

University of Maryland College Park



Request for Proposal (RFP) No. 109533

To Provide Traffic Data and Associated Products to The Eastern Coalition Organization Members and Affiliates through the Traffic Data Marketplace (ETC-TDM)

Issue Date:	Friday, May 14, 2021
Pre-Proposal Conference:	Thursday, June 3, 2021, 12:30 – 2:30PM E.T.
Deadline for Questions:	Monday, June 14, 2021, 2PM ET
Proposal Due Date:	Wednesday, June 30, 2021, 9AM ET

WARNING: Contractors who have received this document from a source other than the Issuing Office should immediately contact the Issuing Office and provide their name and mailing address in order that amendments to the RFP or other communications can be sent to them. Contractors who fail to notify the Issuing Office with this information assume complete responsibility in the event that they do not receive communications from the Issuing Office prior to the closing date.

Contractors are cautioned not to make changes to any of the terms and conditions in this solicitation. Doing so may render a Contractor's proposal unacceptable and subject to rejection. Questions and comments must be addressed to the point of contact identified in Section A-1, Item 9 of this document.

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PART I – THE SCHEDULE
SECTION A-1 – SOLICITATION / CONTRACT FORM

1. CONTRACT NUMBER	2. SOLICITATION NUMBER 109533	3. TYPE OF SOLICITATION NEGOTIATED (RFP)	4. DATE ISSUED May 14, 2021	5. REQUISITION NUMBER N/A
6. ISSUED BY UNIVERSITY OF MARYLAND DEPARTMENT OF PROCUREMENT AND SUPPLY 2113-R CHESAPEAKE BUILDING COLLEGE PARK, MARYLAND 20742			7. ADDRESS PROPOSAL TO BOX Folder: See Logistics below ATTN: RFP #109533	

SOLICITATION

8. Sealed proposals in original plus number of copies specified in Section A-2, Subsection D for furnishing the supplies or services in the Schedule will be received at the location specified in Item 7 (if no location is specified in Item 7, then the location specified in Item 6) until the date and time specified in Section A-2, Subsection E.

CAUTION – LATE Submissions, Modifications, and Withdrawals; see Section A-2, Subsection F entitled "Late Proposals". All offers are subject to all terms and conditions contained in this solicitation.

9. FOR INFORMATION CALL	A. NAME Cari Pfister	B. TELEPHONE (NO COLLECT CALLS) AREA CODE 301	NUMBER 405-5848	C. E-MAIL ADDRESS cpfister@umd.edu	D. FAX NUMBER

OFFER (Must be fully completed by Contractor)

10. In compliance with the above, the undersigned agrees, if this offer is accepted within the time period specified in Section A-2, Subsection G, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the Schedule.

11. ACKNOWLEDGEMENT OF AMENDMENTS

The Contractor acknowledges receipt of all amendments to the SOLICITATION.

This contract incorporates the Solicitation/Request for Proposal and any amendments thereto, as well as Contractor's proposal and amendments thereto. In the event of a discrepancy between the terms of this contract, including amendments and modifications made thereto, and Contractor's proposal and amendments thereto, the discrepancy shall be resolved by giving precedence in the following order:

- a) This Contract, including the Solicitation/Request for Proposal and amendments and modifications made thereto
- b) Contractor's proposal, including amendments and modifications made to the proposal.

This contract, including the documents incorporated by reference and any negotiated changes prior to contract award, contains the entire agreement of the parties and supersedes all prior agreements and understandings, oral or otherwise, between the parties.

12. NAME, ADDRESS AND FEI NUMBER OF CONTRACTOR	13. CONTRACTOR REMIT-TO ADDRESS	14. NAME TITLE AND E-MAIL OF PERSON AUTHORIZED TO SIGN OFFER (Print or Type)
15. TELEPHONE NUMBER AREA CODE NUMBER EXT.		16. SIGNATURE
		17. OFFER DATE

AWARD (To be completed by University)

18. ACCEPTED AS TO ITEMS LABELED	19. AMOUNT	20. FRS ACCOUNT NUMBER
21. ADMINISTERED BY (If other than Item 6)		
22. NAME OF PROCUREMENT OFFICER (Type or Print)	23. UNIVERSITY OF MARYLAND (Signature of Procurement Officer)	24. AWARD DATE

IMPORTANT – Award will be made on this Form or by other authorized official written notice.

Section A-2 -- Instructions, Conditions and Notices to Contractors

The University of Maryland, on behalf of The Eastern Transportation Coalition (formerly the I-95 Corridor Coalition), is issuing this RFP to engage one or more Contractors to provide the following types of Traffic Data sets and associated products to Coalition Organizations

- a) Real-time Travel Time and Speed Data
- b) Volume Data
- c) Conflation - Traffic Data
- d) Waypoint Data
- e) Origin-Destination Data
- f) Freight Data

The Contractor may submit a proposal for all of the above noted data sets, one or more of the above noted data sets, or for only individually selected data sets. It is not required that a Contractor respond to all types of data sets.

An initial four-year contract award is anticipated. The contract may be renewed, if desired by the Coalition, up to a maximum contract life of eight years.

A. ISSUING OFFICE

The sole point of contact at the University of Maryland, College Park (hereinafter “University” or “University of Maryland”) for purposes of this Request for Proposal (RFP) is the Issuing Office. The location of the Issuing Office is contained in Part I, Section A-1, Item 6 of this document. Point of contact information is listed in Part I, Section A-1, Items 9(a) through 9(d) of this document.

B. PRE-PROPOSAL VIRTUAL CONFERENCE

An optional virtual pre-proposal conference will be held **on Thursday, June 3, 2021 at 12:30 P.M. EST.** Confirmed Date may be posted on the Coalition’s website (<https://tetcoalition.org/projects/vpp-marketplace/>)

Firms should estimate a duration of a maximum 2 Hours. Contractors who are attending the virtual pre-proposal conference are requested confirm attendance to **cpfister@umd.edu** three (3) days prior to the conference. A virtual web link will be provided to those confirming attendance.

Any and all dialogue at the virtual meeting is unofficial; questions must be submitted in writing to **cpfister@umd.edu** by electronic mail by Contractors for official response.

While attendance at the pre-proposal virtual conference is not mandatory, all interested Contractors are encouraged to attend to be able to better prepare acceptable proposals.

C. QUESTIONS

Each Contractor is responsible for reading carefully and understanding fully the terms and conditions of this RFP. Acceptable method of written communication is electronic mail. All contact between Contractors and the University will be formally made in writing through the Issuing Office. Requests for clarification or additional information must be made in writing to the Procurement Officer and

received at the Issuing Office **no later than Monday, June 14, 2021 at 2 p.m. EST.** Confirmed Date may be posted on the Coalition's website (<https://tetcoalition.org/projects/vpp-marketplace/>)

Such requests should contain the following: **"QUESTIONS: RFP #109533"**. Only written communications relative to the procurement shall be considered. **Questions should be sent by email to cpfister@umd.edu.** It is incumbent upon the Contractor to verify University receipt of their questions.

All questions will be answered in writing. **Questions should be sorted and labeled by each Core Traffic Data Item as applicable.** Both questions and answers will be distributed, without identification of the inquirer(s), to all Contractors who are on record with the Procurement Officer as having received this RFP. No oral communications can be relied upon for proposal purposes.

To the extent that a question causes a change to any part of this RFP, an amendment shall be issued addressing such.

D. SUBMISSION OF PROPOSALS

Proposals must be:

- (1) submitted in the format set forth herein,
- (2) made in the official name of the firm or individual under which Contractor's business is conducted (including the official business address),
- (3) signed by a person duly authorized to commit Contractor to the proposal,
- (4) submitted with the assigned RFP number clearly marked on the cover or envelope,
- (5) separated into Technical and Financial volumes, and
- (6) addressed to the Procurement Officer identified in Section A-1, Item 9 and sent to the address shown in Section A-1, Item 7.

The Contractor must submit **one (1) FILE (marked "TECHNICAL")** and **one (1) original FILE (marked "FINANCIAL")** to the respective Box Folders. Each file description shall include the proposer's name, RFP number, and "TECHNICAL" or "FINANCIAL."

Commingling of technical and financial information or failure to submit the two volumes **separately** may result in the proposal being deemed **NON-ACCEPTABLE** and thereby rejected.

BOX LOGISTICS:

TECHNICAL FOLDER:

<https://umd.app.box.com/f/453715880f2c461c8f0578c1d5300e56>

FINANCIAL FOLDER:

<https://umd.app.box.com/f/a3132b4050dc4d1498fee3e8c263de60>

NOTE: IF THERE ARE ISSUES WITH SUBMITTING, PLEASE SEND AN EMAIL TO: CPFISTER@UMD.EDU

NOTE: PROPOSALS will only be accepted through the portal given above.

E. CLOSING DATE

Proposals must arrive at the location identified in Section A-1, Item 7 of this document **ON OR BEFORE WEDNESDAY, JUNE 30, 2021, 9A.M. EST**, in the format set forth herein. **PROPOSALS SUBMITTED TO ANY OTHER ADDRESS, OR AFTER 9A.M. EST ON Wednesday, June 30, 2021, will not be considered.**

Contractors mailing proposals should allow sufficient mail delivery time to insure timely receipt by the Issuing Office. Proposals, amendments to proposals, or requests for withdrawal of proposals arriving after the closing time and date shall not be considered. There shall be no public opening of the proposals. The names of Contractors will not be released until after award.

F. LATE PROPOSALS

Any proposal or modification of a proposal including a Best and Final Offer (BAFO) that is not received through the web portal noted above in Section A-2, D by the designated time and date set forth herein will be considered late and shall not be considered. Delivery of the proposal to the specified location by the prescribed time and date is the sole responsibility of the Contractor. Exceptions may be authorized, at the sole discretion of the Procurement Officer, when the reason for the late proposal, late request for withdrawal, late modification of a proposal or BAFO is due to the action or inaction of the University. A record of the late proposal, request for withdrawal, modification of a proposal or BAFO shall be made in the appropriate procurement file.

G. DURATION OF PROPOSAL OFFER

Proposals shall be valid for a minimum of 120 days following the closing date of this RFP. If an award is not made during that period, the proposal shall automatically extend for another 120 days, unless the Contractor gives specific written notice to the Procurement Officer at least 15 days before the expiration of the then current 120-day period. Proposals shall automatically renew for an additional 120 days until such time as an award is made or proper written notice is given to the University of Contractor's intent to withdraw its proposal. By submission of a proposal, Contractor guarantees that its offer shall be firm for the period specified above.

H. AMENDMENTS TO THE RFP

If it becomes necessary to revise any part of this RFP, notice of the revision will be given in the form of an amendment to Contractors who are on record with the Procurement Officer as having received this RFP. All amendments shall become a part of this RFP. Each Contractor must acknowledge receipt of amendments, and the failure of a Contractor to acknowledge any amendment shall not relieve the Contractor of the responsibility for complying with the terms thereof.

I. RESERVED

J. ECONOMY OF PREPARATION

Each proposal should be prepared simply and economically, providing a straightforward, concise description of the Contractor's offer and capabilities to satisfy the requirements of this RFP. Emphasis should be on completeness and clarity of content.

K. RESERVED

L. PUBLIC INFORMATION ACT NOTICE

Contractors shall specifically identify those portions of their proposals that they deem to contain confidential, proprietary information or trade secrets and shall provide specific justification, with respect to each separate portion identified, why such materials, upon request, should not be disclosed by the State under the Access to Public Records Act, State Government Article, Title 10, Subtitle 6, Annotated Code of Maryland.

In order for such claims of confidentiality to be considered, Contractors must clearly identify and provide individual justification for each and every section that is claimed to contain confidential, proprietary information or trade secrets. It is **NOT** sufficient to preface your proposal with a proprietary statement, or to use a page header or footer that arbitrarily marks some or all pages as confidential. General claims of confidentiality or similar blanket designations shall not be effective.

M. TWO VOLUME PROPOSAL

The selection procedure for this procurement requires an independent evaluation of the technical and financial proposals. This separation allows for evaluation of technical proposals on their technical merit only. Consequently, Contractor shall submit its proposal in two separate proposals as indicated below. No pricing information is to be included in the technical proposal.

See Part IV, Section L for additional details pertaining to the evaluation process.

1. VOLUME I - TECHNICAL

This volume should be prepared in a clear and concise manner with pages numbered. The technical volume shall not contain any price information. If such is included in the technical volume, it will not be evaluated by the financial evaluation committee. Volume I must contain the following sections:

a. EXECUTIVE / MANAGEMENT SUMMARY

The Executive/Management Summary should contain a brief synopsis of how the Contractor's proposal meets the needs of the members and affiliates of the Eastern Transportation Coalition.

b. REFERENCES

Contractors must provide at least two references that validate the Contractor's ability to provide the referenced traffic data sets, preferably similar in size, scope and complexity as the requirements defined in this RFP. **Reference information is to be incorporated in the form provided in Section C/Subsection 4.0.** Cited references must be able to confirm, without

reservation, the Contractor's ability to perform as mandated in this solicitation. The Contractor shall provide, at a minimum:

- Name of the company or institution
- Name of primary contact
- Address
- Telephone number
- E-mail address
- Annual Dollar Value of Contract
- Start Date
- Completion Date
- Description of the project/service

The University reserves the right to take any or all of the following actions: to reject a proposal based on an unsatisfactory reference, to contact any person or persons associated with the referenced site, to request additional references, to contact organizations known to have used in the past or currently using the products supplied by the Contractor or the Contractor's subcontractors, to contact independent consulting firms for additional information about the Contractor or the Contractor's subcontractors and to visit any or all of the reference sites for demonstrations.

c. THE TECHNICAL PROPOSAL

Contractors may propose on all or only specific data set sections noted in the requirements and specification section in Section “C”. The Contractor is not required to submit a proposal for all six data sets.

The Contractor’s Proposal must meet the Mandatory Requirements and Specifications for each of the data sets for which they are submitting a proposal.

Contractors may submit a proposal for any data set or combination of data sets, however, technical proposal must be able to be separated by data set description for review and scoring both technically and for pricing.

Each dataset has varying degrees of Highly Desirable and Desirable requirements and specifications in addition to Mandatory requirements and specifications. Contractors are encouraged to fully read and understand the differences between Mandatory, Highly Desirable, and Desirable requirement and specifications as outlined in Section C, subsection 3.1 and to respond accordingly.

It is not required to submit a proposal for each dataset for a proposal to be considered responsive to this RFP.

Contractors are urged to read the proposal very carefully and to submit their questions, in writing, by the due date for questions. Misinterpretation of requirements or specifications by the Contractor shall not relieve the Contractor of responsibility to accurately address them in this RFP or to perform the contract, if awarded.

The information/items specified herein must be addressed in the technical proposal.

For each of the datasets included in Section C, subsection 3.1, to which the Contractor is responding, the Contractor must describe in detail how the proposed products meet or exceed the stated Mandatory requirements and specifications. The Contractor must explain any exception or deviation from them. Subsection 3.1 uses priority and response codes that serve as a guide to the responder. The requirements and specifications in subsection 3.1 are structured in a matrix format. Contractors are to respond to the requirements and specifications using the same matrix format shown. Responses requiring supporting information may be entered directly into the matrix or Contractors may reference the information located elsewhere in the RFP response including the Executive / Management Summary and Appendices. Provide, if available, full objective evidence of the Contractor's ability to meet the data quality requirements and specifications such as independent verifications, validations, studies or reports.

d. RISK ANALYSIS

Contractors must provide a full risk analysis as requested in Section C, subsection 3.3.

e. DATA OWNERSHIP AND DATA LICENSING

Contractors must provide a clear and affirmative response indicating support for Data Ownership and Data Licensing provisions in section C, subsection 6.0. Failure to do so may result in rejection of proposal.

f. TECHNICAL RESPONSE REQUIREMENTS

Contractors are urged to read the requirements and specifications very carefully and to submit their questions, in writing, by the due date for questions. Misinterpretation of any requirements or specifications by the Contractor shall not relieve the Contractor of responsibility to accurately address the requirements of this RFP or to perform the contract, if awarded.

The volume which contain original documents, should be clearly identified as the **ORIGINAL Technical Volume**

Volume 1- Technical Proposal must also contain:

Contractors must complete Items 11, 12, 13, 14, 15, 16 and 17 of the Solicitation / Contract Form (Section A-1) of this document and include TWO signed originals as part of Contractor's Technical proposal, in the original Technical Volume. Failure to submit these signed documents may cause the Contractor's proposal to be rejected, at the sole discretion of the University.

Technical Responses including/addressing:

- Executive/Management Summary
- References
- Response to Technical Specifications (Section C, subsection 3.1)
- Risk Analysis (Section C, subsection 3.3)

- Response to Data Ownership and Licensing (Section C, subsection 6.0)
- Any additional support documentation required.

Small Business Certificates (if required)

Affidavits/Certifications/MBE Compliance forms as follows:

- Completed and signed Maryland Proposal Affidavit
- Completed and signed Conflict of Interest Affidavit and Disclosure
- Completed and signed Federal Certifications,
- Small Business information as may be required in Sections U/V,
- Maryland Affidavit of Living Wage
- Completed Minority Subcontracting Forms, etc).
- Required Economic Benefits to Maryland Information
- Any additional support documentation required.

The University may make a final determination regarding a proposal's acceptability solely on the basis of the proposal as submitted.

TOTAL PAGE COUNT

The total page count of Volume I shall not exceed 75 pages, excluding inclusion of the RFP. Each double-sided page shall count as TWO pages. Except as stated below in this paragraph, Volume I shall be presented in 12-point font or larger. The 75-page limit includes bibliographical summaries and any resumes. The 75-page limit also includes all figures, tables, appendices and all other ancillary materials. Subject to the exception stated in the next sentence, the dimensions of each page shall be no greater than 8 ½ by 11 inches. Up to 10 of the 75 maximum pages in Volume I may be "fold-out" pages having dimensions not exceeding 11 inches by 17 inches – provided that any such larger pages are bound into Volume I. Footnotes, legends or labels associated with the tables or diagrams, and other information which is ancillary to the main text, may be presented in a font size smaller than 12-point font – provided that any such smaller font is fully legible. (Biographical summaries and resumes are not considered ancillary material and must therefore be presented in 12-point font or larger.)

2. VOLUME II - FINANCIAL

This volume consists of and must contain the following items. Contractors shall not include any technical information or specifications in the financial volume. If such are included in the financial volume, they shall not be evaluated by the technical evaluation committee.

a. PRICING SECTION

This volume shall be in accordance with Section B – Pricing.

b. FINANCIAL VIABILITY

The University reserves the right to require, during proposal evaluation, that the Contractor provide a copy of its most current Annual Report or audited Statement of Financial Condition to include a Balance Sheet, Income Statement and Cash Flow Statement or other acceptable

financial information. These documents may be relied on in any determination regarding Contractor financial responsibility.

c. RESERVED

d. NOTICES INFORMATION

Contractors must complete Section G.5 and submit this information as part of their financial proposal.

N. CANCELLATION OF THE RFP

The University may cancel this RFP, in whole or in part, or reject all proposals submitted in response to the RFP when such action is determined to be fiscally advantageous to the University and/or the State or otherwise in the best interest of the University and/or the State.

O. VIRTUAL ORAL PRESENTATIONS/DEMONSTRATIONS

Contractors who submit proposals initially judged by the Procurement Officer to be reasonably susceptible of being selected for award may be asked to discuss their proposals with the University to facilitate arrival at a contract most advantageous to the University.

- 1.0 The University reserves the right to waive the Oral Presentation/Product Demonstration, in which case the technical evaluation will be based on the written technical proposal submittal alone. Proposers are therefore encouraged to submit the best possible proposal at each opportunity for submittal
- 2.0 The due date and time of the oral presentation/product demonstration will be determined by the University upon evaluation completion of Technical Proposals. The actual date will be verified with the applicable Proposers at the time the presentation is requested. Refer to the Solicitation Schedule for tentative dates. Proposers are advised to set these dates aside so as to avoid a conflict
- 3.0 The oral presentation will be virtual and informal, as the University is not interested in a marketing presentation, rather, it will be a casual and informal format in which to view the Proposers presentations, etc.
- 4.0 The purpose of the oral presentation/product demonstration will be to clarify the proposer's proposal as requested by the Evaluation Committee.
- 5.0 The criteria and format of the demonstration will be provided with the written request to conduct an oral presentation.

P. SOLICITATION, PROPOSAL ACCEPTANCE, AWARD AND DISCUSSIONS

This RFP creates no obligation on the part of the University to award a contract or to compensate Contractors for proposal preparation expenses. The University reserves the unilateral right to cancel this solicitation at any time and to accept or reject any and all proposals, in whole or in part, received in response to this RFP; to award one or more Indefinite Delivery, Indefinite Quantity (IDIQ) contract(s) under which task orders will be issued to authorize work. The University intends to create a Traffic Data Marketplace for Coalition Organizations consisting of multiple awards based on levels of capability, quality, pricing and demonstrated ability to deliver. Levels of capability are defined in Part III, Section J, List of Attachments, List of Definition as the evalua, Highly Desirable and Desirable requirements and specifications of Traffic Data.

Discussions may be conducted with those Contractors who submit proposals initially judged by the Procurement Officer to be reasonably susceptible of being selected for award. However, the University reserves the right to award a contract based upon the proposals received without further discussions.

