

NORTH CAROLINA
WAKE COUNTY

CONTRACT FOR SERVICES

THIS CONTRACT (this "Contract") is entered into by and between VHB ENGINEERING NC, P.C., hereinafter referred to as the "Contractor;" and the NC Capital Area Metropolitan Planning Organization, hereinafter referred to as "CAMPO." As the lead planning agency for CAMPO, the City of Raleigh (the "City") is an intended third-party beneficiary to the Contract. All parties herein shall collectively hereinafter be referred to as the "Parties".

WITNESSETH:

WHEREAS, CAMPO desires to procure a contractor to perform services; and

WHEREAS, CAMPO has completed necessary steps for retention of professional and other services under applicable City policies; and

WHEREAS, CAMPO has agreed to engage the Contractor, and the Contractor has agreed to contract with the CAMPO, for performance of services as described, and according to the further terms and conditions, set forth herein.

NOW THEREFORE, in consideration of sums to be paid to the Contractor, and other good and valuable consideration, the Contractor and CAMPO do contract and agree as follows:

1. Scope of Services

The Contractor shall perform for CAMPO the following described services: described in Attachment A: Scope of Services. Contractor shall have the right to rely upon information provided to and gathered by the Contractor.

2. Time of Performance

In performing the services described in this Contract, it is mutually agreed that time is of the essence. The Contractor shall begin work upon Notice to Proceed and work shall be completed no later than June 30, 2018. The term of this Agreement shall commence upon execution by CAMPO and shall run through Contractor's completion of all tasks identified in Attachment A to CAMPO's satisfaction.

In the event the services under the Contract are not completed by this date, the Contractor shall be assessed liquidated damages of \$0 for each day's delay beyond the completion date. If liquidated damages are not applicable to this Contract, insert '(0) zero' in the space above.

3. Compensation; Time of Payment

For services to be performed hereunder, the CAMPO shall pay the Contractor a not to exceed contract amount of \$399,398.00 for services performed during fiscal year (FY) 2018 for a total contract amount of \$ 399,398.00 unless changed by a duly authorized amendment. Invoices shall be accompanied by a narrative statement of work, which shall be approved by the CAMPO Executive Director or his designee, prior to approval for payment. The standard City of Raleigh payment term is NET 30 days from the date of invoice. **For prompt payment you may email all invoices to (Lisa.Blackburn@campo-nc.us). All invoices must include the following Purchase Order Number _____.** Invoices submitted without the correct purchase order number will result in delayed payment.

4. Workmanship and Quality of Services

All work performed under this Contract shall be performed in a professional manner, to the reasonable satisfaction of CAMPO, and shall conform to all prevailing industry and professional standards.

5. Standard of Care

Contractor shall perform for or furnish to CAMPO professional and related services in all phases of the project to which this Contract applies as hereinafter provided. Contractor may employ such Contractor's Consultants as Contractor deems necessary to assist in the performance or furnishing of professional and related services hereunder. Contractor shall not be required to employ any Contractor's Consultant unacceptable to Contractor.

The standard of care for all professional and related services performed or furnished by Contractor under this Contract will be the care and skill ordinarily used by members of Contractor's profession practicing under similar conditions at the same time and in the same locality.

6. Notices

All notices, requests for payment, or other communications arising hereunder shall be sent to the following:

CAMPO

Contractor: VHB ENGINEERING NC, P.C.

Attn: Paul Black
Capital Area MPO
421 Fayetteville Street, Suite 203
Raleigh, NC 27601
Telephone: 919-996-4400

Attn: Jody Lewis
VHB ENGINEERING NC, P.C.
940 Main Campus Drive #500
Raleigh, NC 27606
Telephone: 919-829-0328
Email: jllewis@vhb.com

All notices regarding a dispute arising under this Agreement shall also be provided to:

Capital Area MPO
Attn: Executive Director
421 Fayetteville Street, Suite 203
Raleigh, NC 27601

7. Non-discrimination

To the extent permitted by North Carolina law, the parties hereto for themselves, their agents, officials, employees and servants agree not to discriminate in any manner on the basis of race, color, creed, national origin, sex, age, handicap, or sexual orientation with reference to the subject matter of this Contract. The parties further agree, to the extent permitted by law, to conform with the provisions and intent of any applicable non-discrimination laws.

8. Minority or Women Owned Businesses

The City of Raleigh prohibits discrimination in any manner on the basis of race, color, creed, national origin, sex, age or handicap or sexual orientation and will pursue an affirmative policy of fostering, promoting and conducting business with women and minority owned business enterprises. The Contractor shall adhere to any MWBE requirements associated with any public funding involved in this Contract.

9. Assignment

This Contract may not be assigned without the express written consent of CAMPO.

10. Applicable Law

All matters relating to this Contract shall be governed by the laws of the State of North Carolina, without regard to its choice of law provisions, and venue for any action relating to this Contract shall be Wake County Civil Superior Court or the United States District Court for the Eastern District of North Carolina, Western Division.

11. Insurance

Contractor agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this Contract the following coverages and limits. The requirements contained herein, as well as CAMPO's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Contractor under this Contract.

Commercial General Liability – Combined single limit of no less than \$1,000,000 each occurrence and \$2,000,000 aggregate. Coverage shall not contain any endorsement(s) excluding nor limiting Product/Completed Operations, Contractual Liability or Cross Liability.

Automobile Liability – Limits of no less than \$1,000,000 Combined Single Limit. Coverage shall include liability for Owned, Non-Owned and Hired automobiles. In the event Contractor does not own automobiles, Contractor agrees to maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Auto Liability policy. Automobile coverage is only necessary if vehicles are used in the provision of services under this Contract and/or are brought on a COR site.

Worker's Compensation & Employers Liability – Contractor agrees to maintain Worker's Compensation Insurance in accordance with North Carolina General Statute Chapter 97 with statutory limits and employees liability of no less than \$1,000,000 each accident.

Additional Insured – Contractor agrees to endorse CAMPO and the City of Raleigh as additional insureds on the Commercial General Liability, Auto Liability and Umbrella Liability if being used to meet the standard of the General Liability and Automobile Liability. The Additional Insured shall read "Capital Area Metropolitan Planning Organization and the City of Raleigh are named additional insured as their interest may appear."

Certificate of Insurance – Contractor agrees to provide both CAMPO and the City of Raleigh a Certificate of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect, and Certificates of Insurance shall provide a minimum thirty (30) day endeavor to notify, when available, by Contractor's insurer. If Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify CAMPO and the City of Raleigh within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. **The Certificate Holders' addresses should read:**

**City of Raleigh
Post Office Box 590
Raleigh, NC 27602-0590**

and

**CAMPO
421 Fayetteville Street, Suite 203
Raleigh, NC 27601**

Umbrella or Excess Liability – Contractor may satisfy the minimum liability limits required above under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability, however, the Annual Aggregate limits shall not be less than the highest 'Each Occurrence' limit for required policies. Contractor agrees to endorse CAMPO and the City of Raleigh each as an 'Additional

Insured' on the Umbrella or Excess Liability, unless the Certificate of Insurance states the Umbrella or Excess Liability provides coverage on a 'Follow-Form' basis.

Professional Liability – Limits of no less than \$1,000,000 each claim. This coverage is only necessary for professional services such as engineering, architecture or when otherwise required by CAMPO.

