

REQUEST FOR PROPOSAL NO. 19-012

FRAMEWORK FOR EVALUATING BIG DATA IN REGIONAL TRAVEL AND MOBILITY ANALYSES

Offerors shall submit one (1) original and

five (5) copies of their proposal, and one "soft" copy on CD/DVD or Thumb-drive to:

Alieu Turay
Contracts and Purchasing Specialist II
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington, D.C. 20002-4290

Submission Deadline: Wednesday, April 10, 2019

Time: 2:00 PM EST

REQUEST FOR PROPOSAL RFP# 19-012

February 27, 2019

FRAMEWORK FOR EVALUATING BIG DATA IN REGIONAL TRAVEL AND MOBILITY ANALYSIS

I. METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

The Metropolitan Washington Council of Governments ("COG") is the regional organization of the Washington area's 24 major local governments and their governing officials, plus area members of the Maryland and Virginia legislatures and the U.S. Senate and House of Representatives.

COG provides a focus for action on issues of regional concern such as comprehensive transportation planning, air and water quality management, environmental monitoring, tracking economic development and population growth and their effects on the region, coordinating public safety programs, and promoting child care and housing for the region. COG is supported by financial contributions from its participating local governments, federal and state government grants and contracts, and through grants and contracts from foundations and the private sector.

The National Capital Region Transportation Planning Board ("TPB") is responsible for coordinating transportation planning at the regional level in Northern Virginia, Suburban Maryland and the District of Columbia. The TPB is the federally designated Metropolitan Planning Organization ("MPO") for the region and plays an important role as the regional forum for transportation planning. The TPB prepares plans and programs that the federal government must approve for federal-aid transportation funds to flow to the Washington region.

Members of the TPB include representatives from the transportation agencies of the states of Maryland, Virginia, and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority ("WMATA"), the Maryland and Virginia General Assemblies, non-voting members from the Metropolitan Washington Airports Authority ("MWAA"), and federal agencies.

The TPB was created in 1965 by local and state governments in the Washington region in response to a requirement in 1962 highway legislation mandating the establishment of official MPOs. The TPB became associated with COG in 1966, serving as COG's transportation policy committee.

II. PROJECT OVERVIEW

As part of the state Technical Assistance Program within the Fiscal Year 2019 Unified Planning Work Program (UPWP), TPB, in coordination with the District of Columbia Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), and WMATA, is commissioning a study and seeking a qualified

Contractor to conduct an independent evaluation of Big Data and its use and limitations in regional travel and mobility analyses and modelling.

Big Data is characterized as an information asset with such high volume, velocity, and variety that specific technology and analytical methods are required for its transformation into value¹. With processing and analytics tools, Big Data can illustrate patterns and trends in human behavior and activity. Big Data sources with transportation planning applications include but are not limited to passively collected data from mobile applications, including GPS traces and location-based services, on-board vehicle sensors, traffic sensors and cameras, unmanned aircraft/space-based radar used to monitor traffic flow, and smart card data.

III. BACKGROUND

Transit agencies, state departments of transportation, and metropolitan planning organizations rely on conventional survey and field data collection methods to gather data to understand travel behavior. These methods entail lengthy and costly data collection projects, but the importance of the data collected is vital to understanding travel behavior and mobility.

Throughout its history, the TPB has employed a rigorous data collection program to obtain key information on travel throughout the Washington region. Efforts include a once-a-decade regional household travel survey, various traffic count studies, on-board transit surveys, and a bi-annual regional air passenger survey, among others. The regional household travel survey provides TPB with statistically-significant data on travel conducted by the region's households. Data include trip origin/destination, trip length, frequency of trips, travel mode, travel time, and trip purpose, etc.

The regional air passenger survey provides similar information for persons who travel from a home or work location to one of the three major commercial airports in the region. Traffic count studies yield valuable information on vehicle volumes and vehicle occupancy at key locations at specified times of the day.

The data resulting from all these efforts are used to estimate, calibrate, and validate the regional travel demand model, which is one of the primary technical tools used by TPB to estimate current travel in the region as well as forecast future travel to inform regional leaders in transportation planning and decision-making.

Although costly and time-consuming, there is a clear advantage to having produced these datasets in this manner over many years. By maintaining oversight and control over the data collection methodology and protocols, TPB has been able to ensure reliable and statistically-valid time series of data that are used to analyze and understand regional travel behavior over many decades.

The emergence of Big Data holds tremendous potential for advancing our understanding of travel behavior and mobility. Big Data may provide key insights on regional travel behavior that were previously obtained with surveys and traffic counts. Private data vendors now

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¹ De Mauro, Greco, Grimaldi, (2016) "A formal definition of Big Data based on its essential features", Library Review, Vol. 65 Issue: 3, pp.122-135, https://doi.org/10.1108/LR-06-2015-0061

provide access to Big Data using various cost models, ranging from one-time purchases, to limited subscriptions, to full subscriptions that include professional data analysis services. While Big Data presents opportunities, such as validating other data or possibly replacing conventional data collection, it brings new challenges for TPB, including but not limited to:

- Ensuring methodological consistency from vendor to vendor and/or for multi-year time series;
- Developing and applying practices to independently validate and verify data;
- Balancing the "black box" competitive/proprietary information concerns of vendors of private-sector-sourced data with the TPB need to document methodological relationships across member agencies, programs, and studies;
- Keeping abreast of the quickly-evolving marketplace of Big Data products;
- Accommodating randomly timed "sales calls" by data vendors outside a traditional request for proposals process;
- Maintaining access to and fully leveraging gratis data and associated analysis tools, such access to the Vehicle Probe Project / Probe Data Analytics Suite available through TPB's affiliate membership in the I-95 Corridor Coalition; and
- Determining how to maximize value while evaluating competing Big Data products, including those that TPB can already access.

IV. PURPOSE

COG seeks a qualified firm to perform an independent evaluation of Big Data sources and their applicability in evaluating regional travel behavior and in estimating, calibrating, and validating regional travel demand models.