Q. EVIDENCE OF RESPONSIBILITY

Prior to the award of a contract pursuant to this RFP, the Procurement Officer may require Contractor to submit such additional information bearing upon Contractor's ability to perform the contract as the Procurement Officer deems appropriate. The Procurement Officer may also consider any information otherwise available concerning the financial, technical, and other qualifications or abilities of the Contractor.

R. ELECTRONIC FUNDS TRANSFER (EFT)

By submitting a response to this solicitation, the Offeror agrees to accept payments by electronic funds transfer (EFT) unless the State Comptroller's Office grants an exemption. The selected Offeror shall register using the COT/GAD X-10 Vendor Electronic Funds Registration Request Form, which may be found on the following website:

http://compnet.comp.state.md.us/General_Accounting_Division/Vendors/Electronic_Funds_Transfer/

Any request for exemption must be submitted to the State Comptroller's Office for approval at the address specified on the COT/GAD X-10 form and must include the business identification information as stated on the form and include the reason for the exemption.

See Payment of University Obligations clause in PART II, Contract Clauses, Section I for additional information.

S. FORMATION OF AGREEMENT/CONTRACT WITH SUCCESSFUL CONTRACTOR

This Contract shall also include any other forms or documents deemed necessary by the Procurement Officer.

This RFP and any resulting contract shall be governed by the University System of Maryland Procurement Policies and Procedures, and University of Maryland Procurement Policies and Procedures. These policies and procedures may be viewed at the following web site:

www.purchase.umd.edu From the main menu, select the category Policy and then "Policies and Procedures".

T. DEBRIEFING OF UNSUCCESSFUL PROPOSORS

A debriefing of an unsuccessful proposer (s) shall be conducted upon written request submitted to the Procurement Officer within ten (10) days of the date on which the proposer knew, or should have known, its proposal was unsuccessful. The debriefing shall be limited to a discussion of the proposers' unsuccessful proposal. The debriefing will be oral and shall provide information on areas in which the proposal was deemed weak or insufficient. The debriefing may NOT include discussion of a competing proposal or discussion, thoughts, notes or ranking from an individual evaluation committee member. A summarization of the procurement officer's rationale for the selection may be given. Debriefings shall be conducted at the earliest feasible time.

U. CONTRACT IMPLEMENTATION MEETING

Contractor receiving an award under this solicitation may be required to attend a Contract Implementation Meeting to be held after contract award, as scheduled by the Procurement Officer. The location and agenda for this meeting will be communicated to the Contractor by the Procurement Officer.

V. RESERVED

W. RESERVED

X. ECONOMIC BENEFITS TO THE STATE OF MARYLAND

Economic Benefit Factors:

The Offeror shall submit in their Technical Proposal, Section C/ Subsection 3.1, a description of the benefits that will accrue to the Maryland Economy during the term of this contract, as a direct or indirect result of the Offeror's performance of this contract.

NOTE: Because this submission is part of the Offeror's Technical Proposal, it must not contain any statement of actual or estimated dollar amounts for any of the sub-factors shown below. Instead, the Offeror is instructed to quantify the economic benefit as a percentage of the Offeror's total Price Proposal (wherever so indicated in brackets): **Contractor is NOT to include any details of their price proposals with this information.**

Y INDEFINITE DELIVERY/INDEFINITE QUANTITY (IDIQ) CONTRACT

Under this IDIQ contract, Contractor shall be paid **only** for the data /products contracted, via Task Orders placed by authorized individuals, at the quantities and pricing structure contained herein. The price discount structure in the pricing sheet shall apply to all products.

Z Items Ordered and Delivered

The contractor is authorized to provide only those Items/Services covered by the contract and specifically identified via orders placed by authorized individuals. If a review of orders placed by the

Contractor reveals that Items/Services other than that covered by the contract has been ordered and delivered, such delivery shall be a violation of the terms of the contract and may be considered by the Procurement Officer as a basis to terminate the contract and/or as a basis not to award the contractor a subsequent contract/renewal. The Procurement Officer may take such steps as are necessary to have the items returned by the University, regardless of the time between the date of delivery and discovery of the violation. In such event, the contractor shall reimburse the University the full purchase price.

AA Commercial Nondiscrimination Clause

A. "As a condition of entering into this Agreement, Contractor represents and warrants that it will comply with the State's Commercial Nondiscrimination Policy, as described under State Finance and Procurement Article, Title 19, Annotated Code of Maryland. As part of this compliance, Contractor may not discriminate on the basis of race, color, religion, ancestry or national origin, sex, age, marital status, sexual orientation, or disability or other unlawful forms of discrimination in the solicitation, selection, hiring, or commercial treatment of subcontractors, vendors, suppliers, or commercial customers, nor shall Contractor retaliate against any person for reporting instances of such discrimination. Contractor shall provide equal opportunity for subcontractors, vendors, and suppliers to participate in all of its public sector and private sector subcontracting and supply opportunities, provided that this clause does not prohibit or limit lawful efforts to remedy the effects of marketplace discrimination that have occurred or are occurring in the marketplace. Contractor understands that a material violation of this clause shall be considered a material breach of this Agreement and may result in termination of this Agreement, disqualification of Contractor from participating in State contracts, or other sanctions. This clause is not enforceable by or for the benefit of, and creates no obligation to, any third party.

B. The Contractor shall include the provision in §A of this regulation in all subcontracts to the State contract.

C. The following provision is mandatory for all State contracts: As a condition of entering into this Agreement, upon the request of the Maryland Commission on Human Relations, and only after the filing of a complaint against Contractor under State Finance and Procurement Article, Title 19, Annotated Code of Maryland, as amended from time to time, Contractor agrees to provide within 60 days after the request a complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past 4 years on any of its contracts that were undertaken within the State of Maryland, including the total dollar amount paid by Contractor on each subcontract or supply contract. Contractor further agrees to cooperate in any investigation conducted by the State pursuant to the State's Commercial Nondiscrimination Policy as set forth under State Finance and Procurement Article, Title 19, Annotated Code of Maryland, and to provide any documents relevant to any investigation that is requested by the State. Contractor understands that violation of this clause is a material breach of this Agreement and may result in contract termination, disqualification by the State from participating in State contracts, and other sanctions."

Section B – Pricing

Traffic Data Price Proposals

For the purposes of Pricing, the following requirements pertain to any Core Data Items noted in the pricing worksheet attached to this Request for Proposal. Traffic Data procured through the Traffic Data Marketplace shall be rendered to the University through the issuance of firm fixed price task orders based on the method for pricing (referred to hereafter as the Pricing Method) negotiated and accepted in the RFP.

Contractors shall provide a full pricing information for any Core Data Item for which the Contractor is offering a Technical Proposal.

Travel Time and Speed Data
Volume Data
Conflation Traffic Data
WayPoint Data
Origin – Destination Data
Freight Data

A sample spreadsheet is conveyed as an appendix to this RFP providing guidance on the pricing method and structure for each Core Data Items. The Offeror shall provide a full pricing method conveyed through the customization of the attached worksheet, referred to hereafter as the Offeror's Pricing Worksheet. The Offeror may append additional data and information as appendices, however the core information for the pricing of Core Data Items shall be contained in the Offeror's Pricing Worksheet. The Offeror's pricing, as demonstrated within the Offeror's Pricing Worksheet, will be compared and scored against others that are providing pricing information on the same Core Data Items.

The historical pattern of data purchase from the Vehicle Probe I and Vehicle Probe II program indicate that well over 90% of all task orders were for full state/district data purchases corresponding to the geographic jurisdictional boundaries of the Coalition Full Members. As such the primary pricing method for this RFP represents data purchases for full state/district boundaries of Coalition Full Members. Occasionally (less than 10% of historical task orders) were for less than full state/district geographic bounds, such as cities, metropolitan areas, counties, or even custom geo-fenced areas.

Contractors pricing proposals shall contain firm fixed pricing information for the geographic bounds of Full Coalition Members, this includes all States within the Coalition, plus the District of Columbia. These prices will be the contract prices for future task orders that encompass Traffic Data for the complete geographic bounds of Full Coalition Members.

Contractors shall also provide a pricing method for less than full state/district task orders such as cities, counties, metropolitan areas, etc. If/when a task order is generated for less than full state/district regions, the Coalition will request from the Offeror a cost estimate. The Coalition will compare the cost estimate with the Contractor's method provided in the Pricing Proposal in response to this RFP for reasonableness and consistency.

For the Pricing Proposal, the following shall be contained in the Offeror's Pricing Worksheet:

- Offeror shall provide pricing for data that encompass the geographic bounds of each Coalition Full Member.
- Offeror shall provide a description of the pricing method for any future task order that encompass geographic regions (cities, counties, metropolitan areas, geo-fenced areas, etc.) that do not align with the geographic bounds of a Coalition Full Member.
- If a pricing formula is dependent on referenced data (such as vehicle miles travel (VMT), population, or roadway miles as example), Offeror shall provide references for any data used in a pricing formula.
- Offeror shall provide pricing for any technical options proposed in the Technical Volume of the RFP.
- Offeror shall provide pricing for the anticipated initial four-year funding and subsequent option years.
- Offeror shall provide any discounts available for the purchase of multiple geographic regions, multiple data products, or multiple years in a single task order, or any other discounts that may be applied.

Separate price proposals, each corresponding to a Core Data Set for which the Offeror has submitted a Technical Response may be submitted. Each technical/price proposal must be completed as specified herein.

The Offeror's price proposal may reference other information. Any such information must be either appended to the cost proposal or referenced through a URL within the cost proposal.

The Offeror's pricing proposal shall contain:

- Startup/mobilization fees (if any)
- Data subscription/license fees for the base contract term years 1 through 4.
- Data subscription/license fees for continuing coverage for optional renewal periods (years 5 through 8)
- Cost for any options, or other charges or fees.

The price proposal shall be fully incorporated as part of the Contractor's response, and any resulting contract. Evaluation will be based on firm fixed price data rates (as established and demonstrated by Offeror's Pricing Worksheet), totaled over each year/term of what will be a proposed eight (8) year contract consisting of an initial four-year contract with two options each for a two-year renewal. Evaluation will be based on information entered in the Pricing Volume of the proposal, including the Offeror's Pricing Worksheet.

Ancillary Products proposed in the Technical Volume related to the Core Traffic Data categories shall be including the Pricing Volume, with documented pricing. Ancillary Products are considered items associated with the use or integration of the Core Traffic Data that may benefit Coalition Organizations, but are not specified in this RFP as Mandatory technical requirement or specification. Ancillary products may include data products that address Desirable requirements and specifications which are not included as part of the Core Data Product. Ancillary Products may not be an element of the technical evaluation or selection process. Ancillary product proposals shall be submitted to the University as part of the RFP response, and fully described in the Technical Proposal, as well as costed in the Price

Proposal. Pricing schedules for Ancillary Products may (or may not) be added to the selected vendor's or vendors' contract.

Section C – Description/Requirements/Specifications/Statement of Work

1.0 BACKGROUND

The University of Maryland in College Park is a major public research university located on 1,250 acres of rolling land along the Baltimore-Washington, D.C. hi-tech corridor. Founded in 1856, the University has already attained national distinction as one of the top twenty national public universities. To realize its aspirations and fulfill its mandates, the University advances knowledge, provides outstanding and innovative instruction, and nourishes a climate of intellectual growth in a broad range of academic disciplines and interdisciplinary fields. It also creates and applies knowledge for the benefit of the economy and culture of the State, the region, the nation and beyond.

1.1 The Eastern Transportation Coalition Partnership

The Eastern Transportation Coalition (referred to hereafter as the “Coalition” and formerly the I-95 Corridor Coalition) is a partnership of state departments of transportation, regional and local transportation agencies, toll authorities, and related organizations, including law enforcement, transit, port and rail organizations located in the Eastern portion of the United States from Maine to Florida (including the District of Columbia) and as far west as Alabama and Tennessee, with affiliate members in other states and in Canada. Coalition members work together to reduce congestion, increase safety/security, work toward sustainable, equitable and high-performance mobility, and assure that the entire transportation network supports economic vitality throughout the region. The Coalition pursues a wide range of projects and activities related to providing reliable and timely travel information, coordination of operations, incident response and freight movement within the Corridor and across different modes of travel, and electronic systems to make payment of tolls and transit fares easier. Recognizing that the efficiency of passenger and freight movement through the region is not limited to one mode or facility, the work of the Coalition encompasses all modes and highway facilities, with an emphasis on facilitating long distance transportation that traverses state jurisdictional boundaries. By leveraging resources, sharing information and coordinating programs, the Coalition adds value to the individual member organization's activities, and provides a synergy for more dynamic, efficient, and seamless transportation solutions throughout the Corridor.

Detailed information about the Eastern Transportation Coalition can be found at the following web site: www.tetcoalition.org.

1.2 History

The Coalition began as an informal group of transportation professionals working together in the early 1990's to more effectively manage major highway incidents that impacted travel across jurisdictional boundaries. In 1993, the Coalition was formally established to enhance transportation mobility, safety and efficiency in the regions. Over the years, the Coalition's program evolved from studying and testing intelligent transportation systems (ITS) technologies to a broader perspective that embraced integrated deployments and coordinated system operations and management. The Coalition's perspective evolved from a concentration on highways to one that encompasses all modes of travel and focuses on the efficient transfer of people and goods between modes.

Moving forward, the Coalition will become more engaged with its members and with the private sector to identify solutions to critical bottlenecks, including the challenging issue of financing these improvements. The Coalition will also become more engaged in deploying and operating its information sharing system, engaging the resources of its members and the private sector in providing as much quality and real-time information to as many people as possible through numerous delivery methods.

1.3 Members

The Coalition brings to the table the key decision and policy makers that have or will influence the operation of the Corridor including but not limited to:

- State and Local Departments of Transportation,
- Transportation Authorities,
- Transit and Rail Agencies,
- Port Authorities
- Motor Vehicle Agencies,
- State Police/Law Enforcement,
- Regional Transportation Organizations
- Metropolitan Planning Organizations
- US Department of Transportation,
- Canadian Provinces Departments of Transportations
- Intercity Passenger and Freight Transportation Providers, and
- Transportation Industry Associations.

Geographic membership in the Coalition currently includes the boundaries of:

- Alabama
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Maine
- Maryland
- Massachusetts
- New Hampshire
- New Jersey
- New York
- North Carolina
- Pennsylvania
- Rhode Island
- South Carolina
- Tennessee
- Vermont
- Virginia
- Additional Affiliates in Canada (New Brunswick and Quebec)

1.4 Partnership with the University of Maryland Center for Advanced Transportation Technology

The Center for Advanced Transportation Technology (CATT) at the University of Maryland (UMD) department of Civil Engineering (CE) provides technical and administrative assistance to the Eastern

Transportation Coalition to realize the Coalition's mission. In conducting this procurement on behalf of the Coalition, the role of CATT falls within the broader mission of the UMD:

... To realize its aspirations and fulfill its mandates, UMD nourishes a climate of intellectual growth and mutual respect, advances knowledge, and provides outstanding and innovative instruction in a broad range of academic disciplines and interdisciplinary fields.

Excerpt taken from <https://www.umd.edu/history-and-mission>

1.5 Definitions – Refer to Part III, Section J, List of Attachments, Attachment 1 - List of Definitions

2.0 Objective of this Procurement

The mission of the Eastern Transportation Coalition (ETC) is to “work together to improve Multimodal transportation services in the region through information sharing and coordinated management and operations.” In order to achieve this mission, the Coalition created a regional traffic monitoring system that acts as a continuous source of real-time transportation system status information within and across the Corridor in July 2008. This regional traffic monitoring system, which was known previously as the Vehicle Probe Project (VPP), but is now referred to as the Traffic Data Marketplace (TDM), serves as a rich source of traveler information and provides invaluable inputs to existing and future management tools that support operations and planning, whose effectiveness is completely dependent on the quality, depth, and scale of the data being supplied. In 2008, the VPP began by providing speed and travel time data on approximately 1500 centerline miles of freeway and 1000 centerline miles of non-freeway roadways. As of January 2013, at the onset of the VPPII initiative, the VPP had grown so that it reported on over 7000 freeway centerline miles and over 27,000 non-freeway centerline miles. Now in 2021, at the writing of the Traffic Data Marketplace (TDM) RFP solicitation, the number of centerline freeway miles for which travel time and speed are reported is greater than 11,700 miles, and the non-freeway miles in the system has eclipsed 98,600 miles across 11 states.

As a result of the success of the Vehicle Probe Project, it is the intent of the Coalition to continue to provide coordination with Coalition Organizations for the purpose of continuing a common set of procedures for data acquisition and dissemination – and will henceforth refer to the project as the Traffic Data Marketplace (or TDM), which stresses the use of non-roadway infrastructure sensors, using data harvested from a variety of devices and technology either associated with vehicles or passengers within the traffic stream. This procurement is sometimes referred to as VPPIII, in that it is the third general procurement associated with this program. VPPI stressed the procurement of travel time and speed to create a common source of traffic data that spanned the Coalition. VPPII expanded that concept to obtain data and ancillary data and services from multiple vendors, again with primary emphasis on travel time and speed. VPPIII (now called the Traffic Data Marketplace), building on I & II, includes not only Speed and Travel Time, but also Traffic Volume, Waypoint Data, Origin-Destination Data, Freight Data, and Conflation Data – all within a multi-state data marketplace.

Successful Proposers will be responsible for providing traffic data and associated products in support of the mission of sustaining and expanding the Eastern Transportation Coalition's regional traffic monitoring system known as the Traffic Data Marketplace. **A four-year initial project period of**

performance is anticipated, with two (2) separately exercisable optional contract renewals, if desired by the University/Coalition, to a maximum contract life not to exceed eight (8) years.

3.0 Contracting Approach & Work Scope

Data shall be rendered to the University through the issuance of firm fixed-priced task orders utilizing the rates contained in Section B of this indefinite delivery/indefinite quantity (IDIQ) Contract.

This TDM procurement encompasses the structure from VPPI and VPPII, but expands to additional Core products. Both VPPI and VPPII was primarily for the procurement of travel time and speed data, even though other types of data were requested. In VPPI and VPPII, a vendor had to be responsive with respect to the core Travel Time and Speed data in order to qualify for consideration of award. In this TDM procurement, the scope is expanding into multiple areas as listed below. A vendor needs to be responsive in one or more of the Core Data categories in order to be considered for possible contract award. These six areas of core response are listed below:

1. Travel Time and Speed Data
2. Volume Data
3. Conflation Data
4. Waypoint Data
5. Origin & Destination Data
6. Freight Data

The definitions of each are provided in Part III, Section J, List of Attachments Attachment 1. These six data categories are critical for Coalition organizations for operations, traveler information, and safe and efficient management of the inter-regional roadway system. Background and objectives common to each core items are provided below.

The Coalition desires to contract for Traffic Data, not sensor equipment, software, hardware or other infrastructure associated with the collection of traffic data. **Probe-based Technologies** are encouraged and preferred, as opposed to equipment and sensors placed on the roadway or in the right-of-way, or data derived from such equipment. Integration of data from existing compatible sources is encouraged. It is the intent of the Coalition to encourage innovative, non-invasive detection technology, while taking advantage of existing data where available. Technical approaches requiring access to agency right-of-way for placement of sensors or equipment are unacceptable.

Real-time and historic traffic data will support the development of seamless networks of traveler information systems, provide data for the calculation of facility and network performance measures for operations and planning purposes, and facilitate and support the coordination and implementation of interagency efforts in response to major incidents and special events of regional significance. Timeliness and accuracy of data are paramount to the success of these efforts.

Roadways of interest include Freeways, Major Arterials, Minor Arterials, Special Use Lanes, and Local Roadways as defined in Part III, Section J, List of Attachments, Attachment 1 and specified in subsection 3.1 for the various Core Data categories. On Freeways, data is requested for both mainline segments as well as freeway to freeway ramps and special use lanes.

Technical specifications within subsection 3.1 provide for the quality, timeliness and consistency of Traffic Data to insure it meets the needs of the Coalition's applications.

Traffic Data Marketplace Core Data Items

Travel Time and Speed Data: Specifications for Speed & Travel Time are highly mature. The specifications for Speed and Travel Time are derived from VPPII primarily with minor edits to reflect feedback from Coalition members, industry, and lessons learned during the period of performance of VPPII. Most, if not all, changes are minor, and for the most part, the specifications for Speed & Travel Time data remain essentially the same in order to maintain consistency from VPPII to the current TDM.

Volume Data: Specifications are derived from recent research, and demonstrations related to the derivation of accurate traffic volume estimates from Probe Data sources. Specifications are structured similar to Travel Time and Speed. Volume Data is a priority for the Coalition in the TDM, and the Coalition intends to award contracts for data to support reporting of estimated volume for various roadway types.

Conflated Traffic Data Sets: The RFP also provides for securing of Conflation Data sets for Coalition members. As the Coalition spans many jurisdictional organizations, there are numerous Base Maps created and maintained by these organizations with custom linear referencing systems. These Base Maps must exchange data with industry sourced Base Maps (such as Traffic Message Channel codes, Open Street Maps, and vendor specific Base Maps), as well as Base Maps used at the federal level such as ARNOLD. The fiscal overhead associated with the numerous transformations of data required was identified by Coalition members as a critical area for which to find a pooled marketplace solution through the TDM. As such this RFP is requesting proposals for streamlined, efficient Conflation Data set to transform in and among these various Base Maps.