All insurance companies must be authorized to do business in North Carolina and be acceptable to CAMPO.

12. Indemnity

To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless the City and CAMPO and each of their officers, officials, employees, agents and independent contractors (excluding the Contractor) from and against any and all losses, damages, costs, expenses (including attorneys' fees), obligations, duties, fines, penalties, royalties, interest charges and other liabilities (including settlement amounts) paid or incurred by any of them as a result of any claims, demands, lawsuits, actions, or proceedings: (i) arising from the Contractor's failure to perform its obligations under this Contract; (ii) arising from the negligent or intentional acts or omissions of the Contractor or any of its agents, employees or subcontractors relating to this Contract, including but not limited to any liability caused by an accident or other occurrence resulting in bodily injury, death, sickness or disease to any person(s) or damage or destruction to any property, real or personal, tangible or intangible; (iii) arising from the Contractor's violation of any law (including, without limitation, immigration laws); (iv) seeking payment for labor or materials purchased or supplied by the Contractor or its subcontractors in connection with this Contract; (v) any claim that the Contractor or an employee or subcontractor of the Contractor is an employee of the City and/or CAMPO, including but not limited to claims relating to worker's compensation, failure to withhold taxes and the like; or (vi) alleging violation, misappropriation or infringement of any copyright, trademark, patent, trade secret or other proprietary rights with respect to the Work or any products or deliverables provided to the City and/or CAMPO pursuant to this Contract ("Infringement Claims").

If an Infringement Claim occurs, the Contractor shall either: (i) procure for the City and/or CAMPO the right to continue using the affected product or service; or (ii) repair or replace the infringing product or service so that it becomes non-infringing, provided that the performance of the overall product(s) and service(s) provided to the City and/or CAMPO shall not be adversely affected by such replacement or modification. If the Contractor is unable to comply with the preceding sentence within thirty (30) days after the City and/or CAMPO are directed to cease use of a product or service, the Contractor shall promptly refund to the City all amounts paid under this Contract.

13. Limitation of Liability

Contractor shall procure and maintain insurance as required by and set forth in this Contract. Notwithstanding any other provisions of this Contract, and to the fullest extent permitted by law, the liability of the Contractor shall not exceed the total insurance proceeds to be paid on behalf of Contractor by Contractor's insurers under the terms and conditions of Contractor's insurance policies applicable thereto (excluding fees, costs and expenses of investigation, claims adjustments, defense and appeal).

14. Intellectual Property

Any information, data, instruments, documents, studies, reports or deliverables given to, exposed to, or prepared or assembled by the Contractor under this Contract shall be kept as confidential proprietary information of the CAMPO and not divulged or made available to any individual or organization without the prior written

approval of the CAMPO. Such information, data, instruments, documents, studies, reports or deliverables will be the sole property of CAMPO and not the Contractor.

All intellectual property, including, but not limited to, patentable inventions, patentable plans, copyrightable works, mask works, trademarks, service marks and trade secrets invented, developed, created or discovered in performance of this Contract shall be the property of the CAMPO.

Copyright in and to any copyrightable work, including, but not limited to, copy, art, negatives, photographs, designs, text, software, or documentation created as part of the Contractor's performance of this project shall vest in the CAMPO. Works of authorship and contributions to works of authorship created by the Contractor's performance of this project are hereby agreed to be 'works made for hire' within the meaning of 17 U.S.C. 201.

15. Force Majeure

Except as otherwise provided in any environmental laws, rules, regulations or ordinances applicable to the parties and the services performed under this Contract, neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations by an act of war, hostile foreign actions, nuclear explosion, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Either party to the Contract must take reasonable measures and implement reasonable protections when a weather event otherwise defined as a force majeure event is forecast to be eligible to be excused from the performance otherwise required under this Contract by this provision.

16. Advertising

The Contractor shall not use the existence of this Contract, or the name of the City of Raleigh or CAMPO, as part of any advertising without the prior written approval of the City of Raleigh and CAMPO.

17. Cancellation

CAMPO may terminate this Contract at any time by providing thirty (30) days written notice to the Contractor. In addition, if Contractor shall fail to fulfill in timely and proper manner the obligations under this Contract for any reason, including the voluntary or involuntary declaration of bankruptcy, CAMPO shall have the right to terminate this Contract by giving written notice to the Contractor and termination will be effective upon receipt. Contractor shall cease performance immediately upon receipt of such notice.

In the event of early termination, Contractor shall be entitled to receive just and equitable compensation for costs incurred prior to receipt of notice of termination and for the satisfactory work completed as of the date of termination and delivered to CAMPO. Notwithstanding the foregoing, in no event will the total amount due to Contractor under this section exceed the total amount due Contractor under this Contract. The Contractor shall not be relieved of liability to CAMPO for damages sustained by CAMPO by virtue of any breach of this Contract, and CAMPO may withhold any payment due to the Contractor for the purpose of setoff until such time as CAMPO can determine the exact amount of damages due CAMPO because of the breach.

Payment of compensation specified in this Contract, its continuation or any renewal thereof, is dependent upon and subject to the allocation or appropriation of funds to CAMPO for the purpose set forth in this Contract.

18. Laws/Safety Standards

The Contractor shall comply with all laws, ordinances, codes, rules, regulations, safety standards and licensing requirements that are applicable to the conduct of its business, including those of Federal, State, and local agencies having jurisdiction and/or authority.

Contractor must comply with *North Carolina Occupational Safety and Health Standards for General Industry, 29CFR 1910*. In addition, Contractor shall comply with all applicable occupational health and safety and environmental rules and regulations.

Contractor shall effectively manage their safety and health responsibilities including:

A. Accident Prevention

Prevent injuries and illnesses to their employees and others on or near their job site. Contractor managers and supervisors shall ensure personnel safety by strict adherence to established safety rules and procedures.

B. Environmental Protection

Protect the environment on, near, and around their work site by compliance with all applicable environmental regulations.

C. Employee Education and Training

Provide education and training to all contractors employees before they are exposed to potential workplace or other hazards as required by specific OSHA Standards.

19. Applicability of North Carolina Public Records Law

Notwithstanding any other provisions of this Contract, this Contract and all materials submitted to CAMPO by the Contractor are subject to the public records laws of the State of North Carolina, and it is the responsibility of the Contractor to properly designate materials at the time of initial disclosure to the City of Raleigh or CAMPO that may be protected from disclosure as “Confidential” and/or “Trade Secrets” under North Carolina law as such and in the form required by law prior to the submission of such materials to the City of Raleigh or CAMPO. Contractor understands and agrees that CAMPO and the City of Raleigh may take any and all actions necessary to comply with federal, state, and local laws and/or judicial orders and such actions will not constitute a breach of the terms of this Contract. To the extent that any other provisions of this Contract conflict with this paragraph, the provisions of this section shall control.

20. Miscellaneous

The Contractor shall be responsible for the proper custody and care of any property furnished or purchased by CAMPO or the City of Raleigh for use in connection with the performance of this Contract, and will reimburse CAMPO or the City of Raleigh for the replacement value of its loss or damage.

The Contractor shall be considered to be an Independent Contractor and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. Nothing herein is intended or will be construed to establish any agency, partnership, or joint venture. Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract. Such employees shall not be employees of or have any individual contractual relationship with CAMPO.

