

Standard Consultant Contract
For Local Public Agency Consultant Contracts with Federal-aid Participation

This **AGREEMENT**, made as of the date of the last party's signature below, is by and

BETWEEN The East Central Intergovernmental Association (ECIA), the **Owner**, located at:

7600 Commerce Park
Dubuque, IA 52002
563-556-4166
www.ecia.org

And Parsons Transportation Group, Inc, the **Consultant**, located at:

650 Algonquin Road, Suite 400
Schaumburg, IL 60175
Phone: 847.925.0120
FAX: 847.925.0140

For the following Project: Metro Dubuque Traffic Data Aggregation for Connected Vehicles project

The **Owner** has decided to proceed with the Project, subject to the concurrence and approval of the Iowa Department of Transportation (Iowa DOT), and the Federal Highway Administration (FHWA), U.S. Department of Transportation (when applicable).

The **Owner** desires to employ the **Consultant** to provide consulting engineering, software design, system deployment, and support services to assist with the development and completion of the Project. The **Consultant** is willing to perform these services in accordance with the terms of this Agreement.

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ARTICLE 1 INITIAL INFORMATION

This Agreement is based on the following information and assumptions.

1.1 Project Parameters

The objective or use is: To develop an open interface to make real-time transportation information available directly to vehicles over the cellular network. Today, local, regional, and state transportation data is not aggregated or standardized into any single format appropriate for this type of interface. Working in partnership with the City of Dubuque, City of East Dubuque, City of Asbury, City of Peosta, Iowa Department of Transportation (Iowa DOT), Illinois Department of Transportation (IDOT), Wisconsin Department of Transportation (WisDOT), Parsons, and Harman Automotive, ECIA will develop a comprehensive data set of traffic data for the entire Dubuque metropolitan area, integrate the data in a standardized format, build appropriate intelligence to define distribution limits for each piece of data, and develop an open interface to provide this data in near real time via cellular connections to original equipment manufacturers (OEM), infotainment system providers, and other third-party data stakeholders.

1.2 Financial Parameters

1.2.1 Amount of the **Owner's** budget for the **Consultant's** compensation is:
\$1,767,000

1.2.2 Amount of the **Consultant's** budget for the subconsultants' compensation is:
\$252,378

1.3 Project Team

1.3.1 The **Owner's** Designated Representative, identified as the **Contract Administrator** is:
Chandra Ravada
Interim Executive Director
East Central Intergovernmental

The **Contract Administrator** is the authorized representative, acting as liaison officer for the **Owner** for purpose of coordinating and administering the work under the Agreement. The work under this Agreement shall at all times be subject to the general supervision and direction of the **Contract Administrator** and shall be subject to the **Contract Administrator's** approval.

1.3.2 The **Consultant's** Designated Representative is:
Joseph Brahm, Parsons

1.3.3 The subconsultants retained at the **Consultant's** expense are identified in the following table:

<u>Subconsultant</u>	<u>Amount Authorized</u>	<u>Maximum Amount Payable</u>	<u>Method of Payment</u>
Harman Automotive, Harman International Industries, Incorporated	\$107,254	\$107,378	LS
Agency Interfaces	\$145,000	\$145,000	CPFF

1.4 Time Parameters

1.4.1 The **Consultant** shall begin work under this Agreement upon receipt of a written notice to proceed from the **Owner**.

1.4.2 The Consultant shall endeavor to complete the work in accordance with the attached project schedule. The Consultant will work closely with the Owner to meet the Milestone goals defined in Schedule A in the Scope of Work .

The Owner may adjust the schedule and Milestones in coordination with the Consultant to meet Owner needs and Priorities.

1.4.3 The Consultant will coordinate with the external agencies and their system vendors to define interfaces, costs and schedules for system to system interfaces. The consultant will not contract with the external agency system providers until the Owner has reviewed and approved the interface design, costs and schedule. Only approved interfaces that can be built within the budget and phase one schedule will be deployed.

1.5 Minimum Qualification Standards (MQS)

1.5.1 Notwithstanding anything to the contrary in the contract documents, all services within this Agreement shall be performed with the skill and care customarily exercised by professionals in the same industry as **Consultant** performing the same services of a similar complexity at the same general time and location. All materials (including but not limited to off the shelf software, software as a service, and hardware) provided under this Agreement shall be supplied in a reasonable and diligent manner and comply with all Applicable Laws, the requirements and specifications of this Agreement, and industry best practices.

ARTICLE 2 ENTIRE AGREEMENT, REQUIRED GUIDANCE, AND APPLICABLE LAW

- 2.1 **Entire Agreement of the Parties.** This Agreement, including its attachments, represents the entire and integrated agreement between the **Owner** and the **Consultant** and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both **Owner** and **Consultant**. This Agreement comprises the documents listed as attachments in the Table of Contents. The work to be performed by the **Consultant** under this Agreement shall encompass and include all detail work, services, materials, equipment and supplies necessary to prepare and deliver the scope of services provided in Attachment A.
- 2.2 **Required Guidance.** All services shall be in conformity with the Specifications outlined in Attachment B, the Iowa Department of Transportation Federal-aid Project Development Guide, Instructional Memorandums to Local Public Agencies (I.M.s), and other standards, guides or policies referenced therein. In addition, applicable sections of the U.S. Department of Transportation Federal Aid Policy Guide (FAPG) shall be used as a guide in preparation of plans, specifications and estimates.
- 2.3 **Applicable Law.** The laws of the State of Iowa shall govern and determine all matters arising out of or in connection with this Agreement without regard to the choice of law provisions of Iowa law. In the event any proceeding of a quasi-judicial or judicial nature is commenced in connection with this Agreement, the exclusive jurisdiction for the proceeding shall be brought in the Iowa District Court for Dubuque County Iowa. This provision shall not be construed as waiving any immunity to suit or liability including without limitation sovereign immunity in State or Federal court, which may be available to the **Owner**. The **Consultant** shall comply with all Federal, State and local laws and ordinances applicable to the work performed under this Agreement.

ARTICLE 3 FORM OF COMPENSATION

3.1 Method of Reimbursement for the Consultant.

3.1.1 Compensation for the **Consultant** shall be computed in accordance with one of the following compensation methods, as defined in Attachment C:

- .1 Cost Plus Fixed Fee - Attachment C
- .2 Lump Sum - Attachment C
- .3 Specific Rate of Compensation - Attachment C
- .4 Unit Price - Attachment C
- .5 Fixed Overhead Rate - Attachment C

3.1.2 When applicable, compensation for the subconsultant(s) shall be computed in accordance with one of the payment methods listed in section 3.1.1. Refer to section 1.3.3 for identification of the method of payment utilized in the subconsultant(s) contract. The compensation method utilized for each subconsultant shall be defined within the subconsultant contract to the **Consultant**.

- 3.2 Subconsultant's Responsibilities for Reimbursement.** The **Consultant** shall require the subconsultants (if applicable) to notify them if they at any time determine that their costs will exceed their estimated actual costs. The **Consultant** shall not allow the subconsultants to exceed their estimated actual costs without prior written approval of the **Contract Administrator**. The prime **Consultant** is cautioned that cost under-runs associated with any subconsultant's contract are not available for use by the prime **Consultant** or other subconsultant unless the **Contract Administrator**, Iowa DOT, and FHWA (when applicable) have given prior written approval.

ARTICLE 4 TERMS AND CONDITIONS

4.1 Ownership of Engineering Documents

4.1.1 All sketches, tracings, plans, specifications, reports on special studies and other data originally prepared by **Consultant** under this Agreement shall become the property of the **Owner** and shall be delivered to the **Contract Administrator** upon completion of the plans or termination of the services of the **Consultant**. There shall be no restriction or limitation on their future use by the **Owner**, except any use on extensions of the project or on any other project without written verification or adaptation by the **Consultant** for the specific purpose intended will be the **Owner's** sole risk and without liability or legal exposure to the **Consultant**. Notwithstanding the foregoing, to the extent **Consultant** utilizes to create or incorporate into the Works for Hire any intellectual property owned or developed by **Consultant** developed prior to execution of this Agreement, right, title and ownership of such pre-existing intellectual property shall remain with the **Consultant** and **Consultant** shall grant to **Owner** a limited, royalty-free, worldwide, irrevocable license to use such intellectual property for the purpose of the Project.