Waypoint Data: The various types of Waypoint Data has emerged prolifically in the past twelve months due to the pandemic and concerns of disease propagation, mobility behavior and contract tracing. There are several examples on the market of Waypoint from various technologies. The intent of the specifications is to invite vendors to propose quality offerings for road agencies for various purposes. The burden is on the vendor to provide detail, transparency, proof of representative sampling, and value to Coalition organizations.

Origin and Destination (O&D) Data: This data is closely associated with Waypoint Data, but includes only end points, and information related to the endpoints that reveal trip purpose. O&D data derived from Waypoint Data that is scalable, timely and statistically representative to inform various member applications is of interest to Coalition organizations. As with the Waypoint data, the burden is on the vendor to provide detail, transparency, proof of representative sampling, and value to Coalition organizations in their RFP response.

Freight Data: Data from non-traditional sources are of great interest to Coalition members. The types of freight data of interest are detailed in the specifications. Vendors are encouraged to provide as much contextual information as possible that reflects the quality, usability and value of their freight data for Coalition purposes.

Ancillary Data Products

Ancillary Data Products encompass various derivative products that enhance the usability and value of the Core Data items. Such products may include (but are not limited to) data delivery in various electronic mapping formats, alternative data delivery formats, a web-based traffic monitoring sight, specific visualizations of data to assist operations, link segmentation definitions and attributes, alternative link definition methodology, specialized application program interfaces, analytic services accompanying the data, and an archive of provided data (beyond that specified).

As with the Core Data items, specifications for some Ancillary Data Products may be contained in Section C, subsection 3.1 of the RFP designated as ‘Desirable’. Note ‘Desirable’ specifications are not ‘Mandatory’. Allowable Vendor responses to the ‘Desirable’ specifications, which are optional, in the RFP include

- (a) no response, this is interpreted as vendor does not support the ‘Desirable’ specification,
- (b) include as part of the Core Data Item, which means if a Coalition member writes a task order, the ‘Desirable’ specification is included as part of the Core Data product,
- (c) the ‘Desirable’ specification is met through an Ancillary Data Product that is separately priced.

Traffic Data Marketplace – Validation Program

The details of the Traffic Data Marketplace Validation Program can be found at <https://tetcoalition.org/projects/vpp-marketplace> Refer to Reference Docs and Presentations

Any data provided through the Traffic Data Marketplace is subject to validation and QC/QA, the results of which may be shared within the Coalition as well as outwardly through Coalition communications and publications. Any vendor will be provided an opportunity to review the results before results are shared. Any data provided by the TDM will be validated and/or QC/QA’d to the extent possible within the resource budget of the Coalition under the direction of the Coalition’s Validation Committee for the purposes of characterizing and quantifying the suitability of such data for various applications and affirming data meets specifications.

Failure of a vendor to deliver data as contracted may result in dispute resolution (as outlined in Part 2 Contract Clauses, Section I, No. 22)

3.1 Traffic Data Marketplace - Functional Requirements, Specifications & Features

Refer to Part III, Section J, List of Attachments, Attachment 2

Technical Requirements and Specifications for: The Eastern Transportation Coalition Traffic Data Marketplace

3.2 Reserved

3.3 Risk Analysis

Reliance on Outside Contractors:

If successful delivery of traffic information is dependent on contractual agreements between the vendor and an outside contractor, provide evidence of sustainable relationship such as copies of agreement or commitment letters. Also describe contingency measures that are planned if partners are lost.

Offerers shall supply a project risk analysis as part of the technical proposal. The analysis shall identify ways in which the Coalition may decrease or mitigate project risk, ways that the contractor can decrease or mitigate project risk, identify risks that increase cost, and identify project requirements that are outside of the capabilities of available technology.

4.0 REFERENCES

Each proposing contractor must provide at least two (2) references for each Core Data Item for the vendor provides a Technical Proposal on the Vendor Reference Form provided below. A reference may be used for multiple Core Data Items as applicable. References for active contracts within the last three (3) years, similar in size, scope and complexity as the requirements defined in this RFP, are preferred. References must be able to demonstrate the contractor's capability to perform the requirements of this RFP. ***Note: The contractor's references must be able to verify the size and scope of referenced project/contract.***

<u>4.1. CONTRACT REFERENCE 1</u>	
Name of Client:	
Name of Contact:	
Address:	
Phone Number:	
E-Mail Address:	
Annual Dollar Value of Contract:	
Start Date:	
Completion Date:	
Description of Service	
Justification of Similar Size and Scope	

<u>4.1. CONTRACT REFERENCE 2</u>	
Name of Client:	
Name of Contact:	
Address:	
Phone Number:	
E-Mail Address:	
Annual Dollar Value of Contract:	
Start Date:	
Completion Date:	
Description of Service	
Justification of Similar Size and Scope	

4.1. CONTRACT REFERENCE 3	
Name of Client:	
Name of Contact:	
Address:	
Phone Number:	
E-Mail Address:	
Annual Dollar Value of Contract:	
Start Date:	
Completion Date:	
Description of Service	
Justification of Similar Size and Scope	

5.0 TASK ORDERS

5.1 Task Order Procedure

In accord with the IDIQ nature of this Contract, all requests for data shall be committed and payments effected, under individual firm-fixed-price task orders. Each task order will initiate the provision of data as defined in the individual task order. Subsequent increases/ decreases in capability will be implemented via subsequent task order modification.

5.3 Additional Task Order Provisions

The University may modify task orders in the same manner as they are issued. A modification request will be developed by the University and forwarded to the contractor. The contractor will propose a task order to address the modifications and all associated costs in accordance with subsection 5.1 above.

In the event that there is a conflict between the requirements of the Contract or the Task Order Scope of Work, the Contract shall prevail.

6.0 DATA OWNERSHIP AND DATA LICENSING

It is the intent of this contract to secure for the Coalition, its Members (Full Member and Affiliate Member organizations as defined at www.tetcoalition.org, see also definitions), and their officially designated representatives including subcontractors (collectively, Data Licensees) nonexclusive licenses that can be used to reproduce, use, distribute and make derivative works based on the Traffic Data provided by Contractor consistent with the Data Licensees' transportation management, operations and planning responsibilities. Paragraphs below further define the rights that Contractor shall extend to Data Licensees. The Contractor's proposal shall affirm the Contractor's ability and intent to grant the data rights presented in section 6.1 below. The Contractor may propose additional restrictions on Data Licensees beyond those presented herein to safeguard the commercial value of the Contractor's Traffic Data, but any such restrictions should not impede the use of the data for the Coalition's envisioned purposes. Any restrictions imposed by the Contractor will be assessed in the evaluation of proposals. Prior to receiving data, all Data Licensees upon evidence of contractual need-to-know will be required

to sign a Data Use Agreement binding the Data Licensee, at a minimum, to the requirements defined herein. See section 6.2 for information about the Data Use Agreement

6.1 Data Licensing Section

The Contractor shall retain ownership of all Traffic Data it acquires and provides to The Eastern Transportation Coalition Data Licensees as a result of this contract.

Data Licensees shall have the right to use the Traffic Data provided under this contract for purposes consistent with their mission, objectives, and goals as a road authority. Even if the RFP addresses specific uses of the data, the data shall be used for any purpose consistent with the road authority's role as an owner/operator/planner of transportation infrastructure. This includes the right to use Traffic Data for transportation planning and operational analyses, performance measures, service and data quality validation analyses, all other internal organization applications and purposes, and to archive all Traffic Data. Contractor's shall disclose any uses or applications that are expressly prohibited as part of their RFP response. Any such exclusions will be weighed as part of the evaluation of the proposal.

Data Licensees will cooperate with the contractor to protect the commercial value of Traffic Data by taking such measures as (a) retaining any proprietary or restricted use notices included on the Traffic Data as received, (b) not obstructing or modifying such notices, (c) ensuring that all copies also include all notices included on the Traffic Data as received; and (d) storing and disseminating Traffic Data using methods, communication mediums and technologies that provide reasonable protection against unlawful copying, unauthorized access, or unauthorized use of the Traffic Data by third parties.

Data Licensees shall not have the right to sell or otherwise transfer Traffic Data to (a) public entities that are not Full Members or Affiliate Members of the Coalition, (b) to any private entities or subcontractors for purposes not under contract with Data Licensees or (c) to universities or researchers unless there is a specific agency sponsored named project with a defined period of performance under agreement with a Data Licensee.

The license granted by the Contractor to the Data Licensees shall authorize Data Licensees to create visualizations and summary statistics of the Traffic Data (i.e., maps, graphs, charts, tables, etc.) for presentation and distribution to the general public. Data Licensees shall own the copyright in any such derivative works to the extent those works are protected by copyright.

Nothing in this contract shall prohibit Data Licensees from acquiring, displaying or otherwise presenting or sharing with external users, information Data Licensees have obtained from sources other than the Contractor. Nothing in this contract shall prohibit Data Licensees from analyzing, synthesizing, or processing Traffic Data with other data from sources other than the Contractor. Nothing in this contract shall preclude Data Licensees from distributing, displaying or otherwise presenting any Traffic Data or derivative works deemed essential to the safety of the traveling public.

Traffic Data procured through the Traffic Data Marketplace may be used by Coalition supported and sanctioned data visualization, analytics, and planning tools that benefit the Coalition and its Members. This includes real-time analytics, performance metrics, archive, and planning tools, both existing and future development.

All Data Licensees, including subcontractors requiring access to Traffic Data supporting programs on behalf of the Coalition and its Members, shall be obligated to execute a Data Use Agreement and comply with its limitations and conditions. All subcontractors shall access data through an executed Data Use Agreement. Any Data Licensees that desire access to the Traffic Data for purposes not funded or sanctioned by the Data Use Agreement must negotiate directly with the Contractor for access and rights to the Traffic Data.

Unless otherwise negotiated, the license to the Traffic Data as executed through the Data Use Agreement does not expire, and is in effect as long as the Data Licensee honors its terms. License to the Traffic Data does not expire based on contract or task order period of performance. The Data Use Agreement will remain in effect even after the contract or task order expires, allowing the Coalition member to retain the data for an unlimited period of time in the future, as long as the terms of the Data Use Agreement are honored.

Traffic Data provided under any ensuing task order issued pursuant to this contract shall be accessible to all Data Licensees at no additional licensing cost subject to these terms and restrictions. Cost recovery related to big data sets reflecting cloud data transfer or storage charges, or the like, may be allowed. Any such charge shall be included in the cost proposal.

Traffic Data provided under any ensuing task order may NOT be shared with adjoining government jurisdictions that are not Members of the Coalition.

Under no circumstance will any Data Licensee be responsible for another Data Licensee's breach of its duties under the Data Use Agreement. Each Data Licensee shall be individually liable for its own violations of the Data Use Agreement.

6.2 Data Use Agreement

The Data Use Agreement (or DUA) refers to a common licensing vehicle between with any Contractor that governs the responsibility of the Data Licensee and use of any Traffic Data procured and accessed through the Traffic Data Marketplace. Applicable Data Use Agreement/s will be developed post award. A Data Licensee shall execute the DUA with applicable Contractor prior to gaining access to Traffic Data. The DUA will include the provisions of Data Licensing Section 6.1, any negotiated changes or extensions, and any provisions specific to the type of Traffic Data provided by the Contractor.

It is the intent of the Coalition to create common licensing terms across Contractors for the various core data items in the TDM.

7.0 SERVICE DELIVERY TIMEFRAMES, FEES, AND SCHEDULE

Unless otherwise specified by the task order, Contractor will have three (3) months from the time that a task order for Traffic Data is authorized to begin providing said Data to the Coalition consistent with the requirements in Part I, Section C of this contract.

Section D - Packaging and Marking

The following packaging and marking requirements are incorporated herein:

The packaging of real time traffic data is subject to the applicable requirements given in Part III, Section J, Attachment 2 – Technical Requirements and Specifications for: The Eastern Transportation Coalition Traffic Data Marketplace.

Section E - Inspection and Acceptance

The following inspection, testing and acceptance requirements are incorporated herein:

It is the intent of the Coalition to independently validate that the accuracy, latency and availability requirements have been achieved as referenced in Attachment 2. The anticipated methods and procedures are documented in the *Eastern Transportation Coalition Data Validation Program*, available at <https://tetcoalition.org/projects/vpp-marketplace/>

Please select the Reference Docs and Presentations tab on the page for more details on the ETC Validation Program. This document will be updated periodically as validation methods evolve appropriate to the needs of the Coalition.

In the event that any validation exercise indicates that the Traffic Data does not meet minimum requirements as given herein, the University shall have the right to renegotiate coverage, costs, and/or requirements or terminate the task order or contract agreement with no further financial obligation to the Contractor. Refer to Attachment 4 - Coalition Dispute Resolutions for information on the Coalitions procedure for dispute resolution associated to failure of a Vendor to meet technical specifications of the contract.

Section F - Deliveries or Performance

Deliveries and performance specifications of real-time traffic data is subject to the applicable requirements given in Part III, Section J, Attachment 2 – Technical Requirements and Specifications for: The Eastern Transportation Coalition Traffic Data Marketplace.

Section G - Contract Administration Data

1.0 Roles of the University of Maryland Program Manager and Procurement Officer

Procurement Officer:

The Procurement Officer is the University of Maryland's authorized representative for all pre-contract matters related to this contract. Additionally, throughout the duration of the contract, the Procurement Officer shall be the only individual with authority to modify any provisions of this contract including, without limitation, the statement of work, pricing or any other sections.

Traffic Data Marketplace (TDM) Program Manager:

Denise Markow, the Eastern Transportation Coalition's TSMO Director (dmarkow@umd.edu) and designated staff shall be the principal interface on behalf of the University of Maryland for post-award technical matters, and shall have the authority to explain and provide further details regarding the University of Maryland's expectations concerning the work to be performed hereunder and/or the items to be provided herein. The TSMO Director and designated staff shall have no authority to modify any provisions of this contract. The Coalition may appoint a new Program Manager during the duration of this contract in the event that the TSMO Director position is vacated, or need arises to distribute responsibility to other Coalition staff.

2.0 Invoicing

The Contractor shall provide the following invoicing services. Invoices shall reflect the price structure spelled out in Part I, Section B.

Throughout the duration of any resultant contract, the Contractor shall provide one copy of each invoice. The invoice must contain the following minimum information:

- Invoice Number
- Invoice Date
- The word ORIGINAL printed on the original copy of the document.
 - The full company or corporate name and address; payment address if it differs from corporate address.
 - The full nine (9) digit Federal Tax Identification number (for U.S. Contractors only) or Social Security Number.
- Task Order Number, Purchase order number and or contract number.

Direct invoices to the following address:

University of Maryland
Attn.: Accounts Payable Department
Chesapeake Building – Room 3101
College Park, MD 20742

Any invoice that is unclear, illegible or does not conform to these specific requirements shall be returned to the Contractor for re-issuance.

3.0 Schedule of Payments

Payments from the University to the Vendor are to be paid in accordance with Part II Contract
Clauses, Section I subsection 16.

4.0 Assignment

No part of the work specified herein may be assigned or transferred to another Contractor
without the prior written authorization of the Procurement Officer.

5.0 Notices

Notices under this contract shall be in writing and shall be considered effective upon personal
delivery to the individual listed below or five calendar days after deposit in any U.S. mailbox,
first class and addressed to the other party as follows:

For the University of Maryland:

Cari Pfister
Procurement & Supply
University of Maryland
2113R Chesapeake Building
College Park, MD 20742-3111
Telephone: 301-405-5848
Facsimile: 301-314-9565
Email: cpfister@umd.edu

For Contractor: (please complete the following)

Telephone: _____
Facsimile: _____
Email: _____

Section H - Special Contract Requirements

1. Term of Contract

The contract term shall commence on the date the contract is signed on behalf of the University or such later date as the University directs. The anticipated start date is July 1, 2022. The **contract term shall terminate four (4) years** after the beginning date unless extended or sooner terminated in accordance with the contract.

At the sole option of the University, the contract may be renewed for two **(2) additional separately exercisable two (2) year terms**, under the same terms and conditions, with prices as quoted in Section B and accepted by the University of Maryland.

2. Reserved

3. Reserved

4. Minority and Disadvantaged Business Enterprise (MBE) Notice
MBE firms are encouraged to respond to this solicitation.

5. Order of Precedence (within this contract)

In the event of a discrepancy within Sections A through L of this contract, such discrepancy shall be resolved by giving precedence in the following order:

- a) Part I, Section H – Special Contract Requirements
- b) Part I, Section C – Description/Requirements/Specifications/Statement of Work
- c) Remaining Sections of Part I (Sections A, B, D, E, F and G)
- d) Part II – Contract Clauses (Section I)
- e) Part III – List of Documents, Exhibits and Other Attachments (Section J)
- f) Part IV – Representations and Instructions (Section K and Section L)

6. Reserved

PART II - CONTRACT CLAUSES

Section I - Contract Clauses

1. Scope of Work

The Scope of Work is defined in Section C of this document.

2. Compensation and Method of Payment

Total compensation is shown in Section A, Item 19 of this document. Method of payment is defined in Section G, Subsections 2 and 3 of this document.

3. Contract Term

The contract term is defined in Section H, Subsection 1 of this document.

4. University Work Rules

Employees and agents of Contractor shall, while on the premises of the University, comply with all University rules and regulations. Contractor shall acquaint itself with conditions governing the delivery, receiving and storage of materials at the work site if applicable to this work, as not to interfere with University operations. Contractor shall not stop, delay, or interfere with University work schedule without the prior approval of the University's specified representative.

5. Reserved

6. Reserved

7. Reserved

8. Reserved

9. Multi-Year Contracts Contingent Upon Appropriations

If the General Assembly fails to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be canceled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either the University's rights or the Contractor's rights under any termination section in this Contract. The effect of termination of the Contract hereunder will be to discharge both the Contractor and the University from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the Contract. The University shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

10. Variations in Estimated Quantities

The pricing shall remain firm and fixed at the dollar amounts or discount levels indicated in Section B for the duration of the contract. Quantity estimates are provided for informational purposes only and the University shall not be held to them. Any variation between actual quantities purchased hereunder and estimated quantities provided shall not entitle the Contractor to any type of equitable adjustment.

11. Reserved

12. Specifications

All materials, equipment, supplies or services shall conform to Federal and State laws and regulations, and to the specifications contained herein.

13. Cost and Price Certification

By submitting cost or price information the Contractor certifies that, to the best of its knowledge, the information submitted is accurate, complete, and current as of a mutually determined specified date prior to the conclusion of any price discussions or negotiations for:

- a. A negotiated contract, if the total contract price is expected to exceed \$100,000 or a smaller amount set by the Procurement Officer; or
- b. A change order or contract modification, expected to exceed \$100,000, or a smaller amount set by the Procurement Officer.

The price under this contract and any change order or modification hereunder, including profit or fee, shall be adjusted to exclude any significant price increases occurring because the Contractor furnished cost or price information which, as of the date agreed upon between the parties, was inaccurate, incomplete, or not current.

14. Delays and Extensions of Time

(1) The Contractor agrees to perform the work continuously and diligently and no charges or claims for damages shall be made by it for any delays or hindrances, from any cause whatsoever, during the progress of any portion of the work specified in this contract.

(2) Time extensions will be granted only for excusable delays that arise from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of the State in either its sovereign or contractual capacity, acts of another contractor in the performance of a contract with the State, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or the subcontractors or suppliers.

15. Suspension of Work

The Procurement Officer unilaterally may order the Contractor in writing to suspend, delay or interrupt all or any part of the work for such period of time as he or she may determine to be appropriate for the convenience of the University.

16. Payment of University Obligations

Payments to the Contractor pursuant to this contract shall be made no later than thirty (30) days after the University's receipt of a proper invoice from the Contractor. Charges for late payment of invoices, other than as prescribed by Title 15, Subtitle 1, of the State Finance and Procurement Article, Annotated Code of Maryland, are prohibited. Electronic funds transfer (EFT) will be used by the State to pay Contractor(s) for Contracts with a value over \$200,000 and any other State payments due Contractor(s) unless the State Comptroller's Office grants Contractor(s) an exemption.

17. Delivery and Acceptance

Delivery shall be made in accordance with the solicitation specifications. The University, in its sole discretion, may extend the time of performance for excusable delays due to unforeseeable causes beyond the Contractor's control. The University unilaterally may order in writing the suspension, delay, or

interruption of performance hereunder. The University reserves the right to test any materials, equipment, supplies or services delivered to determine if the specifications have been met. The materials listed in the bid or proposal shall be delivered FOB the point or points specified prior to, or on the date specified in the bid or proposal. Any material or service that is defective or fails to meet the terms of the solicitation specifications will be rejected. Rejected materials or services shall be promptly replaced or re-performed, at the direction of the University. The University reserves the right to purchase replacement materials or services in the open market. Contractors failing to promptly replace materials or re-perform services lawfully rejected shall be liable for any excess price paid for the replacement, plus applicable expenses, if any.

18. Non-Hiring of Officials and Employees

No official or employee of the State of Maryland whose duties as such official or employee include matters relating to or affecting the subject matter of this contract, shall, during the pendency and term of this contract and while serving as an official or employee of the State become or be an employee of the contractor or any entity that is a subcontractor on this contract.

19. Nondiscrimination in Employment

The Contractor agrees: (a) not to discriminate in any manner against an employee or applicant for employment because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, sexual orientation (added effective October 1, 2001) or physical or mental handicap unrelated in nature and extent so as reasonably to preclude the performance of such employment; (b) to include a provision similar to that contained in subsection (a), above, in any subcontract except a subcontract for standard commercial supplies or raw material; and (c) to post in conspicuous places accessible to employees and applicants for employment, notices setting forth the substance of this section.