This Contract may be amended only by written agreement of the parties executed by their authorized representatives.

21. Audit

The City of Raleigh Internal Audit Office may conduct an audit of Contractor’s financial, performance and compliance records maintained in connection with the operations and services performed under this Contract. The City or its designee may conduct such audits or inspections throughout the term of this Contract and for a period of three years after final payment or longer if required by law.

In the event of such an audit, Contractor agrees that the City, or its designated representative, shall have the right to review and to copy any work, materials, payrolls, records, data, supporting documentation, or any other sources of information and matters that may in City's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract Document. The Contractor agrees that the City, or its designated representative, shall have access to Contractor personnel pertaining to the performance of this contract, including but not limited to financial, performance, operations and compliance records. Contractor agrees to maintain such records for possible audit for a minimum of three years after final payment, unless a longer period of records retention is stipulated. Contractor agrees to allow the City's auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. City's authorized representative or designee shall have reasonable access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Contract and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article. Further, Contractor agrees to include a similar right to the City to audit and interview staff in any subcontract related to performance of this contract.

Contractor shall require all payees to comply with the provisions of this article by including the requirements hereof in a written contract agreement between Contractor and payee. Contractor will ensure that all payees have the same right to audit provisions contained in this Contract.

The City agrees to provide Contractor with an opportunity to discuss and respond to any findings before a final audit report is issued.

City's rights under this provision shall survive the termination of this agreement. The City may conduct an audit up to three years after this agreement terminates.

22. E - Verify

Contractor shall comply with E-Verify, the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law and as in accordance with N.C.G.S. §64-25 et seq. In addition, to the best of Contractor's knowledge, any subcontractor employed by Contractor as a part of this contract shall be in compliance with the requirements of E-Verify and N.C.G.S. §64-25 et seq.

23. IRAN DIVESTMENT ACT CERTIFICATION

Contractor certifies that, as of the date listed below, it is not on the Final Divestment List as created by the State Treasurer pursuant to N.C.G.S. § 147-86.55, *et seq.* In compliance with the requirements of the Iran Divestment Act and N.C.G.S. § 147-86.59, Contractor shall not utilize in the performance of the contract any subcontractor that is identified on the Final Divestment List.

24. Incorporation of Documents/Complete Agreement

This Contract, and any documents incorporated below, represent the entire Contract between the parties and suspend all prior oral or written statements, agreements or Contracts.

Specifically incorporated into this Contract are the following attachments, or if not physically attached, are incorporated fully herein by reference:

- Attachment A: Scope of Services
- Certificate(s) of Insurance

In cases of conflict between this Contract and any of the above incorporated attachments or references, the terms of this Contract shall prevail.

The remainder of this page remains blank intentionally.

THIS CONTRACT is entered into this day of , 20 .
IN WITNESS WHEREOF, the Contractor has executed the foregoing with the signature(s) of its duly
authorized officer(s), and the MPO has executed with the signature of its Executive Director,
acknowledged by a notary, with the official seal affixed, the day and year first above written.

CONTRACTOR:

By:

Printed Name/Title

(If corporate)

ATTEST:

By:_____

Printed Name/Title

(Affix Seal)

NC CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION "CAMPO"

By: _____
Chris Lukasina, Executive Director

ACKNOWLEDGEMENT by
NC CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION, "CAMPO"

State of North Carolina
County of Wake

I, _____, a Notary Public for said County and State, do hereby certify that Chris Lukasina, Executive Director personally came before me this day and acknowledged the due execution for the foregoing instrument.

Witness my hand and official seal, this the ____ day of _____, 2017.

_____, Notary Public

(Affix notary seal)

My Commission Expires: _____

ATTACHMENT A: TRIANGLE REGION INTELLIGENT TRANSPORTATION SYSTEMS

STRATEGIC DEPLOYMENT PLAN UPDATE

for

CAPITAL AREA AND DCHC MPO, RALEIGH AND DURHAM, NC

SCOPE OF WORK

Date: February 27, 2018

OBJECTIVE

The objective of this study is to update the Intelligent Transportation System (ITS) Plan for the Triangle region of North Carolina. The major constituents of this study are the Capital Area Metropolitan Planning Organization (CAMPO), the Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO), and the North Carolina Department of Transportation (NCDOT). The ITS plan will be updated to include state-of-the-art systems for managing current and emerging traffic and for implementation of transit management technologies for the region.

VHB Engineering NC, P.C. (VHB) will lead the study and is joined on the study team by ICF and Iteris.

SCOPE OF SERVICES

TASK 1 PROJECT MANAGEMENT | April – June 2019 | \$59,071

Task 1 will focus on setting up the staff framework at both VHB and CAMPO, along with laying out the project and clarifying any issues that are not clear.

Task 1.1 Project Management

VHB will provide overall project management and the VHB Project Manager (VHB PM) will be the primary point of contact for the project team and will be available to the Client Project Manager (Client PM) throughout the life of the project. The "Project Team" will include:

- Consultant Lead
- CAMPO Lead
- DCHC Lead
- NCDOT Division 5 Lead
- NCDOT Transportation Planning Division Lead
- Federal Highway Administration (FHWA) Lead

Task 1.2 Project Management Meetings and Communication

The VHB project manager will hold bi-weekly project management meetings, in person or by conference call, with the project management team to ensure measurable progress and timely completion of the project tasks. Major issues, project status, upcoming work, and deliverables will be discussed. Project team communications will also be conducted by phone, email, and in-person as necessary.

Task 1.3 Kickoff Meeting

The VHB team will initiate the project with a kickoff meeting to bring together project staff and key members of the VHB team. This meeting serves multiple purposes:

- Bring together client and consultant staff working on the project
- Clarify project schedule, objectives, priorities, work products, project management, and reporting procedures
- Identify and obtain available data and background materials
- Identify and obtain related plans and studies
- Gain further insight on local issues and sensitivities
- Discuss immediate next steps, upcoming meetings, and deliverables

The project team will send a data request list in advance of the kickoff meeting to facilitate collection of this information.

Client Responsibilities:

- Space for all meetings at no cost to the project
- All data, plans, and studies requested by the VHB Team
- Staff participation in all meetings.

VHB Team Deliverables:

- Schedule, agenda, and summaries of all meeting discussions

TASK 2 PROJECT COMMUNICATIONS | April – June 2019 | \$38,474

Task 2 will set the stage for communicating with regional stakeholders. It will run in the background concurrent with other tasks culminating in the stakeholder meetings as milestones along the way.

Task 2.1 Develop Communications Plan

The VHB team will develop a communications strategy to engage regional stakeholders in decision-making. We will rely on the regional stakeholders to communicate to the general public as they deem necessary regarding the study progress and findings. The VHB project manager will be the primary point of contact for the VHB team, but, depending on the topic of communication, some communications will be directly between key staff of the VHB team and members of the core team.

Task 2.2 Stakeholder Workshops

We anticipate that staff and representatives of CAMPO, DCHC, NCDOT, the Federal Highway Administration (FHWA) and all municipalities represented in the two regional MPOs will be part of the larger stakeholder group for the study. We will rely on CAMPO, DCHC, and NCDOT to identify a smaller subset of staff and representatives to comprise the core team. The core team will provide oversight of progression of the study, and will review deliverables and will convey materials and findings to the larger stakeholder group prior to meetings between the VHB team and the stakeholders.