4.1.2 The **Owner** and the **Consultant** agree that any electronic files prepared by either party shall conform to the specifications listed in Attachment B. Any change to these specifications by either the **Owner** or the **Consultant** is subject to review and acceptance by the other party. Additional efforts by the **Consultant** made necessary by a change to the CADD software specifications shall be compensated for as Additional Services.

4.1.3 The **Owner** is aware that significant differences may exist between the electronic files delivered and the respective construction documents due to addenda, change orders or other revisions. In the event of a conflict between the signed construction documents prepared by the **Consultant** and electronic files, the signed construction documents shall govern.

4.1.4 The **Owner** may reuse or make modifications to the plans and specifications, or electronic files while agreeing to take responsibility for any claims arising from any modification or unauthorized reuse of the plans and specifications.

4.2 Subconsultant Contract Provisions and Flow Down

4.2.1 All provisions of this Agreement between the **Owner** and **Consultant** shall also apply to all subconsultants hired by the **Consultant** to perform work pursuant to this Agreement. It is the **Consultant's** responsibility to ensure all contracts between **Consultant** and its subconsultants contain all provisions required of Consultant in this Agreement. The only recognized exception to this requirement is under provision 3.1.2 when the subconsultant has a different method of reimbursement than the **Consultant**.

4.2.2 The **Consultant** may not restrict communications between the **Owner** and any of the subconsultants. The **Consultant** will encourage open communication among the **Owner**, the **Consultant** and the subconsultants, provided that **Consultant** is copied on all written communications and immediately informed of all verbal communications relevant to or foreseeably affecting **Consultant's** obligations under this Agreement.

- 4.3 Consultant's Endorsement on Plans.** The **Consultant** and its subconsultants shall, where required, endorse and certify the completed project deliverables prepared under this Agreement, and shall affix thereto the seal of a professional engineer or architect (as applicable), licensed to practice in the State of Iowa, in accordance with the current Code of Iowa and Iowa Administrative Code.

4.4 Progress Meetings. From time to time as the work progresses, conferences will be held at mutually convenient locations at the request of the **Contract Administrator** to discuss details of the design and progress of the work. The **Consultant** shall prepare and present such information and studies as may be pertinent and necessary or as may be requested by the **Contract Administrator**, to enable the **Contract Administrator** to pass judgment on the features and progress of the work.

4.5 Additional Documents. At the request of the **Contract Administrator**, the **Consultant** shall furnish sufficient documents, or other data, in such detail as may be required for the purpose of review.

4.6 Revision, Repair or Replacement of Work Product

4.6.1 Drafts of written, drawn, or graphically rendered work products, if any, shall be performed in accordance with the specifications listed in Attachment B subject to the performance standard set forth in Article 1.5.3 herein, and shall be reviewed by the **Consultant** for quality control and then be submitted to the **Contract Administrator** by the **Consultant** for review and comment. The comments received from the **Contract Administrator** and the reviewing agencies shall be incorporated by the **Consultant** prior to submission of the final work product by the **Consultant**. Work products revised in accordance with review comments shall constitute "satisfactorily completed and accepted work." Requests for changes on work products by the **Contract Administrator** shall be in writing. In the event there are no comments from the **Contract Administrator** or reviewing agencies to be incorporated by the **Consultant** into the final work product, the **Contract Administrator** shall immediately notify the **Consultant**, in writing, that the work product shall constitute "satisfactorily completed and accepted work."

4.6.2 In the event that such work product prepared by the **Consultant** is found to be in error and revision or reworking of the work product is necessary to conform to the performance standard set forth in Article 1.5.3 herein, subject to the Support Agreement incorporated herein as Attachment J, the **Consultant** agrees that it shall do such revisions without expense to the **Owner**, even though final payment may have been received. The **Consultant** must give immediate attention to these changes so there will be a minimum of delay to the project schedule. The above and foregoing is not to be construed as a limitation of the **Owner's** right to seek recovery of damages for negligence on the part of the **Consultant** herein.

4.6.3 However, should the **Contract Administrator** find it desirable to have previously satisfactorily completed and accepted written, drawn, or graphically rendered work product or parts thereof revised, the **Consultant** shall make such revisions if requested and directed by the **Contract Administrator** in writing, and such work will be paid for as provided in Article 4.7.

4.6.4 The **Consultant's** responsibility for repair, replacement or remediation of software deployed on site shall be in accordance with and subject to the terms of the Licensing Agreement incorporated herein as Attachment K, while software licensed as a service to **Owner** shall be in accordance with and subject to the SaaS Agreement incorporated herein as Attachment L.

4.6.5 Subject to the terms of applicable licensing agreements, the **Consultant** represents and warrants that: (a) all services and materials will be performed and provided in a professional and safe manner by duly qualified and experienced persons and in accordance with all Applicable Laws; (b) the materials are of merchantable quality, correspond with their sample description, will reasonably perform in accordance with the requirements of this Agreement, and are new, genuine and free of any encumbrance; (c) the provision of the materials and performance of the services hereunder, and receipt of such materials and services by the **Owner** will not infringe the intellectual property rights of any third party, and (d) it will comply with, and ensure that its employees, officers, agents, authorized representatives and subconsultants also comply with, the **Owner's** policies, including in respect to safety, sustainability, information technology, and security, as amended from time to time and made available to **Consultant**.

4.6.6 Remediation or reperformance of Support services provided by **Consultant** shall be in accordance with and subject to the terms and conditions of Attachment J.

4.6.7 In the event of the conflict or ambiguity of, or lack of reference to, terms between this Agreement and those of a licensing agreement incorporated herein, the terms of the applicable licensing agreement shall govern and control with respect only to the granting of the license and the use of the licensed

product, and this Agreement shall govern and control in all other matters.

