

SOLICITATION INFORMATION

May 4, 2006

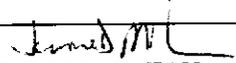
RFP NUMBER #B06336

**TITLE: 5 YEAR AUTOMATED PAVEMENT CONDITION
DATA COLLECTION/STATEWIDE DIGITAL VIDEO LOG**

OPENING DATE AND TIME: 6/1/06 at 2:30 PM

PRE-BID/ PROPOSAL CONFERENCE: <u>NO</u>	DATE:	TIME:
MANDATORY:		
LOCATION:		

SURETY REQUIRED: <u>NO</u>
BOND REQUIRED: <u>NO</u>


JEROME MOYNIHAN
ADMINISTRATOR OF PURCHASING SYSTEMS

JM:da

Vendors must register on-line at the State Purchasing Website at www.purchasing.ri.gov to be able to download a Bidder Certification Cover Form which must accompany each offer.

NOTE TO VENDORS:

Offers received without the entire completed three-page RIVIP Generated Bidder Certification Cover Form attached may result in offer disqualification.

THIS PAGE IS NOT A BIDDER CERTIFICATION FORM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
REQUEST FOR PROPOSALS NO. B06336
5 YEAR Automated Pavement Condition Data Collection/Statewide Digital
Video Log

Section A - INTRODUCTION

The Department of Administration/Office of Purchases, on behalf of the Rhode Island Department of Transportation (RIDOT) is soliciting proposals from individual vendors specializing in automated pavement condition data collection and both right-of-way and pavement view digital imaging to collect, process, verify, and deliver a complete data set for Rhode Island's pavement management network through a performance based contract. The data collection shall include roughness, rutting, cracking and other distresses as well as other related work using automated data collection vehicles plus video recording capabilities. The pavement management network shall be clearly defined by the RIDOT through the use of maps and written descriptions. It is estimated that the pavement management network consists of approximately 1,800 lane miles for pavement condition data collection and approximately 2,300 lane miles for right-of-way video image collection. The right-of-way video image collection will also include 45 centerline miles of bicycle paths and approximately 400 ramps. All pavement condition data collection will be performed each year of the 5-YEAR contract term. All right of way data collection for highway and bicycle paths will be performed in YEARS 1, 3, and 5 of this contract, and all right of way data collection for ramps will be performed in YEAR 1 only of this contract. All Respondents are required to demonstrate compatibility with the existing RIDOT pavement management system (PMS) and all Geographic Information System (GIS) interfaces for the digital images. Offers not meeting this compatibility requirement shall be deemed unacceptable and will not be considered. Monitoring and quality control of the pavement condition data shall be accomplished through the use of control sections selected and validated by the RIDOT prior to the start of work. The data on these control sections will be updated annually by RIDOT, and the successful Vendor (VENDOR) shall perform them separately for each year's pavement condition data collection. **It is required that for each contract YEAR, once the successful VENDOR begins the RIDOT survey, they remain in Rhode Island and that all data collection be completed in a continuous time frame.**

The RIDOT anticipates the award of one (1) contract that will have a contract completion date of **FIVE (5) YEARS** after the date of authorization to commence work. Upon initial contract award, authorization to proceed with approved work assignments for first **THREE (3) YEARS** of contract term will be given by RIDOT; proposed fixed costs for YEARS 4 and 5 will be defined at point of award but will be authorized by RIDOT: 1) pending review and acceptance of VENDOR's performance and 2) availability of federal funding.

Respondents are instructed to submit a **Technical Proposal** response along with a separate **Cost Proposal** both described in detail herein. Upon direction, RIDOT will require an oral presentation and a working system demonstration from the top ranked Respondents to provide further detail on their qualifications and technical approach.

Proposal submittals received must be in accordance with guidelines as outlined in this request and the State's General Conditions of Purchase which can be accessed online through the *Rhode Island VENDOR Information Program*, or "RIVIP" as it is known, @

<http://www.purchasing.ri.gov>

All Respondents are advised to review all sections of this request thoroughly and to follow the instructions carefully. Failure to make a complete submission as described elsewhere herein may result in rejection of the proposal.

Note: This is a Request for Proposals (RFP), not an Invitation for Bid; responses will be evaluated on the basis of the relative merits of the proposal, in addition to price. There will be no public opening and reading of responses received by the Office of Purchases pursuant to this request; other than to name those firms who have submitted proposals. Technical Proposal and Cost Proposal must be two (2) separate documents.

All Respondents are advised to review all sections of this RFP carefully and to follow instructions carefully; failure to make a complete submission as described elsewhere herein may result in rejection of the proposal.

Section B - GENERAL INSTRUCTIONS AND NOTIFICATIONS TO RESPONDENTS:

- All Respondents **MUST** register online at the RIVIP's Internet website @ <http://www.purchasing.ri.gov>.
- A fully-completed signed *RIVIP Bidder Certification Cover Sheet* – All three pages **MUST** accompany **EACH** response submitted. Failure to make a complete submission inclusive of this three-page document may **result in disqualification**.
- Should there be a need for assistance in registering and/or downloading any document, call (401) 222-2142, ext. 134 for RIVIP HELP DESK technical assistance.
Office Hours: 8:30 AM – 4:00 PM.
- All costs associated with developing and submitting a proposal in response to this RFP, and to provide oral or written clarification of its content shall be borne by the **VENDOR**. In addition, all costs associated with providing an on-site (at the RIDOT) system demonstration and presentation shall be borne by the **VENDOR**. The State assumes no responsibility for these costs.
- It is intended that an award pursuant to this RFP will be made to a prime **VENDOR**, who will assume responsibility for all aspects of the work. Joint venture(s) will not be considered, but sub-contract(s) are permitted provided the sub-contractor(s) proposed are clearly identified with the type of work to be performed in response to this RFP.
- All pricing submitted will be considered to be *firm* and *fixed* unless otherwise indicated herein.
- Submissions in response to this solicitation are considered to be irrevocable for a period of not less than ninety (90) days following the established due date and may not be withdrawn without the express written permission of the State Purchasing Agent.
- Responses misdirected to other State locations or which otherwise are not received by the State Division of Purchases by the established due date for any cause will be determined to be late and will not be considered. The office clock, for the purpose of registering the arrival of a document, is in the reception area of the Department of Administration (DOA), Division of Purchases, One Capitol Hill, Providence, Rhode Island.
- Respondents must possess a working familiarity with the guidelines outlined in the *Rhode Island Standard Specifications for Road and Bridge Construction, 2004*, which is currently available on-line @ www.dot.state.ri.us.
- Respondents are advised that all materials submitted to the State for consideration will be considered to be public records as defined in RI Gen Laws 38-2, without exception, and will be released for inspection immediately upon request once an award is made.