20. Financial Disclosure

The Contractor shall comply with State Finance and Procurement Article, Sections 13-221, Annotated Code of Maryland, which requires that every business that enters into contracts, leases or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more, shall, within 30 days of the time when the aggregate value of these contracts, leases or other agreements reaches \$100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

NOTE: The financial disclosure form is available under "Public Disclosures" on the following web site:
www.sos.state.md.us

21. Political Contribution Disclosure

The Contractor shall comply with the provisions of Article 33, Sections 14-101 through 14-108, Annotated Code of Maryland, which require that every person that enters into contracts, leases, or other agreements with the State, a county, a municipal corporation or other political subdivision of the State, or their agencies, during a calendar year in which the person receives in the aggregate \$100,000 or more, shall file with the State Administrative Board of Election laws a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws:

- (1) prior to purchase, completion or execution of any sale or any lease or contract by the University, and shall cover the preceding two calendar years; and
- (2) if the contribution is made after the completion of a sale or purchase, or execution of a lease or contract, then, twice a year, throughout the contract term, on (1) February 5, to cover the 6-month period ending January 31; and (2) August 5, to cover the 6 month period ending July 31.

NOTE: The political contribution disclosure form is available as "Title 14" under "Campaign Finance and Campaign Fund Reporting" under the "Forms" heading of the following web site:
www.elections.state.md.us

22. Disputes

- (1) This contract is subject to the University System of Maryland (USM) Procurement Policies and Procedures, and the University of Maryland Procurement Policies and Procedures.
- (2) Except as otherwise provided by law, all disputes arising under or as a result of a breach of this contract that are not disposed of by mutual agreement shall be resolved in accordance with this section.
- (3) As used herein, "claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. A voucher, invoice, or request for payment that is not in dispute when submitted is not a claim under this section. However, if the submission subsequently is not acted upon in a reasonable time, or is disputed as to liability or amount, it may be converted to a claim for the purpose of this section.
- (4) Within thirty days of when the basis of the claim is known or should have been known, whichever is earlier, the claim shall be made in writing and submitted to the Procurement Officer for decision in consultation with the Office of the Attorney General, as appropriate.
- (5) When a claim cannot be resolved by mutual agreement, the Contractor shall submit a written request for final decision to the Procurement Officer. The written request shall set forth all the facts surrounding the controversy.
- (6) The Contractor, at the discretion of the Procurement Officer, may be afforded an opportunity to be heard and to offer evidence in support of his claim.
- (7) The Procurement Officer shall render a written decision on all claims within 180 days of receipt of the Contractor's written claim, unless the Procurement Officer determines that a longer period is necessary to resolve the claim. If a decision is not issued within 180 days, the Procurement Officer shall notify the Contractor of the time within which a decision shall be rendered and the reasons for such time extension. The decision shall be furnished to the Contractor, by certified mail, return receipt requested, or by any other method that provides evidence of receipt. The Procurement Officer's decision shall be deemed the final action of the University.
- (8) The Procurement Officer's decision shall be final and conclusive unless the Contractor mails or otherwise files a written appeal with the Maryland State Board of Contract Appeals within 30 days of receipt of the decision.
- (9) Pending resolution of a claim, the Contractor shall proceed diligently with the performance of the contract in accordance with the Procurement Officer's decision.

23. Termination for Convenience

- (1) The performance of work under this contract may be terminated by the University in whole or in part, in accordance with this section, whenever the University shall determine that such termination is in the best interest of the University or the State. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work is terminated and the time when such termination becomes effective.
- (2) After receipt of a Notice of Termination, and except as otherwise directed by the Procurement Officer, the Contractor shall:
 - (a) stop work as specified in the Notice of Termination;
 - (b) place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of the portion of the work under the contract as is not terminated;

- (c) terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;
 - (d) assign to the University, in the manner, at times, and to the extent directed by the Procurement Officer, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the University shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
 - (e) settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Procurement Officer, to the extent he may require, which approval or ratification shall be final for all the purposes of this section;
 - (f) transfer title and deliver to the University, in the manner, at the times, and to the extent, if any, directed by the Procurement Officer,
 - (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and
 - (ii) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would have been required to be furnished to the University;
 - (g) use its best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Procurement Officer, any property of the types referred to in (f) above; provided, however, that the Contractor
 - (i) may not be required to extend credit to any purchaser, and
 - (ii) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Procurement Officer; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the University to the Contractor under this contract or shall otherwise be credited to the price or cost of the work covered by this contract or paid in such other manner as the Procurement Officer may direct;
 - (h) complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and
 - (i) take any action that may be necessary, or as the Procurement Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the University has or may acquire an interest. The Contractor shall submit to the Procurement Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Procurement Officer, and may request the University to remove them or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the University shall accept title to these items and remove them or enter into a storage agreement covering the same; provided, that the list submitted shall be subject to verification by the Procurement Officer upon removal of the items, or if the items are stored, within forty-five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made before final settlement.
- (3) After receipt of a Notice of Termination, the Contractor shall submit to the Procurement Officer his termination claim, in the form and with certification prescribed by the Procurement Officer. This claim shall be submitted promptly but in no event later than one (1) year from the effective date of termination, unless one or more extensions in writing are granted by the Procurement Officer, upon request of the Contractor made in writing within the one-year period or authorized extension thereof. However, if the Procurement Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after the one-year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Procurement Officer may determine the claim at any time after the one-year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Procurement Officer may

determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

(4) Subject to the provisions of paragraph (3), the Contractor and the Procurement Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this section, which amount or amounts may include a reasonable allowance for profit on work done; provided, that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. The contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in paragraph (5) of this section, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Procurement Officer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this section, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts that may be agreed upon to be paid to the Contractor pursuant to this paragraph.

(5) In the event of the failure of the Contractor and the Procurement Officer to agree as provided in paragraph (4) upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this section, the Procurement Officer shall pay to the Contractor the amounts determined by the Procurement Officer as follows, but without duplication of any amounts agreed upon in accordance with paragraph (4):

(a) for completed supplies or services accepted by the University (or sold or acquired as provided in paragraph (2) (g) above) and for which payment has not theretofore been made, a sum equivalent to the aggregate price for the supplies or services computed in accordance with the price or prices specified in the contract, appropriately adjusted for any saving of freight or other charges;

(b) the total of-

(i) the costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but exclusive of any costs attributable to supplies or services paid or to be paid for under paragraph (5)(a) hereof;

(ii) the cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in paragraph (2) (e) above, which are properly chargeable to the terminated portion of the contract (exclusive of amounts paid or payable on account of supplies or materials delivered or services furnished by subcontractors or Contractors before the effective date of the Notice of Termination, which amounts shall be included in the costs payable under (g) above); and

(iii) a sum, as profit on (i) above, determined by the Procurement Officer to be fair and reasonable; provided, however, that if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, no profit shall be included or allowed under this subdivision (iii) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and

(c) the reasonable cost of settlement accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to this contract.

The total sum to be paid to the Contractor under (a) and (b) of this paragraph shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. Except for normal spoilage, and except to the extent that the University shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor as provided in (5) (a) and (b) (i) above, the fair value, as determined

by the Procurement Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the University or to a buyer pursuant to paragraph (2) (g).

(6) Costs claimed, agreed to, or determined pursuant to (3), (4), (5) and (11) hereof shall be in accordance with USM Procurement Policies and Procedures in effect on the date of this contract.

(7) The Contractor shall have the right of appeal, under the section of this contract entitled "Disputes," from any determination made by the Procurement Officer under paragraph (3), (5), or (9) hereof, except that if the Contractor has failed to submit his claim within the time provided in paragraph (3) or (9) hereof, and has failed to request extension of the time, he shall have no right of appeal. In any case where the Procurement Officer has made a determination of the amount due under paragraph (3), (5), or (9) hereof, the University shall pay to the Contractor the following: (a) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Procurement Officer, or (b) if an appeal has been taken, the amount finally determined on such appeal.

(8) In arriving at the amount due the Contractor under this section there shall be deducted (a) all unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this contract, (b) any claim which the University may have against the Contractor in connection with this contract, and (c) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of this section, and not otherwise recovered by or credited to the University.

(9) If the termination hereunder be partial, the Contractor may file with the Procurement Officer a claim for an equitable adjustment of the price or prices specified in the contract relating to the continued portion of the contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the Contractor for an equitable adjustment under this section shall be asserted within ninety (90) days from the effective date of the termination notice, unless an extension is granted in writing by the Procurement Officer.

(10) The University may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this contract whenever in the opinion of the Procurement Officer the aggregate of such payments shall be within the amount to which the Contractor shall be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this section, such excess shall be payable by the Contractor to the University upon demand, together with interest computed at the prime rate established by the State Treasurer for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the State; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or a later date as determined by the Procurement Officer by reason of the circumstances.

(11) Unless otherwise provided for in this contract, or by applicable statute, the Contractor shall, from the effective date of termination until the expiration of three years after final settlement under this contract, preserve and make available to the University at all reasonable times at the office of the Contractor but without direct charge to the University, all his books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this contract and relating to the work terminated hereunder, or, to the extent approved by the Procurement Officer, reproductions thereof.

24. Termination for Default

(1) The University may, subject to the provisions of paragraph (3) below, by written notice of default to the Contractor, terminate the contract in whole or in part in any one of the following circumstances: (a) If the Contractor fails to perform within the time specified herein or any extension thereof, or (b) If the Contractor fails to perform any of the other provisions of this contract, or so fails to make progress as to

endanger performance of this contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Procurement Officer may authorize in writing) after receipt of notice from the Procurement Officer specifying such failure.

(2) In the event the University terminates this contract in whole or in part as provided in paragraph (1) of this section, the University may procure substitute performance upon terms and in whatever manner the Procurement Officer may deem appropriate, and the Contractor shall be liable to the University for any excess costs for substitute performance; provided, that the Contractor shall continue the performance of this contract to the extent not terminated under the provisions of this section.

(3) Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the University in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform shall be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if the default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform unless substitute performance for the subcontractor was obtainable from another source in sufficient time to permit the Contractor to meet the performance schedule.

(4) If, after notice of termination of this contract under the provisions of this section, it is determined for any reason that the Contractor was not in default under the provisions of this section, or that the default was excusable under the provisions of this section, the rights and obligations of the parties shall, if the contract contains a section providing for termination for convenience of the University, be the same as if the notice of termination had been issued pursuant to such section. If, after notice of termination of this contract under the provisions of this section, it is determined for any reason that the Contractor was not in default under the provisions of this section, and if this contract does not contain a section providing for termination for convenience of the University, the contract shall be equitably adjusted to compensate for such termination and the contract modified accordingly; failure to agree to any such adjustment shall be a claim as defined in the section of this contract entitled "Disputes".

(5) If this contract is terminated as provided in paragraph (1) of this section, the University, in addition to any other rights provided in this section, may require the Contractor to transfer title and deliver to the University, in the manner, at the times, and to the extent, if any, directed by the Procurement Officer, (a) the fabricated or unfabricated parts, work in progress, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination, and (b) the completed or partially completed plans, drawings, information, and other property which, if the contract had been completed, would have been required to be furnished to the University; and the Contractor shall, upon direction of the Procurement Officer, protect and preserve property in the possession of the Contractor in which the University has an interest. Payment for completed supplies delivered to and accepted by the University shall be at the contract price. Payment for manufacturing materials delivered to and accepted by the University and for the protection and preservation of property shall be in an amount agreed upon by the Contractor and Procurement Officer; failure to agree to such amount shall be a claim as defined in the section of this contract entitled "Disputes". The University may withhold from amounts otherwise due the Contractor hereunder such sum as the Procurement Officer determines to be necessary to protect the University against loss because of outstanding liens or claims of former lien holders.

(6) The rights and remedies of the University provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(7) As used in paragraph (3) of this section, the terms, "subcontractor" and "subcontractors" mean subcontractor(s) at any tier.

25. Arrearages

By submitting a response to this solicitation, the proposer represents that it is not in arrears in the payment of any obligation due and owing the State of Maryland, including the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of the contract if selected for contract award.

The proposer is also informed that the Comptroller (per State Finance and Procurement Article Sections 7-222 may not, except under the conditions specified therein, issue a warrant for payment to a person if the person owes \$50 or more to the State, a unit of the State government, or any governmental entity under the control of the State. Therefore, applications for payment submitted by a contractor and approved by the University for payment may not be processed by the Comptroller for payment to the contractor if an arrearage in excess of \$50 exists.

26. Compliance with Laws

The Contractor hereby represents and warrants that: **A.** It is qualified to do business in the state of Maryland and that it will take such actions as, from time to time hereafter, may be necessary to remain so qualified; **B.** It shall comply with all federal, State and local laws, regulations, and ordinances applicable to its activities and obligations under this contract: and **C.** it shall obtain, at its expense, all licenses, permits, insurance and governmental approvals, if any, necessary to the performance of its obligations under this contract.

27. Retention of Records

The Contractor shall retain and maintain all records and documents relating to this contract for three (3) years after final payment by the University hereunder or any applicable statute of limitation, whichever is longer, and shall make them available for inspection and audit by authorized representatives of the University, including the Procurement Officer or designee at all reasonable times.

28. Tax Exemption

The State is generally exempt from Federal Excise Taxes, Maryland Sales and Use Taxes, District of Columbia Sales Taxes and Transportation Taxes. Exemption certificates shall be completed upon request. Where a Contractor is required to furnish and install material in the construction or improvement of real property in performance of a contract, the Contractor shall pay the Maryland Sales Tax and the exemption does not apply.

29. Registration

Pursuant to §7-201 et seq. of the Corporation and Associations Article of the Annotated Code of Maryland, corporations not incorporated in the State of Maryland shall be registered with the State Department of Assessments and Taxation, 301 West Preston Street, Baltimore, Maryland 21201 before doing any interstate or foreign business in this State. Before doing any intrastate business in this State, a foreign corporation shall register with the Department of Assessments and Taxation.

NOTE: The registration form is available as "Combined Registration Application" under the "Businesses" heading of the following web site: <http://www.dat.state.md.us/sdatweb/sdatforms.html>

Questions about this requirement may be sent to the Department of Assessment and Taxation at Charterhelp@dat.state.md.us and a response should be forthcoming within 24 hours.

30. EPA Compliance

Materials, supplies, equipment or services shall comply in all respects with the Federal Noise Control Act of 1972, where applicable.

31. Occupational Safety and Health Act

All materials, supplies, equipment, or services supplied as a result of this contract shall comply with the applicable U.S. and Maryland Occupational Safety and Health Act standards.

32. Maryland Law Prevails

The provisions of this contract shall be governed by the laws of Maryland without reference to its Conflicts of Laws rules.

33. Software Licensing

Licensor represents and warrants that the software, as delivered to the University, does not contain any program code, virus, worm, trap door, back door, timer, or clock that would erase data or programming or otherwise cause the software to become inoperable, inaccessible, or incapable of being used in accordance with its user manuals, either automatically, upon the occurrence of Licensor-selected conditions, or manually on the command of Licensor.

34. MUCITA

The Maryland Uniform Computer Information Transactions Act (MUCITA), Maryland Code Annotated [Commercial Law] 22-101 through 22-816, does not govern this Agreement, except to the extent that section 22-104(2) of the Act applies. The parties further agree that this Agreement shall be governed by the common law of Maryland relating to written agreements and Maryland statutes other than MUCITA which may apply.

35. Applicability of Federal Laws

If Federal contract and/or grant funds are utilized in any manner in the performance of this contract, then the University reserves the right to bind Contractor to all applicable clauses of the Federal Acquisition Regulation (FAR) and other FAR supplements, as well as all applicable provisions of the Office of Management and Budget (OMB) Circular A-110. Contractor agrees to promptly complete and return to the University any related forms and/or affidavits as may be required.

36. Protests and Claims

Any protest regarding the award of this contract or claim arising out of this contract shall be administered in accordance with the University System of Maryland Procurement Policies and Procedures, Section X - Protests and Claims. Detail is available by accessing the following web site: www.purchase.umd.edu Click on this web site, then select the category "Policies and Procedures", followed by "USM Procurement Policies and Procedures".

37. Intellectual Property

Intellectual Property Warranty and Indemnification.

The Contractor shall own all data it provides to authorized users under this contract. Contractor represents and warrants that all data it provides under this contract shall be original, not encumbered or in the public domain or if owned by someone other than Contractor that Contractor is authorized to release the data under this Contract. If data provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, University shall have the right, in its sole discretion, to require Contractor to produce, at Contractor's own expense, new non-infringing data or obtain permission, at Contractor's cost, to provide the data as a means of remedying any claim of infringement in addition to any other remedy available to the University under law or equity. Contractor further agrees to indemnify and hold harmless the University, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages of any type alleging or threatening that any data, provided under this contract infringe any proprietary or intellectual property rights (copyright, trade secrets or patent) of any third party (Third Party Claims of Infringement). If a Third Party Claim of Infringement is threatened or made before Contractor receives payment under this contract, University shall be entitled, upon written notice to Contractor, to withhold some or all of such payment.

38. E-Maryland Marketplace

All vendors interested in conducting business with the University of Maryland must register at: <https://procurement.maryland.gov/> Registration is free. eMarylandMarketplace™ is the State of Maryland's Internet-based procurement system. Registered vendors can access bid solicitations and receive email notification when new solicitations are posted.

39. Eligibility to Purchase

By submitting a proposal, Contractor agrees to extend the proposed price structure and discounts to all University System of Maryland campuses and facilities, any public body/Agency, public or private health or educational institution or any University related foundation with the understanding that such utilization is in accord with the public body/Agency, public or private health or educational institution's policies and procedures.

40. Use of Agreement by Third Parties

It is the intent of this Agreement to allow for cooperative procurement. Accordingly, any public body/Agency, public or private health or educational institution, or any University related foundation may access the Agreement if authorized by the Selected Firm.

Participation in this cooperative procurement is strictly voluntary. If authorized by the Selected Firm, the Agreement will be extended to the entities above to purchase at fees in accordance with the terms of the Agreement. The Selected Firm will notify the University in writing of any such entities accessing the Agreement. No modification of the Agreement or execution of a separate agreement is required to participate. The Selected Firm will provide semi-annual usage reports for all entities accessing the Agreement. Participating entities will place their own orders directly with the Selected Firm and will fully and independently administer use of the Agreement to include contractual disputes, invoicing and payments without direct administration from the University. The University will not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Selected Firm to extend the Agreement. It is understood and agreed that the University is not responsible for the acts or omissions of any entity accessing the Agreement under this section, and will not be considered in default of the Agreement no matter the circumstances.

Use of this Agreement does not preclude any participating entity from using other agreements or competitive procurement processes as the need may be.

41. Proposal Affidavit

The enclosed Proposal Affidavit shall be completed and submitted to the Procurement Officer as part of Contractor's proposal.

42. Changes

The Procurement Officer may at any time, by written order, make unilateral changes within the general scope of this contract in any one or more of the following:

- (1) Description of services to be performed.
- (2) Time of performance (i.e., hours of the day, days of the week, etc.).
- (3) Place of performance of the services.
- (4) Drawings, designs, or specifications when any supplies to be furnished are to be specially manufactured for the University in accordance with the drawings, designs, or specifications.
- (5) Method of shipment or packing of supplies.
- (6) Place of delivery.

The section entitled "Delays and Extensions of Time" prohibits the Contractor from making charges or claims for damages for any delays or hindrances from any cause whatsoever during the progress of any portion of the work specified in this Contract. If a change, as allowed above, causes an increase or decrease in the cost of the work which is not time-related, the University shall make an equitable adjustment in the contract price and shall modify the contract.

The Contractor must assert its right to an adjustment under this section within 30 days from the date of receipt of the written order. Any request for an adjustment must be submitted in writing to the Procurement Officer.

Failure to agree to any adjustment shall be a dispute under the Disputes section. However, nothing in this section shall excuse the Contractor from proceeding with the contract as changed.

43. Pre-Existing Regulations

The regulations set forth in USM Procurement Policies and Procedures in effect on the date of execution of this Contract are applicable to this Contract.

44. Indemnification

The Contractor shall defend, indemnify and save harmless the University System of Maryland, its officers, employees and agents, from any and all claims, liability, losses and causes of actions which may arise out of the errors, omissions and performance or non-performance by the Contractor, employees or agents, of the work covered by this contract. The University shall not assume any obligation to indemnify, hold harmless or pay attorneys' fees that may arise from or in any way be associated with the performance or operation of this agreement.

45. Reserved

46. Reserved

PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

Section J - List of Attachments

The Following attachments are included as part of this Request for Proposals:

Attachment 1: List of Definitions

Attachment 2: Technical Specifications for: The Eastern Transportation Coalition Traffic Data Marketplace

Attachment 3: Traffic Data Pricing Sheet

Attachment 4: The Eastern Transportation Coalition Traffic Data Marketplace (TDM) Dispute Resolution Process

PART IV REPRESENTATIONS AND INSTRUCTIONS

Section K – Representations, Certifications and other Statements

BID/PROPOSAL AFFIDAVIT

A. AUTHORITY

I HEREBY AFFIRM THAT:

I, _____ (print name), possess the legal authority to make this Affidavit.

