can be restricted as required
 - Mandli prefers that the Department host the ESRI LRS layer basemap
 - QC process automatically runs and flags concerning sections for review
 - The Department will be trained to do our own QA.
 - Cloud storage is a pay as you go system.
- Location Reference Integrations
 - Route Log Mile and Route X/Y

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- WGS83 coordinate system
- Multi-year web-viewer playback
- Pavement Conditions Data
 - System will remember bridge features
 - Can accept/reject/recollect collections
 - Able to exclude construction zones with post-collection flags
 - Uses a unique program other than the standard Pavemetrics
- Critical Curve and Safety Data
 - Questions surrounding the algorithms/process for curve detection and reporting. Seems like separate ESRI/GIS software is required.
 - Additional development would be require for complex curve detection.
 - Simple-Spiral already built into the system
 - Cross-slope and super-elevation is a standard processing output.
- Reporting and Analytical Functionality/Web Visualization Viewer
 - User export options for reporting specific requirements.
 - Data roll-up capable of 0.005mi precision.
 - WVV integrates with Department's active directory for login credentials
 - RoadView Explorer retains the most recent two years of data
 - Reports are basic queries to the SQL tables and run from the viewer
 - QC process is automatically run and an auditing program will flag concerning sections for review. Mandli offers optional QC and the Department will be trained for QA.
- Downstream Systems Integrations
 - No Api documentation was forwarded as requested and stated would be provided
- Implementation Services/Customer Support
 - Support available 8am-6pm M-F
 - Guarantee e-mail response by next business day but no mention of resolution goals.
 - Text/phone call capable
 - Either Department will have to remove the most expensive component annually and ship for calibration or pay to have a service representative come 3-4 weeks prior to system calibration.
- Systems Maturity
 - 2017 web viewer launched as SaaS.
 - Yearly updates to improve product
 - 3rd generation of their automation software
- IT Hosting Provision/Optional Data Collection Services/Caveats and Limitations

RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Mandli Communications

DATE: 5/13/2024

EVALUATOR NAME: Casey Nash

EVALUATOR DEPARTMENT: Transportation

- It sounded like we will have to have involvement in the administration of the database and file moving.
- Appendix G Proposed Services Requirements Worksheet
 - Warranty has many clauses which sounds like they will not be responsible for any actual damages or issues.

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Other

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RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathway

DATE: 5/13/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

Individual Evaluator Comments:

- Appendix C Qualifications and Experience Form:
 - Overview/Qualifications
 - Established with proper specialization
 - DOT experience The 3D pavement analysis system used by over close to ½ of all State DOTs..
 - Came in first in AL study of Reference's bidders (not named) 1st (3D-PAS) and 2nd (Pathway 3D) in accuracy.
 - Not sure how many vehicles w/SaaS they've deployed
 - Written half of State DOT Data Quality Management Plans
 - Strong industry presence References noted industry presence/innovations
 - Proactively keeps up with the Govt standards/ very engaged
 - Their every speed profiler has already been tested to certify to the coming R56 standard as soon its released.
 - high emphasis on the actual collection/processing services.
 - Collected all mileage for 30 States
 - Demo Rudy Sr PM, Scott Alt PM, Everett Sr Project Eng, Paul Constable communication coordination, Nathan Callison Senior IT.
 - o Litigation no
 - o Subcontractors no.
 - o References –. References use the proposed machine, services/architecture.
 - Extremely enthusiastic references. They deliver on what they promise, with high quality and on time. Collect in wide ranging conditions successfully.
 - Low-Moderate \$ risk
 - Very poor organization in RFP.

RFP#: 202401014

RFP TITLE: Highway Data Collection Vehicle System

BIDDER NAME: Pathway

DATE: 5/13/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- Appendix F Proposed Services Form:
 - 1 System Overview
 - 2 Vehicle Collection System
 - HDCVS, no license concerns
 - Intel i7 Windows 10 Pro PC computer with: DDR 4 16 GB of RAM. No CPU info
 - 12 TB on vehicle stores 8 wk/6 wk/1 collection 3 subsystems with separately managed storage drives --system storage management seems harder. Demo most states don't collect with redundant data...when you remove a drive you have to rebuild the array. They tried it and every State rejected the RAID redundancy after trying it out because you have to rebuild the array when you remove a drive.
 - Demo Each piece had a different set of harddrives, so what has to be shipped? Typically, you would have 1 harddrive per computer system...all the cameras have a single drive DVR, road surface large capacity disk 3D drive probably 1, profile data typically USB drive. Pelican case. They give us lots of extras just in case there's a high volume weekly collection.
 - They provide the storage appliance for our physical backup. This would a tertiary backup of the storage
 - Demo Can the verification be done at the State's verification site so we can have confidence in the measures? Agencies are starting to struggle with this (VT, MA) now they take it to NH as part of their contract. They would like a multiagency certification in our region as no site nearby. They get 98% repeatability but you are not supposed to use same device for the IRI baseline so they at least can repeat on same machine. Shipping the CERPRO is very difficult but might have to do that once per year (no more logistically).
 - 2.4 unclear on calibration equipment -- none is identified in 2.4 or 2.1. There is some listed in the Warranty section of Hardware Support Service attachment. Then at the end "Any unique tools and/or calibration equipment needed for use with the data collection vehicle"
 - o Data Processing SaaS Proposed/Collected Data Management and Transfer:

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RFP TITLE: Highway Data Collection Vehicle System

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DATE: 5/13/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- VERY Strongly recommend mail not ethernet upload in writeup, puzzling given data size estimates. In demo they made it sound reasonable to download it WEEKLY. Daily QC check w validator, then download the data weekly takes 3-4 hrs
- "PathView" desktop, so they host and process everything for us. We would use a limited access staging copy of the webviewer to do the QAs. They can take produce reports, data extracts, GIS extracts or ship over the wire. Reference can't measure with Pathweb
- I reviewed this with Procurement to get determination on whether we could consider this or must reject the proposal. Can be considered as long as it is not in opposition to what we required.
- Some references are doing this and very happy -- except that they do have PathView onprem with an annual data export for report generation.
- Tom we need to be sure our project level data also gets processed and is usable. Demo - YES THIS SERVICE COVERS PROCESSING OF OTHER COLLECTIONS THAN THE ANNUAL COLLECTION.
- We cannot, and would not want to, accept the offer of the desktop hardware to run Pathview on Prem as that adds back all the IT overhead we are trying to eliminate with SaaS requirement. It is in direct opposition to our SaaS requirement.
- Demo Where we become completely dependent on your processing timeframe and QA/QC, do you offer any kind of guarantee on dta processing timeframes or quality of data to ensure we can meet our deadlines and quality standards? They have not run into it with other states. In terms of what's in the RFP and Fed Highway requirements they would attempt to beat our current timeline. Their goal is to never keep us waiting. Weekly meetings and the web portal help to communicate, partnership decisions. --- References agree
- Location Reference Integrations
 - ESRI-based basemaps formats are natively supported.
 - Collection Routes as shapefile optimally.
 - Native LRS integration They collect directly onto our LRS within their collection, it's instantly tied to our LRS.
 - 2.7 GPS No post-processing or real-time corrections are required.
 Demo Explain how you get to survey-level accuracy and what is the accuracy of collection including elevation IMU for highest accuracy we can get. Provides curve, crossslope, grade, elevation the system

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can use itself for its realtime correction. IT IS NOT SURVEY GRADE.. They can get it to sub-meter accuracy with mild post-processing. If we do that does the data get back in for the reporting? You get a cleaned copy to use but the initial data is always kept as well.

WHO does the reprocessing? Sometimes elevation accuracy is very critical. Yes we do have the ability to do it. Sure you CAN do, but what is really covered in your services since we will not have the desktop software? We don't charge to make your data as good as it can. The only exception would be additional data collection for asset inventory, non-offered modules

•

Pavement Conditions Data

- Pathway Services understands MaineDOT's desire to pass all Quality Control activities to the finally selected vendor and Pathway Services provides this service, Pathways proposes to do all processing/reporting
- Note: Like one of the references, rather than manual correction, we should precollect on crack seal and cross map to QA.
- Bridge/Construction flagging hot key and altered by post-processing. Demo They flag RR X, vehicle changes lanes, construction. Not bridges or pavement changes, they want to do this manually from the images because it's most accurate not flagging. Can we upload the bridge flags as they don't move a lot? How we collect it doesn't affect how we report it. From their perspective for reporting, they want to use their procedure. They say they can do it in a week or two for bridges, and a few days for pavement changes statewide. Can the bridge data be exported out for our LRS yes it's already tied into your LRS, any asset or metadata.
- Although we can't manually fix data ourselves we can QA and reject if anything that is processed for them to fix. Reference - We QA, our data and crack seal has been rated to our satisfaction. Bottom line crack rating is a labor intensive process and the last data received for the year.
- Critical Curve and Safety Data
 - Superelevation is available
 - Demo Is Curve data is included in the offered data processing? Yes but... Curve data definitions vary widely from state to state...end/start point, how small is too small, can't get states to agree. The data types

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are standard. Customization would be an additional charge if it goes way outside a normal scope.

- Reporting and Analytical Functionality
 - Basically all collection progress info is supplied via Pathways as they are doing most of the work. Custom client Project Management Portal dashboard and communications site to track the current collection process. Demo - Updated nightly
 - How do we access the reports for Geoprocessing need tabular format of information. – download from your personal Pathweb reports, or their report portal.
 - We need to get Route XY in every report of data. Demo- We are not only using your provided linework we are giving you an extension list at the end of the year...variances between our LRS and their measures they flag so that we can incorporate it into the LRS. . Do you incorporate lane of travel as well then? Does this include measures variances between landmarks as well? YES, plus DMI because of roads 3D not 2D.
 - Demo So if we are updating measures and giving up a new update of our LRS, how is the historic data managed? Is it moved to the current network or kept on the network at data collection time? Most commonly, we store the date of the historical spatial file for the record but the States like them resnap it to the current map dynamically.