- In accordance with RI Gen. Laws 7-1.1-99, no foreign corporations (a corporation established other than in Rhode Island) has the right to transact business in this State until it has procured a Certificate of Authority to do so from the Office of the Secretary of State (401) 222-2357. IF APPLICABLE, A COPY OF RESPONDENT'S CERTIFICATE OF AUTHORITY MUST BE INCLUDED AS PART OF THE SUBMITTED RFP/COSTLOCATED BEHIND THE FRONT PAGE OF EACH COPY OF THE PROPOSAL. FAILURE TO DO SO MAY RESULT IN AUTOMATIC DISQUALIFICATION.
- **Although not required, Disadvantaged Business Enterprise (DBE)** participation is encouraged on all RIDOT projects. A list of current Rhode Island State certified DBE firms may be obtained through the RIDOT website @ www.dot.state.ri.us. Any questions should be directed to:

Office of Business and Community Resources
 Room 106, Two Capitol Hill
 Providence, RI 02903
 (401) 222-3260

All information requested below must be organized in the exact order in which the following RFP requirements are presented with page numbers in consecutive order. RFP/COST PROPOSAL packages should contain a Table of Contents that cross-references each RFP requirement with specific page cited.

Section C – INSTRUCTIONS FOR RFP SUBMISSION CONTENT AND FORMAT

Respondents are instructed to submit – EACH under separate cover - the following documentation sealed and clearly labeled as to *Bid No., Project Description and Content*:

TECHNICAL PROPOSAL -- (Original + 5 Copies and 2 CD ROMS)

Note: The Technical Proposal submission must NOT contain any references to component or system cost. Inclusion of cost information within the Technical Proposal submission may result in disqualification.

- All pages of the Technical Proposal shall be clearly numbered and indexed.
- A Letter of Transmittal signed by an authorized agent of the Prime VENDOR shall be included with the Technical Proposal submission.
- Technical Proposal Submission shall be divided into the following four sections and include at a minimum the information requested below:

I: **MANAGEMENT PLAN AND DEMONSTRATED EXPERIENCE WITH SIMILAR PROJECTS**

II: **TECHNICAL APPROACH**

III: **PROJECT SCHEDULE**

IV: **RESPONSIBILITY FOR DAMAGE CLAIMS**

I: **MANAGEMENT PLAN AND DEMONSTRATED EXPERIENCE WITH SIMILAR PROJECTS**

1. **Firm Identification and Executive Summary:** As part of the Management Plan section of the Technical Proposal, the VENDOR shall submit proof that the company has been in business for a minimum of five (5) years as well as the following required information. The information shall include a company description as follows:

- (A) Type of business entity (i.e., corporation, partnership, sole proprietorship etc.). Include place and date of incorporation.
- (B) If privately owned, name of company (or other business entity) making submittal and name of all persons having an equity or ownership interest in the company or business, regardless of whether such person is involved in the management or operation of the company. Names and titles of corporate officers.
- (C) If publicly owned, name of company (or other business entity) making submittal and names and titles of corporate officers.
- (D) Name, location, and telephone number of the representative to be contacted regarding all matters.

2. **Qualification and Experience Information:** As part of the Management Plan section of the Technical Proposal, the VENDOR'S personnel for this project shall have individuals with a minimum of 5 years experience in the successful collection, verification, editing, delivering, and completion of similar automated pavement condition data and video image surveys in other states.

- (A) The VENDOR shall provide the resumes of all **key personnel** to be assigned to this project.
- (B) To establish direct and relevant experience with automated pavement condition data and video image surveys, the VENDOR or VENDOR team must demonstrate they have successfully completed similar surveys, utilizing automated data collection technology and survey vehicles, in at least 3 other States.
- (C) The VENDOR shall list the States and a contact person from each State complete with all pertinent information so RIDOT may ask questions relating to performance and quality of data collected.
- (D) The experience portion of the submittal of qualifications shall be based on the experience of the prospective VENDOR, their Sub-contractors, and their Project Manager, from here on referred to as "the team". The submittal shall demonstrate the experience of the team, individually and collectively in conducting similar surveys. If compliance is based on the activities of sub-contractors, submit the names of those firms or individuals and the proposed extent of their responsibilities on this project. No change in the named subcontractor(s) will be permitted unless otherwise authorized in writing by the RIDOT Project Engineer.

3. **Management Plan:** As part of the Management Plan section of the Technical Proposal, the VENDOR shall provide an Executive Summary of the VENDOR'S qualifications and a detailed Management Plan for this project including:

- (A) **Management Approach:** Describe the general plan for meeting the management requirements of the project. Include a description of the proposed methods for planning, organizing, scheduling, controlling and coordinating the total data collection and testing effort. List labor, equipment, resources, and materials available to the company to ensure timely completion of the project. Provide a photograph and/or a video of the test vehicle(s) to be used on the project as well as equipment specifications for the vehicle. Describe a back-up plan to maintain the project schedule in the event of vehicle break down. Identify the senior level staff members and what their respective responsibilities will be on the project.
- (B) **Key Personnel:** Specifically identify key personnel to be assigned to the project. Assignment of key personnel to the project must be for the duration of the project. Provide a detailed resume for each such individual. In the event such personnel are not employees of the prospective

VENDOR, submit documentation of the relationship. Describe the individuals' responsibilities on previous projects and their proposed responsibility on this project. Demonstrate that the team has the capability, in terms of both types and quantities of personnel, facilities and equipment required, to accomplish the work in this contract on schedule. The Management Plan shall demonstrate to the RIDOT that the team has sufficient competent personnel and a satisfactory plan for carrying out the total data collection effort in an efficient and timely manner. The project manager must have a minimum of five years of experience in pavement management and/or pavement data collection, including video imaging experience. The management team shall also include at least one individual with a minimum of 5 years experience in the collection and processing of video image data.