- 4.7 Extra Work.** If the **Consultant** is of the opinion that any work it has been directed to perform is beyond the scope of this Agreement, and constitutes "Extra Work," it shall promptly notify the **Contract Administrator** in writing to that effect. In the event that the **Contract Administrator** determines that such work does constitute "Extra Work", the **Consultant** shall promptly develop a scope and budget for the extra work and submit it to the **Contract Administrator**. The **Owner** will provide extra compensation to the **Consultant** upon the basis of actual costs plus a fixed fee amount, or at a negotiated lump sum. The **Consultant** shall not proceed with "Extra Work" without prior written approval from the **Owner** and concurrence from the Iowa DOT. Prior to receipt of a fully executed Supplemental Agreement and written Notice to Proceed, any cost incurred that exceeds individual task costs, or estimated actual cost, or the maximum amount payable is at the **Consultant's** risk. The **Owner** has the right, at its discretion, to disallow those costs. However, the **Owner** shall have benefit of the service rendered.
- 4.8 Extension of Time.** The time for completion of each phase of this Agreement shall not be extended because of any delay attributed to the **Consultant**, but may be extended by the **Contract Administrator** in the event of a delay attributed to the **Owner** or the **Contract Administrator**, or because of unavoidable delays beyond the reasonable control of the **Consultant**.
- 4.9 Responsibility For Claims And Liability**
- 4.9.1** The **Consultant** agrees to indemnify and hold the **Owner**, the State of Iowa, the Iowa DOT, their agents, employees, representatives, assigns and successors harmless for any and all liabilities, costs, demands, losses, claims, damages, expenses, or attorneys' fees, including any stipulated damages or penalties, which may be suffered by the **Owner** as the result of third-party claims to the extent caused by, arising out of, or resulting from the negligence, negligent errors or omissions, willfully wrongful misconduct, or breach of any covenant or warranty in this Agreement of or by the **Consultant** or any of its employees, agents, directors, officers, subcontractors or subconsultants, in connection with this Agreement.
- 4.9.2** The **Consultant** shall obtain and keep in force insurance coverage as required by the attached Insurance Schedule . Proof of **Consultant's** insurance will be provided to the **Owner** at the time the contract is executed and upon each insurance coverage renewal. Attachment M, Insurance Schedule J Professional Services and review coverage limits.
- 4.10 Current and Former Agency Employees (Conflicts of Interest)**
- The **Consultant** shall not engage the services of any current employee of the **Owner** or the Iowa DOT unless it obtains the approval of the **Owner** or the Iowa DOT, as applicable, and it does not create a conflict of interest under the provisions of Iowa Code section 68B.2A. The **Consultant** shall not engage the services of a former employee of the **Owner** or the Iowa DOT, as applicable, unless it conforms to the two-year ban outlined in Iowa Code section 68B.7. Similarly, the **Consultant** shall not engage the services of current or former FHWA employee without prior written consent of the FHWA, and the relationship meets the same requirements for State and local agency employees set forth in the above-referenced Iowa Code sections and the applicable Federal laws, regulations, and policies.
- 4.11 Suspension of Work under this Agreement**
- 4.11.1** The right is reserved by the **Owner** to suspend the work being performed pursuant to this Agreement at any time. The **Contract Administrator** may affect such suspension by giving the **Consultant** written notice, and it will be effective as of the date established in the suspension notice. Payment for the **Consultant's** services will be made by the **Owner** to the date of such suspension, in accordance with the applicable provisions in Article 4.12.2 or Article 4.12.3 below.
- 4.11.2** Should the **Owner** wish to reinstate the work after notice of suspension, such reinstatement may be accomplished by thirty (30) days' written notice within a period of one year after such suspension, unless this period is extended by written consent of the **Consultant**.
- 4.11.3** In the event the **Owner** suspends the work being performed pursuant to this Agreement the **Consultant** with approval from the **Contract Administrator**, has the option, after 180 days to terminate the contract.

4.11.4 Consultant shall be entitled to compensation for claims, costs and expenses necessarily arising from a suspension lasting more than **30** days or necessarily continuing regardless of such suspension.

4.12 Termination of Agreement

4.12.1 The right is reserved by the **Owner** to terminate this Agreement at any time and for any reason upon not less than thirty (30) days written notice to the **Consultant**.

4.12.2 In the event the Agreement is terminated by the **Owner** without fault on the part of the **Consultant**, the **Consultant** shall be paid for the reasonable and necessary work performed or services rendered and delivered up to the effective date or time of termination. The value of the work performed, and services rendered and delivered, and the amount to be paid shall be mutually satisfactory to the **Contract Administrator** and to the **Consultant**. The **Consultant** shall be paid a portion of the fixed fee, plus actual costs, as identified in Attachment C. Actual costs to be reimbursed shall be determined by audit of such costs to the date established by the **Contract Administrator** in the termination notice, except that actual costs to be reimbursed shall not exceed the Maximum Amount Payable. **Consultant** shall also be paid for reasonable termination costs, including those necessary due to cancellation of subconsultant agreements, equipment leases or restocking fees, but not loss of anticipated profits.

4.12.3 In the event the Agreement is terminated by the **Owner** for fault on the part of the **Consultant**, the **Consultant** shall be paid only for work satisfactorily performed and delivered to the **Contract Administrator** up to the date established by the termination notice. After audit of the **Consultant's** actual costs to the date established by the **Contract Administrator** in the termination notice and after determination by the **Contract Administrator** of the amount of work satisfactorily performed, the **Contract Administrator** shall reasonably determine the amount to be paid to the **Consultant**.

4.12.4 This Agreement will be considered completed upon the completion of Tasks as identified in the attached Scope of Services.

4.13 Right to Set-off. In the event that the **Consultant** owes the **Owner** any sum under the terms of this Contract, the **Owner** may set off the sum owed to the **Owner** against any sum owed by the **Owner** to the **Consultant** under any other contract or matter in the **Owner's** sole discretion, unless otherwise required by law. The **Consultant** agrees that this provision constitutes proper and timely notice of the **Owner's** intent to utilize any right of set-off.

4.14 Assignment or Transfer. The **Consultant** is prohibited from assigning or transferring all or a part of its interest in this Agreement, unless written consent is obtained from the **Contract Administrator** and concurrence is received from the Iowa DOT and FHWA, if applicable.

4.15 Access to Records. The **Consultant** is to maintain all books, documents, papers, accounting records and other evidence pertaining to this Agreement and to make such materials available at their respective offices at all reasonable times during the agreement period, and for three years from the date of final closure of the Federal-aid project with FHWA, for inspection and audit by the **Owner**, the Iowa DOT, the FHWA, or any authorized representatives of the Federal Government; and copies thereof shall be furnished, if requested.

4.16 Iowa DOT and FHWA Participation. The work under this Agreement is contingent upon and subject to the approval of the Iowa DOT and FHWA, when applicable. The Iowa DOT and FHWA shall have the right to participate in the conferences between the **Consultant** and the **Owner**, and to participate in the review or examination of the work in progress as well as any final deliverable.

4.17 Nondiscrimination Requirements.

4.17.1 During the performance of this Agreement, the **Consultant** agrees to comply with the regulations of the U.S. Department of Transportation, contained in Title 49, Code of Federal Regulations, Part 21, and the Code of Iowa, Chapter 216. The **Consultant** will not discriminate on the grounds of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion, or disability in its employment practices, in the selection and retention of subconsultants, and in its procurement of materials and leases of equipment.

4.17.2 In all solicitations, either by competitive bidding or negotiation made by the **Consultant** for work to be performed under a subcontract, including procurement of materials or equipment, each potential subconsultant or supplier shall be notified by the **Consultant** of the **Consultant's** obligation under this contract and the regulations relative to nondiscrimination on the grounds of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion, or disability.

4.17.3 In the event of the **Consultant's** noncompliance with the nondiscrimination provisions of this Agreement, the **Owner** shall impose such contract sanctions as it, the Iowa DOT, or the FHWA may determine to be appropriate, including, but not limited to withholding of payments to the **Consultant** under the Agreement until the **Consultant** complies, or the Agreement is otherwise suspended or terminated.

4.17.4 The **Consultant** shall comply with the following provisions of Appendix A of the U.S. DOT Standard Assurances:

During the performance of this contract, the **Consultant**, for itself, its assignees and successors in interest (hereinafter referred to as the "**Consultant**") agrees as follows:

1. Compliance with Regulations: The **Consultant** shall comply with the Regulations relative to non-discrimination in Federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. Nondiscrimination: The **Consultant**, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subconsultants, including procurement of materials and leases of equipment. The **Consultant** shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the **Consultant** for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subconsultant or supplier shall be notified by the **Consultant** of the **Consultant's** obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, national origin, sex, age, or disability.
4. Information and Reports: The **Consultant** shall provide all information and reports required by the Regulations or directives issued pursuant there to, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the **Owner**, the Iowa Department of Transportation or Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a **Consultant** is in the exclusive possession of another who fails or refuses to furnish this information the **Consultant** shall so certify to the **Owner**, the Iowa Department of Transportation or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
5. Sanctions for Noncompliance: In the event of the **Consultant's** noncompliance with the nondiscrimination provisions of this contract, the **Owner** shall impose such contract sanctions as it, the Iowa Department of Transportation or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to the **Consultant** under the contract until the **Consultant** complies, and/or
 - b. cancellation, termination or suspension of the contract, in whole or in part.
6. Incorporation of Provisions: The **Consultant** shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The **Consultant** shall take such action with respect to any subcontract or procurement as the **Owner**, the Iowa Department of Transportation or

the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance: provided, however, that, in the event a **Consultant** becomes involved in, or is threatened with, litigation with a subconsultant or supplier as a result of such direction, the **Consultant** may request the **Owner** or the Iowa Department of Transportation to enter into such litigation to protect the interests of the **Owner** or the Iowa Department of Transportation; and, in addition, the **Consultant** may request the United States to enter into such litigation to protect the interests of the United States.