WVV "PathWeb" WVV

- They will add fields to additional field elements for searching
- Integrate to other apps via embedded URL query link
- Historical images supported. Reference really likes the ability to jump to historical images for a specific location
- References like the staging and production and ease of publishing to production.
- Downstream Systems Integrations
 - Webviewer, no
 - demo API access? Yes a matter of seconds to integrate with agileassets or DTiMS, with our mapping tool we use an URL query string with some syntax, any app can accessing data from Pathweb within a couple of minutes. The urls being returned include thumbnail and fullsize option publically available to embed? You can use the

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download button...will not give native access to the server without authentication. That is what pathweb does, theoretically possible w/ authentication and performance, have not done this

dTIMS Data export – request the files from the project manager

Implementation Services

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- Although they provide only GANNT chart without clear roles/responsibilities, they state anticipated that on-site acceptance testing of data collection vehicle equipment will require a minimum of four (4) days to properly demonstrate all vehicle subsystem operations, software training, data processing, reporting, and data integration with ALIM and dTIMS.
- Sept 1 90 day build after vehicle is received.
- Vehicle testing in Nov, delivery around XMAS
- March-June pilot and data collection simultaneously, pilot data submitted to Maine in June.
- Real collection May-Sept
- Good training, Same training content, online school, that their teams use. Avail 24x7
- 40 hrs customization may be required for curve data.
- Customer Support
 - Ref Having full control over the hardware and software empowers them to provide faster, better support and data improvements.
 - Ref Support has gone to heroic lengths for some references to do so
 - References love the customer service Not nickeled and dimed, very good and responsive customer service.
 - Pathway Services will respond to technical support requests within 24 hours typically within an hour of a submitted request to the assigned Project Manager. Direct cell phone access to technicians is provided for before or after hours emergency support. The company's knowledge of subsystem equipment and standing inventory allows for on-site emergency support within 48 hours. A solution will be provided within 72 hours of the initial report filing. Pathway Services provides telephone, video chat, and online support during normal cusbusiness hours from 7a-5p, Monday Friday EST, excluding any MaineDOT-identified state and federally recognized holidays
- Systems Maturity

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EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

- PathView major upgrade in 2021 and at least 1 major update annually. Aggressively building out new major features/enhancements.
- Pathweb released 2012. Since 2021 they updated browser support and upgraded mostly UI features
- Migration test config to prod is acceptable.
- Did not address the process of preserving and testing customizations during upgrades. We will have some..
- Software updates are provided to users as major release updates are made and if/when MaineDOT personnel have requested a specific software functionality modification. Notification will be provided for any major release not specifically initiated by the department. – this is followed by the training for that release by video chat and updated printed materials at no added cost.
- IT Hosting Provision
 - MBO DATA LLC, dba TulsaConnect
 - SSAE 18 SOC 2 Type II, Accreditation/Attestation by: Hogan Taylor, LLP Year: 2022 will be available at contracting time.
 - Meet our expected RPO RTO Uptime (And of course, it would only apply to the WWV)
 - SLA aim for 8 hours to restore outage fix issue in 1 calendar day.
 - SLA scheduled uptime of 99.9% during working hours
 - No issues with sample uptime report.
- Optional Data Coll Services
 - Use same equipment on different vehicle chassis from their fleet of 44 using same downstream processing.
 - Historical imagery collected by other vendor subsystems can be integrated into PathWeb with an automated conversion process
- NO CAVEATS
- Appendix G Proposed Services Requirements Worksheet
 - No issues.

Appendix F - IT POLICY - two waiver needs but not alarming

Sample SLA, hardware service agreement – no issues.

COST PROPOSAL NOTES

Clear

RFP #: 202401014

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BIDDER NAME: Pathway

DATE: 5/13/24

EVALUATOR NAME: jennifer chisum **EVALUATOR DEPARTMENT:** OIT

 No rates provided for ad hoc services in year 3+ which will impact contract negotiation but not cost score.

OPTIONAL

Fixed costs

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bruce Van Note Commissioner

AGREEMENT AND DISCLOSURE STATEMENT RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

I, Brady Foster 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.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bruce Van Note Commissioner

AGREEMENT AND DISCLOSURE STATEMENT RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

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).

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| 4/26/24 | | Date |

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bruce Van Note Commissioner

AGREEMENT AND DISCLOSURE STATEMENT RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

I, James 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.

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Signature Date

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bruce Van Note Commissioner

AGREEMENT AND DISCLOSURE STATEMENT RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

l,	Tom Lynch	_ accept the offer to	become a me	mber of the Re	quest for Propos	sals
(RFP)) Evaluation Tean	n for the State of Ma	iine Departmen	it of Transporta	tion. I do hereby	accept
		is agreement AND h	•	•	•	may
have	in connection with	n a bidder who has s	submitted a pro	posal to this RF	FP.	
Neith	er I nor anv memb	per of my immediate	family have a	personal or fina	ancial interest, di	rect or

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Jon Inho	04/29/2024
Signature	Date

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bruce Van Note Commissioner

AGREEMENT AND DISCLOSURE STATEMENT RFP #: 202401014

RFP TITLE: Highway Data Collection Vehicle System

I, Casey Nash 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.

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Cay & Mh	4/26/20)24
Signature	Date	