Meetings with the core team will be held monthly with the option to cancel or postpone individual meetings depending on progress of the study and the need to share new findings. We anticipate a total of 18 meetings with the core team, but only three meetings with the larger stakeholder group.

The "Stakeholder Group" will consist of a representative from all member entities on the TCC at a minimum. The "Core Group" will be a subset of the Stakeholder Group that will include all the Project Team members, plus a representative sample of the Stakeholder Group (to include at least one transit provider).

Stakeholder Workshop #1 will involve:

- ITS overview, specifically tailored to the region and its stakeholders
- Overall project process, schedule, and engagement activities
- Discussion of the regional needs regarding transportation and ITS.
- Description of the region's existing ITS from initial findings and current architecture.
- Discussion of planned ITS and connected vehicle elements envisioned in the future.

Stakeholder workshop #1 will support the establishment of regional needs and plans for the architecture and deployment plan development activities. The workshop will be followed by one-on-one stakeholder discussions as the VHB team finalizes the architecture draft. The one-on-one stakeholder discussions will refine the architecture definition with stakeholder-specific information.

Stakeholder Workshop #2 will involve an overview of the architecture development progress and artifacts to date which will represent a draft of the architecture. It will also involve the review, discussion and prioritization of project candidates supported by the regional ITS architecture and under consideration for the ITS Deployment Plan. The second workshop will support the refinement of the architecture and guidance of the deployment plan.

Stakeholder Workshop #3 will involve the review of the draft deployment plan to gather stakeholder feedback on proposed project prioritization and definition.

The VHB team will provide materials and will lead all stakeholder and Core Group meetings. We will coordinate with the Client PM to host meetings at the CAMPO offices in Raleigh, NC as the default location, but other locations can be considered as long as there is no cost to the project. We anticipate that only key staff of the VHB team will attend the core team meetings in person depending on the topics planned for the discussion; however, all team members will be available to participate through telephone conference calls or virtual online meetings utilizing internet applications such as Skype or GoToMeeting. We will coordinate with the Client PM CAMPO staff to facilitate conference calls and virtual on-line meeting participation.

Client Responsibilities:

- Space for all workshops at no cost to the project
- List of stakeholders and core team members
- Staff participation in all workshops

VHB Team Deliverables:

- Scheduling and facilitation of three half-day stakeholder workshops
- Summaries of all workshop discussions
- Agenda and materials for all workshops
- Hosting of virtual on-line meetings as necessary
- Final stakeholder matrix
- Final core team matrix
- Communications plan

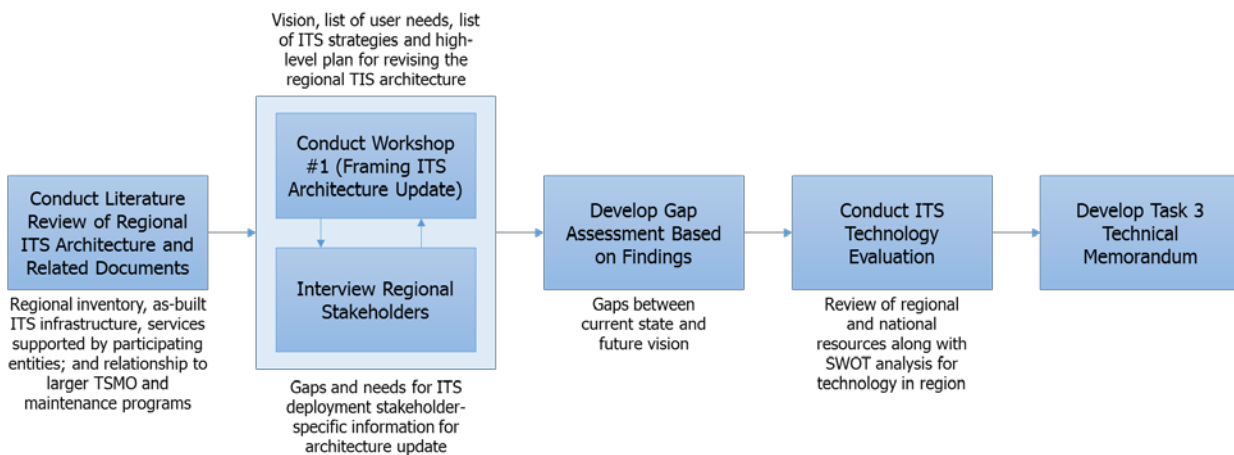
TASK 3 ANALYZE EXISTING CONDITIONS, ASSESS NEEDS AND GAPS, REVIEW EXISTING DEPLOYMENTS AND EVALUATE ITS TECHNOLOGIES | April – September 2018 | \$61,729

Client responsibilities and VHB team deliverables are indicated by subtask for Task 3 due to the complexity of the task.

Task 3 is a critical part of the CMP development and will establish the basis for identifying strategies in Task 4.

The VHB team will analyze the current state of ITS in the Triangle region while accounting for larger ITS developments that are occurring nationally and internationally. We will review existing regional strategies, policies, and needs; identify the current state of ITS in the Triangle region; and evaluate potential ITS technologies for future deployment. This information will be gathered through the following activities.

Figure 1: Overview of Task 3 Activities and Outcomes



Task 3.1 Literature Review

The VHB team will use the 2010 Regional ITS Architecture documents and stakeholder strategic vision-related documents to conduct a comprehensive literature review. Client will provide all relevant regional planning documents for review, which will be saved and shared on secure on-line SharePoint. The VHB team will develop a baseline inventory of existing deployments in the region using the current matrix of projects produced by the Triangle region and NCDOT. The VHB team will coordinate with the appropriate staff of stakeholders to obtain and review additional regional planning documents, such as MPO work program documents and recent NCDOT STIP documents. We are anticipating gathering the following information through the literature review: the current regional inventory of ITS deployments; current as-built ITS infrastructure (field, center, and communications); services supported by the participating entities; and the relationship to the larger transportation system management and operations and maintenance programs.

Client Responsibilities:

- Provide all relevant regional planning documents
- Assistance in coordinating with stakeholders

VHB Team Deliverables:

- Secure on-line SharePoint for data and document sharing
- Inventory of existing ITS deployments

Task 3.2 Stakeholder Involvement

The first stakeholder workshop will be vital for the VHB team to gain an understanding of where the Triangle region stands today with ITS deployment and where the Triangle region desires to be in 10 years, we will also engage the agencies responsible for planning and implementation to help guide what the region must do to reach these objectives. The VHB team will lead a series of workshops to help frame and inform the ITS architecture and the ITS strategic deployment plan. The first workshop will focus on regional needs, strategies, and objectives around ITS deployment. The workshop will include a capability maturity assessment for the region, which will be oriented around establishing the current institutional structures for ITS planning, development, and deployment. The outcome of the workshop will be a list of user needs and ITS strategies along with plans for revising the architecture which will feed into the ITS Strategic Deployment Plan update.