4.18 Compliance with Title 49, Code of Federal Regulations, Part 26

4.18.1 The **Consultant** agrees to ensure that disadvantaged business enterprises (DBEs) as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this Agreement. In this regard the **Consultant** and all of its subconsultants shall take all necessary and reasonable steps in compliance with the Iowa DOT DBE Program to ensure disadvantaged business enterprises have the maximum opportunity to compete for and perform contracts.

4.18.2 The **Consultant** shall pay its subconsultants for satisfactory performance of their work no later than 30 days from receipt of each payment it receives from the **Owner** for such work. If the **Owner** holds retainage from the **Consultant**, the **Consultant** may also withhold retainage from its subconsultant(s). If retainage is withheld from a subconsultant, full payment of such retainage shall be made within 30 days after the subconsultant's work is satisfactorily completed.

4.18.3 Upon notification to the **Consultant** of its failure to carry out the requirements of this Article, the **Owner**, the Iowa DOT, or the FHWA may impose sanctions which may include termination of the Agreement or other measures that may affect the ability of the **Consultant** to obtain future U.S. DOT financial assistance. The **Consultant** is hereby advised that failure to fully comply with the requirements of this Article shall constitute a breach of contract and may result in termination of this Agreement by the **Owner** or such remedy as the **Owner**, Iowa DOT or the FHWA deems appropriate, which may include, but is not limited to:

- 1. withholding monthly progress payments;
- 2. assessing sanctions;
- 3. liquidated damages; and / or

4.19 Severability. If any section, provision or part of this Agreement shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the Agreement as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their proper officials thereunto duly authorized as of the dates below.

Parsons Transportation Group, Inc

By _____ Date: _____

Joseph Brahm
Vice President

ATTEST:

By _____ Date: _____

East Central Intergovernmental Association (ECIA)

By _____ Date: _____

Chandra Ravada
Interim Executive Director

Attachment A

Parsons Smart Grant Scope of Services

Introduction:

This agreement provides for engineering services to help plan, and design an open interface to deliver near real-time transportation information directly to vehicles over the cellular network

This work will be accomplished according to the following tasks.

- Task 1: Project Management
- Task 2: Agency Coordination
- Task 3: Evaluation and Design
- Task 4: Prototyping
- Task 5: Development
- Task 6: System Documentation
- Task 7: Project Integration & Testing
- Task 8: Data Sharing and Storage
- Task 9: Implementation and Final Reports

Task 1: Project Management

Purpose:

The Dubuque STREETS SMART Grant project involves multiple agencies systems integration and development and deployment of a prototype interface. The ability to maintain schedule will require a focused effort. As part of the SMART Grant Program, the project will also include special SMART Grant tracking and reporting.

The objective of this task will be to provide project leadership that encompasses managing resources, tasks, project schedule, costs, and keeping the ECIA and the City of Dubuque involved and informed throughout the project lifecycle.

Inputs:

- Contract
- Scope of Services
- ECIA SMART Grant Application
- Parsons Project Management-PM policies and procedures
- ECIA and City of Dubuque (The City) Project Management Team
- USDOT SMART Grant procedures and guidelines

Approach:

- Conduct kickoff meetings with ECIA and The City Team to discuss management approach including clarification of scope, expectations, and any project interrelationships
- Review USDOT policies and procedures related to the management of SMART Grant Phase 1 Projects
- Develop Project Schedule
- Develop Data Management Plan
- Agree on Evaluation Metrics and Reporting in accordance with Attachment B
- Develop Project Management Plan
- Provide monthly project status reports via meeting that include:
 - Status Summary

- Issues/Risks updates
- Progress Assessment
- Activities Performed
- Deliverables Completed
- Updates to project schedule.
- Coordinate delivery of project deliverables.
- Parsons will work closely with ECIA to develop the USDOT required SMART Grant Project reporting

Deliverables:

- Project Schedule and updates
- Data Management Plan
- Evaluation Metrics and Reporting
 - *Baseline Report (Evaluation Plan):*
- Project Management Plan
- Project Status Reports and invoices
- Specific Issues and Actions Report
- Risk Assessment updates
- Monthly Project Schedule
- Project Work Plan updates
- Input for SMART Project Reporting to USDOT per Attachment B

Assumptions:

- Bi-weekly status meetings via Teams
- Most interactions will be via teams, however on-site staff will be available as needed to ensure smooth progress of the project
- Monthly Project Status Reports
- Specific Issues and Actions reporting as needed
- Project Schedule updates on an as needed basis
- Project Work Plan updates as appropriate
- Parsons will support and provide input to USDOT reporting, but ECIA will submit the required reports.

Task 2: Agency Coordination

Purpose:

In order to provide a more complete set of data for the metropolitan area, the project team envisions integrating near real-time traffic data and traffic-related events in the region from Iowa DOT, WisDOT, and IDOT. This will require coordination with the agencies and their systems integrators. Parsons will support this coordination; help **define needs** and the interfaces and work with the agencies to develop any required agreements.

When needed, Parsons will bring external agency ATMS systems integrators on as subconsultants to support the development of the C2C interfaces.

Inputs:

- Agency ATMS interface documentation
- Agency Policies and Procedures
- ATMS C2C standards
- Data & user needs as defined in other tasks to support the cellular interface to motorist.

Approach:

- Parsons will coordinate initial project introduction meetings with each agency.
- A series of meetings are expected to coordinate and develop interface details.
- When practical, interface designs will start with any available and documented C2C interfaces available from each agency.
- The primary focus of the interfaces will be to ingest near real time data from each system for traffic and traffic related events within the region. However, the team will support the distribution of data from the STREETS system for agencies that are interested in getting data within the Dubuque Metro area.
- Using an established C2C standards will be the preferred approach when an agency does not have an established interface and API.

Deliverables:

- C2C API Documentation
- Agency meeting notes
- Subconsultant agreements as needed

Assumptions:

- The project budget identifies expected interface cost by the agency system integrators. If the agency integrator cannot support the interfaces within the identified budgets, the team may need to consider not including the interface for this Phase 1 of the SMART Project and add it to any phase 2 deployment.
- ECIA and The City will support coordination with the other agencies to encourage support for the desired interfaces.

Task 3: Evaluation and Design*Purpose:*

This task includes a needs assessment and the evaluation of available and potential data and the design of a near real time interface that will make a complete set of transportation data available for potential in vehicle infotainment systems or other third-party transportation information service providers. The system **design** will integrate the data in a standardized format, build appropriate intelligence to define distribution limits for each piece of data, and develop an open interface to provide this data in near real time via cellular connections to original equipment manufacturers (OEM), infotainment system providers, and other third-party data stakeholders. The Design will consider, and balance agency needs, motorists needs and OEM needs.

The design will leverage transportation/transit infrastructure and aggregate data from existing smart transportation systems and ITS devices to provide a complete picture of real-time traffic and road conditions for a whole metropolitan area, including freeways, arterials, bridges, and railroad crossings.

Inputs:

- **Regional Agencies**
- STREETS system data architecture
- Agency interface APIs
- Guidance from Harman Automotive team regarding best approach to provide and display data to motorist
- Relevant C-V2X standards
- Other industry stakeholder inputs as available

Approach:

- Parsons will work with Harman Automotive, to design a solution that includes all relevant travel data in a fashion that would allow vehicles to display the right data to the right motorists at the right time.
- Parsons team will solicit input from other similar SMART projects identified at the SMART Summit.
- We anticipate a series of design workshops. The team will consider how and when the data should be made available to motorist, how it will be distributed and potentially filtered and displayed to motorist at the right time.
- Each type of data will be evaluated for best distribution and display potential.
- The Team will develop a complete design document that addressed software, hardware and distribution details.
- A draft API will be developed for potential interface users.

Deliverables:

- Design Document
- Draft API Document for users

Assumptions:

- All documents will be provided in electronic format only.