II: TECHNICAL APPROACH

- (A) Within the Technical Approach section of the Technical Proposal, the team shall demonstrate their understanding of the intent and scope of this project. The team shall also demonstrate a thorough understanding of the technical requirements and the specific data items required for both the pavement condition data collection and video imaging. The proposed methodology for collecting the pavement condition data and the video images including collection intervals and resolution shall be detailed in this section.
- (B) The team shall also describe in detail how they propose to integrate all the data collected (pavement and video image) with both the current RIDOT pavement management system and all current RIDOT geographic information system (GIS) interfaces.
- (C) Points may be awarded in the evaluation of the technical proposals for capabilities offered which have not been required or requested, but which RIDOT deems, at their sole discretion, to be beneficial with respect to the operational objectives of the pavement management system and/or the GIS interface.

III: PROJECT SCHEDULE

- (A) The prospective VENDOR will submit a proposed project schedule detailing all aspects of the project from start up to final delivery of all required data items. The schedule shall detail the sequence of project tasks including a critical path with project milestones and proposed task completion dates.
- (B) RIDOT requires that the VENDOR will be able to collect, process, edit, validate, and deliver the complete data set by **October 1** of each year of scheduled data collection:

<u>CONTRACT YEAR</u>	<u>DATA REQUIREMENT</u>	<u>MEASUREMENT</u>
• YEARS 1, 2, 3, 4 and 5	Pavement Data Collection	1800 Lane Miles
• YEARS 1, 3 and 5	Highway and Bicycle Path ROW Data Collection	2,300 lane miles for right-of-way video image collection of highways. The right-of-way video image collection will also include 45 centerline miles of bicycle paths.
• YEAR 1	Ramp ROW Data Collection	approximately 400 ramps

The VENDOR will begin working within one (1) month after the contract is awarded. Within one (1) week after the date the contract is awarded, the VENDOR will submit a detailed work schedule, including a completion date for each year of scheduled data collection, to RIDOT for approval. In

order to ensure timely completion of this project, **Section 108.08 – Failure to Complete on Time** of the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition will apply for each year of scheduled data collection starting on October 1, until the job is completed and final data is received and accepted by RIDOT.

PLEASE NOTE: For the purposes of this project, there is no winter shutdown; further liquidated damages will be assessed during this time if necessary.

- (C) RIDOT also requires that the selected VENDOR remain working on this project *continuously* until each year's scheduled work is completed once it is started. Except for mechanical or equipment failure, the selected VENDOR'S equipment and crew(s) shall remain in Rhode Island until each year's scheduled data collection is successfully completed and accepted by the RIDOT Project Manager.
- (D) The VENDOR shall describe in the proposal how the project will be continued on schedule in the event of vehicle break down. This requirement applies for both the pavement condition survey vehicle and the right of way survey vehicle if a different vehicle is used for each task.
- (E) Liquidated Damages shall be assessed in accordance with **Section 108.08 - Failure to Complete on Time** of the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition as of October 1 of each year. Please note that for the purposes of this project liquidated damages will be assessed during the winter shutdown period.
- (F) A statement regarding the team's approach to meeting the RIDOT schedule is required. Alternate schedules, which conform to the acceptance requirements, will be evaluated if proposed.

IV: RESPONSIBILITY FOR DAMAGE CLAIMS

Respondents to this RFP shall include in their TECHNICAL PROPOSAL written acknowledgement of the following requirements and specific insurance disclosures as detailed below:

- (A) **INDEMNIFICATION:** By participating in this RFP the VENDOR agrees to defend, indemnify and hold harmless the State of Rhode Island, the RIDOT, their officers and employees, from any and all suits, actions, claims, losses, expenses, damages and any and all other liabilities of any character resulting in any injuries or damage to any person, entities, or property arising out of (or which may be claimed to arise out of) any act and/or omission of the Team in performance of work covered by the Contract, and/or in consequence of any neglect in safeguarding the work; and/or through use of unacceptable materials or equipment in conducting the work; and /or because of any neglect, or misconduct of the Team; and/or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; and/or from any claims or amounts arising out of or recovered under the Workers' Compensation Act, or any other law, ordinance, order, or decree. The State of Rhode Island may retain for its exclusive use, without recourse by the Team or anyone claiming under the Team, any and all amounts due the Team as provided under the Contract Documents to assure the Team's compliance with this Section. The VENDOR shall provide written confirmation satisfactory to the RIDOT that all such actions have been properly addressed prior to final payment under Subsection: **Final Inspection and Acceptance** in these documents. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State of Rhode Island, which immunity is hereby reserved by the State of Rhode Island.
- (B) **INSURANCE:** To be considered responsive each Respondent *must fully disclose in the Technical Proposal* their insurance source(s), - i.e., both the identification of the insurance broker and source insurance company, -as applicable, and coverage limit(s) for each of the required insurance coverages listed below. All sources of insurance must be licensed to do business in the State of Rhode Island.

At the point of award, the **VENDOR** will be **required** to provide certificates of insurance to document the following policies in force for the life of this contract adding a statement that declares the State of Rhode Island and the RIDOT as "Additionally Insured". The effective date(s) must precede the date of award and coverage shall remain in effect through the completion of the project.

- **Comprehensive General Liability Insurance:** Technical Proposal: To be considered responsive each prospective **VENDOR**, if applicable, **must disclose in the Technical Proposal** any insurance deductibles and/or self-insured retainege in excess of \$10,000.