The Capability Maturity Assessment will include an evaluation of:

- How ITS projects are planned, programmed, and funded
- How performance is measured
- How systems and technology are procured, tested, and deployed across the region
- What types of workforce and collaboration exist
- What level of decision-maker support exists for ITS

Client Responsibilities:

- Space for all workshops and meetings at no cost to the project
- Assistance to the VHB Team in arranging meetings with stakeholders
- Staff participation in all relevant meetings

VHB Team Deliverables:

- In-Person, Half-Day Workshop
- Workshop Summary Report

Stakeholder Interviews. Subsequent to the state of the practice assessment, the team will also interview regional stakeholders (up to 5 interview sessions) to identify gaps and needs in terms of ITS deployment with an intentional focus on transit operations. These stakeholder discussions will also help to refine the architecture definition with stakeholder-specific information. To begin, the Client project management team will provide a list of potential stakeholders. These stakeholders should represent a cross-section of the regional agencies and their multi-modal interests. The VHB team will contact the identified stakeholders to request an interview, describe the purpose for the interview, and schedule a date and time for the interview to take place. As part of the preparation, we will develop an interview protocol which will provide structure with the understanding that there is flexibility to elicit important input pending the flow of the interview. Two members of the VHB team will participate in each interview – one lead interviewer and one note taker. The interviews will each be approximately one hour long. Once all the interviews have been completed, the VHB team will summarize the feedback received, ensuring that no feedback can be traced to any one particular stakeholder – ensuring anonymity of response.

Client Responsibilities:

- Space for meetings at no cost to the project
- Assistance in coordinating with stakeholders

VHB Team Deliverables:

- Five (5) Stakeholder interview sessions

- One summary report

Task 3.3 Gap Assessment

The information gathered through the literature review, workshop #1, and stakeholder interviews will lead to the gap assessment. Using the information received, the VHB team will define the gaps between the existing conditions and future vision to support updates to the ITS Architecture (Task 5) and Deployment Plan (Task 6). The assessment also report on gaps between what was recommended in the 2010 plan and what was implemented—and why some of those recommendations were met while others were not implemented.

Client Responsibilities:

- Assistance in coordinating with stakeholders

VHB Team Deliverables:

- Summary of gaps in the current Triangle region ITS deployments
- Summary of met and unmet recommendations from the 2010 plan

Task 3.4 ITS Technology Evaluation

The VHB team will review both national resources along with existing regional studies, plans, data, and documents that examine the land use and transportation infrastructure within the Triangle region to understand existing physical, policy, or other challenges and impediments to transportation technology adoption. Part of this will include developing a risk-based analysis framework (e.g., SWOT analysis) to identify (1) the range of potential or likely implications of anticipated technology trends and (2) the importance of these implications/changes. Findings will include:

- Likely technology trends and their implications, in relation to the region's objectives.
- Issues that will impact deployment of new transportation technologies, including opportunities for advancing technology deployment and integrating technology considerations into transportation planning and investment decision-making.
- Existing conditions in the Triangle region that may create challenges or impediments to deployment of transportation technology.

Client Responsibilities:

- Provide all relevant regional planning documents
- Assistance in coordinating with stakeholders

VHB Team Deliverables:

- Summary of likely new technologies and challenges to deployment

Task 3.5 Technical Memorandum

Based on the information gathered in this task, the VHB team will develop a draft technical memorandum. The document will include an analysis of existing conditions and trends; consensus-driven vision, objectives, and ITS strategies; gap assessment between existing conditions and desired conditions (in 10-year period); and information on the organizational structure, policies, and resulting implications for agencies responsible for ITS operations and investments in the region. The memorandum will be submitted to the Client PM for distribution for review and feedback within three weeks of delivery. Upon receipt of feedback the VHB team will develop a comment resolution matrix to track our updates. The VHB team shall submit the comment resolution matrix as an accompaniment to the final technical memorandum within three weeks of receipt of comments from the Client PM.

Client Responsibilities:

- Assistance in coordinating with stakeholders for reviews

VHB Team Deliverables:

- Draft and final technical memorandum with accompanying comment resolution matrix
- Existing conditions draft and final report

TASK 4 IDENTIFICATION AND EVALUATION OF INTELLIGENT TRANSPORTATION SYSTEM STRATEGIES | April - November 2018 | \$40,995

Task 4 will overlap with and will build upon the findings of Task 3. Outcome of Task 3 will be used to determine new strategies to consider and to also determine existing strategies and deployments to discontinue.

This task will provide recommendations for ITS strategies and implementations for the Triangle region.

Task 4.1 Review Current Deployments

The VHB team will review current ITS deployments to recommend deployments to continue, improve upon, or discontinue.

Task 4.2 Identify New Technologies and Strategies

The VHB team will review new technologies and strategies and recommend those that will be appropriate for consideration in the Triangle region.

Task 4.3 Review Current Regional ITS Organization

The VHB team will review the current ITS organization structure to identify strengths, areas to improve, and additional partners or relationships that could benefit ITS implementation and operations in the region.

Task 4.4 Technical Memorandum

The VHB team will prepare a technical memorandum summarizing the processes in this task and the findings and recommendations. A draft memorandum will be submitted to the core team for consideration. A final memorandum will be submitted to the core team after the VHB team has incorporated comments and revisions suggested by the core team.

To complete this task, the VHB team will rely on data available from CAMPO, DCHC, and NCDOT concerning current deployments and on interviews with key agency staff.

The findings of this task will be used to develop the regional ITS strategic deployment.

Client Responsibilities:

- Assistance in obtaining requested regional planning documents and inventories
- Coordination with the core team for the review of the technical memorandum

VHB Team Deliverables:

- ITS strategies roadmap that will include priorities
- 10-year and beyond project list with cost estimates
- Draft and final technical memorandum with accompanying comment resolution matrix

TASK 5 UPDATE THE TRIANGLE REGIONAL ARCHITECTURE | April – December 2018 | \$93,666

Client responsibilities and VHB team deliverables are indicated by subtask for Task 5 due to the complexity of the task.

Task 5 will run concurrently with other tasks for most of the duration of the project and will update the regional ITS architecture to meet current architecture requirements.

Task 5.1 Stakeholder Inventory

The VHB Team will develop an updated list of partner agencies and stakeholders to be incorporated into the updated Triangle Regional ITS Architecture. The VHB team will review the current regional ITS architecture inventory of existing and proposed intelligent transportation systems will be reviewed and compared the updated list of partner agencies and stakeholders with those identified in the current architecture and needs analysis/gap assessment report to determine what changes are needed to the current stakeholder inventory.

Client Responsibilities:

- Assistance in identifying new stakeholders

VHB Team Deliverables:

- Updated list of partner agencies and stakeholders

Task 5.2 Ingest Regional ITS Needs Analysis and Gap Assessment Results

The VHB team will begin the architecture update process with the conversion of the Triangle Regional ITS Architecture from Turbo Architecture to the Regional Architecture Development for Intelligent Transportation (RAD-IT) software tool which is part of the new architecture tool set replacing Turbo Architecture. This will establish a new baseline from which to begin the architecture update.

The VHB team will engage stakeholders in the first Stakeholder Workshop with a needs assessment. As a starting point for the vision, goals and objectives, The VHB team will use those identified and/or related to the Joint 2045 Metropolitan Transportation Plan (MTP). The regional goals and objectives will be entered into the RAD-IT software tool. The goals and objectives will be linked to the regional ITS architecture elements defined in the remaining tasks supporting traceability.