Task 4: Prototyping*Purpose:*

The intent of this task is to define how each piece of transportation data should be defined and shared to allow for the most appropriate distribution and display for motorist. Parsons, Harman and the partnering agencies will work through each event type, traffic type and other relevant data such as signal timings. The intent of this task is to determine the best way to share and display each type of data to motorist. The team will consider infotainment system integration considerations and potential use by other third-party users. This task will document high-level use cases and system requirements from an OEM perspective to the traffic data sharing interface.

Inputs:

- Available data elements
- Harman Infotainment team input
- Agency team members
- Input from similar SMART Grant projects

Approach:

- Series of end user focused workshops
- Whiteboard and story boarding sessions
- Review and analyze each data type
- Consider how data sets fit together and order of flow and presentation
- The optimization of end user experience should drive the interface definition

Deliverables:

- Use cases, System requirements and System architecture documents
- Full documentation of prototype interface details

- Sample functional prototype interface feeding storyboard outputs.

Assumptions:

- Two in person workshops and the rest online via TEAMS
- Share Site will be used to support coordination

Task 5: Development

Purpose:

This task provides for the development required to support the appropriate data management, integration, formatting and distribution to meet the needs as defined in the prototyping and design tasks.

Inputs:

- STREETS ATMS system Architecture
- C-V2X standards and developing standards
- Latest security practices

Approach:

- Agile development method
- Close coordination between development and other Task Team members
- Use Confluence to document the design and development details
- Use Jira to track software tasks and assignments.

Deliverables:

- Software, licensing and internal hardware required to support the project goals and prototype.
- A sample prototype demonstration of the implemented data sharing as would be used in a vehicle environment. **This will include PPT presentation, recorded sample demo and related software.**

Assumptions:

- Biweekly reviews with The City Team
- Development will be provided at Parsons facilities coordinated out of Parsons Schaumburg IL office

Task 6: System Documentation

Purpose:

This task provides the full documentation for Phase 1 deployment. It includes system architecture, schematics, data schema, data flow, system administration, agency interface documentation, licensing, and a full API for the data interface to the infotainment system providers and other end users.

It includes support for documentation required by USDOT for SMART Grant Phase 1 projects.

Inputs:

- Project Scope of work
- USDOT documentation requirements
- Parsons software development practices

Approach:

- Documentation continues from the start of the project.
- Meeting notes and project decisions are documented as a part of Project Management task
- Design details and decisions are documented in Confluence.
- System architecture, schematics, data schema, data flow, system administration, agency interface documentation, licensing, and a full API for the data interface will be provided.
- Parsons will support the development of USDOT required SMART grant documentation.
- Interface API will be available online.

Deliverables:

- Defined Final Design Documents
- Interface API documents

Assumptions:

- ECIA will lead the effort to provide USDOT documentation with support from the Parsons Team.

Task 7: Project Integration & Testing

Purpose:

This task provides testing throughout the development process. Under the Agile development, testing will be performed as the components are developed. Parsons provides testing at multiple levels.

Testing is provided to ensure that the delivered system meets the needs and requirements, and retains the accuracy and completeness as expected. The test plans will be based on the needs and requirements identified in Task 3.

Inputs:

- Parsons testing policies and procedures
- Related standard documents
- Story board outputs and functional requirements
- Prototype design team

Approach:

- With Agile development we expect the testing to be an iterative and cooperative process with the Prototype design team.
- Testing results will be documented and coordinated within Jira tickets.
- Final system testing will be performed at the end of the development cycles.
- Final testing will be based on formal test plans and results will be fully documented

Deliverables:

- Jira ticket tracking of test results. Parsons will provide direct access to Jira tickets or ticket outputs in PDF format, if direct access is not available.
- Final test plans, in Word or PDF format.
- Final test results documentation in Word or PDF format
- Final test issue resolution.

Assumptions:

- Agile style development process.

Task 8: Data Sharing and Storage

Purpose:

The purpose of this task is to provide and set up all the required hardware, support the set up of all communication needs and set up a cloud-based environment to provide a sharing platform for external users to access the data.

Inputs:

- Data Schema
- Data sizing
- Cost of Options
- Cyber security
- The City's IT infrastructure

Approach:

- Parsons will evaluate hardware and communications needs in coordination with ECIA and The City
- The Parsons team will work with The City to determine the most appropriate hosting site for the distribution of the data.
- Once the hosting service is selected, Parsons will set up the environment and interfaces to the data integration on site at The City.

Deliverables

- Local hardware required to support the deployment
- Hosting details, documentation and costs breakdown

Assumptions:

- Hosting will be provided for the remainder of the Phase one Project only.

Task 9: Implementation and Final Report

Purpose:

This task supports the development of the Implementation Report and Final Report, initial and final, based on project experience and input from third party infotainment system and ATIS providers, in accordance with Attachment A and USDOT Requirements. This task will include a detailed implementation plan with costs for the next phase of the SMART project that will be used to support the

Phase 2 grant application.

Inputs:

- Attachment A to this Scope
- Story board outputs and functional requirements
- USDOT SMART final report requirements
- Feedback from infotainment system providers
- Feedback from USDOT
- Feedback from Project Stakeholders

Approach:

Pursuant to USDOT Guidelines the reports will cover:

- The anticipated deployment and operational costs of the project as compared to the benefits and savings from the project if implemented at scale
- The means by which the project has met the original expectation, as projected in the grant application, including data describing the means by which the project met the specific goals
- The performance measurement data
- The requirements for a successful at-scale implementation and an assessment of the feasibility of at scale implementation
- An analysis of the success, challenges and validity of the initial approach, any changes or improvements that would be made in Stage 2 if recommended for award and any challenges to continued maintenance and operations in Stage 2
- Lessons learned and recommendations

Deliverables:

- Draft reports will be submitted in accordance with Attachment B

Assumptions:

- Parsons will lead the development of the Implementation and Final Implementation Reports with significant input from ECIA, The City and the rest of the Project Team.
- ECIA will submit the Reports after review and approval of Parsons draft submittals.
- No hard copy submittals will be required.

Attachment B
USDOT REQUIREMENTS
PERFORMANCE MEASUREMENT INFORMATION

Baseline Measurement Date: Due 90 days after award

Baseline Report Date ('Evaluation Plan'): Due 90 days after award

Measure	Category and Description	Measurement Frequency
Safety and Reliability	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on emergency response and the safety of systems for pedestrians, bicyclists, and the broader traveling public	End of period of performance
Resiliency	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the reliability and resiliency of the transportation system including cybersecurity and climate change	End of period of performance
Equity and Access	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on connecting or expanding access to jobs, education, and essential services for underserved or disadvantaged populations	End of period of performance
Climate	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on congestion, air pollution, emissions, and energy efficiency	End of period of performance
Partnerships	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the economic competitiveness and private sector investments or partnerships including	End of period of performance

	technical and financial commitments	
Integration	Qualitative Project Benefits: Qualitative description of the anticipated impacts of at-scale implementation on the integration of systems and the connectivity of infrastructure, connected vehicles, pedestrians, bicyclists, and the broader traveling public	End of period of performance
Costs	Project Costs: Quantification of the cost of the proof-of-concept or prototype carried out using the grant (Stage 1)	End of period of performance
Costs	Project Costs: Quantification of the anticipated cost of at-scale implementation (Stage 2)	End of period of performance
Lessons Learned and Recommendations	Lessons Learned and Recommendations: Description of lessons learned and recommendations for future deployment strategies	End of period of performance