- General Aggregate \$2,000,000
- Products Completed \$2,000,000
- Personal Injury and Advertising \$1,000,000
- Each Occurrence \$1,000,000

- **Automobile Liability Insurance**

- Combined single Limit \$1,000,000 - Each Occurrence
- Including Non-owned and/or hired vehicles and equipment

- **Workers' Compensation Insurance**

- Coverage B \$100,000

COST PROPOSAL (Original + 5 Copies and 2 CD ROMS)

The **Cost Proposal** shall be separately sealed, and submitted at the same time as the Technical Proposal. (SEE FORMAT ATTACHED) The **Cost Proposal** shall be a single proposal consisting of the following elements detailed below:

1. LUMP SUM COST for scheduled data collection broken down annually as follows:		
• YEARS 1, 2, 3, 4 and 5	Pavement Data Collection	1800 Lane Miles
• YEARS 1, 3 and 5	Highway and Bicycle Path ROW Data Collection	2,300 lane miles for right-of-way video image collection of highways. The right-of-way video image collection will also include 45 centerline miles of bicycle paths.
• YEAR 1	Ramp ROW Data Collection	approximately 400 ramps

2. PER UNIT COSTS for scheduled data collection broken down annually as follows:	
• Unit Cost Per Lane Mile To Collect Pavement Data YEARS 1, 2, 3, 4 and 5	
• Unit Cost Per Lane Mile To Collect Right-of-Way Images for Highways YEARS 1, 3 and 5	
• Unit Cost per Centerline Mile to Collect Right-of-Way Images for Bicycle Paths YEARS 1, 3 and 5	
• Unit Cost Per Ramp to Collect Right-of-Way Images YEAR 1 only	

Lump Sum Cost To Complete The Project

The Respondent shall submit an annual total Lump Sum project cost for each year of 5 YEAR contract term that reflects the complete proposed data collection and delivery effort as described in the Technical Proposal using the format provided. This cost shall be all-inclusive with no extra, optional or hidden costs. **Respondents are required to fully disclose all itemized costs as part of the Lump Sum submittal. Respondents must include on a separate sheet additional documentation itemizing Labor, Materials Equipment, Travel and all other applicable costs used to calculate ANNUAL LUMP SUM TOTALS and to document any ASSUMPTIONS relative to PER ANNUM PRICING or UNIT COSTS.**

The annual Lump Sum cost is what RIDOT expects to pay for this project. The VENDOR is also required to submit unit costs as described below. RIDOT shall use the unit costs provided by the VENDOR to adjust the total cost of the project only if the actual productive data collection mileage driven by the VENDOR exceeds RIDOT's estimated mileages for either the pavement data collection or the right of way imaging. RIDOT shall verify whether the productive mileage exceeds the estimated mileage. However, in no case shall the adjusted mileage exceed fifteen percent (15%) of the total estimated mileage of either pavement data collection (1,800 lane miles) or right-of-way images (2,300 lane miles of roads, 45 centerline miles of bicycle paths, and 400 ramps).

Unit Cost Per Lane Mile To Collect Pavement Data

The prospective VENDOR will submit a unit cost per lane mile for each scheduled YEAR to collect all pavement condition related data, which includes, but is not limited to all distress types as outlined in the attached SOW, any inventory items, and pavement perspective video images. This cost shall include all items of work as detailed in the Technical Proposal and figured into the annual Lump Sum cost. RIDOT reserves the right to add mileage to the pavement condition data collection network during the life of the contract. If RIDOT adds any mileage over the life of the contract, the additional mileage shall be billed by the VENDOR at the unit cost per lane mile.

Unit Cost Per Lane Mile To Collect Right-of-Way Images

The VENDOR shall submit a unit cost per lane mile for each scheduled YEAR to collect all right-of-way digital images. This cost shall reflect the same image quality outlined in the Technical Proposal and figured into the annual Lump Sum cost. RIDOT reserves the right to add mileage to the right-of-way data collection network during the life of the contract. If RIDOT adds any mileage over the life of the contract, the additional mileage shall be billed by the VENDOR at the unit cost per lane mile.

Section D - PROPOSAL QUESTIONS AND SUBMISSION REQUIREMENTS

Questions regarding this RFP may be posted at RIDOT's "Bidding Opportunities" web page accessible at: <http://www.dot.state.ri.us/contracting/bids/> and following the link to "?" to access Questions and Answers for solicitation. Responses to questions submitted for the subject project will also be posted under the same questions menu.

A determination will be made by RIDOT, in coordination with the Division of Purchases, whether an addendum will be required. The Q& A Forum will disable 5 FULL CALENDAR DAYS prior to the due date for this project. **Therefore, questions will not be accepted after Midnight on MAY 26, 2006.**

Section E- SUBMISSION REQUIREMENTS

Technical Proposal ("original" plus five (5) hard copies and two (2) CD ROMS) are to be submitted; labeled CD ROMS (2) should be included in a separate envelope and submitted along with proposal package. A separately sealed Cost Proposal ("original" plus five (5) copies and two (2) CD ROMS) are to be submitted simultaneously. RIDOT recommends that the electronic version of said Proposal be submitted in Adobe PDF format.

Respondents must submit proposals in a sealed package marked:
B06336 - RIDOT 5 YEAR Automated Pavement Condition Data Collection/Statewide Digital Video Log by **JUNE 1, 2006** no later than **2:30 P.M.** Requested documentation is to be either mailed or hand-delivered to:

BY COURIER OR MAIL:
 RI Department of Administration
 Division of Purchases (2nd fl)
 One Capitol Hill
 Providence, RI 02908-5855

NOTE: Proposals received after the above-referenced due date and time will not be considered. SEE GENERAL NOTIFICATIONS.

Section G – EVALUATION AND SELECTION

THE RIDOT WILL ESTABLISH A TECHNICAL REVIEW COMMITTEE THAT WILL EVALUATE AND SCORE PROPOSALS RECEIVED UTILIZING THE FOLLOWING CRITERIA:

TECHNICAL APPROACH <i>A maximum of – 50 POINTS- will be awarded based on an evaluation of the Technical Proposal.</i>	50 POINTS
PROJECT SCHEDULE <i>A maximum of – 15 POINTS – will be awarded based on an evaluation of the Scope of Work and adherence to the required schedule.</i>	15 POINTS
ORAL PRESENTATION / SYSTEM DEMONSTRATION <i>A maximum of - 15 POINTS - will be awarded based on the quality of presentation and system demonstration.</i>	15 POINTS
COST PROPOSAL <i>A maximum of – 20 POINTS – will be awarded based on an evaluation of the proposed project cost.</i>	20 POINTS
MAXIMUM SCORE	100 POINTS

Technical and Cost Proposals will be evaluated separately. **Cost Proposals** will remain sealed until such time as technical and system demonstration scoring has been completed.