- A. As part of this effort, the Contractor shall perform a variety of tasks that generally will fall into the following three (3) broad categories:
 - 1. Review and compare how other metropolitan areas have used Big Data in similar applications
 - 2. Identify and analyze potential Big Data sources,
 - 3. Recommend if TPB should pursue Big Data and, if so, provide a corresponding strategy to invest in Big Data to support future transportation planning studies and analyses as well as support for regional travel demand forecasting activities.
- B. A single-award contract to a qualified firm will be used to procure this evaluation and may include optional future tasks to perform technical analyses of travel behavior in the Washington metropolitan region.
- C. TPB ultimately is interested in whether Big Data analytics can be used appropriately to examine travel behavior and mobility in the Washington region, and gain insight on the strengths and limitations of Big Data sources in conducting mobility analyses.
- D. TPB seeks the following work products from a Contractor. (Note: Work products also are identified in the Scope of Work, which contains more detailed, specific descriptions):

- 1. State-of-the-practice review of the use of Big Data to analyze mobility and travel behavior by Metropolitan Planning Organizations (MPOs);
- 2. Identification and analysis of potential Big Data sources, including strengths, limitations, and appropriateness for various types of analytical studies; and
- 3. A recommendation for TPB to (or to not) pursue Big Data and a corresponding strategy for investment, including detailed information on the commitment that would be required of TPB to procure Big Data—i.e. the cost of data purchase/subscriptions; best practices for Big Data source identification, consideration, and review; minimum IT requirements to adequately store, process, query, analyze, and document results; staff competencies required to manage and conduct Big Data analyses.
- E. This is to be a fully "independent" evaluation. As such, it is intended and expected that responses to this RFP would be submitted by entities that are not Big Data providers or have no affiliation, strategic partnership, or a financial stake in a Big Data provider.
- F. In their responses to this RFP, Offerors should demonstrate their ability to conduct this evaluation in an independent manner.
- G. This evaluation is intended to provide TPB with necessary information and understanding of the strengths, limitations, applicability, and acquisition costs of various potential Big Data sources before committing to a significant investment in Big Data. TPB seeks to determine the feasibility of using various Big Data sources to:
 - Analyze regional travel and mobility to help validate data TPB collects through its conventional survey and traffic monitoring programs described earlier and to provide additional information and understanding of aspects of mobility that are not easily captured through conventional programs.
 - 2. Estimate, calibrate, and validate its regional travel demand model.
 - 3. Fulfill federal mandates for a regional Congestion Management Process (CMP).
 - 4. Understand the characteristics and impacts of emergent travel options and technologies on travel throughout the region, including, but not limited to, the rapid rise in the use of Transportation Network Companies (TNCs), such as Uber and Lyft², traffic information and route navigation apps such as Google Maps and Waze, and real-time arrival and trip-planning for transit, ridesharing, bikesharing, etc.
- H. If the findings of this study result in obtaining Big Data to conduct regional travel and mobility analyses, TPB intends to apply Big Data analytics in answering key research questions on regional travel and mobility as well as travel demand modelling. The

² By some estimates, Uber and Lyft now carry more passengers in the DC area than Metrobus.

following list reflects numerous potential research considerations that Big Data may assist in addressing.

List 1 - Research Considerations for Big Data

1. Travel Demand Modelling

- a. Obtaining origin-destination ("O-D") patterns by mode.
- b. Obtaining geographic O-D for trips that use a specific road segment.
- c. Obtaining better information about vehicle travel speeds and volumes.
- d. Better understanding the dynamically-priced toll lanes, such as the High Occupancy Toll ("HOT") lanes in Virginia, including who is using them and the rate at which they are being used per week.
- e. Understanding the volume breakdown between the adjacent general-purpose lane and dynamically-priced lanes as well as the magnitude of changes in traffic volumes in the general purpose and dynamically-priced lanes that result in HOT lane price changes.
- f. Identifying trip purpose / type of destination
- g. Obtaining estimates of through travel and external travel (external-to-internal and internal-to-external), including external transit travel, which is not currently included in the travel demand forecasting model.
- h. Obtaining data to calibrate/validate TPB's new generation of travel demand models, such as estimating signal delay or queue length.

2. Transportation Network Companies ("TNCs")

- a. Quantifying the magnitude and O-D patterns of TNC trips.
- b. Assessing the existing and forecasting the future relationship between TNCs and transit travel (i.e., understanding where TNCs support/enhance transit use and where TNCs compete with/supplant transit travel).
- c. Understanding how and where (across the region, by land use, by residential and commercial density) TNCs are influencing Vehicle Miles of Travel (VMT).
- d. Temporal distribution of TNC ridership (in rush hours, weekday/weekend, monthly, and quarterly).
- e. Demography of TNC riders in the region, including but not limited to income, race/ethnicity, and gender.

3. Travel Demand Management ("TDM")

- a. Evaluating the influence of employer-based TDM policies on travel behavior (e.g. obtaining more insight about the influence of teleworking policies on trip generation).
- b. Supporting TDM model calibration.
- c. Estimating the current and forecasting the future share of the workforce that is telecommuting on a given day.

4. Connected Autonomous Vehicles ("CAVs") (Once CAVs represent a more significant share of motor vehicles)

- a. Obtaining O-D information about CAVs, both personally owned and fleet vehicles.
- b. Understanding how auto occupancy levels could be affected by CAVs, zero-occupant vehicles, and shared mobility service.

- c. Understanding how CAVs could impact other TDM measures (walking/biking/transit, rideshare/telework, etc.).
- d. Understanding how CAVs could impact employer and residential location considerations.
- e. Forecasting the impact of CAVs on parking, including revenue generation.
- f. General availability of data from CAVs.

5. Traffic Counts

- a. Obtaining permanent/temporary/hourly traffic count data.
- b. Providing a measure of the day-to-day variability of traffic counts.
- c. Validating and supplementing traffic counts collected by State DOTs.
- d. Obtaining vehicle classification estimates to supplement traffic counts collected by State DOTs.
- e. Data on longitudinal traffic counts (traffic counts by certain times of day over years / overlaid with different land use developments and policies such as HOT lanes).
- f. Determining vehicle classification within traffic counts.

6. System Performance/Congestion Management Process

- a. Monitoring and/or evaluating transportation system performance.
- b. Obtaining regional and/or project-specific congestion management information.
- c. Understanding impacts of congestion management strategies.
- d. Recognizing trends in new congestion management strategies and beginning to predict/track their impacts as well.
- e. Understanding impacts of specific events, such as major traffic incidents, severe weather events, or major scheduled special events, as well as the impacts of strategies employed to manage transportation impacts of these events.

7. Other Research Considerations

- a. Obtaining information about existing and forecast regional freight and commercial vehicle travel.
- b. Obtaining information about intercity bus travel.
- c. Validating data collected from household travel surveys (i.e., National Household Travel Survey (NHTS), Washington Regional Travel Survey, etc.).
- d. Integrating Big Data with household travel surveys to provide both long-distance and local travel behavior data on a recurring basis.
- e. Using O-D data to validate model estimation derived from household travel surveys.
- f. Identifying the destination choice and mode choice for areas with high concentrations of low-income and/or minority residents.
- g. Understanding interactions between traffic, traffic congestion, and transit bus operations.
- h. Monitoring real-time traffic/transit/rail data.
- i. Evaluating how Big Data could be used for transportation-related project selection.
- j. Understanding how the use of alternative modes for commuting (bike, walk, ridesharing, transit, car/vanpool, telework) affects the overall network in terms of major highways and arterials and how the level of service (LOS) would look if the individuals using those modes drove alone instead.