<p>Evaluation Plan</p> <p>The Recipient shall submit an evaluation plan and data management plan that provides an overview of how the project will be evaluated and how the data collected will be managed and stored. The Evaluation plan and Data Management plan shall include the following three sections:</p> <ul style="list-style-type: none"> • An overview of how the proof-of-concept or prototype will be evaluated and how the data collected will be managed and stored. • A description of the anticipated impact areas (i.e. goals) of the project if implemented at scale and the methods that will be used to estimate the anticipated benefits and costs associated with implementation. • Robust performance metrics and measurable targets based on the project goals to inform whether the proof-of-concept or prototype meets expectations and whether full implementation would meet program goals. • The baseline data for each performance measure that is identified in the Performance Measure Table in Attachment A and a detailed description of the data sources, assumptions, variability, and estimated levels of precision for each performance measure. 	<p>Within 90 calendar days after execution of this Agreement.</p>
<p>Data Management Plan</p> <p>Applicants are expected to account for data and performance reporting including:</p> <ul style="list-style-type: none"> • Default to open access when appropriate (exceptions include protecting personally identifiable information [PII], Indigenous data sovereignty, or confidential business information [CBI]). • Protect PII, intellectual property rights, and CBI. • Utilize, when possible, open licenses and protect USDOT’s non-exclusive copyright to data and corresponding outputs. • Make the source code or tools necessary to analyze the data available to the public, if relevant. • Provide relevant metadata (in a DCAT-US file, and, optionally, a discipline-appropriate metadata standard file), and data documentation (README.txt files, data dictionaries, code books, supporting files, imputation tables, etc.); and, • Where applicable, consider contributing data to voluntary resources such as NHTSA’s AV TEST Initiative. • Projects should implement data management best practices including, but not limited to, implementation of published data specifications and standards (formal and informal); increasing data discoverability and data sharing; and enabling interaction of systems, interoperability, and integration of data system <p>Further guidance will be provided to assist applicants selected for a Stage 2 Grant to update their Data Management Plan.</p>	<p>Within 90 calendar days after execution of this Agreement</p>

<p>Implementation Report</p> <p>The Recipient shall submit an Implementation report that assesses the anticipated costs and benefits of the project and demonstrates the feasibility of at-scale implementation. The Implementation Report shall include the following five sections:</p>	<p>Annual- Stage 1 grants require a Draft report due within 1 year of the grant award.</p>
<ul style="list-style-type: none"> • A description of the anticipated deployment and operational costs of the project as compared to the benefits and savings from the project if implemented at scale. • The means by which the project has met the original expectation, as projected in the grant application, including data describing the means by which the project met the specific goals. • Lessons learned and recommendations for future deployment strategies to optimize transportation efficiency and multimodal system performance. • A description of the requirements for a successful at-scale deployment and an assessment of the feasibility of at-scale implementation. • An analysis of the success, challenges and validity of the initial approach, any changes or improvements they would make in Stage 2 if recommended for award and any challenges to continued maintenance and operations in stage 2. • The performance measurement data for each performance measure that is identified in the Performance Measure Table in Attachment A. 	
<p>Program Evaluation</p> <p>As a condition of grant award, grant recipients may be required to participate in an evaluation undertaken by USDOT or another agency or partner. Evaluation may take different forms such as an implementation assessment across grant recipients, an impact and/or outcomes analysis of all the selected sites within or across grant recipients, or a benefit/cost analysis or assessment of return on investment. As a part of the evaluation, as a condition of award, grant recipients must agree to</p> <ul style="list-style-type: none"> • Make records available to the evaluation contractor or USDOT staff. • Provide access to program records, and any other relevant documents to calculate costs and benefits. • In case of an impact analysis, facilitate the access to relevant information as requested. • Follow evaluation procedures as specified by the evaluation contractor or USDOT staff. 	<p>As applicable</p>

<p>Reporting of Matters Related to Recipient Integrity and Performance If the total value of a selected applicant's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then the applicant during that period of time must maintain the currency of information reported to the SAM that is made available in the designated integrity and performance system (currently FAPIIS) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110- 417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111- 212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.</p>	As applicable
<p>Tangible Personal Property Report (SF-428) The recipient must report on the status of personal property in which the Federal Government retains an interest. Interim property reports may be required at DOT discretion. A final personal property report is required at closeout.</p>	As applicable
<p>Real Property Status Report (SF-429) The report is a multi-purpose form that DOT may require for general reporting about real property acquired or constructed under a federal award, as well as for recipients to make a request related to acquisition or improvement of real property or to request disposition instructions. If applicable, recipients shall submit this report in accordance with the terms provided in 2 CFR § 200.329, no less frequently than annually.</p>	As applicable
<p>Final Report The Recipient shall submit (in a format to be provided by DOT) the Recipient's assessment of the Grant Project to DOT within the Closeout process of the grant agreement.</p>	Final report shall be submitted not later than 120 days after the end of the period of performance
<p>Additional Reporting may be required</p>	As applicable

ATTACHMENT C COST PLUS FIXED FEE

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation of all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees in the amount of the **Consultant's** actual cost plus applicable fixed fee amount. The **Consultant's** actual costs shall include payments to any subconsultants. The estimated actual costs and fixed fee are shown below and are itemized in Attachment C. Subconsultant costs are not available for use by the prime **Consultant** or other subconsultants. A contingency amount has **not** been established to provide for actual costs that exceed those estimated.

Estimated Actual Costs (Prime only)	\$ 1,338,083	
Fixed Fee (Prime only)	\$ 176,580	
Contingency (Prime only)	\$ 0	
Total Prime Consultant Costs		\$ 1,338,083
Harman Automotive	\$ 107,378	
Agency Interface Consultants	\$ 145,00	
Total Subconsultant Costs		\$ 252,378
Maximum Amount Payable		\$ 1,767,000

The nature of engineering services is such that actual costs are not completely determinate. Therefore, the **Consultant** shall establish a procedure for comparing the actual costs incurred during the performance of the work to the estimated actual costs listed above. The procedure will itemize prime consultant and subconsultant costs in association with each scoped task. The purpose is to monitor these two elements and thus provide for early identification of any potential for the actual costs exceeding the estimated actual costs. The procedure shall be used in a way that will allow enough lead time to execute the paragraphs below without interrupting the work schedule. Therefore, once the accrued labor costs for a scoped task reach 85% of the estimated value for the prime or subconsultant, then the **Consultant** shall notify the **Owner** in writing.

It is possible that the **Consultant's** costs for the scoped tasks may need to exceed those shown in Attachment C. The **Consultant's** and subconsultants' costs for scoped tasks shall not be exceeded without prior written authorization from the **Contract Administrator** and concurrence from the Iowa DOT. Costs for scoped tasks that exceed estimated costs, if approved by the **Contract Administrator**, may be compensated via Supplemental Agreement, Work Order, Amendment, or Contingency as detailed in the paragraphs below. If the **Consultant** exceeds the estimated costs for scoped tasks for any reason (other than that covered in Section 3.1.1.2) before the **Contract Administrator** is notified in writing, the **Owner** will have the right, at its discretion, to deny compensation for that amount.

The fixed fee amount will not be changed unless there is a substantial reduction or increase in scope, character, or complexity of the services covered by this Agreement or the time schedule is changed by the **Owner**. The adjustment to fixed fee will consider both cumulative and aggregate changes in scope, character, or complexity of the services. Any change in the fixed fee amount will be made by a Supplemental Agreement, Work Order, or Amendment.

If a contingency amount has been established and at any time during the work the **Consultant** determines that its actual costs will exceed the estimated actual costs, thus necessitating the use of a contingency amount, it will promptly so notify the **Contract Administrator** in writing and describe what costs are causing the overrun and the reason. The **Consultant** shall not exceed the estimated actual costs without the prior written approval of the **Contract Administrator** and concurrence of the Iowa DOT. The **Owner** or Iowa DOT may audit the **Consultant's** cost records prior to authorizing the use of a contingency amount.

The maximum amount payable will not be changed except for a change in the scope. Changes due to an

overhead adjustment are identified in Section 3.1.1.2. If at any time it is determined that a maximum amount payable will be or has been exceeded, the **Consultant** shall immediately so notify the **Contract Administrator** in writing. The maximum amount payable shall be changed by a Supplemental Agreement, Work Order, or Amendment or this Agreement will be terminated as identified in Article 4.12.3. The **Owner** may audit the **Consultant's** cost records prior to making a decision whether or not to increase the maximum amount payable.