The first phase of technical review will evaluate and score the TECHNICAL APPROACH and PROJECT SCHEDULE as proposed in Technical Proposal. ***The maximum combined score under this review phase is 65 POINTS; Respondents receiving scores of less than 50 POINTS will be disqualified and removed from any further consideration.***

Qualifying firms will then advance to the second review phase: ORAL PRESENTATION AND SYSTEM DEMONSTRATION. RIDOT will provide a ten (10) day notice to all qualifying firms requested to provide an oral presentation and system demonstration. This notice will include the time and location of the presentation. All presentations will be limited to one (1) hour in duration, including questions. This demonstration shall be used for ranking and qualification purposes. ***Maximum scoring under this review phase is 15 POINTS.***

The working system demonstration shall show that the VENDOR can provide all pavement condition survey data and video images consistent with the requirements of this RFP, and link this information to the current RIDOT Pavement Management System. Compatibility with RIDOT's current pavement management system is a critical component for this project (*SEE SCOPE OF WORK "Contract Requirements"*). The demonstration requires the submission of sample pavement data and images collected by the team that meets the exact criteria and specifications of the product described in their technical proposal. Such a demonstration shall be performed at the RIDOT Main Office located at 2 Capitol Hill in Providence, Rhode Island within ten (10) days following receipt of notice.

The VENDOR shall be responsible for all costs associated with the preparation, submission, travel, and execution of the work necessary to provide the presentation and system demonstration. The VENDOR shall provide all material, hardware, computer software, communications equipment and connections, necessary to perform the presentation and system demonstration. The RIDOT shall provide a conference room for meetings between the State and VENDOR.

Upon completion of review, ORAL PRESENTATION /SYSTEM DEMONSTRATION points awarded will be combined with previously scored TECHNICAL APPROACH / PROJECT SCHEDULE scoring. ***The maximum combined score under this review phase is 80 POINTS; VENDORS receiving scores of less than 65 POINTS will be disqualified and removed from any further consideration.*** Qualifying VENDORS will advance to the final COST PROPOSAL evaluation phase. ***Maximum scoring for COST PROPOSAL evaluation is 20 POINTS.***

A combined FINAL SCORE based on all criteria reviewed will be assigned by the Review Committee that will establish a final ranking and selection recommendation.

Consistent with RIDOT's and the State of Rhode Island's Office of Purchases' requirements for the selection of vendors, the Review Committee's recommendation will then require review and acceptance by the RIDOT Advisory Consultant Selection Committee. With the RIDOT Director's support, this RIDOT recommendation will then require review and acceptance by the Department of Administration's State Architecture/Engineering Consultant Selection Review Committee.

Notwithstanding the above, the State reserves the right to accept or reject any or all options, bids, proposals, to award on the basis of cost alone, and to act in its best interest.

At any point during the review process, any proposal found to be substantially non-responsive will be dropped from further consideration.

Section H – CONTRACT AWARD

Upon final selection the VENDOR will be required to sign a Letter of Agreement based on this RFP, the VENDOR'S Technical and Cost Proposal Responses, and any other terms, conditions, operating procedures, reporting requirements and other technical provisions and administrative controls that need to be clarified. RIDOT will forward a *Recommendation to Award* to the Department of Administration/ Office of Purchases including the signed Letter of Agreement and all required Insurance Certification. The Office of Purchases will review and determine whether to proceed to award at which time a purchase order will be issued. RIDOT will then issue formal Notice to Proceed.

The State reserves the right to make an award or multiple awards or to reject any or all proposals based on what it considers to be in its best interest.

SCOPE OF WORK FOR

5 YEAR Automated Pavement Condition Data Collection/Statewide Digital Video Log

Section 1 – PROJECT DESCRIPTION

The Rhode Island Department of Transportation (RIDOT), is soliciting proposals from individual VENDORS or VENDOR teams specializing in automated pavement condition data collection and both right-of-way and pavement view digital imaging to collect, process, verify, and deliver a complete data set for Rhode Island's pavement management network through a performance based contract. This contract will be a five (5) year contract with collection tasks scheduled as follows:

<u>CONTRACT YEAR</u>	<u>DATA REQUIREMENT</u>	<u>MEASUREMENT</u>
• YEARS 1, 2, 3, 4 and 5	Pavement Data Collection	1800 Lane Miles
• YEARS 1, 3 and 5	Highway and Bicycle Path ROW Data Collection	2,300 lane miles for right-of-way video image collection of highways. The right-of-way video image collection will also include 45 centerline miles of bicycle paths.
• YEAR 1	Ramp ROW Data Collection	approximately 400 ramps

The pavement data collection shall include, but is not limited to roughness, rutting, cracking and other distresses as well as other related work using automated data collection vehicles. The pavement management network shall be clearly defined by the RIDOT through the use of maps and written descriptions. The estimated lane mileage for pavement condition data collection is approximately 1,800 lane miles.

This project also involves using a mobile mapping system to collect high-resolution digital imagery along approximately 2,300 lane miles of Rhode Island's highway network, 45 centerline miles of Rhode Island's bicycle paths, and 400 miles of Rhode Island's ramps. RIDOT will use the imagery to create positionally accurate right-of-way infrastructure inventories such as signs, guardrails, striping, curbs and sidewalks that will be used in conjunction with the RIDOT's existing GIS. In addition to infrastructure element positioning, the system shall support the measurement of road widths, sign and pole heights and the tracing of polygons such as road cut areas. All of the positioned elements shall be able to have one or more attribute tags. All output data must be able to be formatted to match our existing GIS system.

All Respondents are required to demonstrate compatibility with the existing RIDOT pavement management system (PMS) and all Geographic Information System (GIS) interfaces for the digital images. Offers not meeting this compatibility requirement shall be deemed unacceptable and shall not be given further consideration. Monitoring and quality control of the pavement condition data shall be accomplished through the use of control sections selected and validated by the RIDOT prior to the start of work. It is required that once the VENDOR begins the RIDOT survey, all data collection shall be completed in a continuous time frame.