V. SCOPE OF WORK

Task 1: Establish Technical Advisory Committee ("TAC") Membership, Responsibilities, and Meeting Schedule and Create Study Work Plan

- A. Upon Notice to Proceed ("NTP") from the assigned COG Project Manager, the Contractor shall draft an invitation to potential TAC members, describing the purpose of the study and roles and responsibilities of TAC members. The TAC shall be composed of technical staff sourced from among COG, DDOT, MDOT, VDOT, WMATA, and member local governments, as appropriate.
- B. The COG Project Manager, in consultation with other technical staff, will provide guidance to the Contractor on invitation language and potential jurisdiction and agency membership (including points of contact) in the TAC. The Contractor shall maximize jurisdiction and agency participation in the TAC and ensure that TAC members actively participate in guiding the study and reviewing deliverables.
- C. The Contractor shall schedule an initial meeting with the TAC no later than thirty (30) days following NTP.
- D. At the initial meeting, the Contractor shall distribute for TAC review and approval a draft study work plan, the document outlining the study purpose and TAC member roles and responsibilities, and a draft TAC meeting schedule for the length of the study.
- E. COG anticipates that the TAC will meet at least once a month.
- F. The study work plan shall contain a timeline and narrative for completing all tasks and subtasks in the study and shall also include major milestones such as draft deliverables and TAC review and comment on draft deliverables, as well as TAC meetings.
- G. The Contractor may adapt the study work plan from one submitted in response to this Request for Proposals ("RFP"), but it should reflect current knowledge and conditions at the time of the first TAC meeting.
- H. Contractor shall take written notes at all TAC meetings (including any follow-up actions and responsible parties) and distribute them for review within five (5) working days of the meeting.
- I. The study work plan shall be finalized within ten (10) working days of the first TAC meeting and shall include a list of information and data that will be requested from jurisdictional and agency staff through the TAC membership to support Task 2 and 3.
- J. The study work plan shall also include milestone briefings to the Travel Forecasting Subcommittee, TPB Technical Committee, and other appropriate TPB committees/subcommittees/working groups.

Deliverables: TAC membership, TAC written purpose/objectives, TAC meeting schedule, study work plan with milestones and TAC review responsibilities, TAC meetings, TAC meeting notes

Task 2: State-of-the-practice review of the use of Big Data to analyze mobility and travel behavior by Metropolitan Planning Organizations.

- A. In accordance with the work plan developed in Task 1 and under the oversight of COG and the TAC, the Contractor shall research and compile information on other metropolitan areas' experience using Big Data to support mobility and travel behavior analyses and regional travel demand modelling activities.
- B. The metropolitan areas examined should be comparable to the National Capital Region in either size, complexity of regulatory environment, or some other appropriate measure(s) that would provide appropriate insights for the National Capital Region.
- C. The analysis should identify the following:
 - 1. What other MPOs are using (or have considered) using Big Data.
 - 2. What Big Data sources were considered and used.
 - 3. Why the region selected the data sources used.
 - 4. How Big Data was applied, including what tasks (model calibration, congestion monitoring, etc.) it helped accomplishment.
 - 5. Whether Big Data was used to replace existing data collection/analysis methods and programs.
 - 6. Whether Big Data was used to supplement and validate existing methods and programs.
 - 7. Whether Big Data was used as part of a first-time methodology to address a new requirement or planning study.
 - 8. Lessons learned or changes in courses of action in applying Big Data in regional planning analyzed.
 - 9. Whether and how the region addressed any of the specific COG Big Data considerations in List 1.
- D. The research consideration identified in List 1 of this RFP shall inform this task. To that end, the benchmark analysis should identify whether other regions used Big Data to address any of those specific questions.
- E. The benchmark analysis shall be documented in a technical memorandum that documents the methodology, analysis, findings, and conclusions of this task.
- F. The technical memorandum shall include a matrix or similar methods to convey comparable information in a side-by-side format, when appropriate.

G. The use of graphics, tables, charts, and other appropriate visualizations is encouraged to convey distilled information and findings of the benchmark study.

Deliverables:

- 1) Draft Technical Memorandum
- 2) Final Technical Memorandum
- 3) Presentations as identified in the work plan

Task 3: Big Data evaluation

- A. Building on the lessons and insights gained from Task 2 and under the direction of the TAC, the Contractor shall identify and analyze potential Big Data sources, specifically with respect to the research considerations identified in Section IV-Purpose of this RFP.
- B. During this task, the Contractor shall -
 - 1. Develop a comprehensive data needs table that addresses TPB's research considerations for Big Data (see List 1).
 - 2. Conduct an independent evaluation of potential Big Data sources.
 - 3. Develop a matrix identifying Big Data sources that respond to TPB's comprehensive data needs.
 - 4. Provide guidance and caveats for each Big Data source analyzed.
- C. As part of this task, the Contractor shall identify Big Data sources along with their strengths, limitations, and appropriateness for various analyses and applications.
- D. For each Big Data source identified, the Contractor shall provide a thorough description of how that data source can be applied to the research considerations identified in this RFP.
- E. This description shall include whether Big Data could be used to replace existing research and analysis methods used by TPB or if Big Data could be used as a supplemental tool to augment and/or validate research and analysis activities undertaken by TPB.
- F. The Contractor shall also provide guidance and caveats on the general applicability and reliability of the various Big Data sources for various tasks.
- G. This should include a justification based on a variety of considerations including, among others, the following:
 - 1. The commitment that would be required of TPB to procure Big Data—cost of data purchase/subscriptions.
 - 2. The ability/limitations of TPB to partner and/or share data with other stakeholders, including licensing restrictions.

- 3. Minimum IT requirements to adequately store, process, query, analyze, and document results either locally or in cloud-based platforms.
- 4. Technical staff competencies required to manage and conduct Big Data analyses.
- 5. Training requirements to ensure continuity of staff competencies to manage and conduct Big Data analyses.
- 6. Assurances of a consistent methodology used to develop and maintain Big Data over the long term (years, possibly decades) to ensure the integrity of time-series analyses.
- H. The Contractor shall make specific recommendations whether to invest in Big Data, including a strategy for investment and specific Big Data sources.
- I. The Contractor should identify not only what investment would be required of TPB to acquire recommended Big Data on its own; it should also be cognizant of partnering opportunities that may exist with other agencies to leverage resources and gain efficiencies through partnering. For example, if one agency already subscribes to a recommended Big Data source but that license only covers a portion of the region, then what incremental investment might be required of TPB to make in order to have access to this Big Data for the entirety of the region. Similarly, if one agency already subscribes to a recommended Big Data source that covers the entire region but has limited licensing and sharing restrictions, what incremental investment might be needed to modify the terms of the license to expand the scope of use and access of the Big Data.
- J. The Contractor shall develop these recommendations with independent thinking that is informed by the analysis it performed for this study.
- K. The Contractor will evaluate the usefulness and applicability of each Big Data source with respect to TPB's in-house research and analyses methods and capabilities that it has cultivated over decades.
- L. This research project recognizes that in regional transportation planning there is no "one size fits all" solution. The goal of this study is to thoughtfully consider the merits and limitations in investing in Big Data to support the depth and breadth of research, analysis, and modelling activities conducted at TPB. The study's resulting final report will include all findings from the aforementioned task as well as the State-of-the-practice review completed in Task 2.
- M. The final report shall include the following elements:
 - 1. State-of-the-practice review of other metropolitan areas' experience using Big Data to analyze mobility and travel behavior and to estimate, calibrate, and validate the regional travel demand model.