B. CERTIFICATION REGARDING COMMERCIAL NONDISCRIMINATION

The undersigned bidder hereby certifies and agrees that the following information is correct: In preparing its bid on this project, the bidder has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not engaged in "discrimination" as defined in §19-103 of the State Finance and Procurement Article of the Annotated Code of Maryland. "Discrimination" means any disadvantage, difference, distinction, or preference in the solicitation, selection, hiring, or commercial treatment of a vendor, subcontractor, or commercial customer on the basis of race, color, religion, ancestry, or national origin, sex, age, marital status, sexual orientation, or on the basis of disability or any otherwise unlawful use of characteristics regarding the vendor's, supplier's, or commercial customer's employees or owners. "Discrimination" also includes retaliating against any person or other entity for reporting any incident of "discrimination". Without limiting any other provision of the solicitation on this project, it is understood that, if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid. As part of its bid or proposal, the bidder herewith submits a list of all instances within the past 4 years where there has been a final adjudicated determination in a legal or administrative proceeding in the State of Maryland that the bidder discriminated against subcontractors, vendors, suppliers, or commercial customers, and a description of the status or resolution of that determination, including any remedial action taken. Bidder agrees to comply in all respects with the State's Commercial Nondiscrimination Policy as described under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland.

B-1. CERTIFICATION REGARDING MINORITY BUSINESS ENTERPRISES.

The undersigned bidder hereby certifies and agrees that it has fully complied with the State Minority Business Enterprise Law, State Finance and Procurement Article, §14-308(a)(2), Annotated Code of Maryland, which provides that, except as otherwise provided by law, a contractor may not identify a certified minority business enterprise in a bid or proposal and:

- (1) Fail to request, receive, or otherwise obtain authorization from the certified minority business enterprise to identify the certified minority proposal;
- (2) Fail to notify the certified minority business enterprise before execution of the contract of its inclusion in the bid or proposal;
- (3) Fail to use the certified minority business enterprise in the performance of the contract; or

(4) Pay the certified minority business enterprise solely for the use of its name in the bid or proposal.

Without limiting any other provision of the solicitation on this project, it is understood that if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid.

C. AFFIRMATION REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business (as is defined in Section 16-101(b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, §6-220, Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other state or federal law, except as follows (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

D. AFFIRMATION REGARDING OTHER CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies, has:

(1) Been convicted under state or federal statute of:

(a) A criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract; or

(b) Fraud, embezzlement, theft, forgery, falsification or destruction of records or receiving stolen property;

(2) Been convicted of any criminal violation of a state or federal antitrust statute;

(3) Been convicted under the provisions of Title 18 of the United States Code for violation of the Racketeer Influenced and Corrupt Organization Act, 18 U.S.C. §1961 et seq., or the Mail Fraud Act, 18 U.S.C. §1341 et seq., for acts in connection with the submission of bids or proposals for a public or private contract;

University of Maryland RFP No. 109533 To Provide Real-Time Traffic Datasets to The Eastern
Transportation Coalition Organizations and Affiliates

(4) Been convicted of a violation of the State Minority Business Enterprise Law, §14-308 of the State Finance and Procurement Article of the Annotated Code of Maryland;

(5) Been convicted of a violation of §11-205.1 of the State Finance and Procurement Article of the Annotated Code of Maryland;

(6) Been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any law or statute described in subsections (1)—(5) above;

(7) Been found civilly liable under a state or federal antitrust statute for acts or omissions in connection with the submission of bids or proposals for a public or private contract;

(8) Been found in a final adjudicated decision to have violated the Commercial Nondiscrimination Policy under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland with regard to a public or private contract; or

(9) Admitted in writing or under oath, during the course of an official investigation or other proceedings, acts or omissions that would constitute grounds for conviction or liability under any law or statute described in §§B and C and subsections D(1)—(8) above, except as follows (indicate reasons why the affirmations cannot be given, and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of the person(s) involved and their current positions and responsibilities with the business, and the status of any debarment):

E. AFFIRMATION REGARDING DEBARMENT

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities, including obtaining or performing contracts with public bodies, has ever been suspended or debarred (including being issued a limited denial of participation) by any public entity, except as follows (list each debarment or suspension providing the dates of the suspension or debarment, the name of the public entity and the status of the proceedings, the name(s) of the person(s) involved and their current positions and responsibilities with the business, the grounds of the debarment or suspension, and the details of each person's involvement in any activity that formed the grounds of the debarment or suspension).

F. AFFIRMATION REGARDING DEBARMENT OF RELATED ENTITIES

I FURTHER AFFIRM THAT:

(1) The business was not established and it does not operate in a manner designed to evade the application of or defeat the purpose of debarment pursuant to Sections 16-101, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland; and

(2) The business is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business, except as follows (you must indicate the reasons why the affirmations cannot be given without qualification):

G. SUB-CONTRACT AFFIRMATION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, has knowingly entered into a contract with a public body under which a person debarred or suspended under Title 16 of the State Finance and Procurement Article of the Annotated Code of Maryland will provide, directly or indirectly, supplies, services, architectural services, construction related services, leases of real property, or construction.

H. AFFIRMATION REGARDING COLLUSION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business has:

(1) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;

(2) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the bidder or offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

I. CERTIFICATION OF TAX PAYMENT

I FURTHER AFFIRM THAT:

Except as validly contested, the business has paid, or has arranged for payment of, all taxes due the State of Maryland and has filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Department of Labor, Licensing, and Regulation, as applicable, and will have paid all withholding taxes due the State of Maryland prior to final settlement.

J. CONTINGENT FEES

I FURTHER AFFIRM THAT:

The business has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency working for the business, to solicit or secure the Contract, and that the business has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency, any fee or any other consideration contingent on the making of the Contract.

K. ACKNOWLEDGEMENT

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland, or any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland with respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above business with respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: _____

By: _____ (print name of Authorized Representative and Affiant)

_____ (signature of Authorized Representative and Affiant)

CONTRACT AFFIDAVIT

A. AUTHORITY

I HEREBY AFFIRM THAT:

I, _____ (print name), possess the legal authority to make this Affidavit.

**B. CERTIFICATION OF REGISTRATION OR QUALIFICATION WITH THE STATE
DEPARTMENT OF ASSESSMENTS AND TAXATION**

I FURTHER AFFIRM THAT:

The business named above is a (check applicable box):

Note: For the purposes of this Certification, Domestic means incorporated or with a strong legal presence within the State of Maryland, Foreign means incorporated outside of or without a strong legal presence in Maryland

- (1) Corporation — ☐ domestic or ☐ foreign;
- (2) Limited Liability Company — ☐ domestic or ☐ foreign;
- (3) Partnership — ☐ domestic or ☐ foreign;
- (4) Statutory Trust — ☐ domestic or ☐ foreign;
- (5) ☐ Sole Proprietorship.

and is registered or qualified as required under Maryland Law. I further affirm that the above business is in good standing both in Maryland and (IF APPLICABLE) in the jurisdiction where it is presently organized, and has filed all of its annual reports, together with filing fees, with the Maryland State Department of Assessments and Taxation. The name and address of its resident agent (IF APPLICABLE) filed with the State Department of Assessments and Taxation is:

Name and Department ID

Number: _____ Address: _____

and that if it does business under a trade name, it has filed a certificate with the State Department of Assessments and Taxation that correctly identifies that true name and address of the principal or owner as:

Name and Department ID Number: _____

Address: _____.

Pursuant to §7-201 et seq. of the Corporation and Associations Article of the Annotated Code of Maryland, corporations not incorporated in the State of Maryland shall be registered with the State Department of Assessments and Taxation, 301 West Preston Street, Baltimore, Maryland 21201 before doing any interstate or foreign business in this State. ***NOTE: "Foreign" contractors are required to register with the Maryland Department of Assessments & Taxation at the time of proposal submission. The forms for registration are available from the website <http://www.dat.state.md.us/sdatweb/sdatforms.html> For further help call (410) 767-1340 or email: charterhelp@dat.state.md.us.***

C. FINANCIAL DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, the provisions of State Finance and Procurement Article, §13-221, Annotated Code of Maryland, which require that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more shall, within 30 days of the time when the aggregate value of the contracts, leases, or other agreements reaches \$100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

NOTE: The financial disclosure form is available under on the following web site:
<http://www.sos.state.md.us/PublicDisclosure.aspx>. For further information, go to www.sos.state.md.us

D. POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, Election Law Article, §§14-101 — 14-108, Annotated Code of Maryland, which requires that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies or a political subdivision of the State, during a calendar year in which the person receives in the aggregate \$100,000 or more shall file with the State Board of Elections a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election.

NOTE: The political contribution disclosure form is available at
http://www.elections.state.md.us/campaign_finance/disclosure_of_contributions.html. Frequently asked questions and answers are available from this website.

E. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contract is for a law enforcement agency and the agency head or the agency head's designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency's undercover operations.)

I CERTIFY THAT:

(1) Terms defined in COMAR 21.11.08 shall have the same meanings when used in this certification.

(2) By submission of its bid or offer, the business, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the business shall:

(a) Maintain a workplace free of drug and alcohol abuse during the term of the contract;

(b) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the business' workplace and specifying the actions that will be taken against employees for violation of these prohibitions;

(c) Prohibit its employees from working under the influence of drugs or alcohol;

(d) Not hire or assign to work on the contract anyone who the business knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;

(e) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in its workplace if the business has observed the violation or otherwise has reliable information that a violation has occurred;

(f) Establish drug and alcohol abuse awareness programs to inform its employees about:

- (i) The dangers of drug and alcohol abuse in the workplace;
- (ii) The business's policy of maintaining a drug and alcohol free workplace;
- (iii) Any available drug and alcohol counseling, rehabilitation, and employee assistance programs; and
- (iv) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;

(g) Provide all employees engaged in the performance of the contract with a copy of the statement required by §E(2)(b), above;

(h) Notify its employees in the statement required by §E(2)(b), above, that as a condition of continued employment on the contract, the employee shall:

- (i) Abide by the terms of the statement; and
- (ii) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction;

(i) Notify the procurement officer within 10 days after receiving notice under §E(2)(h)(ii), above, or otherwise receiving actual notice of a conviction;

(j) Within 30 days after receiving notice under §E(2)(h)(ii), above, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:

- (i) Take appropriate personnel action against an employee, up to and including termination; or
- (ii) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and

(k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §E(2)(a)—(j), above.

(3) If the business is an individual, the individual shall certify and agree as set forth in §E(4), below, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance of the contract.

(4) I acknowledge and agree that:

(a) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification;

(b) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and

(c) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in suspension and debarment of the business under COMAR 21.08.03.

F. CERTAIN AFFIRMATIONS VALID

I FURTHER AFFIRM THAT:

To the best of my knowledge, information, and belief, each of the affirmations, certifications, or acknowledgements contained in that certain Bid/Proposal Affidavit dated _____, 20____, and executed by me for the purpose of obtaining the contract to which this Exhibit is attached remains true and correct in all respects as if made as of the date of this Contract Affidavit and as if fully set forth herein.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: _____

By: _____ (printed name of Authorized Representative and Affiant)

_____ (signature of Authorized Representative and Affiant)

CONFLICT OF INTEREST INFORMATION

A. Each solicitation that will result in the selection of a Contractor who will assist a unit in the formation, evaluation, selection, award, or execution of a State contract shall provide notice of the requirement of this regulation.

B. "Conflict of interest" means that, because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the State, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

C. "Person" has the meaning stated in COMAR 21.01.02.01B (64) and includes a bidder, offeror, Contractor, consultant or subcontractor or subconsultant at any tier, and also includes an employee or agent of any of them if the employee or agent has or will have the authority to control or supervise all or a portion of the work for which a bid or offer is made.

D. If the Procurement Officer makes a determination prior to award that facts or circumstances exist giving rise or which could in the future give rise to a conflict in interest, the procurement officer may reject a bid or offer under COMAR 21.06.02.03B.

E. After award the State may terminate the contract, in whole or in part, if it deems such termination necessary to avoid an actual or potential conflict of interest. If the Contractor knew or reasonably could have been expected to know of an actual or potential conflict of interest prior to or after award and did not disclose it or misrepresented relevant information to the Procurement Officer, the State may terminate the contract for default, institute proceedings to debar the Contractor from further State contracts, or pursue such other remedies as may be permitted by law or the contract.

F. A conflict of interest may be waived if the Procurement Officer, with approval of the agency head or designee, determines that waiver is in the best interest of the State. The determination shall state the reasons for the waiver and any controls that avoid, mitigate, or neutralize the conflict of interest.

G. Each bidder or offeror responding to a solicitation that will result in the selection of a Contractor who will assist a unit in the formation, evaluation, selection, award, or execution of another State contract shall provide the affidavit and disclosures set forth in Subsection H of this regulation to the Procurement Officer with the bid or offer and such other times as may be required by the Procurement Officer.

H. The affidavits and disclosures required by Subsection G of this regulation shall be in substantially the same form as follows:

CONFLICT OF INTEREST AFFIDAVIT AND DISCLOSURE

A. "Conflict of interest" means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the State, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

B. "Person" has the meaning stated in COMAR 21.01.02.01B(64) and includes a bidder, offeror, Contractor, consultant, or subcontractor or subconsultant at any tier, and also includes an employee or agent of any of them if the employee or agent has or will have the authority to control or supervise all or a portion of the work for which a bid or offer is made.

C. The bidder or offeror warrants that, except as disclosed in D below, there are no relevant facts or circumstances now giving rise or which could, in the future, give rise to a conflict of interest.

D. The following facts or circumstances give rise or could in the future give rise to a conflict of interest (explains in detail--attach sheets if necessary):

E. The bidder or offeror agrees that if an actual or potential conflict of interest arises after the date of this affidavit, the bidder or offeror will immediately make a full disclosure in writing to the Procurement Officer of all relevant facts and circumstances. This disclosure shall include a description of actions which the bidder or offeror has taken and proposes to take to avoid, mitigate, or neutralize the actual or potential conflict of interest. If the contract has been awarded and performance of the contract has begun, the Contractor shall continue performance until notified by the Procurement Officer of any contrary action to be taken.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

Date: _____

By: _____
(Signature of Authorized Representative and Affiant)

Printed Name: _____

Title: _____

Federal Employer Identification Number (FEIN): _____

**PRINCIPLES OF SOCIAL RESPONSIBILITY
and
SOCIAL RESPONSIBILITY AFFIDAVIT INFORMATION**

I. Principles of Social Responsibility

A. As provided for in Section VIII. C. of the University System of Maryland Procurement Policies and Procedures, the University is required to make purchases from and award contracts to “responsible” contractors. The Procurement Officer may use certain factors, including but not limited to a satisfactory record of integrity and business ethics to determine if a bidder or offeror is responsible. The University has determined that a bidder or offeror’s record of integrity and business ethics includes a demonstrated commitment to providing goods and services in an ethical, and socially and environmentally responsible manner by compliance with all applicable:

- (1) Federal and state labor relations and employment laws;
- (2) Federal and state non-discrimination in employment laws;
- (3) State of Maryland Commercial Nondiscrimination laws;
- (4) State of Maryland, Minority Business Enterprise (“MBE”) laws; and,
- (5) Federal and state health, safety and environmental laws.

The above laws are referred to as “Social Responsibility Laws.” The bidder or offeror’s compliance with the above laws is referred to as “Social Responsibility.”

B. Each bidder or offeror shall complete a Social Responsibility Affidavit, in the form that follows, as part of a bid or proposal submitted to the Procurement Officer in response to any solicitation to furnish goods or services of any kind including, but not limited to architectural or engineering services; construction; construction related services; maintenance; consulting; information technology (hardware, software and services); equipment or other commodities.

C. The Procurement Officer shall consider information provided in the Social Responsibility Affidavit to determine if a bidder or offeror is responsible. A determination that a bidder or offeror is not responsible may be considered as the basis for eliminating that bidder or offeror from further consideration for a contract award.

D. After award, the University may terminate a contract for default if the bidder or offeror did not disclose the requested information; misrepresented relevant information to the Procurement Officer; or was subject to a final judgment of non-compliance with applicable Social Responsibility Laws post-award. In such cases, the University may also institute proceedings to debar the vendor from further State contracts, or pursue such other remedies as may be permitted by law or the contract.

SOCIAL RESPONSIBILITY AFFIDAVIT AND DISCLOSURE

A. The bidder or offeror agrees that if it is the subject of a final, non-appealable judgment with respect to compliance with applicable Social Responsibility Laws after the date of this affidavit, the bidder or offeror will immediately make a full disclosure in writing to the Procurement Officer of all relevant facts and circumstances. This disclosure shall include a description of actions which the bidder or offeror has taken or proposes to take to correct the violation. If the contract has been awarded and performance has begun, the vendor shall continue performance until notified by the Procurement Officer of any contrary action to be taken.

B. CERTIFICATION OF COMPLIANCE WITH SOCIAL RESPONSIBILITY LAWS

I HEREBY AFFIRM THAT:

(1) There has been no final, non-appealable judgment made during the last five years against the bidder or offeror for noncompliance with federal or state labor relations and other employment laws or regulations, including but not limited to the National Labor Relations Act, as amended; the Davis-Bacon Act, as amended; the Fair Labor Standards Act, as amended; the Maryland Living Wage law, State Finance and Procurement Article, §18-101 et seq., Annotated Code of Maryland; the Maryland Prevailing Wage law, State Finance and Procurement Article, §17-201 et seq., Annotated Code of Maryland; federal and state child labor laws; federal minimum wage laws and; the Family Medical Leave Act, except as follows (explain below or add additional sheets):

(2) There has been no final, non-appealable judgment made during the last five years against the bidder or offeror for violation of federal or state non-discrimination in employment laws or regulations, including but not limited to laws prohibiting discrimination on the basis of race, color, religion, ancestry or national origin, sex, age, marital status, sexual orientation, or disability unrelated in nature and except so as to reasonably preclude the performance of the employment, except as follows (explain below or add additional sheets):

(3) There has been no final, non-appealable judgment made during the last five years against the bidder or offeror for violation of the State of Maryland Commercial Non-Discrimination Policy, State Finance and Procurement Article, §19-101 et seq., Annotated Code of Maryland, except as follows (explain below or add additional sheets):

(4) There have been no instances during the last five years of failure by the bidder or offeror to meet mutually agreed upon goals for minority business participation (MBE) on projects performed for the University or any other State of Maryland agency, or any other sanctions for MBE program non-compliance; or any final, non-appealable judgment of noncompliance with the State of Maryland Minority Business Participation law, State Finance and Procurement Article, § 14-308 et seq., Annotated Code of Maryland, except as follows (explain below or add additional sheets):

(5) There has been no final, non-appealable judgment made during the last five years against the bidder or offeror for violation of federal or state health, safety or environmental laws or regulations, including but not limited to the U.S. Occupational Safety and Health Act standards; Maryland Occupational Health and Safety laws, State Labor and Employment Article, § 5-101 et seq., Annotated Code of Maryland, or the Federal Noise Control Act of 1972, except as follows (explain below or add additional sheets):

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY
THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST
OF MY KNOWLEDGE, INFORMATION AND BELIEF.

Date: _____ By: _____
(Authorized Representative and Affiant)

CERTIFICATION REGARDING INVESTMENT ACTIVITIES IN IRAN

Ref: Maryland Board of Public Works Advisory Number 2013-1

1. The undersigned of _____ (Contractor) certifies that, in accordance with State Finance & Procurement Article, §17-705:

(i) it is not identified on the list (see NOTE below) created by the Board of Public Works as a person engaging in investment activities in Iran as described in §17-702 of State Finance & Procurement Article; and

(ii) it is not engaging in investment activities in Iran as described in State Finance & Procurement Article, §17-702.

Or;

2. The undersigned is unable make the above certification regarding its investment activities in Iran due to the following activities:

Signature:

Date Signed:

Name of Authorized Representative:

Title:

NOTE: Information and List is available at:

www.bpw.state.md.us

Click On "Advisories"

Scroll Down to "2013-1"

Click On "IAI LIST"

Section L - Evaluation Factors for Award

A. EVALUATION COMMITTEES

The Procurement Officer shall work with The Eastern Transportation Coalition at UMD to establish separate technical and financial evaluation committees to review and rate the proposals. The financial evaluation committee may be composed of the Procurement Officer and any other individuals appointed by the Procurement Officer. The technical evaluation committee shall be composed of individuals from the Coalition member states working with the Coalition's designated staff and the Procurement Officer.

B. ACCEPTABILITY OF PROPOSALS:

The Procurement Officer shall determine which contractors have met the basic requirements of the RFP. Failure to comply with any mandatory requirement will normally disqualify a contractor's proposal. The Procurement Officer shall have the sole authority to determine whether any deviation from the requirements of this RFP is substantial in nature. The Procurement Officer may waive or permit to be cured minor irregularities or minor informalities in proposals that are immaterial or inconsequential in nature, whenever it is determined to be in the University's best interest. In addition, the Procurement Officer may reject in whole or in part any and all proposals if such is in the University's interest, and may reject proposals that are outside the competitive range financially, without performing a technical evaluation. The University may accept other than the lowest priced offer. The Procurement Officer may conduct discussions with contractors in any manner deemed necessary to best serve the interests of the University. The Procurement Officer may limit the competitive range to firms highly rated technically by the University for purposes of efficiency. The University reserves the right to make an award to more than one contractor or to split an award among contractors.