The pavement condition data and video images shall *meet or exceed* the minimum requirements set forth in these specifications. Points may be awarded in the evaluation of the technical proposals for capabilities offered which have not been required or requested, but which RIDOT deems, at their sole discretion, to be

beneficial with respect to the operational objectives of the pavement management system and/or the GIS interface.

Section 2 – CONTRACT REQUIREMENTS

General Requirements:

1. All pavement data collected by the VENDOR shall be compatible with RIDOT's existing pavement management system (PMS) and the existing computer system. RIDOT's existing PMS consists of the database and analysis software "dTIMS CT" provided by Deighton Associates, Limited. Details regarding the "dTIMS CT" software can be reviewed by accessing the Deighton website at <http://www.deighton.com>. The pavement data shall be submitted to RIDOT in Microsoft Access 2000 files. Details on the format of the Microsoft Access files will be discussed in the start-up meeting with RIDOT. RIDOT's existing computer setup consists of the X86 Intel based computers and laptops, connected to a network server with Microsoft Windows 2000 and NT technology. The VENDOR is required to provide a demonstration, satisfactory and acceptable to the RIDOT Pavement Management Unit, of compatibility with RIDOT's existing PMS prior to final acceptance of the VENDOR's proposal. The VENDOR shall give a working demonstration of their ability to provide a seamless transfer of all data collected into RIDOT's software prior to final acceptance of the proposal. The demonstration shall be at the RIDOT offices in Providence, Rhode Island. The seamless data transfer process shall be included with the final data delivery to RIDOT.
2. The VENDOR shall pay for shipping charges to deliver all equipment, software, and data to RIDOT. The VENDOR shall also pay for all shipping costs incurred as a result of errors in the information provided to RIDOT. The VENDOR shall pay all shipping costs associated with this project until all data is finalized, accepted by RIDOT and final payment is made.

Automated Pavement Data Collection Measurement Requirements:

1. Automated, continuous and objective measurements of distance, rut depth (left and right wheel paths), roughness, and transverse profile shall be collected and recorded by automated vehicle-mounted data collection equipment capable of operating at normal, variable highway speeds. Operation of the data acquisition vehicle shall minimize undue delay or risk to the traveling public and shall not require additional traffic control or lane closures. The data shall be collected in a single pass of the vehicle and stored in an onboard computer for direct transfer to RIDOT electronically in a format acceptable to the current RIDOT PMS. All equipment used for data collection shall provide a high degree of repeatability. Documentation of the accuracy and repeatability is required to be submitted as part of the technical proposal.
2. The VENDOR will be required to collect automated data on the following distresses: longitudinal cracking (length of cracking), transverse cracking (number of cracks), alligator cracking (area of cracking), block cracking (area of cracking), rutting (depth of ruts in both wheel paths), roughness in both wheel paths. The VENDOR will also be required to collect data on the following distresses: potholes and patches (length of roadway affected by potholes and patches or area of potholes and patches), edge cracking, and bleeding. The distress data shall be classified into low, medium, and high severity levels if applicable as defined by RIDOT. The VENDOR shall, at a minimum, provide the tools for RIDOT staff to obtain these data if the VENDOR cannot provide the data to RIDOT directly.
3. Rut depth and transverse profile data shall be collected for a full 12-foot lane width, unless otherwise directed by RIDOT.
4. Roughness data shall be collected in terms of International Roughness Index (IRI). Roughness data shall also meet or exceed the Federal Highway Administration's (FHWA) Highway Performance Monitoring System (HPMS) requirements.

5. All collected data shall be referenced to routes and kilometer points in units acceptable to RIDOT. The data shall be summarized at intervals to be agreed upon by RIDOT and the VENDOR (typically on a 100 meter basis). The data files to be provided to RIDOT by the VENDOR shall be in a format completely compatible with the current RIDOT PMS data structure and system architecture as provided by Deighton Associates, LTD.
6. The collection of pavement images is required. A pavement image is an image taken with the camera facing perpendicular to the pavement surface. The images must be submitted on a medium that allows for viewing RIDOT's existing computer setup. RIDOT's existing computer setup is described under General Requirements, Item 1. The resolution of pavement images shall be such that cracks 3 mm in width are visible. In order for RIDOT to conduct QC on the data, the pavement images shall be available to RIDOT upon request.
7. All pavement related data, including any pavement videos, shall be collected only from the outside travel lanes in both directions. The approximate size of this roadway network is 1,800 lane miles.

Quality Assurance:

1. RIDOT shall select several random test sections of roadway throughout the State. The VENDOR shall drive and collect data on these sections of the network prior to starting the remaining data collection. The schedule for all initial runs, including re-runs, of test sections shall be determined prior to data collection work beginning. Once all test sections have been successfully completed by the VENDOR and accepted as accurate by the RIDOT, the VENDOR can begin the formal survey. To insure quality data collection during the survey, the VENDOR is required to re-survey any one of the several available test sections every 500 productive lane miles run in the survey. The VENDOR shall notify RIDOT of which section they are testing each time this procedure is required. All data collected on test sections shall be provided to RIDOT within one (1) business day to verify the accuracy and repeatability of the data collected.
2. If the data on the test sections is determined to be beyond 30% above or below distress values determined by RIDOT, the VENDOR shall make all adjustments to the equipment necessary to provide acceptable test section results. The VENDOR shall then re-run all test sections. If the VENDOR is unable to provide acceptable data to RIDOT upon the second attempt, the contract will be terminated and award will go to the second ranked VENDOR.
3. If the VENDOR has been permitted to run productive lane miles and has provided subsequent test section data that is beyond 30% above or below distress values determined by RIDOT, the VENDOR shall make the equipment adjustments required to provide acceptable test section results to RIDOT. The VENDOR shall continue re-running the test section and making necessary equipment adjustments until acceptable test section results are provided to RIDOT. The VENDOR will not be permitted to survey additional lane miles until acceptable test section results are provided to and accepted by RIDOT.
4. The data on the validation sections shall be updated annually by RIDOT. The successful VENDOR shall drive and collect data on these sections for each year of data collection. The same provisions described above will apply for each year of data collection on the validation sections.
5. The distance-measuring instrument (DMI) shall have an accuracy of 0.001 mile.