- 2. Identification and analysis of potential Big Data sources, including strengths, limitations, sources/methodology, and appropriateness for various types of analytical studies.
- 3. A recommendation about whether (or not) to pursue Big Data and a corresponding strategy for investment or plan to reevaluate.
- 4. If Contractor recommends pursuing Big Data, Contractor shall provide a strategy for investing in Big Data source(s), including detailed information on the commitment that would be required of TPB to procure Big Data—cost of data purchase/subscriptions; minimum IT requirements to adequately store, process, query, analyze, and document results; staff competencies required to manage and conduct Big Data analyses. If the Contractor recommends acquisition of specific Big Data sets, the Contractor shall include a procurement strategy as part of the recommendations.
- 5. If Contractor recommends against pursuing Big Data, Contractor shall provide a detailed explanation and plan for reevaluating potential use of Big Data.

Deliverables:

- 1) Draft Report
- 2) Final Report
- 3) Presentations as identified in the work plan

VI. SPECIAL CONDITIONS

The following conditions apply to the Contractor selected:

- A. Federal, state or foreign taxes are not allowable.
- B. Legal fees of any type are not allowable without prior written approval of COG Contracting Officer.
- C. In the event the project is terminated by administrative action, the Contractor will be paid for work actually performed to the date of termination.
- D. Any work to be subcontracted to a Subcontractor shall be clearly identified and such Subcontractor shall be approved by COG prior to contract issuance.
- E. The Contractor, acting as an independent contractor, shall defend and hold COG harmless from and shall be solely responsible, where found liable, for the payment of any and all claims for loss, personal injury, death, property damage, or otherwise, arising out of any act of omission or negligence of its employees or agents in connection with the performance of this work.
- F. In case of failure by the Contractor and/or Subcontractor to perform the duties and obligations imposed by the resulting contract, COG may, upon verbal notice, to be confirmed in writing, procure the necessary services from other sources and hold the Contractor and/or Subcontractor responsible for any and all additional costs occasioned thereby.

- G. The Contractor covenants that it presently has no interest, shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this contract. The Contractor further covenants that in the performance of this contract, no person having any such interest shall be employed.
- H. It is understood that funding for the ensuing contract is contingent upon COG receiving funds from the sponsoring agency. Should funding from the sponsoring agency be delayed, for any reason, COG shall make a concomitant delay in funding to the Contractor.
- I. Payment will be made to the Contractor within 30 days following the receipt of a correct invoice from the contractor and approval of the COG Project Manager. Contractor shall submit its final invoice within 30 days after expiration of the contract.
- J. In submitting a proposal in response to this RFP, and in performing services under any contract resulting from this RFP, the successful Contractor shall be bound by, and comply with, all the terms, conditions, and requirements contained within Attachments A and B.
- K. All soft copy and digital materials that Contractor obtains from jurisdictions and agencies to complete the scope of work must be transferred to COG in native machine-readable file formats (e.g., Excel data must be delivered in unprotected, open, read-write Excel files).
- L. Deliverables should be in common electronic formats and files and are not considered final and complete until the COG Project Manager has confirmed in writing that they have been accepted.

VII. INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

- A. COG intends to award a single contract resulting from this solicitation to the responsible Contractor whose proposal conforms to the solicitation and will be most advantageous to COG and its members. Proposals will be evaluated on the basis of cost, technical and other requirements specified herein.
- B. COG may award a contract based on initial offers received without discussion. Therefore, each initial offer should contain the Offeror's best terms from a price and technical standpoint. COG may communicate with Offerors to clarify, verify or obtain additional information about its past performance or experience.

VIII. PERIOD OF PERFORMANCE AND TYPE OF CONTRACT

- A. The period of performance shall begin once the Executive Director of COG has signed a contract and continue through June 30, 2020
- B. The Contract will be issued as a time and materials basis in an amount not to exceed one hundred forty-five thousand dollars (\$145,000).

IX. CONTENT OF PROPOSAL

A. Format

All potential Contractors must submit their proposals following the prescribed format. Adherence to the proposal format by all Offerors will ensure a fair evaluation regarding the needs of COG.

Offerors not following the prescribed format may be deemed non-responsive. The letter transmitting the proposal must be signed by an officer authorized to bind the Offeror. The proposal must include the following:

1. Section 1. Qualifications of the firm and key personnel

- a. This section shall provide the professional credentials and expertise of the Offeror and key personnel assigned to this project.
- b. Although standard personnel resumes may be included as attachments to the proposal, amplification specific to this solicitation is required in this section.
- c. The absence of such project specific information shall cause the proposal to be deemed non-responsive.

2. Section 2. Proposed method to accomplish the work

- a. In this section of the proposal, Offerors must provide a detailed description of their approach for accomplishing the tasks specified herein.
- b. This section shall include a work plan, schedule, and a project management plan that will detail all lines of authority and communication which will support all the project requirements and logically lead to the deliverables required in this RFP.
- c. A matrix shall be provided which will identify, by task, key personnel assignments and the number of anticipated hours for those personnel by task.
- d. Timely completion of the tasks outlined for this PROJECT is of critical importance. Offerors are to provide a brief description of their current projects and the availability of key personnel proposed in this PROJECT.

3. Section 3. Cost proposals for the Offeror and any Subcontractor(s).

This section shall provide the total costs by work task, including all expenses, profits and fees to be charged to COG for providing the services described above.

4. Section 4. References of the Contractor and any Subcontractor(s)

a. The proposed Contractor and any Subcontractor shall provide at least three (3) references who COG may contact regarding similar work performed.

- b. Offerors may provide letters of reference from previous relevant clients. Names, titles, addresses and telephone numbers shall be included for each reference.
- c. All three of these references shall include work in which the key personnel proposed to COG have been assigned. **See Attachment D**.

B. Proposal Document Organization

- 1. Respondents shall submit a cover letter to COG Contracts and Purchasing Manager, (address above) signed by an authorized principal or agent of the Offeror, which provides an overview of the proposal, as well as, the name, title and phone number of the person to whom questions may be directed to concerning the proposal.
- 2. The letter should also include a statement by the Offeror accepting all terms and conditions contained in this RFP. The written proposal shall be organized to match the headings delineated below:
 - a. Letter of Interest
 - b. Table of Contents
 - c. Executive Summary
 - d. Qualifications of the Firm and key Personnel
 - e. Proposed method to accomplish the work
 - f. Cost Proposal
 - g. References (See Attachment D)

X. PROPOSAL QUESTIONS

Technical and procedural questions concerning the RFP must be submitted in writing to Alieu Turay at aturay@mwcog.org with a courtesy copy to purchasing@mwcog.org no later than 2:00 PM on Monday March 25, 2019.

All technical and procedural questions will be posted to the web as an addendum to this RFP within three (3) working days after the cutoff date. No questions will be accepted following the cutoff date.