3.1.1.2 Reimbursable Costs. Reimbursable costs are the actual costs incurred by the **Consultant** which are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulations Systems, Subchapter E., Part 30 (when applicable), and Part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required. The Title 48 requirements include the following:

1. Salaries of the employees for time directly chargeable to work covered by the Agreement, and salaries of principals for time they are productively engaged in work necessary to fulfill the terms of the Agreement.
2. Direct non-salary costs incurred in fulfilling the terms of this Agreement. The **Consultant** will be required to submit a detailed listing of direct non-salary costs incurred and certify that such costs are not included in overhead expense pool. These costs may include travel and subsistence, reproductions, computer charges and materials and supplies.
3. The indirect costs (salary related expenses and general overhead costs) to the extent that they are properly allowable to the work covered by this Agreement. The **Consultant** has submitted to the **Owner** the following indirect costs as percentages of direct salary costs to be used provisionally for progress payments for work accomplished during the **Consultant's** current fiscal year: Salary related expenses are 39.25% of direct salary costs and general overhead costs are 87.61% of direct salary costs.

Use of updated overhead percentage rates shall be requested by the **Consultant** after the close of each fiscal year and the updated overhead rate shall be used to update previous year invoices and subsequent years as a provisional rate for invoicing in order to more accurately reflect the cost of work during the previous and subsequent years.

Any actual fiscal year or fiscal year's audited or unaudited indirect costs rates known by the **Consultant** shall be used in computing the final invoice statement. All unverified overhead rates shall have a schedule of computation supporting the proposed rate attached to the final bill. Prior to final payment for work completed under this Agreement all indirect cost rates shall be audited and adjusted to actual rates through the most recently completed fiscal year during which the work was actually accomplished. In the event that the work is completed in the current fiscal year, audited indirect cost rates for the most recently completed fiscal year may be applied also to work accomplished in the current fiscal year. If these new rates cause the actual costs to be exceeded, the contingency amount will be used.

3.1.1.3 Premium Overtime Pay. Premium overtime pay (pay over normal hourly pay) will not be allowed without written authorization from the **Contract Administrator**. If allowed, premium overtime pay shall not exceed 2 percent of the total direct salary cost without written authorization from the **Contract Administrator**.

3.1.1.4 Payments. Monthly payments within thirty (30) days of **Owner's** receipt of invoice shall be made based on the work completed and substantiated by monthly progress reports. The report shall indicate the direct and indirect costs associated with the work completed during the month. The **Contract Administrator** will check such progress reports and payment will be made for the direct non-salary costs and salary and indirect costs during said month, plus a portion of the fixed fee. Fixed fee will be calculated and progressively invoiced based on actual costs incurred for the current billing cycle. Each invoice shall be accompanied with a monthly progress report which details the tasks invoiced, estimated tasks to be billed on the next invoice, and any other contract tracking information.

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from

prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon delivery and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement of costs incurred and amounts earned. Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. Final audit will determine correctness of all invoiced costs and final payment will be based upon this audit. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

**ATTACHMENT C-1
Cost Analysis Worksheet**

I. Direct Labor Cost (Prime Only)				
<u>Category</u>	<u>Hour</u>	<u>Rate/Hour</u>	<u>Amount</u>	
Project Manager (SEM)	640	\$ 119.00	\$76,160	
Chief Engineer (SPE)	800	\$ 84.75	\$67,800	
Lead Engineer (PE)	1370	\$ 72.75	\$99,668	
Senior SW Engineer (SE)	1162	\$ 58.83	\$68,360	
Eng II (EII)	1314	\$ 49.65	\$65,240	
Engineer I (EI)	820	\$ 39.86	\$32,685	
Associate Engineer (AE)	1016	\$ 35.86	\$36,434	
Senior Tech Specialist (TS)	896	\$ 60.49	\$54,199	
Administrative Assistant (AA)	500	\$ 36.73	\$18,365	
Payroll total:	8518			\$518,911
II. Combined Overhead (COH) & Facilities Capital Cost of Money (FCCM) Costs (Prime Only)				
IIA.	Indirect Cost Factor:		126.86%	\$658,291
IIB.	FCCM Factor: (Insert FCCM factc		0.008%	\$42
Combined Overhead and FCCM total:				\$658,332
III. Direct Project Expenses (Prime Only)				
Hotel	88	110		\$9,680
Airlines	16	450		\$7,200
Rental Car	88	50		\$4,400
Breakfast	88	6.5		\$572
Lunch	88	6.5		\$572
Dinner	88	19		\$1,672
Mililage	1329	0.56		\$744
Servers, Equipment Including COTS License Fees				\$76,000
Misc Equipment costs				\$2,000
Hosting and Communications				\$58,000
Total Direct Project Expenses				\$160,840
IV. Estimated Actual Costs (EAC) (Prime Only) (I + II + III)				\$1,338,083
(Rounded)				
V. Fixed Fee (Prime Only)				
		(% X (I + IIA))	15%	\$176,580
	Less FCCM		(IIB)	\$42
			Fix Fee total:	\$176,539
(Rounded)				
VI. Contingency (Prime Only)				
		% X (I + II + III)		0
(Rounded)				
VII. Subconsultant Expenses (Designate if Cost Plus Fixed Fee (CP), Lump Sum (LS), etc. and include appropriate number of Attachment "I's" as necessary)				
Harman	LS			\$107,378
Iowa State ATMS Interface	CPFF			\$50,000
Illinois ATMS ATMS Interface	CPFF			\$30,000
Wisconsin ATMS Interface	CPFF			\$65,000
Total Subcontractor Costs:				\$252,378
VIII. [Indicate type of reimbursement] Agreement Total (IV + V + VI +				\$1,767,000

ATTACHMENT D**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS -- PRIMARY COVERED TRANSACTIONS****Instructions for Certification**

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person" "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the definitions and coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a 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;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application /proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

State of Illinois

Cook County

I Joseph Brahm, Vice President of the

Parsons Transportation Group, Inc Company, being duly sworn (or under penalty of perjury under the laws of the United States and the State of Iowa) do hereby certify that the above Statements are true and correct.

(Signature)

Subscribed and sworn to this _____ day of _____, _____.
(month) (year)

ATTACHMENT E

CERTIFICATION OF CONSULTANT

I hereby certify that I, Joseph Brahm, am the Vice President and duly authorized representative of the firm of Parsons Transportation Group, Inc., whose address is 650 E. Algonquin Road, Suite 400, and that neither the above firm nor I has:

- (a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above **Consultant**) to solicit or secure this contract,
- (b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or
- (c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above **Consultant**) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the contract; except as here expressly stated (if any):

I acknowledge that this certificate is to be furnished to the Iowa Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation, in connection with this contract involving participation of Federal-aid highway funds, and is subject to applicable, State and Federal laws, both criminal and civil.

Signature

Date

ATTACHMENT F

CERTIFICATION OF OWNER

I hereby certify that I, Dave Ness, am the Traffic Engineer and the duly authorized representative of the **Owner**, and that the above consulting firm or his representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this contract to:

- (a) Employ or retain, or agree to employ or retain, any firm or person, or
- (b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as here expressly stated (if any):

I acknowledge that this certificate is to be furnished to the to the Iowa Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation, in connection with this contract involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Signature

Date

**ATTACHMENT G
Page 1**

Consultant Name
 Consultant Address
 Consultant Address

Cost Plus Fixed Fee Progressive Invoice

Date

Invoice No.
 Invoice Period Covered
 Consultant Job No.

Client Project No.
 County
 Client Project Description
 Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	----------------------	-----------------------	-------------------

Labor Dollars
 Overhead
 Overhead Adjustments
 Direct Expenses
 Mileage
 Per Diem
 CADD
 Estimated Actual Costs
 [Prime Only] (See Note 1)

Subconsultants (including authorized
 contingency)
 Name
 Name
 Name

Estimated Actual Costs
 [Total Subconsultant Costs]

Total Estimated Actual Costs
 [Prime + Total Subconsultant
 Costs]

Fixed Fee (See Note 2)
 Authorized Contingency
 Total Authorized Amount
 Total Billed To Date
 Remaining Authorized Balance

Unauthorized Contingency
 Prime
 Subconsultant Name
 Subconsultant Name

Labor Hours

Note 1: Do not include Subconsultant Expenses. Include Direct Labor, Overhead, and Direct Expenses for Prime Consultant only.

Note 2: Fixed fee shall be proportionate to the amount of actual costs invoiced compared to the actual costs estimated.

**ATTACHMENT G
Page 2**

Consultant Name
Consultant Address
Consultant Address

Cost Plus Fixed Fee Final Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	----------------------	-----------------------	-------------------

Labor Dollars (2001)
Labor Dollars (2000)
Labor Dollars (1999)
Overhead (2001)
Overhead (2000)
Overhead (1999)
Direct Expenses
 Mileage
 Per Diem
 CADD

Estimated Actual Costs
 [Prime Only]

Subconsultants (including authorized
contingency)

 Name
 Name
 Name

Estimated Actual Costs
 [Total Subconsultant Costs]

Total Estimated Actual Costs
 [Prime + Total Subconsultant
Costs]

Fixed Fee
Authorized Contingency
 Total Authorized Amount

Total Billed To Date
Remaining Authorized Balance

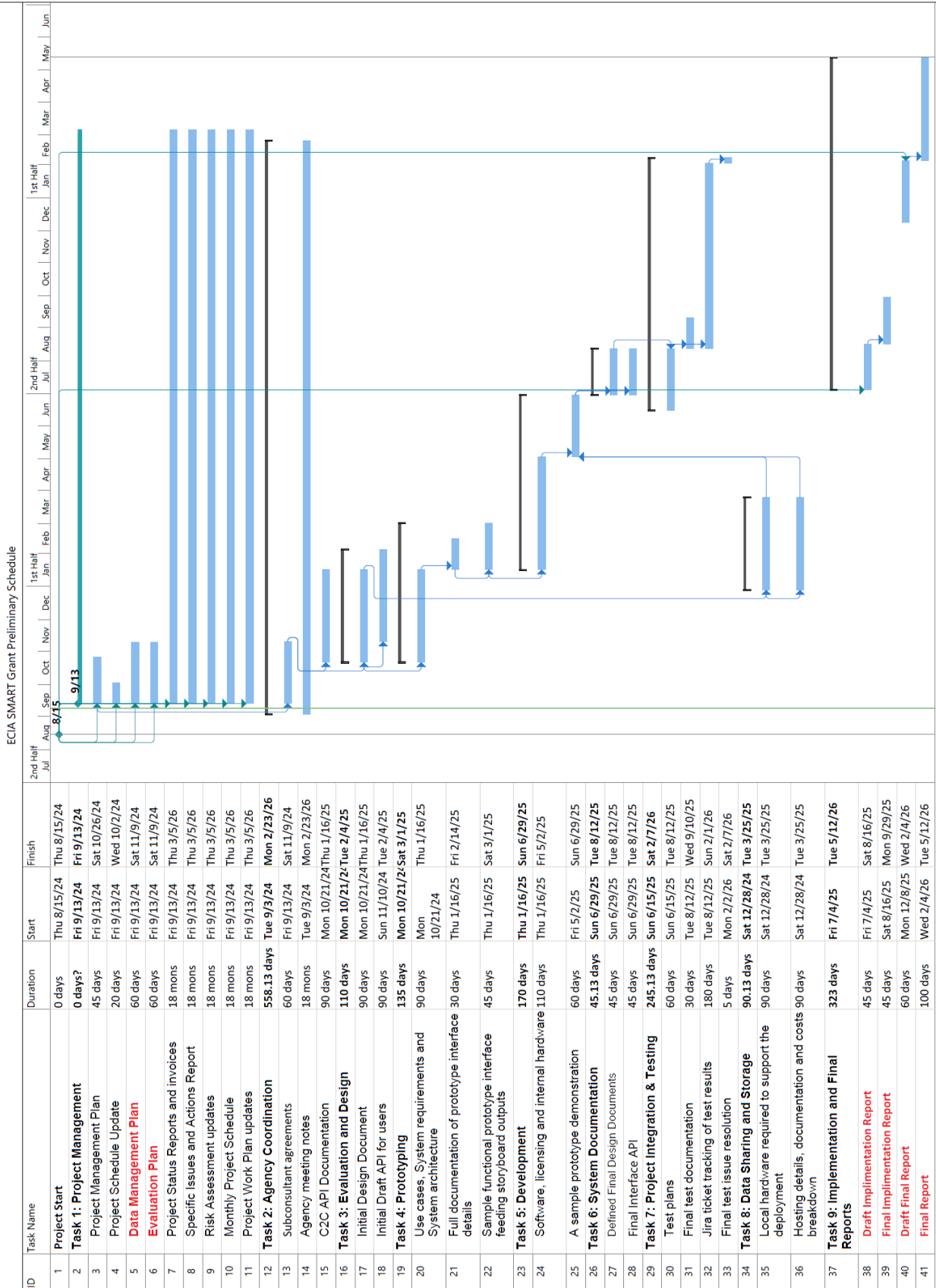
Unauthorized Contingency
 Prime
 Subconsultant Name
 Subconsultant Name

Labor Hours (2001)
Labor Hours (2000)
Labor Hours (1999)

ATTACHMENT G**Page 3****Cost Plus Fixed Fee Final Invoice Instructions**

- Employee Labor Hours and Dollars: A final cumulative job cost report that shows a breakdown of labor by fiscal year, employee name, employee labor hours and employee labor rate is required. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Overhead Rates: Overhead rates and labor dollars to which the overhead rates are applied should match the fiscal year in which the costs are incurred. Overhead rates applied to labor should be audit verified when available. When not available, proposed FAR adjusted rates for the fiscal year in which the labor is incurred should be used.
- Direct Expenses: A final cumulative job cost report that shows a breakdown of direct expenses by specific item (mileage, CADD, per diem, etc....) by fiscal year is required. Direct expense items charged should identify the number of units (miles, hours, prints, copies, feet, etc....) and the rate applied by fiscal year. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Subconsultant: Final invoice requirements for subconsultants with cost plus fixed fee contracts are the same as the requirements for the prime consultant. It is the prime consultant's responsibility to assure such an invoice is acquired and attached to the prime's final invoice.

ATTACHMENT H Project Schedule



ATTACHMENT I
Page 1 of 1
SUBCONSULTANT SCOPE AND BUDGET

Project Number: [\[Insert Project Number\]](#)

State of Iowa

I hereby certify that I, [Suman Sehra](#), am the [VP, Product Management and Innovation](#) and duly authorized representative of the firm of [Harman International Industries, Incorporated](#), whose address is [400 Atlantic Street, 15th Floor Stamford, CT 06901](#), and do hereby certify that the below Scope of Services and Subconsultant Budget Proposals are a true and accurate copy of the Scope of Services and Subconsultant Budget. Any changes to the proposed Scope and Budget shall be documented, signed by both the **Consultant** and subconsultant, and approved by the **Contract Administrator**.

Signature

Date

Purpose:

Harman will work in partnership with Parsons, the City of Dubuque, City of East Dubuque, City of Asbury, City of Peosta, Iowa Department of Transportation (Iowa DOT), Illinois Department of Transportation (IDOT), Wisconsin Department of Transportation (WisDOT, ECIA to develop a comprehensive data set for the entire Dubuque metropolitan area, integrate the data in a standardized format, build appropriate intelligence to define distribution limits for each piece of data, and develop an open interface to provide this data in near real time via cellular connection to original equipment manufacturers (OEM), infotainment system providers, and other third-party data stakeholders.

Harman will support the evaluation and design of the solution, help develop a model and prototype for display of the data for in vehicle use and support the testing and documentation of an open interfaces to support the integration of transportation data into vehicles.

[Fixed Price or \\$107,378](#)