Stakeholder data will be collected and assembled by service categories, such as transit, maintenance, traffic and emergency/incident response. Needs will be prioritized and weighted to reduce potential respondent bias. Needs will be compared to existing services and the ITS inventory to identify needs not addressed by current ITS deployments. Key focus areas will include connected vehicle infrastructure needs, private ride-hailing services, transit management and operations strategies, and regional initiatives such as Integrated Corridor Management (ICM) that are not fully-addressed by the current Architecture.

Client Responsibilities:

- Assistance in coordinating with stakeholders

VHB Team Deliverables:

- Architecture needs analysis and gap assessment report

Task 5.3 ITS Architecture Inventory of Elements Update

The VHB team will review existing and planned ITS elements and programs in the Triangle region and will create a comprehensive list of current and planned ITS elements. The list will be submitted to the Core Group for review and comment. Comments from the Core Group will be incorporated and the VHB Team will develop a final comprehensive list of current and planned elements.

Client Responsibilities:

- Assistance in coordinating with stakeholders for reviews

VHB Team Deliverables:

- Final comprehensive list of current and planned regional ITS elements

Task 5.4 Regional "Operational Concept" Update

The VHB Team will perform the following tasks:

- Review the existing Triangle Regional ITS Architecture Operational Concept.
- Identify recommended changes based upon the ITS and operations currently in place in the region.
- Make the changes necessary to ensure that the Operational Concept reflects current regional conditions.

Client Responsibilities:

- Assistance in obtaining requested regional planning documents

VHB Team Deliverables:

- Triangle Regional ITS Architecture Operational Concept

Task 5.5 Service Packages and Information Flows

The VHB team will perform the following tasks:

- Survey the service packages identified in the existing Triangle Regional ITS Architecture.
- Identify the service packages that are currently applicable to the study area and are not included in the existing Triangle Regional ITS Architecture.
- Update the information flows in the Triangle Regional ITS Architecture to match current conditions.
- Develop a complete set of service package diagrams with information flows that are applicable to the study area as it is today.

Client Responsibilities:

- Assistance in obtaining requested regional planning documents

VHB Team Deliverables:

- Service package diagrams

Task 5.6 ITS Standards, Project Sequencing, and Agreements

The VHB team will perform the following tasks:

- Review the ITS Standards list and revise the list to develop a complete list of current standards identified by the RAD-IT software.

- Create an updated list of inter-agency or inter-local agreements and memoranda of understanding (MOU) that are currently in place within the Triangle region and those that are recommended to be developed between stakeholders to improve information exchange and project implements.

Client Responsibilities:

- Assistance in identifying current agreements and memoranda of understanding

VHB Team Deliverables:

- List of relevant ITS standards
- List of Existing and necessary agreements and MOUs

Task 5.7 Regional ITS Architecture Comprehensive Update

The consultant will use the information developed in the prior tasks to update the Triangle Regional ITS Architecture using the most recent version of the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) and RAD-IT software. The VHB team will develop a comprehensive architecture document that includes all components, written descriptions, and graphics. The document will be written in a way that is easy to follow so that the architecture output is understandable to a variety of audiences. The resulting Comprehensive Architecture Document will be delivered as an editable, digital document file and will include the following:

- Executive Summary – Summarizes the architecture scope and content.
- Region Description – Geographic and scope of transportation services.
- Stakeholders – Each stakeholder will be identified and described as to their transportation role.
- Operational Concept – Clearly described roles and responsibilities for each stakeholder.
- Agreements – Identification of agreements that may be required among stakeholders.
- Functional Requirements – Clear requirements mapped to ITS services, projects and ITS devices.
- Interconnects and Information Flows – List of ITS elements and the information they will exchange.
- ITS Standards – For each information flow, the ITS Standards that apply will be described.

Client Responsibilities:

- Assistance in obtaining requested regional planning documents
- Review and feedback, edits as needed

VHB Team Deliverables:

- Updated Triangle Regional ITS Architecture using the most recent version of the ARC-IT and RAD-IT software (RAD-IT database)
- Executive summary and Comprehensive Architecture Document (PDF)

Task 5.8 Regional ITS Architecture Webpages

The VHB team will develop regional ITS architecture webpages to be added to Client's website that will display the ITS Architecture generated by the RAD-IT software and will host the following documents:

- The Executive Summary,
- The ITS Deployment Plan,
- The ITS Architecture Use,
- Maintenance Instruction Manual,
- The Comprehensive Architecture Document, and
- Content to facilitate update procedures for stakeholders.

A procedure for updating the website content will be developed and delivered with the webpages. The resulting webpages will be easy to update and maintain by the client staff. The VHB team will coordinate closely with the client IT staff during this task.

Client Responsibilities:

- Coordination between the VHB Team and local IT staff

VHB Team Deliverables:

- Regional ITS Architecture webpages compatible with CAMPO's current CMS

TASK 6 DEVELOP REGIONAL ARCHITECTURE USE AND MAINTENANCE | December 2018-March 2019 | \$27,679

Task 6 will follow close behind Task 5 and will establish the procedures maintaining the new architecture.

Task 6.1 Regional ITS Architecture Use and Maintenance Procedures

The VHB team will develop a process for updating the Triangle Regional ITS Architecture. The maintenance procedures will identify the lead agency to be responsible for maintenance of the architecture, the recommended schedule for updating the architecture, which parts of the architecture must be maintained, and protocols for maintaining and updating the architecture. The procedures will provide access to all architecture components and provide the ability for stakeholders and partners to submit maintenance and update information to the lead agency.

Task 6.2 Regional Architecture Use and Maintenance Training

The VHB team will develop training materials for all stakeholders for education on why, when, and how to update the architecture. The VHB team will lead a training session to instruct the designated stakeholder that will be responsible for updating the regional architecture. The training materials developed by the VHB Team will be a useful tool for stakeholders to use as a guide to get a self-guided refresher on the use and maintenance procedures.

Client Responsibilities:

- Assistance in coordinating reviews by the core team

VHB Team Deliverables:

- Draft and final maintenance plan with accompanying comment and resolution matrix
- Use and Maintenance Training Materials
- One training session for the designated stakeholder(s)

TASK 7 DEVELOP PROJECT PRIORITIZATION METHODOLOGY | November 2018- May 2019 | \$44,026

Task 7 will follow the completion of most of the earlier tasks and will develop a methodology to prioritize ITS projects in comparison to other ITS and non-ITS related projects.

The VHB team will develop a methodology and tool for evaluating and prioritizing new ITS projects against other ITS projects and against other project types that might be considered for implementation in the Triangle region. The clients have indicated a preference for the VHB team to prepare the evaluation and prioritization tool in a worksheet platform (likely Microsoft Excel). The tool will allow input of strategies and technologies plus the expected benefits. The output of the tool will be a rating for each

project on a common scale to simplify comparisons. The worksheets will be written and formatted such that they are easily transferable to stakeholders for submitting and evaluating candidate projects.

The VHB team can add value to the evaluation and prioritization tool by preparing the tool to operate in an on-line, web-based application.

Client Responsibilities:

- Assistance in coordinating reviews by the core team

VHB Team Deliverables:

- Project prioritization methodology
- Worksheet-based evaluation and prioritization tool
- Optional – web-based evaluation and prioritization tool

TASK 8 PREPARE REGIONAL ITS STRATEGIC DEPLOYMENT PLAN/CONCLUSIONS AND RECOMMENDATIONS | November 2018-June 2019 | \$33,758

Task 8 will run in the background concurrent with a number of other tasks and will recommend ITS projects for deployment over the next 10 years.