XI. SUBMISSION DATE AND CONTACT

- A. Proposals shall be received by no later than 2:00 P.M., Wednesday, April 10, 2019.
- B. Please place the RFP number on the outside of your submission. <u>Proposals may not be</u> submitted through fax, email, or other electronic methods.

C. Offerors shall submit one (1) original and five (5) copies of their proposal, and one "soft" copy on CD/DVD to:

Alieu Turay
Contracts and Purchasing Specialist II
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington, D.C. 20002-4290

D. LATE PROPOSALS

Any proposal received at the address designated in this RFP after the exact time specified for receipt, will not be considered unless it is the only proposal received. Any modifications to a proposal will be subject to these same conditions.

XII. METHOD OF PROPOSAL EVALUATION AND SELECTION

The proposals will be evaluated by a technical selection committee. The selection committee may hold, at COG's option, a pre-selection meeting with the top-ranked Offerors.

The final recommendation for selection to the COG Contracting Officer may be made based upon interviews and/or a best and final offer submitted by the Offerors, if required by the selection committee. In evaluating the proposals, the following factors will be considered, with points awarded up to the maximum shown:

Factor	Points
Understanding and methodology used for the project	35
Demonstrated knowledge and experience of Key Personnel and availability of	30
Key Personnel	
Cost and Price Analysis	20
DBE Participation	15
Total Points	100

XIII. DISADVANTAGED BUSINESS ENTERPRISE

- A. Disadvantaged Business Enterprise ("DBE") participation shall be an integral component of the Contractor selection process for this RFP. COG's DBE Policy may be viewed on its website www.mwcog.org. Responding firms shall submit with their proposals a DBE Participation Plan to meet this goal. The plan shall identify any DBE (defined in 49 CFR Part 26) that shall be participating in the project. The plan shall include the name and address of the firm, a copy of the firm's current DBE Certification from any federal, state or local government agency that certifies DBE ownership (please note only DBE certifications will be accepted by COG for this purpose).
- B. COG, in accordance with Title VI of the Civil Rights Act of 1964 and 78 Stat. 252, 42 USC 2000 d 42 and Title 49, Code of Federal Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered pursuant to this advertisement will afford minority business enterprises full opportunity to submit bids in response to

this invitation, and will not discriminate on the grounds of race, color, sex, or national origin in consideration for an award.

- C. <u>DBE Assurance</u> The Contractor or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- D. A total of 15 possible points (out of a maximum of 100 points) may be awarded for DBE participation, as measured in dollars, either as the Contractor or "Subcontractor". In the event of a tie score between two or more proposals, the proposal with the largest percentage of DBE participation, as measured in dollars, will be awarded the contract. DBE points are to be awarded as follows:

PARTICIPATION POINTS	
10% to 14%	3
15% to 19%	6
20% to 24%	9
25% to 34%	12
35% or more	15

Federal Law – CFR Part 26.37 (Monitoring Performance) requires COG to include a monitoring and enforcement mechanism to ensure that work committed to DBEs at task order award is performed by DBE's.

To comply with this requirement, the Contractor is required to provide to Rick Konrad, COG Contracts and Purchasing Manager: (1), a monthly DBE payment schedule for the project within 10 days of being awarded a COG Contract/Task Order (consistent with the DBE dollar value included in the Proposal/Task Order), (2), monthly DBE payment documentation is required by the 20th day of the month following the month the work was performed, and (3), documents verifying that the DBE vendor was paid the amount specified in the Proposal/Task Order within 30 days after the contract ends. Contractors failing to provide COG required DBE documentation or meet DBE monthly payments will not be allowed to bid on any COG projects/task orders until any deficiency is corrected. Contractors who fail to meet the total DBE payment for any project will be suspended from bidding on any COG contracts/task orders for six (6) months.

All questions on the DBE requirements should be sent to Rick Konrad at rkonrad@mwcog.org or call 202.962.3332.

SAMPLE DBE PARTICIPATION PLAN

	PERCENTAGE OF CONTRACT
Subcontractor:	OI CONTINACI
Address:	

RFP 19-012 FRAMEWORK FOR EVALUATING BIG DATA IN REGIONAL TRAVEL AND MOBILITY ANALYSIS

Certifying State:	DBE Certification #	
Subcontractor:		
Address:		
Certifying State:	DBE Certification #	
Subcontractor:		
Address:		
Certifying State:	DBE Certification #	

ATTACHMENT A STANDARD TERMS AND CONDITIONS

- A. Energy Conservation. 42 U.S.C. § 6321 et seq.
 - The SUBRECIPIENT agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.
- B. Clean Water Requirements. 33 U.S.C. § 1251 et seq.
 - The SUBRECIPIENT agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended. The SUBRECIPIENT agrees to report each violation to COG and understands and agrees that COG will, in turn, report each violation, as required, to assure notification to appropriate federal agencies including the appropriate EPA Regional Office.
 - 2. The SUBRECIPIENT also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with federal assistance.
- C. <u>Lobbying</u>. 31 U.S.C. § 1352 et seq. (To be submitted with each bid or offer exceeding \$100,000)
 - 1. The undersigned certifies, to the best of his or her knowledge and belief, that:
 - 2. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of and federal contract, grant, loan, or cooperative agreement.
 - 3. If any funds other than federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). [Note: Language in paragraph (b) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995. (P.L. 104-65, to be codified at 2 U.S.C. § 1601 et seq.)]
 - 4. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

5. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

Date:	
The SUBRECIPIENT,, certified accuracy of each statement of its certification and SUBRECIPIENT understands and agrees that the papply to this certification and disclosure, if any.	disclosure, if any. In addition, the
	Signature of SUBRECIPIENT
Authorized Official	
	Name of SUBRECIPIENT
Authorized Official	
	Title of SUBRECIPIENT
Authorized Official	

D. Access to Records and Reports. 49 U.S.C. § 5325

- The SUBRECIPIENT agrees to provide COG, and if applicable the state or federal
 funding agency, the Comptroller General of the United States or any of their
 authorized representatives access to any books, documents, papers and records
 of the SUBRECIPIENT which are directly pertinent to this Contract for the
 purposes of making audits, examinations, excerpts and transactions.
- The SUBRECIPIENT agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- 3. The SUBRECIPIENT agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case the SUBRECIPIENT agrees to maintain same until COG, the applicable state or federal funding agency, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

E. <u>Funding Agency Changes</u>.

The SUBRECIPIENT shall at all times comply with all applicable state and federal agency regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the funding agreement between such agency and COG, as they may be amended or promulgated from time to time during the term of this Contract. SUBRECIPIENT failure to comply shall constitute a material breach of this Contract.

F. Clean Air. 42 U.S.C. § 7401 et seq.

- 1. The Clean Air requirements apply to all contracts exceeding \$100,000, including indefinite quantities where the amount is expected to exceed \$100,000 in any year.
- 2. The SUBRECIPIENT agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. The SUBRECIPIENT agrees to report each violation to COG and understands and agrees that COG will, in turn, report each violation as required to assure notification to the funding federal agency, if any, and the appropriate EPA regional office.
- 3. The SUBRECIPIENT also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with federal assistance.