Mobile Mapping and Right-of Way Image System Requirements:

1. **Camera Resolution:** All imagery shall be captured with digital output cameras with a minimum resolution of 1024 pixels x 768 lines. Standard SVHS video and frame grabbing of analog video is not acceptable. All cameras used must be color.
2. **Image Compression and File Size:** Recorded images compressed using the JPEG compression standard. Images shall be compressed in real-time during the time of capture. Image file size should typically be about 150Kb per image and generally less than 200Kb to reduce file storage needs for the RIDOT.
3. **Full Frame Image Capture:** Full frame digital capture process (non-interlace) using full frame progressive scan cameras.
4. **Camera Setup:** The camera shall be adjustable during setup for changing environment (sunny to cloudy day) to optimize data collection efficiency.
5. **Multiple Viewing Angle and Camera Mounting:** There shall be a minimum of two views during the right-of-way image collection. One view in front of the vehicle showing the driver's perspective, and the second view between 25 and 50 degrees to the right of the driving direction.
6. **Image Header:** All images shall have a user-defined header, which includes, as a minimum, date route name, HHS route number (assigned by RIDOT), meter point, and direction of travel.
7. **Camera Synchronization Requirements:** All images shall be captured at the same time with integrated results.
8. **Digital Camera Frame Rate:** All of the terrestrial data shall be captured using a mobile mapping system capable of traveling at or near posted speeds up to 80 km/hr (50 mph).
9. **GPS/INS/DMI Requirements:** The mobile mapping system shall be capable of producing a continuous GPS base line utilizing a geodetic GPS receiver, an inertial measurement unit and an accurate linear measuring device (DMI).
10. **GPS Receiver:** Minimum 12 channel dual frequency L1 and L2, low noise, and DGPS ready receivers shall be used. DGPS solutions shall be incorporated using a base station or real-time differential link.
11. **Road Attributes:** All road networks shall be segmented and tagged with HHS number and road names.
12. **Accuracy:** The horizontal position of any visible feature between up to 40 meters in front of the cameras will be one meter root mean squared (RMS) or less (latitude/longitude).
13. **Viewing Software:** Provide viewer software so recorded images and data with route and GPS, INS data can be reviewed for quality control.
14. **Shadows:** The VENDOR shall either (1) provide software to allow image brightening in the event that images are too dark to view features, or (2) the VENDOR shall provide images in which all features are visible in shaded areas.

Software for Positioning, Measuring, Attribute Tagging and Viewing:

The VENDOR shall provide software that will run on a PC under Windows 2000 and NT operating systems. The software supplied by the VENDOR shall be able to perform the following at a minimum:

1. Create and modify user definable project information and feature definition files and related attribute information at any time during processing;
2. Position visible features with absolute horizontal accuracy of not more than 1 meter RMS at 40 meters in front of the cameras;
3. Allow choice of using any of the image views for positioning features shown in each view.
4. Organize features in layers, create symbols for features, select point, line, poly line or area feature types and define an unlimited number of attributes to each feature;
5. Add, edit or delete all features and attributes;
6. Support multiple map projections, datums and unit measurement systems;
7. Measure heights, widths and offset within individual images with a relative linear accuracy of 6 cm at 10 meters in front of the cameras;
8. Zoom to target at multiple ratios for precise measurements;
9. Generate and display distance along a baseline from a user selected start point;
10. Generate and display offset from a user defined baseline;
11. Export feature and attribute data to AutoCAD, ArcInfo, ArcView, and relational databases Oracle, and Microsoft Access.
12. View imagery randomly, sequentially or in continuous play mode;
13. View image location points provided by the inertial navigation system on a map;
14. Perform all of the above functions without using other 3rd party software packages.
15. The VENDOR shall provide RIDOT with **seven (7) licenses** of the most recent version of their software to extract features from images.
16. The VENDOR shall provide training on their software to locate features and define attributes about those features. The training will be held at RIDOT offices in Providence.

Requirements for Bicycle Paths:

1. Images shall be collected in only one direction: the eastbound direction or the northbound direction.
2. The VENDOR shall notify the RIDOT project manager of the date they intend to survey each bicycle path three (3) days prior to that date.
3. The speed at which the survey vehicle travels shall not exceed three (3) miles per hour (five (5) kilometers per hour).

4. The VENDOR shall display two (2) signs on the vehicle: one on the front of the vehicle, and one on the rear of the vehicle, indicating that a state DOT survey is in progress.
5. The VENDOR shall use flashing lights on top of the survey vehicle during the survey. These flashing lights shall conform to the MUTCD 2003 Edition, page 6H-12 (Notes for Figure 6H-4 – Typical Application 4 Short-Duration or Mobile Operation on Shoulder - Option: Item 4).
6. The image headers shall include the name of the bicycle path, the chainage in kilometers, and the date of survey.

Data Acceptance Criteria:

Data will be deemed acceptable when:

1. Image Quality: 99% of all images are available and usable;
2. Randomly selected position points are accurate within 1 meter RMS within 40 m in image view.

Mapping Specification:

1. Mapping Projection: The latitude/longitude coordinates shall be projected into the coordinate system used by RIDOT.

Coordinate System: Rhode Island State Plane Feet
Datum: NAD83

2. Linear referencing: the existing HHS highway network [Route, Meter point]

Optional Deliverable:

Road Geometry: Road geometric data (grade, curve radius and cross fall) shall be collected and meet the Federal Highway Administration (FHWA) Highway Performance Monitoring System (HPMS) reporting requirements.

Data Delivery:

1. All digital imagery and related data will be delivered on external hard drives, which will contain all of the information necessary to support positioning and measuring.
2. Mapping Specification: CAD/GIS Input
3. Image Format: JPEG digital standard

Special Requirements for Traffic Maintenance and Protection:

The VENDOR shall submit maintenance and protection of traffic plans for all work required on the roadways to RIDOT for approval. The plan shall show safety features of the survey vehicle as well as details for any work zone setups in the event the vehicle or survey crews will be stationary in the roadway.