The VHB team will prepare the ITS Deployment Plan with updated overall vision, goals, objectives, and performance measures for ITS in the region and will reflect the implementation of the ARC-IT infrastructure. The plan will identify ITS Projects for deployment in the Triangle region over the upcoming 10-year period and will include a description of the projects, planning level project costs, project prioritization and sequencing, and detailed benefits of the project in terms of improved safety (crash reduction), mobility (delay reductions, etc.) and air quality (reduced emissions, etc.), timeframe for deployment, responsible agencies, and relevant ITS service packages. It is anticipated that the deployment plan will include projects to improve operations not only for passenger vehicles but also for transit operations.

Client Responsibilities:

- Assistance in coordinating reviews by the core team

VHB Team Deliverables:

- Draft and Final ITS Deployment Plan with accompanying comment and resolution matrix in an editable, native format digital file, and a snapshot format not meant for editing. The final plan will also be delivered in three hard copies.

		VHB Labor		Iteris Labor		ICF Labor		Total Subconsultant Labor Hours	Total Subconsultant Labor Costs	Total Labor Hours	Total Labor Costs	Total Travel Expenses	Total Misc. Expenses	Total Direct Expenses	Total Costs				
		Hours	Cost	Hours	Cost	Hours	Cost												
Total Billing Rate		Hours	Cost	Hours	Cost	Hours	Cost												
Task Description																			
1 Project Management/Administration																			
1.1	General Project Management/Administration	36	\$7,200	28	\$6,082	27	\$3,899	55	\$9,981	91	\$17,181				\$17,181				
1.2	Project Management Meetings and Communication	160	\$30,400	0	\$0	0	\$0	0	\$0	160	\$30,400				\$30,400				
1.3	Kick-off Meeting	16	\$3,920	8	\$2,175	0	\$0	8	\$2,175	24	\$6,095				\$6,095				
Task Total		212	\$41,520	36	\$8,256	27	\$3,899	63	\$12,155	275	\$53,675	\$396	\$5,000	\$5,396	\$59,071				
2 Project Communications																			
2.1	Develop Communications Plan	16	\$3,040	8	\$2,175	102	\$20,672	110	\$22,847	126	\$25,887				\$25,887				
2.2	Stakeholder Workshops	60	\$11,400	0	\$0	0	\$0	0	\$0	60	\$11,400				\$11,400				
Task Total		76	\$14,440	8	\$2,175	102	\$20,672	110	\$22,847	186	\$37,287	\$0	\$1,187	\$1,187	\$38,474				
3 Analyze Existing Conditions, Assess Needs and Gaps, Review Existing Deployments and Evaluate ITS Technologies																			
3.1	Literature Review	24	\$2,880	12	\$3,262	0	\$0	12	\$3,262	36	\$6,142				\$6,142				
3.2	Stakeholder Involvement (Interviews)	24	\$3,360	0	\$0	0	\$0	0	\$0	24	\$3,360				\$3,360				
3.3	Gap Assessment	0	\$0	0	\$0	480	\$50,833	480	\$50,833	480	\$50,833				\$50,833				
3.4	ITS Technology Evaluation	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0				\$0				
3.5	Technical Memorandum	4	\$800	0	\$0	0	\$0	0	\$0	4	\$800				\$800				
Task Total		52	\$7,040	12	\$3,262	480	\$50,833	492	\$54,095	544	\$61,135	\$0	\$594	\$594	\$61,729				
4 Identification and Evaluation of Intelligent Transportation System Strategies																			
4.1	Review Current Deployments	40	\$3,600	8	\$2,175	24	\$2,367	32	\$4,542	72	\$8,142				\$8,142				
4.2	Identify New Technologies and Strategies	64	\$8,640	0	\$0	40	\$3,479	40	\$3,479	104	\$12,119				\$12,119				
4.3	Review Current ITS Organization	80	\$12,960	0	\$0	40	\$3,479	40	\$3,479	120	\$16,439				\$16,439				
4.4	Technical Memorandum	20	\$3,040	0	\$0	8	\$1,255	8	\$1,255	28	\$4,295				\$4,295				
Task Total		204	\$28,240	8	\$2,175	112	\$10,580	120	\$12,755	324	\$40,995	\$0	\$0	\$0	\$40,995				
5 Update the Triangle Regional Architecture																			
5.1	Stakeholder Inventory	24	\$4,000	11	\$2,199	0	\$0	11	\$2,199	35	\$6,199				\$6,199				
5.2	Integ Regional ITS Needs Analysis and Gap Assessment Draft	0	\$0	65	\$13,367	114	\$13,514	179	\$26,881	179	\$26,881				\$26,881				
5.3	Architecture Inventory Update	0	\$0	24	\$3,964	0	\$0	24	\$3,964	24	\$3,964				\$3,964				
5.4	Operational Concept Update	0	\$0	0	\$4,245	0	\$0	0	\$4,245	0	\$4,245				\$4,245				
5.5	Service Packages and Information Flows	0	\$0	159	\$27,230	0	\$0	159	\$27,230	159	\$27,230				\$27,230				
5.6	ITS Standards and Agreements	0	\$0	23	\$5,301	0	\$0	23	\$5,301	23	\$5,301				\$5,301				
5.7	Architecture Comprehensive Update	0	\$0	49	\$8,209	0	\$0	49	\$8,209	49	\$8,209				\$8,209				
5.8	Architecture Webpages	0	\$0	45	\$7,485	0	\$0	45	\$7,485	45	\$7,485				\$7,485				
Task Total		24	\$4,000	401	\$71,999	114	\$13,514	515	\$85,513	539	\$89,513	\$3,559	\$594	\$4,153	\$93,665				
6 Develop Regional Architecture Use and Maintenance Procedures																			
6.1	Regional ITS Architecture Use and Maintenance Procedures	40	\$5,600	26	\$5,567	0	\$0	26	\$5,567	66	\$11,167				\$11,167				
6.2	Regional Architecture Use and Maintenance Executive	40	\$5,600	45	\$10,321	0	\$0	45	\$10,321	85	\$15,921				\$15,921				
Task Total		80	\$11,200	71	\$15,889	0	\$0	71	\$15,889	151	\$27,089	\$590	\$0	\$590	\$27,679				
7 Develop Project Prioritization Methodology																			
7.1	Develop Project Prioritization Methodology and Methodology	222	\$35,720	8	\$2,175	48	\$6,131	56	\$8,306	278	\$44,026				\$44,026				
7.2	Prepare for Stakeholder Meeting #3	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0				\$0				
7.3	Revise Draft Project Prioritization Methodology	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0				\$0				
7.4	CTT Review	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0				\$0				
7.5	Finalize Project Prioritization Methodology and Revised List	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0				\$0				
Task Total		222	\$35,720	8	\$2,175	48	\$6,131	56	\$8,306	278	\$44,026	\$0	\$0	\$0	\$44,026				
8 Prepare Regional ITS Strategic Deployment Plan/Conclusions and Recommendations																			
8.1	Draft and Final Plan Document	192	\$32,960	0	\$0	0	\$0	0	\$0	192	\$32,960				\$32,960				
Task Total		192	\$32,960	0	\$0	0	\$0	0	\$0	192	\$32,960	\$0	\$798	\$798	\$33,758				
Task Total		0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	\$0	\$0	\$0				
TOTAL HOURS		1,062		544		883		1,427		2,489									
TOTAL LABOR COST			\$175,120		\$105,930		\$105,630		\$211,560		\$386,680				\$12,718				
GENERAL & ADMINISTRATIVE ON SUBCONSULTANT COSTS															\$0				
TOTAL COSTS					\$105,930		\$105,630		\$211,560						\$399,398				
Total Direct Expenses (For Contracts)			\$5,000		\$4,545		\$3,173		\$7,718										
Total Cost (For Contracts)			\$180,120		\$110,475		\$108,803		\$219,278										
		VHB		Iteris		ICF		Total Subconsultants Costs											

ATTACHMENT B:

City of Raleigh Federal Requirements

City of Raleigh (COR) Federal Requirements

All recipients of federally funded grants or use federal assistance to support procurements must comply with the applicable provisions of the Federal procurement standards 2 CFR pt. 200. As result, firms awarded federally funded contracts by City of Raleigh must comply with the following contract provisions set forth herein, unless a particular award term or condition specifically indicates otherwise. These terms and conditions are hereby incorporated into any resulting contract.

Definition

Firm means any company, corporation, partnership, individual, sole proprietorship, joint-stock company, joint venture, governmental body or similar legal entity

Age Discrimination Act of 1975

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of the *Age Discrimination Act of 1975* (Title 42 U.S. Code, § 6101 *et seq.*), which prohibits discrimination on the basis of age in any program or activity receiving Federal financial assistance.

Americans with Disabilities Act of 1990

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of Titles I, II, and III of the *Americans with Disabilities Act*, which prohibits discriminating on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities. (42 U.S.C. §§ 12101– 12213).

Byrd Anti-Lobbying Amendment

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended). Suppliers, contractors, subcontractors, consultants, and sub-consultants who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of an agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

Civil Rights Act of 1964 – Title VI

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*), which provides that no person in the United States will, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Civil Rights Act of 1968

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with Title VIII of the *Civil Rights Act of 1968*, which prohibits discriminating in the sale, rental, financing, and advertising of dwellings, or in the provision of services in connection therewith, on the basis of race, color, national origin, religion, disability, familial status, and sex (42 U.S.C. § 3601 *et seq.*), as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part 100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units—i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground-floor units in buildings without elevators)—be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201).

City of Raleigh (COR) Federal Requirements

Clean Air Act and Federal Water Pollution Control Act (Clean Water Act)

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended—when contract amounts exceed \$150,000 and agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387).

Contract Work Hours and Safety Standards Act

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the *Contract Work Hours and Safety Standards Act* (40 U.S.C. 3701–3708) and where applicable, all contracts awarded in excess of \$100,000 that involve the employment of mechanics or laborers must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

Copeland “Anti-Kickback” Act

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Sub-contractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or sub-recipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

Davis-Bacon Act

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with *Davis-Bacon Act*, as amended (40 U.S.C. 3141–3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 must comply with the Davis-Bacon Act (40 U.S.C. 3141–3144, and 3146–3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”).

Debarment and Suspension

All suppliers, contractors, subcontractors, consultants, and sub-consultants are subject to the non-procurement debarment and suspension regulations implementing Executive Orders 12549 and 12689, and 2 C.F.R. Part 180. These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities.

Drug-Free Workplace Regulations

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701 et seq.), which requires agreement to maintain a drug-free workplace.

Education Amendments of 1972 (*Equal Opportunity in Education Act*) – Title IX

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681 et seq.), which provide that no person in the United States will, on the basis of sex, be excluded from

City of Raleigh (COR) Federal Requirements

participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance.

Energy Policy and Conservation Act

All Suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

Fly America Act of 1974

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942.

Hotel and Motel Fire Safety Act of 1990

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, 15 U.S.C. § 2225a, all suppliers, contractors, subcontractors, consultants, and sub-consultants must ensure that all conference, meeting, convention, or training space funded in whole or in part with Federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225.

Limited English Proficiency (*Civil Rights Act of 1964, Title VI*)

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the *Title VI of the Civil Rights Act of 1964* (Title VI) prohibition against discrimination on the basis of national origin, which requires taking reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services.

Patents and Intellectual Property Rights

Unless otherwise provided by law, suppliers, contractors, subcontractors, consultants, and sub-consultants are subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. All suppliers, contractors, and subcontractors, consultants, sub-consultants are subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents located at 37 C.F.R. Part 401 and the standard patent rights clause located at 37 C.F.R. § 401.14.

Procurement of Recovered Materials

All suppliers, contractors, and subcontractors, consultants, sub-consultants must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

Terrorist Financing

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with E.O. 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism.

Trafficking Victims Protection Act of 2000

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of the government-wide award term which implements Section 106(g) of the *Trafficking Victims Protection Act of 2000*, (TVPA) as amended (22 U.S.C. § 7104). The award term is located at 2 CFR § 175.15, the full text of which is incorporated here by reference in the standard terms and conditions for federally-funded procurements.

Rehabilitation Act of 1973

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the requirements of Section 504 of the

City of Raleigh (COR) Federal Requirements

Rehabilitation Act of 1973, 29 U.S.C. § 794, as amended, which provides that no otherwise qualified handicapped individual in the United States will, solely by reason of the handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Universal Identifier and System of Award Management (SAM)

All suppliers, contractors, subcontractors, consultants, and sub-consultants are required to comply with the requirements set forth in the government-wide Award Term regarding the System for Award Management and Universal Identifier Requirements located at 2 C.F.R. Part 25, Appendix A, the full text of which is incorporated here by reference in the standard terms and conditions for federally funded procurements.

USA Patriot Act of 2001

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175–175c.

Whistleblower Protection Act

All suppliers, contractors, subcontractors, consultants, and sub-consultants must comply with the statutory requirements for whistleblower protections (if applicable) at 10 U.S.C § 2409, 41 U.S.C. 4712, and 10 U.S.C. § 2324, 41 U.S.C. §§ 4304 and 4310.

Termination Provisions

The City of Raleigh may terminate any resulting contract should the Contractor fail to abide by its requirements

Legal Remedies Provisions

In instances where the Contractor violates or breaches contract terms the City shall use such sanctions and penalties as may be appropriate.

Conflict of Interest Provisions

Interest of Members, Officers, or Employees of the Recipient Members of Local Governing Body or Other Public Officials. No member officer or employee of the recipient or its agent no member of the governing body of the locality in which the program is situated and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one year thereafter shall have any financial interest direct or indirect in any contract or subcontract or the proceeds under this agreement. Immediate family members of said member's officers, employees and officials similarly barred from having any financial interest in the program. The recipient shall incorporate or cause to be incorporated in all such contracts or subcontracts a provision prohibiting such interest pursuant to the purpose of this section.

Access to Records and Record Retainage

In general all official project records and documents must be maintained during the operation of this project and for a period of five years following close out.

The City of Raleigh, the comptroller General of the United States, or any of their duly authorized representatives shall have access to any books documents papers and records of the of the Administering Agency which are pertinent to the execution of the Agreement for the purpose of making audits, examinations, excerpts and transcriptions.