G. Recycled Products. 42 U.S.C. § 6962

- The Recycled Products requirements apply to all contracts for items designated by the EPA, when COG or the SUBRECIPIENT procures \$10,000 or more of one of these items during the fiscal year, or has procured \$10,000 or more of such items in the previous fiscal year, using federal funds.
- The SUBRECIPIENT agrees to comply with all requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. § 6962), including but not limited to regulatory provisions of 40 C.F.R. Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 C.F.R. Part 247.

H. No Government Obligation to Third Parties.

- 1. The SUBRECIPIENT acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities of COG, the SUBRECIPIENT, or any other person (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.
- The SUBRECIPIENT agrees to include the above clause in each subcontract
 financed in whole or in part with federal assistance. It is further agreed that the
 clause shall not be modified, except to identify the SUBRECIPIENT that will be
 subject to its provisions.

- I. Program Fraud and False or Fraudulent Statements and Related Acts. 31 U.S.C. § 3801 et seq.
 - 1. The SUBRECIPIENT acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and all appropriate federal agency regulations apply to its actions pertaining to this PROJECT. Upon execution of the underlying contract, the SUBRECIPIENT certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract of the federally assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the SUBRECIPIENT further acknowledges that if it makes, or caused to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the SUBRECIPIENT or to the extent the Federal Government deems appropriate.
 - 2. The SUBRECIPIENT also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with federal assistance, the Federal Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(N)(1) on the SUBRECIPIENT, to the extent the Federal Government deems appropriate.
 - 3. The SUBRECIPIENT agrees to include the above two clauses in each subcontract financed in whole or in part with federal assistance. It is further agreed that the clause shall not be modified, except to identify the SUBRECIPIENT who will be subject to the provisions.
- J. Termination. 49 U.S.C. Part 18

Applicable to all contracts in excess of \$10,000

- Termination for Convenience. COG, by written notice, may terminate this
 Contract, in whole or in part, at any time by written notice to the SUBRECIPIENT
 when it is in COG's best interest. If this Contract is terminated, COG shall be liable
 only for payment under the payment provisions of this Contract for services
 rendered before the effective date of termination.
- 2. Termination for Default [Breach or Cause]. If the SUBRECIPIENT fails to perform in the manner called for in this Contract, or if the SUBRECIPIENT fails to comply with any other provisions of the Contract, COG may terminate this Contract for default. Termination shall be effected by serving a notice of termination on the SUBRECIPIENT setting forth the manner in which the Contract is in default. The SUBRECIPIENT will only be paid the contract price for services performed in accordance with the manner of performance set forth in the Contract. If it is later determined by COG that the SUBRECIPIENT had an excusable reason for not performing, such as strike, fire, or flood, events which are beyond the control of the SUBRECIPIENT, COG, after setting up a new delivery of performance schedule, may allow the SUBRECIPIENT to continue work, or treat the termination as a termination for convenience.
- 3. COG in its sole discretion may, in the case of termination for breach or default, allow the SUBRECIPIENT ten (10) working days in which to cure the defect. In

such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If the SUBRECIPIENT fails to remedy to COG's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within the ten (10) working days after receipt by the SUBRECIPIENT of written notice from COG setting forth the nature of said breach or default, COG shall have the right to terminate the Contract without further obligation to the SUBRECIPIENT. Any such termination for default shall not in any way operate to preclude COG from also pursuing all available remedies against the SUBRECIPIENT and its sureties for said breach or default.

- 4. In the event COG elects to waive its remedies for any breach by the SUBRECIPIENT of any covenant, term or condition of this Contract, such waiver by COG shall not limit COG's remedies for any succeeding breach of that or any other term, covenant, or condition of this Contract.
- K. <u>Civil Rights Requirements</u>. 29 U.S.C. § 62, 42 U.S.C. § 2000, 42 U.S.C. § 602, 42 U.S.C. § 12112, 42 U.S.C. § 12132, 49 U.S.C. § 5332
 - 1. Nondiscrimination. In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and all other provisions of federal law, the SUBRECIPIENT agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the SUBRECIPIENT agrees to comply with applicable federal implementing regulations. The clauses of Appendix A and E of the U.S. DOT Standard Title VI Assurances (USDOT 1050.2A) are incorporated herein by reference.
 - 2. <u>Equal Employment Opportunity</u>. The following equal employment opportunity requirements apply to the underlying contract:
 - a. Race, Color, Creed, National Origin, Sex, In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, the SUBRECIPIENT agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seg. (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable federal statutes, executive orders, regulations, and federal policies that may in the future affect activities undertaken in the course of this PROJECT. The SUBRECIPIENT agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the SUBRECIPIENT agrees to comply with apprenticeship. In addition, the SUBRECIPIENT agrees to comply with any implementing requirements the funding federal agency may issue.

- b. Age. In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and other applicable law, the SUBRECIPIENT agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the SUBRECIPIENT agrees to comply with any implementing requirements the funding federal agency may issue.
- c. <u>Disabilities</u>. In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the SUBRECIPIENT agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the SUBRECIPIENT agrees to comply with any implementing requirements the funding federal agency may issue.
- 3. The SUBRECIPIENT also agrees to include these requirements in each subcontract financed in whole or in part with federal assistance, modified only if necessary to identify the affected parties.

L. Breaches and Dispute Resolution.

- 1. <u>Disputes</u>. Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the COG Executive Director or his/her designee. This decision shall be final and conclusive, unless within ten (10) working days from the date of receipt of its copy, the SUBRECIPIENT mails or otherwise furnishes a written appeal to the Executive Director or his/her designee. In connection with any such appeal, the SUBRECIPIENT shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the Executive Director or his/her designee shall be binding upon the SUBRECIPIENT, and the SUBRECIPIENT shall abide the decision.
- 2. <u>Performance During Dispute</u>. Unless otherwise directed by COG, the SUBRECIPIENT shall continue performance under this Contract while matters in dispute are being resolved.
- 3. <u>Claim for Damages</u>. Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of its employees, agents or others for acts it is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.
- 4. Remedies. Unless this Contract provides otherwise, all claims, counterclaims, disputes and other matters in question between COG and the SUBRECIPIENT arising out of or relating to this agreement or its breach may be submitted by the parties for arbitration if the parties mutually agree, otherwise, such claims, counterclaims, disputes and other matters shall be decided by a court of competent jurisdiction within the District of Columbia.
- Rights and Remedies. The duties and obligations imposed by the Contract and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or

available by law. No action or failure to act by COG or the SUBRECIPIENT shall constitute a waiver or any right or duty afforded to them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

M. Patent and Rights in Data.

- 1. Rights in Data. The following requirements apply to each contract involving experimental, developmental or research work:
 - a. The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; CDs or flash drives (thumbsticks/thumbdrives) containing data; and any other information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term "subject data" does not include financial reports, cost analyses, and similar information incidental to contract administration.
 - b. The following restrictions apply to all subject data first produced in the performance of the contract to which this Attachment has been added:
 - i. In accordance with 49 C.F.R. § 18.34 and 49 C.F.R. § 19.36, the Federal Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for "Federal Government purposes," any subject data or copyright described in subsections M.2.a and M.2.b of this clause below. As used in the previous sentence, "for Federal Government purposes," means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its federal license to any other party.
 - (1) Any subject data developed under that contract, whether or not a copyright has been obtained; and
 - (2) Any rights of copyright purchased by the Purchaser or the SUBRECIPIENT using federal assistance.
- 2. <u>Patent Rights</u>. The following requirements apply to each contract involving experimental, developmental, or research work:
 - a. General If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the contract to which this Attachment has been added, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the Purchaser and the SUBRECIPIENT agree to take actions necessary to provide immediate notice and a detailed report to the party at a higher tier until the federal funding agency is ultimately notified.