C. TECHNICAL EVALUATION:

The technical evaluation committee shall conduct its evaluation of the technical merit of the proposals in accordance with the requirements and specifications of the solicitation. The Contractor must satisfy and explicitly respond to ALL the requirements and specifications, including a detailed explanation of how each item listed in the requirements and specifications is to be met. The last phase of this technical evaluation will be the ranking by the Committee of each qualified proposal on technical merit.

The criteria noted below will be used by the committee for the technical evaluation of proposals for this procurement. Criteria are listed in descending order of importance. "Demonstration of ability" encompasses information provided in the proposals as well as record of past performance. Past performance will be determined by references including but not limited to: the quality of product delivered, ability to meet the specifications as defined, Proposer's record for on-time delivery, technical quality, cost control, demonstrated corrective actions, etc. as required under Section A-2 "Instructions, Conditions and Notices to Contractors", Section M-1B "References".

1. Demonstration of a full understanding of the RFP, and the demonstration of ability to meet all mandatory requirements for the various Traffic Data sets selected by the

Contractor for submittal. This includes technical requirements in (Part I, Section C, subsection 3.1) as mandatory (M) and all other non-technical requirements including support of the Data Ownership and Data Licensing provisions (Part I, Section C, subsection 6.0).

2. Demonstration of ability to meet the highly desirable (HD) technical requirements as specified in Part I, Section C, subsection 3.1.
3. Demonstration of the extent to which project risk can be minimized and/or mitigated as noted in Part I, Section C, subsection 3.3)
4. Demonstration of ability to meet desirable technical requirements (D) as specified in Part I, Section C, subsection 3.1.
5. Economic benefits to Maryland as specified in, Part I, Section C, subsection 3.1, part 7.0.

The terms "must" or "shall" are used throughout this document to indicate mandatory requirements. The terms "Mandatory," "Highly-Desirable" and "Desirable" (abbreviated as M, HD, and D, respectively) are used to describe technical specifications in Section C.

The Contractor's proposal is to clearly state that it meets all mandatory requirements and specifications; that is, that the Contractor is fully capable of delivering the items and providing the services as specified in this RFP.

The Contractor's proposal is to state clearly the degree to which it can meet any highly desirable specifications. The Contractor's proposal may respond to desirable technical requirements. A non-response to a desirable specification will be interpreted as the Contractor is not able to meet the desirable specification.

Each Contractor must provide a written response to each mandatory and highly desirable requirement and specification.

Misinterpretation of requirements and specifications by the Contractor shall not relieve the Contractor of responsibility to accurately address the requirements of the RFP or to perform the contract, if awarded.

The Committee may request additional technical assistance from any source. Industry standard references may be used during the evaluation process.

D. FINANCIAL EVALUATION:

The separate financial volume will be distributed to the financial evaluation committee. This information will then be used to establish a financial ranking.

Evaluation of pricing proposals will be performed based on pricing estimates delivered within the Offeror's Pricing Worksheet.

E. BASIS OF AWARD:

Financial rankings of proposals will be combined with the corresponding technical rankings to determine a final ranking for each proposal. **Technical merit will have greater weight than price.** Price proposals will increase in importance for proposals of equal or near equal technical rank. The Procurement Officer will recommend contract award to the responsible contractor or contractors whose proposal is (are) determined to provide overall best value to the University, considering the evaluation factors in this RFP, and price. The University intends to create a Traffic Data marketplace for Coalition Organizations consisting of multiple awards based on levels of capability, quality, pricing and demonstrated ability to deliver. Levels of capability are defined in the mandatory, highly desirable and desirable specifications of Traffic Data.

F. NEGOTIATION:

The University has the right to accept the best proposal as submitted, without discussion or negotiation. Contractors should therefore not rely on having a chance to discuss, negotiate and adjust their proposals.

Contractors who submit proposals initially judged by the Procurement Officer to be reasonably susceptible of being selected for award may be asked to discuss their proposals with the University to facilitate arrival at a contract most advantageous to the University. If the Procurement Officer determines that discussion is in the best interest of the University, the Procurement Officer will advise contractors in the competitive range to submit a best and final offer for consideration after discussions are held.

However, discussions may not be conducted if the Procurement Officer determines either that discussions are not in the best interests of the University or that discussions need not be conducted: (a) with respect to prices that are fixed by law or regulation, although consideration shall be given to competitive terms and conditions; (b) because the time of delivery or performance does not permit discussions; or (c) because it can be demonstrated clearly from the existence of adequate competition or accurate prior price experience with the particular item that acceptance of an initial offer without negotiation would result in a fair and reasonable price.

Attachment 1 - List of Definitions

<u>Absolute Speed Error:</u> is the absolute value of the difference between the space mean speed reported from the data service and the space mean speed provided by validation procedures for a specified time period or polling interval.
<u>Average Annual Daily Traffic:</u> AADT is a the total volume of vehicle traffic of a highway or road for a year divided by 365 days.
<u>Average Daily Traffic:</u> ADT is the total daily volume of vehicle traffic of a highway or road for a specified time period, season or day of week. For example, ADT for weekdays in springtime.
<u>Base Map:</u> A consistent, standardized electronic method for representing a roadway or transportation system in a link based methodology in a digital medium. See also Segmentation Network.
<u>Coalition:</u> The Eastern Transportation Coalition. (www.tetcoalition.org)
<u>Coalition Members:</u> For the purpose of this solicitation, Coalition Members refer to Full Members and Affiliate Members, and does not include Associate Members. See the Eastern Transportation Coalition. (www.tetcoalition.org) for the current membership.
<u>Coalition Full Members:</u> Full Membership includes State/District Departments of Transportation. See the Eastern Transportation Coalition. (www.tetcoalition.org) for the current membership.
<u>Coalition Affiliate Members:</u> Affiliate Membership includes regional and local public transportation agencies (i.e., transportation authorities, MPO's, Planning Commissions, Municipalities), and other public agencies (Federal agencies and public safety). See the Eastern Transportation Coalition. (www.tetcoalition.org) for the current membership.
<u>Coalition Associate Members:</u> Associate Membership includes transportation-related associations and organizations. See the Eastern Transportation Coalition. (www.tetcoalition.org) for the current membership.
<u>Confidential Information:</u> Confidential Information means University Data and other information, whether in written, oral, graphic, electronic or physical form, including but not limited to scientific knowledge, know-how, processes, inventions, techniques, formulae, data, plans, and business practices, that are not generally known to the public and that, if tangible, is clearly marked by the disclosing party as Confidential Information at the time of disclosure and which, if oral, is summarized and identified in a writing as Confidential Information that is submitted to the receiving party within ten (10) days of initial disclosure.
<u>Coalition Organizations:</u> For the purpose of this RFP, a Coalition Organization is defined as an organization that either owns or operates a major regional transportation system, and is either a Full Member or an Affiliate Member of the Eastern Transportation Coalition or is

an agency of the United States Department of Transportation (U.S. DOT). (Go to www.tetcoalition.org for more information).
<u>Conflation Services:</u> Conflation Services refers to transferring data from one link-node based representation of the road way (referred to as a Base Map) to an alternative Base Map, or applying data conveyed with geodetic location data (latitude, longitude, elevation, and heading) to a designated Base Map representation of the roadway.
<u>Connected Vehicle Data (CVD):</u> A form of Waypoint Data derived directly from vehicles through the manufacturer (referred to as Original Equipment Manufacturers or OEMs). Since approximately 2014 a growing percentage of new automobiles have been equipped with cellular based modems to report critical data to OEMs with respect to performance. In addition to location data, CVD typically contains speed and heading, and may contain such attributes and events such as key on/key off, windshield wiper activation, harsh braking, and fuel consumption. CVD tends to have higher frequency Waypoint data updates, and higher accuracy GPS data since GPS equipment is embedded and integrated into the vehicle. However, CVD data tends to be aligned with a single brand or group of brands of automobiles. Note, this is NOT data derived or obtained by Dedicated Short Range Communication (DSRC) devices, which also is referred to as ‘Connected Vehicle’ data.
<u>Contractor:</u> <u>A commercial entity responding to this RFP to provide Traffic Data as specified. Also see Vendor and Offeror. Vendor, Offeror and Contractor are used interchangeably.</u>
<u>Coverage Area:</u> The combined geographic areas defined by the boundaries of the Coalition Organizations. At the time of issuance of the RFP, Coalition Organizations includes state members along the Eastern seaboard from Maine to Florida as well as Alabama, Tennessee, Vermont and the District of Columbia. (Go to www.tetcoalition.org for a coverage map)
<u>Cross Validation:</u> Cross-validation is a technique in which the parameters of a machine learning estimation model (such as for roadway volume) are trained on a portion of the calibration data (for example 90%) and then tested (validated) on the remaining data (e.g. 10%). The process is iterated using a different, random sub-sets for validation. In the preceding example, model calibration and test is repeated 10 time (n=10), each with a different and unique validation sub-sample. The validation results across the 10 sub-samples are then reported as indicative and representative of the expected performance of the machine learning estimation model for production in real world applications.
<u>Data Availability:</u> The percentage of measurement intervals (combination of space and time) when traffic data estimates are delivered.
<u>Speed Error bias:</u> The average space-mean speed error (not the absolute value) in each speed range.
<u>Freeways:</u> Limited access roadways consisting of four or more lanes.

Latency: Latency is the difference between the time the traffic flow is perturbed as a result on an incident and the time that the change in speed (or other traffic parameter such as volume) is reported in the traffic data.

Link Definition: A Link is a logical representation of a physical segment of roadway with defined beginning and ending locations. A Link Definition is typically based on logical breaks in facilities where one would expect the potential for differing traffic conditions, such as at an interchange or major at-grade intersection, but can also include breaks at major landmarks, jurisdictional boundaries, or at periodic intervals to limit link length.

Local Roads: Generally Local Roads refers to the portion of the roadway system needed to access goods, services, and residential areas for the final link. For the purposes of this procurement, local roads refer to any roadway that meets that general classification but does not qualify as a Freeway, Major Arterial, Minor Arterial, or Special Use Lane.

Location Based Services: Location Based Services (or LBS) is a form or source of Waypoint derived from smart phone applications, transactions and operation. Applications within smart phones either periodically record location, or record location in conjunction with some type of event such as a commerce transaction (paying by a smart phone application). This data, when aggregated, can reflect the mobility patterns of the smart phone owners (as opposed to vehicle movement), has less frequent waypoint updates, and less accurate GPS data compared to other forms of Waypoint. LBS data tends to better reflect trip purpose and points of interest that are visited than other forms of Waypoint data.

Major Arterials: Roadways with greater than 20,000 AADT, but do not qualify as Freeways.

Mean Absolute Percentage Error (MAPE): With respect to volume estimation, the MAPE is the average of the absolute percentage error. The absolute percentage error is given by the absolute value of the difference between the estimated volume and the measured volume divided by the measure volume. See also the Symmetric MAPE

$$MAPE = \frac{1}{N} \sum_{i=1}^N \frac{|V_i - \hat{V}_i|}{V_i}$$

Minor Arterials: Roadways with less than 20,000 AADT but greater than 5000 AADT, and do not qualify as Freeways.

Non-Segregated Special Use Lanes: Special Use Lanes that that are not separated from normal lanes with either a physical structure, a median, or with at least six feet of pavement marking, but are only separated by pavement markings of six feet or less.

Offeror: A commercial entity responding to this RFP to provide Traffic Data as specified. Also see Vendor and Contractor. Vendor, Offeror and Contractor are used interchangeably.

<p><u>Origin – Destination (or OD) Data:</u> For the purposes of this RFP, Origin-Destination (or simply OD) data refers to any data feed that estimates or measures trips or vehicles between nodes, segment pairs in a network, or spatial parcels (such as US Census blocks, block groups, or tracts). At the smallest scale, OD Data may reflect turning movements at an intersection, at a medium scale OD Data may reflect the on/off movements along a major corridor, and at the largest scale OD Data may reflect traffic movement between zones or regions within a metropolitan area, state or even nationally.</p>
<p><u>Probe-based Technologies:</u> Probe based technologies encompass all methods of traffic data collection that do not require roadside infrastructure, but rather relies on harvesting data from other systems that can be used to infer traffic flow. Examples (but not an exhaustive list) of probe based technologies include GPS fleet data, crowd sourcing from/through smart phones, cellular switching data, Connected Vehicle Data reported through OEMs, and Location Based Services through smart phones.</p>
<p><u>Proposer:</u> The legal entity submitting a proposal under this Request for Proposals to whom a contract award can be effected. Sometimes Proposer may be referred to as Contractor or Offerer.</p>
<p><u>Quality Control / Quality Assurance (QC/QA):</u> Quality Control and Quality Assurance refers to methods employed to insure that data and services conform to the those either specified in the contract, or represented by the vendor. Whereas validation refers specifically to meeting minimum accuracy, reliability and timeliness specifications, QC/QA encompasses both validation exercises as well as general attributes of the data and/or service to insure the data meets the needs of Coalition member for the intended purposes.</p>
<p><u>Reliability:</u> The ability of the system to produce traffic data estimates consistently for each link at all times.</p>
<p><u>Requirement:</u> Information that is needed for the proposal or dataset</p>
<p><u>Roadways:</u> All types of roadways within this procurement for which traffic data is requested. This includes Multi-lane facilities such as Interstates, Toll Roads and Freeways as well as Major Arterials, Minor Arterials, Local Roads, Ramps and Special Use Lanes.</p>
<p><u>Rolling Window:</u> With respect to volume estimates, a Rolling Window is an update of current volume based on information from defined time windows beginning at the present point in time, and looking backward. For example, vehicle volumes may be estimated every 15 minutes based on the observed number of vehicle that traversed the roadway in the previous hour. At each 15 minutes' time boundary the previous hourly volume is estimated (ex. the 1:00PM volume estimate would be estimated from observations from 12:00PM to 1:00PM time period, the 1:15PM volume estimate would be based on observations from 12:15PM to 1:15PM, and 1:30PM from 12:30PM to 1:30PM, etc.).</p>
<p><u>Segregated Special Use Lanes:</u> Special Use Lanes that are separated from normal lanes with either a physical structure, a median, or with at least six feet of pavement marking.</p>

<u>Special Use Lanes:</u> Encompasses High-Occupancy Vehicle (HOV) lanes, High-Occupancy Toll (HOT) lanes, reversible flow lanes, express lanes, local lanes, and shoulder lanes.
<u>Specification:</u> A precise description of a technical item
<u>Speed:</u> For the purposes of this RFP (unless designated otherwise), Speed is explicitly defined as the space mean speed over the specified segment or link, that is the distance of the link divided by the time to traverse the link.
<u>Traffic Data:</u> For the purposes of this RFP, Traffic Data encompasses data and associated products as described and specified in this RFP, either real-time or historic. It covers any data procured over the six core data areas as specified in this RFP.
<u>Trajectory Data:</u> Trajectory Data is a form of Waypoint data derived from various types of vehicle probe sources that reflect the movement of vehicles on a roadway. Trajectory data provides the origin point, intermediate waypoints, and ending destinations in geodetic coordinates for a sample of travelers/vehicles. Whereas Connected Vehicle Data can be considered a subset of Trajectory Data, CVD is specific to data obtained from the vehicle through OEM integrated communications. Trajectory data may be obtained through fleet telematics, cell phone applications, or other methods that provide observability into vehicle movement, and may or may not be directly integrated into the vehicle from the factory.
<u>Segmentation Network:</u> A consistent, standardized electronic method for representing a roadway or transportation system in a link based methodology in a digital medium. See also Base Map. Base Map and Segmentation Network are used interchangeably.
<p><u>Symmetric Mean Absolute Percentage Error (SMAPE):</u> With respect to volume estimation, the SMAPE is the average of the symmetric absolute percentage error. The symmetric absolute percentage error is given by the absolute value of the difference between the estimated volume and the measured volume divided by the mean of the measured and estimated volume. See also the Symmetric MAPE</p> $SMAPE = \frac{1}{N} \sum_{i=1}^N \frac{ V_i - \hat{V}_i }{\frac{1}{2} * (\hat{V}_i + V_i)}$
<u>Traffic Data Marketplace:</u> The Traffic Data Marketplace (TDM) is collectively the Traffic Data procured through this RFP and the accompanying system for sharing, licensing, validation, and dispute resolution administered through the Eastern Transportation Coalition.
<u>University:</u> The University as noted in this Document, shall mean the University of Maryland, College Park.
<u>University Data:</u> All data, unless otherwise excluded, residing on or flowing through servers used by or in the conduct of, the effort described in the Scope of Work.

Vendor: A commercial entity responding to this RFP to provide Traffic Data as specified.
Also see Offeror and Contractor. Vendor, Offeror and Contractor are used interchangeably.

Volume: For the purposes of this RFP, volume is defined as the hourly rate of vehicle flow
per direction (not per lane) for the specified segment or link.

Waypoint Data: For the purpose of this solicitation, Waypoint data refers to sources of
location or position data for traveler or vehicles that are updated periodically, providing
geodetic data in the form of latitude, longitude, time, and possibly speed and heading
information. For the purposes of this RFP, Waypoint Data comes from either Trajectory
Data, Connected Vehicle Data, or Location Based Services data.

Attachment 2: Technical Specifications for: The Eastern Transportation Coalition Traffic Data Marketplace

The following section contains the baseline system requirements and specifications in the form of a matrix. Priority codes are given for each requirement and specification in the matrix. The definition of each priority code is defined below.

Priority Codes:

Y/N: Respond Yes or No

M: Mandatory (The Vendor shall verbiage . . .)

The Offeror must respond to any and all *M* within the Core Data category(s) for which the Offeror is responding. Failure to respond to a *M* requirement or specification is cause for determining a proposal non-responsive.

HD: Highly Desirable (The Vendor may . . .)

The Offeror is highly encouraged to respond to all *HD* requirements and specifications within the Core Data category for which the Offeror is responding. Failure to respond to a *HD* will indicate that the Offeror cannot support the *HD* requirement or specification.

D: Desirable, also considered Optional, Specification (The Vendor may . . .)

The Offeror is encouraged to respond to *D* requirements and specifications for which Offeror has an applicable product. Failure to respond to a *D* will indicate that the Offeror cannot support the *D* requirement or specification.

The response for a Requirement or Specification should affirm or deny the Offerors ability to meet the specification. Additionally, supporting information to verify ability to meet requirements and specifications should be provided. If the space in the matrix is not sufficient for a response, please append additional material, and references in the matrix. If additional space is required for further explanation, or if supporting material is appended, directly reference the additional or supporting information within the corresponding cell within the matrix (for example: “see Attachment XX, page Y for a detailed explanation”).

Six Core Data categories are specified below. A vendor must respond to at least one of the six Core areas for consideration. A vendor may provide a proposal for one or more of the Core Data Categories response areas. A response that does not address the minimum mandatory (*‘M’*) requirements and specifications of at least one Core area, will be dis-qualified. For any Core Data category, a vendor shall address all requirements and specifications within the matrix as described above for *‘M’*, *‘HD’*, and *‘D’* as outlined in the description of the Priority Codes above. For expediency and efficiency of review, if a vendor is not responding to one of the Core areas, please indicate so, and omit any associated matrix responses.

If a vendor’s response spans two or more Core Data categories, the vendor is requested and encouraged to consolidate material to the extent possible. For example, if the vendor is responding to Core Data items 1 & 2 (Travel Time and Volume data) with the same product, individually address the response matrix for each section, but consolidate any product specific information in attachments

Item	Description	Priority	Respondent Comments
CORE TRAFFIC DATA – ITEM 1			
REAL TIME TRAFFIC SPEED AND TRAVEL TIME DATA REQUIREMENTS			
<p>Objective:</p> <p>Speed and Travel Time data are at the heart of the Traffic Data Marketplace (formerly the Vehicle Probe Project), providing both real-time and historic travel time and speed estimates on a link basis for various roadway types in the coverage area.</p> <p>Speed refers to the space-mean speed, NOT the instantaneous vehicle speed. Speed, for the purpose of this RFI, refers to the observed time rate of traversal of a segment, defined as the length of the segment divided by the travel time.</p>			
1.0 Real-Time Travel Time & Speed Data			
1.1.0	DOES VENDOR INTEND TO RESPOND TO IS CORE TRAFFIC DATA ITEM	Y/N	If 'No' proceed to ITEM 2.0. If 'Yes', respond to all cell entries that follow
1.1. Base Real-Time Data Elements of Travel Time & Speed for all Roadways			
1.1.1	<p>Mean Travel Time</p> <p>The Vendor shall report Travel Time to the nearest whole second (or equivalent such as decimal minutes)</p>	M	
1.1.2	<p>Mean Speed</p> <p>The Vendor shall report Speed to a precision of the nearest 1 mph or greater.</p>	M	

1.1.3	<p>Status Flag</p> <p>The Vendor shall provide a status flag(s) per segment for each reported Travel Time / Speed record to indicate the following:</p> <ul style="list-style-type: none"> • Normal system operations with sufficient probe density to estimate travel times accurately. • Periods of low-traffic flow, travel time may need to be imputed from a combination of real-time data combined, historical data, and adjacent roadway segments Real-time probe data is not available, travel time is imputed based on historical data and/or adjacent roadway segments • An example of existing status flag are scores of '30', '20' and '10' to indicate whether data feed is based on real-time data ('30'), combinations of real-time and historical data ('20') and assumed free flow ('10'). This is only an example. Any status flag that reflect similar information is acceptable. 	M	
1.1.4	<p>Historic/Anticipated traffic data</p> <p>The Vendor may provide anticipated travel time and speed based on historic travel time and speed data representative for the <u>time of day and day of week</u>.</p>	HD	
1.1.5	<p>Quality Indicator</p> <p>The Vendor may provide a numerical score that reflects the confidence or anticipated error in the estimate of the <u>mean Travel Time & Speed</u>.</p> <p>The intent is to provide a measure similar in concept to the standard error in the estimate of the mean.</p> <p>The method used to generate a numerical score for quality may be dependent on the type of technology and type of processing.</p>	HD	

	Vendor should provide explanation of the quality metric.		
1.1.6	Sample size The Vendor may provide the sample size (such as the number of base probes) for a given time frame (such as the number of observed probes in a 15-minute period).	D	
1.2. Additional Data Feed Elements or APIs for all Roadways			
1.2.1	Posted speed limit for the roadway segment. The Vendor may provide this attribute as part of the travel time data feed or as static information as part of the Base Map.	HD	
1.2.2	[Combined into 1.2.1]		
1.2.3	Congestion alerts/alarms The Vendor may provide a configurable data feed to inform members when a <u>specified segment</u> exceeds a <u>defined maximum travel time or minimum speed</u> threshold	D	
1.2.4	Congestion alerts/alarms The Vendor may provide a data feed to inform members when <u>a group of segments</u> exceed a <u>customizable maximum travel time or minimum speed threshold</u>	D	
1.2.5	Incident alerts/reporting The Vendor may provide a data feed to inform members when roadways within a specified region are exhibiting customizable abnormal travel characteristics (such as slowdowns or congestion)	D	
1.3 Deleted			

1.4. Travel Time and Speed Data Quality and Latency on Freeways and Arterials See document the <i>Eastern Transportation Coalition Data Validation Program</i> , available at https://tetcoalition.org/projects/vpp-marketplace/ Please select the Reference Docs and Presentations tab on the page for more details on the ETC Validation Program.			
1.4.1	Average Absolute Speed Error (AASE) for Freeways Speed data for shall have a maximum average absolute error of 5 MPH in each of the following speed ranges: (all in MPH) 0-30, 30-45, 45-60 and > 60	M	
1.4.2	Speed Error Bias for Freeways Error bias is defined as the average speed error (not the absolute value) in each speed range. Speed data for Freeways shall have a maximum average error of +/- 4 MPH in each of the following speed ranges: 0-30 MPH, 30-45 MPH, 45-60 MPH and > 60 MPH.	M	
1.4.3	Average Absolute Speed Error (AASE) for Arterials Major Arterials (arterials with flow exceeding 20,000 AADT) shall have an AASE of 8 mph or less in the speed ranges defined as 0-15 MPH, 15-25 MPH, 25-35 MPH and > 35 MPH.	M	
1.4.4	Speed Error Bias for Arterials Major Arterials shall have a maximum speed error bias of +/- 4 MPH in each of the speed ranges defined as 0-15 MPH, 15-25 MPH, 25-35 MPH and > 35 MPH.	M	
1.4.5	Accuracy requirements shall be in effect for hours when vehicle flows exceeding 500 VPH for Freeways.	M	
1.4.6	Accuracy requirements shall be in effect for hours when vehicle flows exceeding 500 VPH of through traffic for Arterials.	M	

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1.4.7	Maximum data latency shall be less than or equal to eight (8) minutes.	M	
1.4.8	Maximum data latency may be less than or equal to five (5) minutes.	HD	
1.4.9	Arterial data shall be subject to ‘Slowdown Analysis’ as outlined in the Eastern Transportation Coalition Data Validation Program, with Failure to Capture < 15%.	M	
1.4.10	Arterial data may be subject to ‘Slowdown Analysis’ as outlined in the Eastern Transportation Coalition Data Validation Program, with Fully Captured > 70%.	HD	
1.4.11	Vendor shall support the CATT Works Georeferencing Protocol (CWGP) for submission of data to the validation program. The CWGP can be accessed at: https://tetcoalition.org/projects/vpp-marketplace/ Please select the Reference Docs and Presentations tab on the page. Alternatively, validation locations and associated data can be communicated between Vendor and the ETC Validation Team via OpenLR. The OpenLR version that will be supported by the ETC Validation team is based on the method documented in the publicly available whitepaper (https://www.openlr-association.com/fileadmin/user_upload/openlr-whitepaper_v1.5.pdf)."	M	
1.5. Temporal Reporting			
1.5.1	Traffic data shall be provided 24 hours per day, 7 days per week.	M	
1.5.2	Allowance shall be made for up to 40 hours of scheduled system maintenance per year during off-peak hours.	M	

1.5.3	The Vendor shall report/update traffic conditions at least once every 1 minute.	M	
<p style="text-align: center;">1.6. Spatial Reporting and Link Definitions</p> <p>Data may be requested for the defined roadway types anywhere within the Coverage Area. Procurement of data shall be implemented via task orders specific to the requested area. Based on the Coverage Area, Proposers shall indicate the extents to which data can be provided on the roadway types listed below. Vendor shall provide maps, direct Coalition to electronic web resources, or describe in sufficient detail the extent of coverage for each roadway type in the Coverage Area. See Definitions for description of roadway types. Vendors shall/map provide Travel Time & Speed Data on :</p>			
1.6.1	Freeways	M	
1.6.2	Major Arterials (arterials and state highways > 20000 AADT)	M	
1.6.3	Minor Arterials (arterials and state highways between 5000 and 20000 AADT)	HD	
1.6.4	Interchange Ramps	M	
1.6.5	Segregated Special Use Lanes (See Definitions)	M	
1.6.6	Non-Segregated Special use lanes (See Definitions).	HD	
1.6.7	Local roads	HD	
<p style="text-align: center;">1.7. Spatial Referencing</p> <p>These specifications refer to the encoding of information relative to a Base Map or other Georeferencing system</p> <p>The Vehicle Probe Project originally standardized on Traffic Message Channel (TMC) codes for the delivery of Travel Time & Speed data. Later, proprietary Base Maps were used from vendors to convey data in a more highly granular formats. Open Street Maps (OSM) has emerged as an open source Base Map standard that rivals or exceeds that of TMC, and is non-proprietary requiring no license fee.</p>			

1.7.1	Traffic Data shall be reported using Traffic Message Channel (TMC) codes as specified by the Traveler Information Services Association (TISA), including both internal and external nodes reported separately. More information on TMC codes are available at http://tetcoalition.org/wp-content/uploads/2015/02/TMC_White_Paper-Final.pdf	M	
1.7.2	Traffic Data may be reported using Open Street Map (OSM) segmentation *See note above It is highly desirable for vendor to natively support OSM. At a minimum, vendor data shall be licensed to be conflated to OSM segmentation. Vendors should provide documentation with respect to OSM segmentation support (either current or planned) as part of the RFP response.	HD	
1.7.3	The Vendor may provide finer granularity link definitions – suggested granularity of one mile for freeways, and up to 0.3 miles for complex urban arterials. Vendor response should fully describe any higher definition segmentation, the extent to which such segmentation is open-source, uses static or dynamic referencing, and frequency of map updates.	HD	
1.7.3	The Vendor may provide data in a member provided Base Map that conforms to the CWGP or the OpenLR protocol	D	
1.7.4	Ramps shall be reported as separate links	M	
1.7.5	The Vendor shall provide traffic data for new or improved facilities within six (6) months of roadway open to traffic. Vendor shall describe process for obtaining/reporting such data as part of RFP response.	M	
1.7.6	The Vendor may provide traffic data for new or improved facilities within four (4) weeks of roadway open to traffic. Describe process for obtaining.	HD	

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1.7.7	The Vendor may provide traffic data for new or improved facilities when roadway opens to traffic. Describe process for obtaining.	D	
1.7.8	<p>The Vendor shall provide Link definitions for any network segmentation supported which shall, at a minimum, contain</p> <ul style="list-style-type: none"> Beginning and ending latitude and longitude, identifying the centerline of the lane (or group of lanes) being reported. Freeway / Interstate class roadway segments will report separately for each direction of travel. Beginning and ending heading Segment length Direction of travel (unidirectional or bi-directional) Common name or route number A unique identifier. 	M	
1.7.9	The Vendor may provide Link definitions which shall contain preceding and following segment/s	HD	
1.7.10	The Vendor may provide a GIS shapefile of any base map supported by the vendor	HD	
1.7.11	The Vendor shall not update base map more frequently than once every quarter (three (3) months). Note: Reporting on new roadways as per specification 1.7.6 or 1.7.7 may be accomplished in separate API	M	
1.7.12	<p>Any Base Map update provided by the Vendor shall contain deltas from the previously supported Base Map. Segments shall be identified that have changed.</p> <ul style="list-style-type: none"> Traffic Message Channel (TMC) updates shall contain a list of TMCs that have changed 	M	
1.7.13	The Vendor shall support a base map for at least 12 months from issuing a subsequent base map update.	M	

1.7.14	Base map updates may be no more frequent than once every six months	HD	
1.7.15	Base map updates may be no more frequent than once per year	D	
<p style="text-align: center;">1.8. Availability and Reliability</p> <p>Reliability refers to the ability of the system to produce traffic data estimates consistently for each link at all times. Data reliability is measured simply as the percentage of measurement intervals (combination of space and time) when traffic data estimates are delivered.</p>			
1.8.1	<p>Note: Valid traffic data estimates occur only when sufficient base level data exists to support an estimate of the mean travel time or mean speed for a particular time period. Estimates based purely on imputation (for example, the historical average) are not considered a valid estimate in terms of the availability requirement. Periods of low flow (<500 VPH) are excluded.</p> <p>The Vendor shall provide Traffic data for at least 98 percent of all covered links at all required time reporting intervals, whenever minimum flow volumes are exceeded.</p>	M	
1.8.2	<p>Availability:</p> <p>The Vendor shall provide Data subscription services that shall maintain at least 99.5 percent availability, determined as percent uptime of the data service excluding any scheduled system maintenance (as per 1.5.2).</p>	M	
1.8.3	The Vendor shall document and report Availability on a monthly basis.	M	
<p style="text-align: center;">1.9. Data Formatting, Packaging and Access</p>			
1.9.1	The Vendor shall provide Data as a fully documented API interface consistent with industry standards. Vendor to fully document.	M	

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1.9.2	The Vendor shall allow for selective content subscription so that various states and road authorities may subscribe only to the state geographic area of interest.	M	
1.9.3	The Vendor may allow for selective content subscription so that various states and road authorities may subscribe only to the county geographic area of interest.	D	
1.9.4	The Vendor shall provide hardware, software and network capacity sufficient to initially support up to 50 concurrent data subscriptions, with the capability to scale to 100 data subscriptions as needed. It is the responsibility of the contractor to provide sufficient capacity to service all subscription demands.	M	
1.9.5	Vendors shall archive data purchased by Coalition members for a minimum of one (1) year. The archive must contain data in the same format (same fields reported in the live feed and same temporal and spatial granularity) as it was originally delivered in real-time and accessible via an API, FTP site, S3 bucket, or equivalent interface.	M	
1.9.6	The Vendor may provide a tiling service for travel time and speed for integration into agency traveler information websites, apps, or ATMS platforms as an alternative data access method.	D	
1.9.7	The Vendor may provide a tiling service of historical speed (expected speed for the current time of day and day of week) as an alternative data access method. User may specify color, pen width and speed ranges.	D	
1.9.8	The Vendor may provide a tiling service of the <u>comparative speed</u> (current speed as compared to historical speed for time of day and day of week) as an alternative data access method.	D	
1.10 Visualization Tools and Analytics			

1.10.1	<p>The Vendor may provide a password-protected web-based tool to view real-time traffic data delivered to Coalition Member (not the general public) for the purpose of monitoring the traffic data feed, and validation of conformance to contract specifications. The monitoring service is for use only by the Coalition and its members primarily for administration purposes. Preferences for the service includes:</p> <ul style="list-style-type: none">• Capacity to support up to five (5) concurrent users• Viewing of live traffic data in map based format	D	
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Item	Description	Priority	Respondent Comments
CORE TRAFFIC DATA – ITEM 2			
VOLUME DATA REQUIREMENTS			
<p>Objective:</p> <p>Traffic Volume data is the second dimension of traffic vital to obtain a complete understanding of traffic flow, and is a priority in the Traffic Data Marketplace (formerly the Vehicle Probe Project). The Coalition intends to procure both historic and, possibly, real-time traffic volume data on a link basis for various roadway types in the coverage area.</p> <p>The Coalition has been a leader in research and development of methods to obtain accurate volume estimates from probe based data. The results of that research indicate that probe density and consistency is such to support traffic volume products, and expects the extent of available products to grow into the future to cover more road classes, and to evolve from aggregated historic measures such as AADT and ADT, to real-time estimates across the entire network.</p> <p>Volume refers to the number of vehicles that traverse a segment in a specified time frame, NOT the number of observed traffic probes. Vendors interested in providing base data from which volume can be estimate should respond to the Waypoint Data section.</p> <p>Note: The various traffic volume estimates below marked mandatory (M) reflect the products for which the Coalition desires service. A vendor must be responsive to one (1) or more of the data items marked as ‘M’ to be considered compliant.</p>			
2.1.0 Base Data Elements for all Roadways			
2.1.0	DOES VENDOR INTEND TO RESPOND TO THIS CORE TRAFFIC DATA ITEM.	Y/N	If ‘No’ proceed to section 3.0. If ‘Yes’, respond to all cell entries that follow
2.1 Base Data Elements for Historic Volume Estimates			
2.1.1	Vendor shall provide historic estimated volume data reported as estimated Average Annual Daily Traffic (AADT)	M	
2.1.2	Vendor shall provide historic estimated volume data reported as estimated Average Daily Traffic (ADT) for	M	

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	<ul style="list-style-type: none"> • day or week, • month of year, • season, • weekday/weekend, • a specific day of the year. 		
2.1.3	<p>Vendor shall provide historic estimated volume data reported as hourly (as opposed to daily) estimated Average Hourly Daily Traffic (AHDT)</p> <ul style="list-style-type: none"> • for day or week, • month of year, • season, • weekday/weekend <p>Example – estimated volume for Mondays from 2-3 PM is 3468 vehicles</p>	M	
2.1.4	<p>Vendor shall provide historic estimated volume data reported as estimated Hourly Volumes Flows specific</p> <ul style="list-style-type: none"> • to the day of year and • to the hour of the day. <p>Example – estimated volume for June 5, 2019 from 2-3 PM is 3468 vehicles</p>	M	
2.1.5	<p>NOTE: For any mandatory traffic volume estimates, vendor shall provide date range for which traffic volume estimates are available.</p> <p>Example: ‘Historic AADT estimates are available for calendar year 2018 forward.’</p>	M	
2.1.6	<p>Vendors may provide Hourly Volume Flows available in real time. In response to this RFP, vendor shall indicate future plans to provide a real-time volume feed (if any).</p>	HD	

2.1.7	<p>Vendor may provide historic Sub-Hourly volume flows (ex: 5, 15, 30 minutes) specific</p> <ul style="list-style-type: none"> to the day of the year and to the hour of the day. <p>Example – estimated volume for June 5, 2019 from 2:00-2:15 PM is 900 vehicles</p>	HD	
2.1.8	Vendors may provide real time Sub-Hourly volume flows	HD	
2.2. Status Flag and Error Estimates			
2.2.1	<p>Status Flag</p> <p>The Vendor may provide a status flag(s) per segment for each reported Traffic Volume record to indicate whether sufficient data is available to estimate traffic volumes.</p>	HD	
2.2.2	<p>Quality indicator</p> <p>The Vendor may provide a numerical score that reflects the confidence or error in the estimate of the volume parameter. The intent is to provide a measure similar in concept to the standard error in the estimate of the mean. A suggested method is to use anticipated error derived from Cross-Validation techniques.</p>	HD	
2.2.3	Vendor may provide a flag for low traffic volume situations	HD	
2.3. Additional Data Feed Elements or Services for all Roadways			
2.3.1	The Vendor may report estimated volume separately by vehicle class	D	
2.3.2	The Vendor may report estimated volume separately by groupings of vehicle class (i.e. light duty, heavy duty).	D	

2.4. Volume Data Quality and Latency It is the intent of the Coalition to perform validation of Traffic Volume data provided through this TDM similar in scope and extent as the validation of travel time and speed data. However, the methodology, frequency, and other parameters of the Traffic Volume validation program are not yet established. Any such methods will be consistent with published research in the area, and subject to the resources available through the Coalition. The validation committee of the ETC will provide overall guidance and review. Any vendor that provides data to the ETC or any of its Members, will be required to participate in the Traffic Volume validation program. Due to required calibration, submission of data for validation of Traffic Volume will only be required for the geographic regions for which a vendor is under task order to provide data, though any vendor may submit data (voluntarily) for regions outside of their contracted region. NOTE: All accuracy specifications below are designated as Highly Desirable or Desirable, not Mandatory. This acknowledges that traffic data volume services are an emerging field, and established metrics for quality are still evolving.			
2.4.1	For AADT, accuracy specifications, at a minimum, may be consistent with findings from the FHWA pooled fund project titled ' Non-Traditional Methods to Obtain Annual Average Daily Traffic Evaluation and Analysis Project '. These accuracy specifications reflect current fidelity of 48 hour counts relative to measured AADT.	HD	
2.4.2	Minimum Accuracy Hourly Volume Specification: SMAPE – Minimum accuracy may be expected in the following ranges: 10-15% for High Volume roadways (Freeways) 20-25% for Mid Volume roadways (Arterials) 30-50% for Low Volume roadways (Local Roads)	HD	
2.4.3	Minimum Accuracy Hourly Volume Specification: Coefficient of Determination (R^2) as reported against the calibration data set. Minimum R^2 accuracy may be expected for the following 90% for High Volume roadways (Freeways) 80% for Mid Volume roadways (Arterials) 70% for Low Volume roadways (Local Roads)	HD	

2.4.4	Error to Capacity Ratio (ETCR) – Freeways of less than 10%	HD	
2.4.5	Error to Capacity Ratio (ETCR) – Freeways of less than 5%	D	
2.4.6	Error to Max Flow Ratio (EMFR) – Non-Freeways of less than 20%	HD	
2.4.7	Error to Max Flow Ratio (EMFR) – Non-Freeways of less than 10%	D	
2.4.8	Error to Max Flow Ratio (EMFR) – Local Roads of less than 20%	HD	
2.4.9	The Vendor shall report performance using Cross Validation with the number of training bins (n) greater than or equal six, and less than or equal to ten, chosen at random.	M	
2.4.10	Specification 1.4.11 is included by reference for the submission of Traffic Volume validation data	M	
2.5. Spatial Reporting and Link Definitions			
	The Vendor shall provide volume estimates on the following facilities denoted as ‘M’. The Vendor may provide volume estimates on the following facilities marked at ‘HD’ or ‘D’		
2.5.1	Freeways	M	
2.5.2	Major Arterials	M	
2.5.3	Minor Arterials	HD	
2.5.4	Interchange Ramps	HD	
2.5.5	Segregated Special use lanes	HD	

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2.5.6	Non-Segregated Special use lanes	D	
2.5.7	Intersection Turning Movements	HD	
2.5.8	Local Roads	HD	
2.5.9	Vendors shall provide a matrix of Traffic Volume Estimate type (as described in 2.1.1 to 2.1.8) indexed by road category (as described in 2.5.1 to 2.5.8). Vendors shall respond in the RFP reflective of their current ability to provide accurate traffic volume estimates.	M	
2.6. Spatial Referencing – See section 1.7			
Section 1.7 is included by reference for Volume Estimates			
2.7. Data Formatting, Packaging and Access			
2.7.1	The Vendor shall provide Data using prevailing industry standard formats, packaging, etc. (e.g. APIs, FTP site, S3 bucket, or similar). Vendor to provide description in response.	M	

Item	Description	Priority	Respondent Comments
CORE TRAFFIC DATA – ITEM 3			
CONFLATION DATA SET REQUIREMENTS			
<p>Objective: To secure access to high quality, reasonable cost Conflation Data Sets for Coalition members. As the Coalition spans many jurisdictional organizations, there are numerous Base Maps created and maintained by these organizations with custom linear referencing systems. These Base Maps must exchange data with industry sourced Base Maps (such as TMCs, Open Street Maps, and vendor specific Base Maps), as well as Base Maps used at the federal level such as ARNOLD. The fiscal overhead associated with the numerous transformations of data as a result of various Base Maps was identified by Coalition members as a critical area to resolve. This is compounded by the numerous map updates produced by vendors (with or without underlying geometric changes in the roadway). As a result, this ETC-TDM is requesting proposals for streamlined, efficient Conflation Data Sets in and among these various Base Maps required for modern traffic operations, planning, and roadway management.</p> <p>Conflation Services: Conflation Data Sets refers to translation of data or segment from one link-based representation of the road way (referred to as a Base Map) to an alternative Base Map, or applying data conveyed using geodetic location data (latitude, longitude, elevation, and heading) to a designated Base Map representation of the roadway.</p>			
3.0. Base Data Elements for all Roadways			
3.0	DOES VENDOR INTEND TO RESPOND TO THIS CORE TRAFFIC DATA ITEM	Y/N	<p>If ‘No’ proceed to section 4.0.</p> <p>If ‘Yes’, respond to all cell entries that follow</p>
3.1 Base Maps Supported			
3.1.1.	The Vendor shall be able to support transfer of roadway segments and associated data to/from any Coalition organization custom Base Map/linear referencing system.	M	

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3.1.2	The Vendor shall be able to support transfer of roadway segments and associated data to/from Traffic Management Channel (TMC) Base Map for any vendor variety of TMC codes.	M	
3.1.3	The Vendor shall be able to support transfer of roadway segments and associated data to/from federally sponsored Base Map systems such as the All Roads Network of Linear Referenced Data (ARNOLD) Base Map.	M	
3.1.4	The Vendor shall be able to support transfer of roadway segments and associated data to/from any vendor specific Base Maps, provided that the roadway Base Map is provided with full geodetic referencing as specified in section 1.7.8.	M	
3.1.5	The Vendor shall be able to support transfer of roadway segments and associated data to/from any version of Open Street Map version.	M	
3.1.6	The Vendor shall be able to support transfer of roadway segments and associated data to/from any Base Map system which meets the minimum segmentation reporting as specified in section 1.7.8, including data and segments reported using the GWCP and Open LR protocols.	M	
3.2 Time Responsiveness			
3.2.1	Conflated data sets shall be delivered within 60 days of issuance of task order.	M	
3.2.2	Conflated data sets may be delivered within 30 days of issuance of task order.	HD	
3.2.3	Conflated data sets may be delivered within 15 days of issuance of task order.	D	

3.3 Submission Requirements			
3.3.1	<p>For the purposes of responding to this RFP, Vendors shall provide an overview of their conflation services, including</p> <ul style="list-style-type: none"> • process, • inputs, • outputs, • data formats, • standardized analysis packages, 	M	
3.3.2	<p>Vendors shall provide an overview of acceptance metrics for Conflation Processing</p> <ul style="list-style-type: none"> • To what accuracy of conflation are various road categories (Interstates, Freeways, Major Arterials, Minor Arterial, Ramps, and Local Road) processed? • What accuracy measures used, and how are they defined? • To what level of accuracy is the vendor guaranteeing conflation services work? • What process in place to fix any conflated road segments identified to be in error? 	M	
3.3.3	<p>Vendor shall provide a minimum of three organizational references for which conflation data sets of the nature requested by the ETC have been provided in the previous 24 months.</p>	M	

Description		Respondent Comments	
CORE TRAFFIC DATA – ITEM 4			
WAYPOINT DATA REQUIREMENTS			
<p>Objective: For the purpose of this solicitation, Waypoint Data refers to sources of location or position data from a traveler or their vehicle that are updated periodically, providing geodetic data in the form of latitude, longitude, time, and possibly speed and heading information, as well as information about the vehicles (sudden stops, seat belt usage, key on, key off), referred to as event data, or locations visited (type of trip, point of interest). For the purposes of this RFP, Waypoint Data can come from multiple sources: directly from connected vehicles, from Location-Based Services, other connected devices, or a mixture of any of the above. It can also be delivered after-the-fact or in real-time.</p> <p>The ETC solicits vendors providing various sources of Waypoint Data.</p> <p>Respondents are encouraged to provide separate documentation of their Waypoint Data as any associated/ancillary products and services, and reference such data in their response as appendices.</p>			
4.1 Base Data Elements for all Roadways			
4.1.0	<p>DOES VENDOR INTEND TO RESPOND TO THIS CORE TRAFFIC DATA ITEM</p> <p>If Vendor responds to this section, they should be responsive to at least one type of WayPoint data below (Trajectory Data, which includes Connected Vehicle Data, and Location Based Services Data)</p>	Y/N	<p>If ‘No’ proceed to core item 5.0.</p> <p>If ‘Yes’, respond to cell entries below.</p>
<p>4.2 Vehicle Trajectory Data: Vehicle Trajectory Data is a form of Waypoint data derived from various types of vehicle probe sources that reflect the movement of vehicles on a roadway. Trajectory data provides the origin point, intermediate waypoints, and ending destinations in geodetic coordinates for a sample of travelers/vehicles. Trajectory data includes Connected Vehicle Data (CVD). Connected Vehicle Data specifically refers to data from vehicles through OEM integrated communications. Trajectory data may be obtained through fleet telematics, cell phone applications, or other methods that provide observability into vehicle movement, and may or may not be directly integrated into the vehicle from the factory.</p>			

4.2.1	<p>For the purposes of this RFP response vendor shall describe Trajectory data including:</p> <ul style="list-style-type: none"> • Type of fleet/vehicles included in the data • Data schema • Ping rate • Consistency of ping rate • Any data obscurity methods to protect privacy <p>Penetration rate (and how penetration rate is defined)</p>	M	
4.2.2	<p>Vendor shall provide information on the penetration rate of the Trajectory Data for various sectors of the vehicle mix including but not limited to:</p> <ul style="list-style-type: none"> • Light Duty • Medium Duty • Long Haul Freight • Urban Freight 	M	
4.2.3	<p>Vendor shall provide information on data attributes available with the trajectory data, such as:</p> <ul style="list-style-type: none"> • Home location / work location • Event data such as <ul style="list-style-type: none"> ○ Key on, Key off ○ Hard braking ○ Weather, use of windshield wiper ○ Occupancy, seat belt usage ○ Make, model, year ○ Vehicle class ○ Type of Power Train • Point of interest (place visited) 	M	

	<ul style="list-style-type: none"> Any other available data attributes, events, or ancillary data associated with trajectory data 		
<p>4.3 Location Bases Services Data: Location Based Services (or LBS) is a form or source of Waypoint derived from smart phone applications, transactions and operation. Applications within smart phones either periodically record location, or record location in conjunction with some type of event such as a commerce transaction (paying by a smart phone application). This data, when aggregated, can reflect the mobility patterns of the smart phone owners (as opposed to vehicle movement), has less frequent waypoint updates, and less accurate GPS data compared to other forms of Waypoint.</p> <p>LBS data tends to better reflect traveler behavior, as opposed to vehicle movement, revealing such items as trip purpose, points of interest that are visited, and diurnal patterns of the population.</p>			
4.3.1	<p>Vendor shall describe Location Based Services data attributes including:</p> <ul style="list-style-type: none"> Type of users, traveler information obtained Type of location information provided (geodetics, street addresses, census block, census block group, census tract) Data schema Ping rate or reporting triggers Any data obscurity methods to protect privacy Penetration rate (and how it is measured) Other critical attributes of LBS data <p>The Vendor shall attach a data schema or attribute table as part of response to the RFP for the information in response to 4.3.1</p>	M	
4.3.2	<p>In addition to Waypoint Data location data, vendor shall describe additional attributes that may accompany LBS data. Examples include</p> <ul style="list-style-type: none"> Inferred home location Inferred work location Point of interest that was visited Dwell time at location Imputed mode 	M	

	The Vendor shall attach a data schema or attribute table as part of response to the RFP for the information in response to 4.3.2		
4.4 Licensing, Timeliness and Persistence of ID			
Any vendor responding to either form of Waypoint Data shall provide information as described in section 4.4			
4.4.1	<p>Vendors shall describe data availability with respect to time including:</p> <ul style="list-style-type: none"> • Is WayPoint data available in real-time? • If historical data, what is the delay for availability of waypoint data (Ex. waypoint data information is available within 30 days of field collection) • How far back in time can waypoint data be delivered (Ex. Waypoint data is available from Jan 2018 forward) 	M	
4.4.2	<p>Vendor shall provide information on related to vehicle/traveler trip identifiers.</p> <ul style="list-style-type: none"> • Are vehicle or traveler IDs persistent, or anonymized/randomized? • Can trips by a vehicle/traveler be linked to reveal daily patterns? • How often are trip IDs assigned/randomized? • What triggers a new trip ID? 	M	
4.4.3	Vendor shall describe licensable uses of the data, as well as limitations of use.	M	
4.4.4	<p>Vendor shall describe license time frame:</p> <ul style="list-style-type: none"> • Once licensed, can licensee retain a copy of the data in perpetuity? • If data license is not perpetual, what is the longest time period for which data can be licensed? • If data license is not perpetual, describe any licensing requirements related to expungement of original data, ability to 	M	

	keep derived, aggregated, or transformed versions of the original data.		
4.5 Specifications / Questions for any type of Waypoint Data			
4.5.1	<p>Vendor shall provide information responsive to the following questions related to geo-referencing of data:</p> <ul style="list-style-type: none"> • Is waypoint data snapped to an existing roadway system, if so what Base Map is used? • Are the geodetic coordinates (latitude, longitude, altitude) conveyed with each data item? • How is data provided (data file type, data format, transfer mechanism, etc.)? 	M	
4.5.2	<p>Vendor shall provide information responsive to the following questions related to historical archive data sets:</p> <ul style="list-style-type: none"> • How far back is archive/historical data available? • Is the archive/historical data to the same level of sampling and accuracy as current data? What is typical size of the Waypoint data set as delivered for a state for the time period of a year? (please use a convenient example state such as North Carolina) 	M	
4.5.3	<p>Vendor shall provide information responsive to the following questions related to historical archive data sets:</p> <ul style="list-style-type: none"> • Does penetration rate vary significantly across Coalition States? For example, is data better in Florida, then in the Northeast? • Does penetration rate vary by roadway class? • Does penetration rate vary by other known factors? 	M	
4.5.4	<p>Personal Privacy Protection: Vendor shall provide information related to protection of Personally Identifiable Information (PII):</p> <ul style="list-style-type: none"> • What methods or policies does the Vendor employ relative to PII? 	M	

	<ul style="list-style-type: none"> What industry standards, or government regulations is Vendor data compliant with? 		
Description		Respondent Comments	
CORE TRAFFIC DATA – ITEM 5			
5.0 ORIGIN-DESTINATION DATA REQUIREMENTS			
<p>Objective: For the purposes of this RFP, Origin-Destination (or simply OD) data refers to any data feed that estimates or measures trips (either person or vehicle) that traverses between nodes, segment pairs in a network, or spatial parcels (such as US Census blocks, block groups, or tracts). At the smallest scale, OD Data may reflect turning movements at an intersection, at a medium scale OD Data may reflect the on/off movements along a major corridor, and at the largest scale OD Data may reflect traffic movement between zones or regions within a metropolitan area, state or even nationally.</p>			
5.1 Base Data Elements for all Roadways			
5.1.0	DOES VENDOR INTEND TO RESPOND TO THIS CORE TRAFFIC DATA ITEM	Y/N	If 'No' proceed to section 6.0. If 'Yes', respond to all cell entries that follow
5.2 Source Data, Processing and Use Cases			
5.2.1	<p>Vendor shall describe the source data used to estimate Origin-Destination Data (OD) information such as but not limited to:</p> <ul style="list-style-type: none"> Waypoint Data Trajectory Data LBS Telecommunications data Other 	M	
5.2.2	<p>Vendor shall describe method used for OD table creation:</p> <ul style="list-style-type: none"> Does the vendor report counts from the source data? 	M	

	<ul style="list-style-type: none"> Does the vendor extrapolate or expand the data to reflect entire population? If so, describe the method used 		
5.2.2	<p>Vendor shall describe the spatial areas and granularity of the data, including:</p> <ul style="list-style-type: none"> Census blocks Census Tracts Census Block groups Counties Zip codes User defined geo-fences Other 	M	
5.2.3	<p>Vendor shall describe extents of OD data including the following:</p> <ul style="list-style-type: none"> If O-D data is procured for a region, will Origins or Destinations procured for the region be truncated to the region boundary? For example, if O-D data for Maryland is procured, and the true origin is Harrisburg, PA for a trip, will the data set reflect Harrisburg or will the origin be reflected at the state line of Maryland? 	M	
5.2.4	<p>Vendor shall describe available OD functions/analytics including the following:</p> <ul style="list-style-type: none"> Is segment level OD supported? This is sometimes referred to as ‘select link’ analysis? 	M	
5.2.5	<p>The Vendor shall describe available OD data for intersection level analysis including the following:</p> <ul style="list-style-type: none"> Are interchange and intersection turning movements supported? (Note that this is similar to Volume estimates for roadway intersections and interchanges – please provide consolidated response discussion if responding to both areas.) 	M	

	<ul style="list-style-type: none"> Are interchange OD analysis similar to ‘select link’ available? 		
5.2.6	<p>Vendor shall describe OD data specific to the following:</p> <ul style="list-style-type: none"> Is O/D data reported from home location, or from beginning of trip location? Or both? 	M	
5.2.7	<p>Vendor shall describe OD time aggregation specific to the following questions:</p> <ul style="list-style-type: none"> What date range is supported for OD analysis? How far back in time (historic) is OD Data available? When is the most recent OD Data available? Or what is the latency of available data? <p>For example – when is OD Data available for December 2020? Is it available Jan 1, of 2021, March of 2021, or December of 2021?</p>	M	
5.2.8	<p>Vendor shall describe OD data processing specific to the following questions:</p> <ul style="list-style-type: none"> Is any modeling performed to derive OD estimates? Is so, provide complete description. Is any data fusion performed to derive OD estimates? Is so, provide complete description. 	M	
5.3 Formatting, Privacy, Licensing Restrictions			
5.3.1	<p>Vendor shall describe format for delivery of OD data such as:</p> <ul style="list-style-type: none"> File Type Data Schema Transport Mechanism What is typical size of one year of OD data for a state for one year (measured in GB)? Provide example of a specific state if available (North Carolina for example). 	M	

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5.3.2	<p>Vendor shall describe privacy protection incorporated into the OD data including:</p> <ul style="list-style-type: none">• Truncation of geodetic coordinates• Minimum spatial resolution• Obscuring home location• Industry standard or practices that the vendor adheres to• Government policy or regulations that the vendor adheres to	M	
5.3.3	<p>Vendor shall describe any licensing restrictions including:</p> <ul style="list-style-type: none">• Are there any inherent use restrictions as part of the data licensing?• Any limit on the license preventing perpetual use of the data?	M	

Description		Respondent Comments	
CORE TRAFFIC DATA – ITEM 6			
6.0 FREIGHT DATA REQUIREMENTS			
<p>Objective: The Coalition seeks to provide freight data to support planning and operations within the Coalition. The Coalition’s understanding and perspective on freight data is summarized in its August 2020 publication ‘Demystifying Freight Data: Theory, Terms, and Practical Recommendations’ available at https://tetcoalition.org/wp-content/uploads/2020/08/TETC-Demystifying-Freight-Data-8-4-2020.pdf. Vendors are encouraged to review this document and to provide data solutions consistent with the specification below and within the freight data context shared in the document.</p> <p>Vendors may respond to one or more inquiries for various freight data types as discussed and specified below. Note even though these are presented as proposed specifications, prospective vendors are encouraged to provide comment on products and services that may provide the requested information.</p>			
Base Data Elements for all Roadways			
6.0	DOES VENDOR INTEND TO RESPOND TO THIS CORE TRAFFIC DATA ITEM	Y/N	If ‘Yes’, respond to cell entries that follow.
6.1 Data Items – Travel Time & Speed			
6.1.0	Is Vendor providing Travel Time & Speed data for freight	Y/N	In No, proceed to 6.2.0
6.1.1	Vendor shall describe how the Vendor provides <u>Travel Time</u> and Speed Data of Heavy Duty (vehicle classification) freight movements.	M	
6.1.2	Vendor shall describe how the Vendor provides <u>Travel Time</u> and Speed Data of Medium Duty (vehicle classification) freight movements.	M	

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6.1.3	Vendor shall describe how the granularity of Vendor provided Travel Time data (for example, travel time data is delivered to the nearest second.)	M	
6.1.4	Vendor shall describe the granularity of Vendor provided Speed data (for example, speed data is delivered to the nearest one MPH.)	M	
6.2 Data Items – Volume			
6.2.0	Is Vendor providing Estimated Volume data for freight	Y/N	In No, proceed to 6.3.0
6.2.1	Vendor shall describe how volume of medium duty (vehicle classification) freight movements are obtained and/or estimated.	M	
6.2.2	Vendor shall describe how volume of heavy duty (vehicle classification) freight movements are obtained and/or estimated.	M	
6.2.3	Vendor shall describe how volume of freight movements by FHWA vehicle <u>type</u> are obtained and/or estimated.	M	
6.3 Data Items – Origin & Destination of Freight Vehicles			
6.3.0	Is Vendor providing Origin & Destination data for freight vehicles	Y/N	In No, proceed to 6.4.0
6.3.1	Vendor shall describe how Origin / Destination for the following are obtained and/or estimated: <ul style="list-style-type: none"> • Long haul freight vehicles • Regional freight vehicles • Last mile parcel delivery • Other associated fleets. • Parcel Delivery 	M	
6.4 Data Items – Truck Parking			

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6.4.0	Is Vendor providing Truck Parking data	Y/N	In No, proceed to 6.5.0
6.4.1	<p>Vendor shall describe how truck parking information including but not limited to following are obtained and/or estimated. Note such data is for operational analysis. The Coalition is not requesting a real-time system for directing drivers to specific lots or spaces.</p> <ul style="list-style-type: none"> • Capacity • Utilization • Dwell Times 	M	
6.5 Data Items – Origin & Destination of Freight Cargo			
6.5.0	Is Vendor providing Origin & Destination for Freight Cargo	Y/N	In No, proceed to 6.6.1
6.5.1	<p>Vendor shall describe how Origin / Destination of commodity movement (actual freight) through sampling of ‘Bills of Laden’ is obtained and/or estimated.</p> <ul style="list-style-type: none"> • Include Mode • Include Value 	M	
6.5.2	<p>Vendor shall describe representativeness of Freight O&D data.</p> <ul style="list-style-type: none"> • What percentage of all freight is captured in the O&D data? • What evidence is there that it is representative of actual freight O&D flows? 		

Item	Description	Priority	Response Code	Respondent Comments
7.0 ECONOMIC BENEFITS TO MARYLAND				
7.1	It is mandatory that the Contractor at a minimum respond to the items in this Section XX, even if no benefit is defined. Contractor is reminded NOT to include any details of their price proposals with this information. This needs to be filled out at least once. If answers differ by Core Data Items, fill this out specific to each Core Item for which the vendor is responding.	M		
7.2	The estimated percentage of contract dollars to be recycled into Maryland's economy in support of the contract, through the use of Maryland subcontractors, suppliers and joint ventures partners. Be as specific as possible. Provide a breakdown of expenditures in this category if possible.	D		
7.3	The number and types of jobs for Maryland residents resulting from the contract indicate job classifications, number of employees in each classification and the aggregate payroll to which the contractor has committed at both prime and, if applicable, subcontract levels.	D		
7.4	Tax revenues to be generated for Maryland and its political subdivisions as a result of the contract. Indicate tax category (sales taxes, payroll taxes, inventory taxes and estimated personal income taxes for new employees). Provide a forecast of the total tax revenues resulting from the contract	D		

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	Estimated Percentage of subcontract/Supplier dollars committed to Maryland small business and MBE's. (These are also included under the first category (7.1 above).	D		
7.5	Estimated percentage of subcontract/Supplier dollars committed to "local" Maryland businesses. For purposes of this proposal, a "local" Maryland business is a business with its primary base of operations located in the same county as the job site for this project, or a Maryland business located within twenty-five (25) miles of the job site.	D		
7.6	Other benefits to the Maryland economy which the offeror promises shall result from awarding the contract to the offeror. Describe the benefit, its value to the Maryland economy (in terms of percentages), and how it shall result from the contract award	D		

Attachment 3 – Traffic Data Pricing Sheet

Please download the pricing data sheet at the following link:

<https://tetcoalition.org/projects/vpp-marketplace/>

Attachment 4 –
The Eastern Transportation Coalition Traffic Data Marketplace (TDM)
Dispute Resolution Process

When/if a Contractor fails to meet any of the requirements as outlined in the RFP, this includes the technical and licensing specifications provided in Part I, Section C, resolution will be handled through the following Coalition TDM Dispute Resolution Process:

- (A) Upon notification, from a Coalition member who has written a Task Order with the Contractor or from Coalition staff, of a failure to meet contract specifications as laid out in this RFP and subsequent Contract, the issue will be escalated to a Coalition named TDM Dispute Resolution Committee. The Committee will provide written notice to the Contractor of the failure.

The TDM Dispute Resolution Committee will be composed of representatives from Coalition Member Organizations which have active Task Orders with one or more Contractors from the ETC TDM, and one member of the Coalition staff.

- (B) The Contractor will have 30 days to respond to the notification, and offer resolution to issue. If the Coalition or Coalition Member is satisfied with the resolution, no further action will be taken.

- (C) If the Contractor fails to resolve the issue or the offer of resolution is not deemed satisfactory, the TDM Dispute Resolution Committee may take one or more of the following actions.

- i. Reduce any outstanding invoice from the Contractor by an amount the Committee deems appropriate, and any future invoices until the issues is resolved by the contractor.
- ii. Cancel the contract with the Contractor, and terminate any existing Task Orders against the contract.
- iii. Offer other resolution as deemed appropriate by the Committee.

Any actions to reduce payment, cancel existing task orders or cancel a contracts will be coordinated with the University of Maryland Procurement, subject to applicable Contract clauses in Section I, Paragraphs 22, 23, and 24.

Specific to Traffic Data Availability Specifications

Data quality must meet the availability requirements as noted in Part I, Section C, subsection 3.1 to receive full payment for time periods invoiced. If Contractor fails to meet the availability specification (99.5%), payment for the associated time periods may be discounted by an amount equal to the downtime