Miscellaneous:

1. The VENDOR shall schedule a start up meeting with RIDOT to clarify routing and other logistics and answer all questions prior to beginning collection of any data. The meeting shall be held at the RIDOT offices in Providence, Rhode Island
2. The VENDOR shall submit a work schedule that includes how many kilometers of road will be surveyed per day and a projected completion date. For each year of work, the VENDOR is required to survey certain roads prior to surveying the remaining roads in the project. This prioritized list shall be provided by RIDOT when the VENDOR arrives in Rhode Island to begin that year of data collection.
3. RIDOT staff will be available for field assistance on a limited basis only. RIDOT staff will not be available to travel with the survey crews on a daily basis during the fieldwork. In the event that a RIDOT staff member is required in the field, the VENDOR shall provide a safe/comfortable seat for the RIDOT staff member in the survey vehicle.
4. The VENDOR'S work crews are required to report to RIDOT staff at least once per week to update RIDOT as to the progress of the data collection effort, discuss any problems, completed survey areas and work remaining.
5. Any route for which data and / or video imaging is incomplete or contains errors shall be corrected by the VENDOR. It may be necessary, at the discretion of the RIDOT Engineer, to re-run erroneous sections. Such corrections or re-runs shall be made at the expense of the VENDOR (at no additional cost to RIDOT).
6. RIDOT requires that each route be surveyed continuously and in its entirety from starting point to ending point. If there are data or images missing from a route or any portions of a route the VENDOR shall re-survey the entire route again to collect the missing data and/or images at no expense to the State of Rhode Island.
7. The VENDOR shall delete any duplicate files prior to the final data submission to RIDOT.
8. All data shall be collected, analyzed, summarized, processed and delivered to RIDOT in its final format by October 1 of each year of work. The VENDOR shall begin working within one (1) month after the contract is awarded. Within one (1) week after the date the contract is awarded, the VENDOR shall submit a detailed work schedule, including a completion date, to RIDOT for approval. In order to ensure timely completion of this project, **Section 108.08 – Failure to Complete on Time** of the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition will apply starting October 1 of each year of data collection, until the job is completed and final data is received and accepted by RIDOT. Please note that for the purposes of this project liquidated damages will be assessed during the winter shutdown period.
9. Any deviations from or exceptions to these specifications shall be reported to the Rhode Island RIDOT of Transportation in writing as part of the Technical Proposal. RIDOT reserves the right to reject any proposal not meeting these specifications. All VENDORS are required to demonstrate project capabilities prior to acceptance of their proposal.
10. The VENDOR is required to submit data files and video images on a weekly basis for verification and quality control to the RIDOT.

Section 3 – FINAL DATA ACCEPTANCE PROCEDURE

General Requirements:

1. RIDOT staff will review all data and images delivered for each year of delivery.
2. All items furnished by the VENDOR shall be subjected to monitoring and testing to determine conformance with the RIDOT RFP and Specifications as set forth in this document.
3. RIDOT shall provide written notification to the VENDOR for each year of data collection of the acceptance or rejection of all deliverables.

Section 4 - PAYMENT TERMS

The resultant contract will be a performance-based contract. A three percent (3%) retainage will be withheld on all payments until completion and final acceptance of the project. Liquidated Damages may be assessed for each year of survey in accordance with **Section 108.08 - Failure to Complete on Time** of the Rhode Island Standard Specifications for Road and Bridge Construction, 2004 Edition starting on October 1 of each year of work. Please note that for the purposes of this project liquidated damages will be assessed during the winter shutdown period. Each year of payment shall be based on the unit price per mile of pavement condition data collection times the total number of lane miles plus the unit price per mile of right of way images that were collected times the total number of lane miles. Payments within each year will be made according to the following schedule:

10% - Upon Commencement of Work in Rhode Island

- This shall be defined as the date each YEAR that data collection and/or video imaging commences in Rhode Island with productive lane miles.

40% - Upon Completion of Field Data Collection

- This shall be defined as the date of the final day of data collection and video imaging in Rhode Island for each YEAR of data collection with productive lane miles.

20% - Upon Initial Data Delivery

- This shall be defined as the date when all required deliverables for the assigned YEAR have been submitted to the State of Rhode Island, but not yet reviewed by the State of Rhode Island.

30% - Upon Final Data Delivery and Final Acceptance by RIDOT

- For each assigned YEAR of data collection, this shall be defined as the date when RIDOT provides written documentation of final acceptance of all work and data provided by the VENDOR. RIDOT shall provide written notification of acceptance or rejection of all deliverables for each assigned YEAR.

RFP B06336
 5-YEAR AUTOMATED PAVEMENT CONDITION DATA COLLECTION/ STATEWIDE DIGITAL LOG

ITEMIZED COST PROPOSAL
 (PER CONTRACT YEAR)

VENDOR NAME: _____
 Street Address/ P.O. Box _____
 City/State/Zip _____

INSTRUCTIONS: Vendors must complete all shaded entries and fully disclose all itemized costs associated with each LUMP SUM ANNUAL COST defined. Identify in writing all assumptions related to price and work schedule. (SEE NOTE BELOW.) Failure to complete information requested may result in disqualification of Cost Proposal.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
LUMP SUM Total (PER CONTRACT TASK)	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
PAVEMENT CONDITION	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
ROW HIGHWAYS	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
ROW BICYCLE PATHS	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
RIGHT-OF-WAY RAMPS	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
TOTAL ANNUAL \$	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
UNIT COSTS:					
PER LANE MILE FOR Pavement Data	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
PER LANE MILE FOR ROW Images	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
PER CENTERLINE MI FOR ROW Bicycle Paths	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
PER RAMP FOR ROW Ramps	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____

Vendors must include on a separate sheet additional documentation itemizing Labor, Materials Equipment, Travel and all other applicable costs used to calculate ANNUAL LUMP SUM TOTALS and to document any ASSUMPTIONS relative to PER ANNUM PRICING or UNIT COSTS.