- b. Unless the Federal Government later makes a contrary determination in writing, irrespective of the SUBRECIPIENT status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), the Purchaser and the SUBRECIPIENT agree to take the necessary actions to provide, through the federal funding agency, those rights in that invention due the Federal Government as described in the U.S. Department of Commerce regulations, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," 37 C.F.R. Part 401.
- c. The SUBRECIPIENT also agrees to include the requirements of this clause in each subcontract for experimental, developmental, or research work financed in whole or in part with federal assistance.

N. Interest of Members of Congress.

No member of, or delegates to, the Congress of the United States shall be admitted to a share or part of this Contract or to any benefit arising there from.

O. Interest of Employees of COG.

No employee of COG who exercises any functions or responsibilities in review or approval of the undertaking or carrying out the PROJECT during his or her tenure or one (1) year thereafter, shall have any personal interest, direct or indirect, apart from his or her official duties, in this Contract or the proceeds thereof.

P. Interest of the SUBRECIPIENT.

The SUBRECIPIENT covenants that it has presently no financial interest, shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract. The SUBRECIPIENT further covenants that, in the performance of this Contract, no person having any such interest shall be employed.

Q. Allowable Costs.

Only those costs which are consistent with Title 2 Part 200 of the Code of Federal Regulations shall be reimbursed under this Contract.

R. Covenant Against Contingent Fees.

The SUBRECIPIENT warrants that it has not employed any person to solicit or secure this Contract upon any agreement for a commission, percentage, brokerage or contingent fee. Breach of warranty shall give the Contracts Officer the right to terminate this Contract or, in his discretion, to deduct from the Contract price or consideration the amount of such commission, percentage, brokerage or contingent fees. This warranty shall not apply to commissions payable by the SUBRECIPIENT upon contracts or sales secured or made through a bona fide established commercial or selling agency maintained by the SUBRECIPIENT for the purpose of securing business.

S. Indemnification.

The SUBRECIPIENT, acting as an independent SUBRECIPIENT, shall hold COG harmless from and shall be solely responsible, where found liable, for the payment of any and all claims for loss, personal injury, death, property damage, or otherwise, arising out of any act of omission or negligence of its employees or agents in connection with the performance of this work.

T. Severability.

It is understood and agreed by the parties that if any of these provisions shall contravene, or be invalid under, the laws of the particular state, county or jurisdiction where used, such contravention or invalidity shall not invalidate the whole agreement, but the Contract shall be construed as of not containing the particular provision or provisions held to be invalid in the said particular state, county or jurisdiction and the rights and obligations of the parties shall be construed and enforced accordingly.

U. Assignments.

This Contract shall not be assigned, sublet or transferred in whole or in part by the SUBRECIPIENT, except with the previous written consent of the COG Contracting Officer or his designee.

V. Entire Agreement.

This Contract sets forth the entire understanding of the parties and supersedes all previous agreements, whether oral or in writing, relating to the subject matter hereof. This Contract may only be altered, amended or modified in accordance with Changes Clause of this Contract.

W. Confidential or Personal Data.

- COG respects the privacy or business interests involved in confidential or personal data. It is COG's policy to obtain confidential or personal data or store or allow storage of such data only (i) when necessary to fulfill COG's informationgathering and data collection responsibilities, or (ii) in conjunction with COG projects. COG intends to minimize risk of disclosure of such confidential or personal data.
- 2. Whenever feasible and the requirements of a project allow, the names of survey participants or users of a website or other data collection method shall not be accepted, recorded, stored or retained.
- 3. When COC engages in a project, which involves the collection or storage of confidential or personal information by or through use of surveys, websites or by other data collection, the following conditions shall be met:
 - The survey, website or other collection method shall contain a set of conditions for use and a disclaimer of any COG liability for use, in language approved by COG in writing.

- b. The party(ies) working with COG shall demonstrate adherence to a federal or applicable state standard for protecting confidential or personal information.
- c. The confidential or personal information collected or stored by or through the survey, website or other data collection shall be kept confidential. All necessary steps shall be taken to protect the privacy of the users of the website or other data collection. Any confidential or personal information provided by users of the website or other data collection, including but not limited to their names and addresses, shall be protected.
- d. COG shall retain control over and ownership of all surveys, web pages, control files and scripts, database schema, and database contents, in addition to all content which is published on or stored by the website or other data collection, unless COG specifically agrees in writing otherwise.
- e. No release of any announcements intended for public dissemination concerning the collection or storage of such information by or through the survey, website or other data collection shall occur until COG has given prior written authorization, unless COG specifically agrees in writing otherwise.
- f. In the event that information collected or stored by or through the survey, website or other data collection shall be stolen or handled incorrectly, the party(ies) working with COG on the PROJECT shall be responsible for any required notification to persons who have entered personal information in that system and all costs related thereto.
- g. The PROJECT documents shall provide that other parties working with COG on the survey, website or other data collection or storage shall indemnify COG with at least the following commitment:

The [SUBRECIPIENT or other party] shall indemnify and hold COG harmless from and shall be solely responsible, for the payment of any and all claims for loss, personal injury, death, property damage, infringement or misappropriation of any third party's intellectual property rights, violation of privacy, confidentiality or otherwise, arising out of any act of omission or negligence of its employees or agents in connection with the performance of the work under this [agreement or memorandum of understanding].

 At the end of the project or contract, any personal or confidential information shall be given to COG or destroyed and a certification of destruction provided to COG by the SUBRECIPIENT or other party.

X. COG's Policies and Procedures.

When federal law, or any grant conditions, certifications or assurances require COG to utilize competitive procurement procedures for selection of a SUBRECIPIENT, COG's policies and procedures shall govern every aspect of the SUBRECIPIENT

selection process, e.g., the solicitation, evaluation, award, and post-award process (including, without limitation, any protest of an award, and the terms and conditions under which a contract may be approved, executed and administered). Any SUBRECIPIENT and potential SUBRECIPIENT will be provided with a copy of such policies and procedures, on request.

Y. COG's Information Technology Policy.

Contractors that must access COG's Information Technology systems or require a COG login account to perform their duties must adhere to COG's Information Technology Policies and Procedures. Such contractors will receive a copy of the policies and procedures prior to receiving access to COG's IT systems.

Z. COG's Facilities, Policies, and Procedures.

Contractors that must use any of COG's facilities or equipment must adhere to COG's Facilities, Policies and Procedures. Contractors that utilize any AV or IT equipment through the use of COG's facilities shall also comply with COG's IT Policy. Such contractors will receive a copy of all relevant procedures prior to receiving access to COG's IT systems.

AA. Additional Requirements.

In addition to the terms and conditions expressly referenced in this Contract, the SUBRECIPIENT acknowledges and agrees that the terms and conditions of any federal or state grant that provides funding for this Contract, in whole or in part, shall apply to and shall govern the parties' rights and obligations under this Contract and shall be deemed additional terms, conditions and requirements of this Contract.

BB. DBE Assurance.

The SUBRECIPIENT or ______ shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The SUBRECIPIENT shall carry out applicable requirements of 49 C.F.R. Part 26 in the award and administration of USDOT-assisted contracts. Failure by the SUBRECIPIENT to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the COG deems appropriate.

CC. Audits.

Per the Enhanced Mobility Circular, COG as the Designated Recipient for Enhanced Mobility funds will collect A-133 audit reports from the SUBRECIPIENT receiving more than \$750,000 in federal funds. At a minimum, the SUBRECIPIENT is required to bring to COGTPB's attention any audit findings relevant to its use of FTA funds. The SUBRECIPIENT is not subject to A-133 audit requirements and may require additional monitoring, in a format elected by COG, to ensure compliance.

DD. FFATA Reporting.

1. The Federal Funding Accountability and Transparency Act ("FFATA") requires prime recipients of federal grants and contracts to report sub-award and executive compensation data. COG is the prime recipient of federal awards for the purposes of this policy and is responsible for reporting sub-award data.

- 2. COG and first-tier sub-awardees are required to maintain current registration in the System for Awards Management ("SAM") as well as obtain a DUNS number. COG is responsible for filing the report in the FSRS system, not sub-awardees. However, sub-award recipients must provide the following information to COG before they will be eligible to receive the sub-award:
 - a. The entity's information;
 - Description and/or title of the sub-award (including NAICS code or CFDA number);
 - c. Date and amount of award:
 - Location of the entity receiving the award and the primary location of performance under the award, including the city, state, congressional district, and country;
 - e. Active and current SAM unique identifier;
 - f. DUNS number:
 - g. Names and total compensation of the five (5) highest paid officers/executives of the sub-recipient <u>if</u> all three criteria are met:
 - i. Federal awards make up 80% or more of the SUBRECIPIENT's annual gross revenues; and
 - ii. the SUBRECIPIENT's annual gross revenue from federal awards is \$25 million or more; and
 - iii. the SUBRECIPIENT's officer names are not publicly available and the public does not have access to data on executive compensation of the entity through the Securities and Exchange Commission (SEC) as described in further detail in OMB Guidance on Sub-award and Executive Compensation Reporting (August 27, 2010).
 - (COG, as the prime recipient of the federal award, must also report its own executive compensation data by the end of the month following the award if the same criterion noted above is met.)

EE. Priority of Requirements.

In the event of a conflict between or among any of the terms, conditions and requirements applicable to this Contract, the conflict shall be resolved by giving weight in accordance with the following priorities, in the order as stated below:

- 1. Terms and conditions of any grant that provides funding for this Contract, in whole or in part;
- 2. Terms and conditions set forth or referenced within this Contract;
- 3. Terms and conditions and representations set forth or referenced within Attachments A and F to this Contract;
- 4. Terms, conditions, specifications, and requirements set forth within any solicitation (e.g., RFP or IFB) pursuant to which this Contract was awarded;



ATTACHMENT B AUTHORIZED OFFER

In submitting a bid in response to this RFP, the authorized signatory below acknowledges having read and understood the entire solicitation and agrees to accept the Terms and Conditions set forth in this RFP. The signatory below represents that he/she has the authority to bind the entity named below to the response submitted and any contract awarded as a result of this solicitation.

Offeror/Contractor Information & Signature:

Company Name:

Signature:

Date:

Name (print):

Title:

Company Mailing Address:

Entity Type: (*LLC, LP, etc.*):

Phone/Fax:

Email:

ATTACHMENT C CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The prospective vendor certifies to the best of its knowledge and belief that it and its principals:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any department or agency of the District of Columbia, State of Maryland or the Commonwealth of Virginia or any of the 24 jurisdictions comprising the membership of the Metropolitan Washington Council of Governments (COG);
- Have not within a three year period preceding this date been convicted of or had a civil
 judgment rendered against them for commission of fraud or criminal offense in connection
 with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction
 or contract under a public transaction; violation of Federal or State antitrust statutes or
 commission of embezzlement, theft, forgery, bribery, falsification or destruction of records,
 making false statements, or receiving stolen property;
- Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated above of this certification; and
- Have not within a three-year period preceding this date had one or more public transactions (Federal, State or local) terminated for cause or default.

Vendor understands that a false statement on this certification may be grounds for rejection of any submitted proposal or quotation or termination of any award. In addition, under 18 U.S.C. § 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both if federal funds are being used to support the procurement.

Typed Name of Vendor		
Typed Name & Title of Authorized Representative		
Signature of Authorized Representative	Date	

ATTACHMENT D CONTRACT REFERENCES

CONTRACTOR:

DISCUS It is in listed. ability	DE A MINIMUM OF THREE (3) REFERENCES FROM CUSTOMERS THAT ARE CAPABLE SSING YOUR COMPANY'S ABILITY TO PERFORM CONTRACTS OF COMPARABLE SIZE AND SCONDERATIVE that accurate contact names and phone numbers be given for the project All references should include a contact person who can comment on the compart to perform the services required under this contract. The company should insure the services and contact names given are up-to-date and accurate.	PE. ects ny's
•	nce Number 1	
1.	Name of Client Organization:	
2.	Name and Title of Point of Contact (POC) for Client Organization:	
3.	Phone Number of POC:	
4.	Approximate Value of Contract:	
5.	Duration of Contract:	
6.	Description of Services Provided:	
<u>Refere</u>	nce Number 2	
1.	Name of Client Organization:	
2.	Name and Title of Point of Contact (POC) for Client Organization:	
3.	Phone Number of POC:	
4.	Approximate Value of Contract:	
5.	Duration of Contract:	
6.	Description of Services Provided:	

Reference Number 3

Name of Client Organization:
Name and Title of Point of Contact (POC) for Client Organization:
Phone Number of POC:
Approximate Value of Contract:
Duration of Contract:
Description of Services Provided:
ence Number 4
Name of Client Organization:
Name and Title of Point of Contact (POC) for Client Organization:
Phone Number of POC:
. Approximate Value of Contract:
Duration of Contract:
. Description of Services Provided:
ence Number 5
s. Name of Client Organization:
. Name and Title of Point of Contact (POC) for Client Organization:
s. Phone Number of POC:
5. Approximate Value of Contract:
. Duration of Contract:
B. Description of Services Provided: