



Request for Proposal RFP-4077-15-NJ

INTELLIGENT TRANSPORTATION SYSTEM FOR GVT

RESPONSES DUE:

August 27, 2015 prior to 3:30 PM Local <u>Accepting Electronic Responses Only</u> <u>Responses Only Submitted Through the Rocky Mountain E-Purchasing</u> <u>System (RMEPS)</u>

https://www.rockymountainbidsystem.com/default.asp

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor <u>MUST</u> contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

PURCHASING REPRESENTATIVE:

Nicholas C Jones, Buyer Nickj@gjcity.org 970-244-1533

This solicitation has been developed specifically for a Request for Proposal intended to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction/Mesa County solicitations. All offerors are urged to thoroughly review this solicitation prior to submitting. Submittal by **FAX, EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

REQUEST FOR PROPOSAL

TABLE OF CONTENTS

Section

- 1.0 Administrative Information and Conditions for Submittal
- 2.0 General Contract Terms and Conditions
- 3.0 Insurance Requirements
- 4.0 Specifications/Scope of Services
- 5.0 **Preparation and Submittal of Proposals**
- 6.0 Evaluation Criteria and Factors
- 7.0 Solicitation Response Form
- 8.0 Federal Transit Administration (FTA) Clauses

Attachments:

Required Federal Certifications (Attachment A)

Sample Contract (Attachment B)

REQUEST FOR PROPOSAL

SECTION 1.0: ADMINISTRATIVE INFORMATION & CONDITIONS FOR SUBMITTAL

1.1 Issuing Office: This Request for Proposal (RFP) is issued by the City of Grand Junction. All contact regarding this RFP shall be directed to:

RFP Questions:

Nicholas C Jones, Buyer <u>Nickj@gjcity.org</u>

- **1.2 Purpose:** The purpose of this RFP is to obtain proposals from qualified professional firms to provide a turn-key (beginning-to-end) solution to implement and provide a fully functional, expandable, reliable, and most technologically advanced Intelligent Transportation System (ITS) system available. The System shall be built on a proven and secure operating system, database, and application software and must include graphical user interfaces (GUI) that provide access to fleet and passenger information for Owner staff and via the Internet for the general public. The applications shall follow accepted industry human engineering design standards for ease of readability, understandability, appropriate use of menu-driven operations, user customization and intuitive operation. The System will have a life cycle of ten (10) years that is fully supportable including all upgrades.
- **1.3 The Owner:** The Owner is Mesa County, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.
- **1.4 Compliance:** All participating Offerors, by their signature hereunder, shall agree to comply with all conditions, requirements, and instructions of this RFP as stated or implied herein. Should the Owner omit anything from this packet which is necessary to the clear understanding of the requirements, or should it appear that various instructions are in conflict, the Offeror(s) shall secure instructions from the Purchasing Division prior to the date and time of the submittal deadline shown in this RFP.
- 1.5 Submission: <u>Please refer to section 5.0 for what is to be included.</u> <u>Each proposal shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (https://www.rockymountainbidsystem.com/default.asp).</u> <u>This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.)</u> Please view our "Electronic Vendor Registration Guide" at <u>http://www.gicity.org/BidOpenings.aspx</u> for details. For proper comparison and evaluation, the City requests that proposals be formatted as directed in Section 5.0 "Preparation and Submittal of Proposals." Submittals received that fail to follow this format may be ruled non-responsive. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor <u>MUST</u> contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

- **1.6 Altering Proposals:** Any alterations made prior to opening date and time must be initialed by the signer of the proposal, guaranteeing authenticity. Proposals cannot be altered or amended after submission deadline.
- **1.7 Withdrawal of Proposal:** A proposal must be firm and valid for award and may not be withdrawn or canceled by the Offeror for sixty (60) days following the submittal deadline date, and only prior to award. The Offeror so agrees upon submittal of their proposal. After award this statement is not applicable.
- **1.8** Addenda: All Questions shall be submitted in writing to the appropriate person as shown in Section 1.1. Any interpretations, corrections and changes to this RFP or extensions to the opening/receipt date shall be made by a written Addendum to the RFP by the Owner. Sole authority to authorize addenda shall be vested in the City of Grand Junction Purchasing Representative. Addenda will be issued electronically through the Rocky Mountain E-Purchasing website at <u>www.rockymountainbidsystem.com</u>. Offerors shall acknowledge receipt of all addenda in their proposal.
- **1.9 Exceptions and Substitutions:** All proposals meeting the intent of this RFP shall be considered for award. Offerors taking exception to the specifications shall do so at their own risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Offeror must state these exceptions in the section pertaining to that area. Exception/substitution, if accepted, must meet or exceed the stated intent and/or specifications. The absence of such a list shall indicate that the Offeror has not taken exceptions, and if awarded a contract, shall hold the Offeror responsible to perform in strict accordance with the specifications or scope of work contained herein.
- **1.10 Confidential Material:** All materials submitted in response to this RFP shall ultimately become public record and shall be subject to inspection after contract award. "**Proprietary or Confidential Information**" is defined as any information that is not generally known to competitors and which provides a competitive advantage. Unrestricted disclosure of proprietary information places it in the public domain. Only submittal information clearly identified with the words "*Confidential Disclosure*" and uploaded as a separate document shall establish a confidential, proprietary relationship. Any material to be treated as confidential or proprietary in nature must include a justification for the request. The request shall be reviewed and either approved or denied by the Owner. If denied, the proposer shall have the opportunity to withdraw its entire proposal, or to remove the confidential or proprietary restrictions. Neither cost nor pricing information nor the total proposal shall be considered confidential or proprietary
- **1.11 Response Material Ownership**: All proposals become the property of the Owner upon receipt and shall only be returned to the proposer at the Owner's option. Selection or rejection of the proposal shall not affect this right. The Owner shall have the right to use all ideas or adaptations of the ideas contained in any proposal received in response to this RFP, subject to limitations outlined in the section titled "Confidential Material". Disqualification of a proposal does not eliminate this right.

- **1.12 Minimal Standards for Responsible Prospective Offerors:** A prospective Offeror must affirmably demonstrate their responsibility. A prospective Offeror must meet the following requirements:
 - Have adequate financial resources, or the ability to obtain such resources as required.
 - Be able to comply with the required or proposed completion schedule.
 - Have a satisfactory record of performance.
 - Have a satisfactory record of integrity and ethics.
 - Be otherwise qualified and eligible to receive an award and enter into a contract with the Owner.
- **1.13 Nonconforming Terms and Conditions:** A proposal that includes terms and conditions that do not conform to the terms and conditions of this Request for Proposal is subject to rejection as non-responsive. The Owner reserves the right to permit the Offeror to withdraw nonconforming terms and conditions from its proposal prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions
- **1.14 Open Records:** All proposals shall be open for public inspection after the contract is awarded. Trade secrets and confidential information contained in the proposal so identified by offer as such shall be treated as confidential by the Owner to the extent allowable in the Open Records Act.
- **1.15** Sales Tax: City of Grand Junction/Mesa County is, by statute, exempt from the State Sales Tax and Federal Excise Tax; therefore, all fees shall not include taxes.
- **1.16 Public Opening:** Proposals shall be opened in the City Hall Auditorium, 250 North 5th Street, Grand Junction, CO 81501, immediately following the proposal deadline. Offerors, their representatives and interested persons may be present. Only the names and locations on the proposing firms will be disclosed.

SECTION 2.0: GENERAL CONTRACT TERMS AND CONDITIONS

- 2.1. Acceptance of RFP Terms: A proposal submitted in response to this RFP shall constitute a binding offer. Acknowledgment of this condition shall be indicated on the Cover Letter by the Offeror or an officer of the Offeror legally authorized to execute contractual obligations. A submission in response to the RFP acknowledges acceptance by the Offeror of all terms and conditions, as set forth herein. An Offeror shall identify clearly and thoroughly any variations between its proposal and the Owner's RFP requirements. Failure to do so shall be deemed a waiver of any rights to subsequently modify the terms of performance, except as outlined or specified in the RFP.
- **2.2. Execution, Correlation, Intent, and Interpretations:** The Contract Documents shall be signed by the Owner and Contractor. By executing the contract, the Contractor represents that they have familiarized themselves with the local conditions under which the Work is to be performed, and correlated their observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by any one, shall be as binding as if required by all. The intention of the

documents is to include all labor, materials, equipment, services and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the Owner are, and shall remain, Owner property. They are not to be used on any other project.

- 2.3. Permits, Fees, & Notices: The Contractor shall secure and pay for all permits, fees and licenses necessary for the proper execution and completion of the work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance in any respect, Contractor shall promptly notify the Owner in writing, and any necessary changes shall be adjusted by change order/amendment. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, Contractor shall assume full responsibility and shall bear all costs attributable.
- **2.4.** Responsibility for those Performing the Work: The Contractor shall be responsible to the Owner for the acts and omissions of all their employees and all other persons performing any of the work under a contract with the Contractor.
- **2.5.** Use of the Site: The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the site with any materials or equipment.
- **2.6. Cleanup:** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by their operations. At the completion of work they shall remove all their waste materials and rubbish from and about the project, as well as all their equipment and surplus materials.
- 2.7. Payment & Completion: The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the work under the Contract Documents. Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when Owner finds the work acceptable under the Contract Documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Contract Documents. Partial payments will be based upon estimates, prepared by the Contract Documents.
- 2.8. Performance & Payment Bonds: Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These bonds shall remain in effect for the duration of the Warranty Period (as specified in the Special Conditions). Contractor shall also furnish other bonds that may be required by the Special Conditions. All bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570

(amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds singed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the Owner.

- 2.9. Protection of Persons & Property: The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the work, or in consequence of the non-execution thereof by the Contractor, they shall restore, at their own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.
- **2.10.** Changes in the Work: The Owner, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions. All such changes in the work shall be authorized by Change Order and shall be executed under the applicable conditions of the contract documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or the contract time.
- **2.11. Minor Changes in the Work:** The Owner shall have authority to order minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the contract documents.
- 2.12. Uncovering & Correction of Work: The Contractor shall promptly correct all work found by the Owner as defective or as failing to conform to the contract documents. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. The Owner shall give such notice promptly after discover of condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the contract documents without cost to the Owner.
- **2.13.** Acceptance Not Waiver: The Owner's acceptance or approval of any work furnished hereunder shall not in any way relieve the proposer of their present responsibility to maintain the high quality, integrity and timeliness of his work. The Owner's approval or acceptance of, or payment for, any services shall not be construed as a future waiver of any rights under this Contract, or of any cause of action arising out of performance under this Contract.

- **2.14.** Change Order/Amendment: No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders/amendments to the contract shall be made in writing by the Owner Purchasing Division.
- **2.15. Assignment:** The Offeror shall not sell, assign, transfer or convey any contract resulting from this RFP, in whole or in part, without the prior written approval from the Owner.
- **2.16. Compliance with Laws:** Proposals must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements. Contractor hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, required by law.
- 2.17. Debarment/Suspension: The Contractor herby certifies that the Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Governmental department or agency.
- **2.18. Confidentiality:** All information disclosed by the Owner to the Contractor for the purpose of the work to be done or information that comes to the attention of the Contractor during the course of performing such work is to be kept strictly confidential.
- **2.19.** Conflict of Interest: No public official and/or Owner employee shall have interest in any contract resulting from this RFP.
- **2.20. Contract:** This Request for Proposal, submitted documents, and any negotiations, when properly accepted by the Owner, shall constitute a contract equally binding between the Owner and Offeror. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral, including the Proposal documents. The contract may be amended or modified with Change Orders, Field Orders, or Amendment.
- **2.21. Project Manager/Administrator:** The Project Manager, on behalf of the Owner, shall render decisions in a timely manner pertaining to the work proposed or performed by the Offeror. The Project Manager shall be responsible for approval and/or acceptance of any related performance of the Scope of Work.
- **2.22.** Cancelation of Solicitation: Any solicitation may be canceled by the Owner or any solicitation response by a vendor may be rejected in whole or in part when it is in the best interest of the Owner.
- **2.23. Contract Termination**: This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation at least thirty days past notification.

- **2.24. Employment Discrimination:** During the performance of any services per agreement with the Owner, the Offeror, by submitting a Proposal, agrees to the following conditions:
 - **2.24.1.** The Offeror shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, disability, citizenship status, marital status, veteran status, sexual orientation, national origin, or any legally protected status except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Offeror. The Offeror agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - **2.24.2.** The Offeror, in all solicitations or advertisements for employees placed by or on behalf of the Offeror, shall state that such Offeror is an Equal Opportunity Employer.
 - **2.24.3.** Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- **2.25.** Immigration Reform and Control Act of 1986 and Immigration Compliance: The Offeror certifies that it does not and will not during the performance of the contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, *et.seq.* (House Bill 06-1343).
- **2.26.** Ethics: The Offeror shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.
- **2.27.** Failure to Deliver: In the event of failure of the Offeror to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Offeror responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.
- **2.28.** Failure to Enforce: Failure by the Owner at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Owner to enforce any provision at any time in accordance with its terms.
- **2.29.** Force Majeure: The Offeror shall not be held responsible for failure to perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Offeror, unless otherwise specified in the contract.
- **2.30. Indemnification:** Offeror shall defend, indemnify and save harmless the Owner and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Offeror, or of any Offeror's agent, employee, subcontractor or supplier in the execution of, or performance under, any

contract which may result from proposal award. Offeror shall pay any judgment with cost which may be obtained against the Owner growing out of such injury or damages.

- **2.31.** Independent Firm: The Offeror shall be legally considered an Independent Firm and neither the Firm nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Firm, its servants, or agents. The Owner shall not withhold from the contract payments to the Firm any federal or state unemployment taxes, federal or state income taxes, Social Security Tax or any other amounts for benefits to the Firm. Further, the Owner shall not provide to the Firm any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- **2.32. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.
- **2.33. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.
- 2.34. Patents/Copyrights: The Offeror agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Offeror for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this RFP.
- **2.35. Remedies**: The Offeror and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- **2.36.** Venue: Any agreement as a result of responding to this RFP shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.
- **2.37. Expenses:** Expenses incurred in preparation, submission and presentation of this RFP are the responsibility of the company and can not be charged to the Owner.
- **2.38. Sovereign Immunity:** The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.
- **2.39.** Public Funds/Non-Appropriation of Funds: Funds for payment have been provided through the Owner's budget approved by the City Council/Board of County Commissioners for the stated fiscal year only. State of Colorado statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated orders or other obligations that may arise past the end of the stated Owner's fiscal year shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.

- **2.40. Collusion Clause:** Each Offeror by submitting a proposal certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all proposals shall be rejected if there is evidence or reason for believing that collusion exists among the proposers. The Owner may or may not, at the discretion of the Owner Purchasing Representative, accept future proposals for the same service or commodities for participants in such collusion.
- 2.41. Contingency/Force Account: Contingency/Force Account work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account Authorization will be directed by the Owner through an approved form. Contingency/Force Account funds are the property of the Owner and any Contingency/Force Account funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account funds that are not authorized by Owner.
- **2.42. Gratuities:** The Contractor certifies and agrees that no gratuities or kickbacks were paid in connection with this contract, nor were any fees, commissions, gifts or other considerations made contingent upon the award of this contract. If the Contractor breaches or violates this warranty, the Owner may, at their discretion, terminate this contract without liability to the Owner.
- 2.43. OSHA Standards: All Offerors agree and warrant that services performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA Standards, the Owner may require the services to be redone at no additional expense to the Owner.
- **2.44. Performance of the Contract:** The Owner reserves the right to enforce the performance of the contract in any manner prescribed by law or deemed to be in the best interest of the Owner in the event of breach or default of resulting contract award.
- **2.45. Benefit Claims:** The Owner shall not provide to the Contractor any insurance coverage or other benefits, including Worker's Compensation, normally provided by the Owner for its employees.
- **2.46. Default:** The Owner reserves the right to terminate the contract immediately in the event the Contractor fails to meet delivery or completion schedules, or otherwise perform in accordance with the accepted proposal. Breach of contract or default authorizes the Owner to purchase like services elsewhere and charge the full increase in cost to the defaulting Contractor.
- **2.47. Multiple Offers:** Proposers must determine for themselves which product or service to offer. If said proposer chooses to submit more than one offer, THE ALTERNATE OFFER must be clearly marked "Alternate Proposal". The Owner reserves the right to make award in the best interest of the Owner.

2.48. Cooperative Purchasing: Purchases as a result of this solicitation are primarily for the Owner. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the participating agencies. All participating entities will be required to abide by the specifications, terms, conditions and pricings established in this Proposal. The quantities furnished in this proposal document are for only the Owner. It does not include quantities for any other jurisdiction. The Owner will be responsible only for the award for our jurisdiction. Other participating entities will place their own awards on their respective Purchase Orders through their purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual entity. The Owner accepts no liability for payment of orders placed by other participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.

2.49. Definitions:

- **2.49.1.** "Offeror" and/or "Proposer" refers to the person or persons legally authorized by the Consultant to make an offer and/or submit a response (fee) proposal in response to the Owner's RFP.
- **2.49.2.** The term "Work" includes all labor, materials, equipment, and/or services necessary to produce the requirements of the Contract Documents.
- **2.49.3.** "Contractor" is the person, organization, firm or consultant identified as such in the Agreement and is referred to throughout the Contract Documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the General Contract Conditions of the Contract, Specification and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.
- **2.49.4.** "Sub-Contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the contract documents and means a sub-contractor or his authorized representative.
- **2.50. Public Disclosure Record:** If the Proposer has knowledge of their employee(s) or subproposers having an immediate family relationship with an Owner employee or elected official, the proposer must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the Owner.
- 2.51. Keep Jobs in Colorado Act: Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient

Colorado labor to perform the work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion, and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

2.51.1. "Public Works project" is defined as:

- (a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects
- (b) for which appropriate or expenditure of moneys may be reasonably expected to be \$500,000.00 or more in the aggregate for any fiscal year
- (c) except any project that receives federal moneys.

SECTION 3.0: INSURANCE REQUIREMENTS

Insurance Requirements: The selected Contractor agrees to procure and maintain, at its own cost, policy(s) of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the Contractor pursuant to this Section. Such insurance shall be in addition to any other insurance requirements imposed by this Contract or by law. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Section by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. Contractor shall procure and maintain and, if applicable, shall cause any Subcontractor of the Contractor to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to the Owner. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise:

(a) Worker Compensation: Contractor shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum limits of:

ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) per job aggregate.

The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and

completed operations. The policy shall include coverage for explosion, collapse, and underground hazards. The policy shall contain a severability of interests provision.

(c) Comprehensive Automobile Liability insurance with minimum limits for bodily injury and property damage of not less than:

ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate

This policy shall provide coverage to protect the contractor against liability incurred as a result of the professional services performed as a result of responding to this Solicitation.

With respect to each of Contractors owned, hired, or non-owned vehicles assigned to be used in performance of the Work. The policy shall contain a severability of interests provision. The policies required by paragraph (b) above shall be endorsed to include the Owner, and the Owner's officers and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by Bidder. No additional insured endorsement to any required policy shall contain any exclusion for bodily injury or property damage arising from completed operations. The Bidder shall be solely responsible for any deductible losses under any policy required above.

SECTION 4.0: SPECIFICATIONS/SCOPE OF SERVICES

4.1. AGENCY INFORMATION: Grand Valley Transit (GVT), operated by Mesa County through a contract with MV Transportation, provides public transportation to a population of over 100,000 residents with fixed route, dial-a-ride and paratransit service in an area consisting of approximately 76 square miles within Mesa County, Colorado. The fleet consists of 26 buses for transit service. The current peak requirement for fixed route service is 12 vehicles. The peak requirement for dial-a-ride and paratransit is 5 vehicles.

We believe an Intelligent Transportation System (ITS) will be a vital component to help us with the follow following objectives:

- Accountability: Ensure that GVT is providing timely delivery of transit services in accordance with its published timetables (improve schedule adherence and timed transfers).
- Real Time Passenger Information: Provide real-time transit information to customers via electronic message boards at transfer facilities, the Internet, and text messaging including passenger alerts and eventually at stops and / or other in-vehicle passenger information systems.
- Transit Management: Increase the availability of data for GVT's operations for the purposes of enhanced transit management and service planning.
- Safety: Increase the safety and security of GVT public transportation system. Improve safety on-board vehicles by allowing quick location and response to incidents and emergencies.

- Productivity: As a result of improved schedule adherence and easier passenger access to information, increase ridership of the GVT fixed route transit system.
- Integration: Improve system information output by integrating the ITS with the existing GFI Genfare automated farebox system and, if possible, with the motorola radios for GPS function.

Below are several examples of where Mesa County staff believes an Intelligent Transportation System can be of assistance.

Our Customer Service department continues to field a large number of calls asking how soon the next bus is going to be available at their stop or asking how to get from their current location to another. Vendors should describe how their proposed system can reduce these calls and provide better tools for Customer Service staff to be more efficient.

GVT utilizes a contractor to operate our fixed route, dial-a-ride and paratransit service. To properly manage these contracted services, Mesa County uses tools to monitor service quality and contract adherence. Vendors should describe how their proposed system can assist with this task.

Mesa County is a dynamic growing community which requires GVT to be capable of responding quickly to changes in demand for our service. We need planning tools to help us understand the needs of our riders and look for opportunities to improve service. In addition, our governing board is very involved in the operational metrics of our service, Mesa County desires for the System to produce a comprehensive set of operational reports. Vendors should describe how their proposed system can assist Mesa County in meeting these needs.

As a public transportation agency, GVT, like most others, must optimize the use of scarce funding for our operational expenses, looking for efficiencies and cost reductions wherever possible. Mesa County is interested in proposals that demonstrate an understanding of these funding challenges and includes features which will provide the greatest benefit to GVT.

At various points in this RFP the Proposer will see how Mesa County expects the capabilities of an Intelligent Transportation System to help address the aforementioned objectives. Proposers are encouraged to highlight how the capabilities of their systems will facilitate Mesa County's goals and objectives above.

4.2. PROJECT OVERVIEW: Mesa County is seeking proposals from qualified firms to provide a turn-key (beginning-to-end) solution to implement and provide a fully functional, expandable, reliable, and most technologically advanced ITS system available. The System shall be built on a proven and secure operating system, database, and application software and must include a graphical user interfaces (GUI) that provides access to fleet and passenger information for Mesa County staff and via the Internet for the general public. The applications shall follow accepted industry human engineering design standards for ease of readability, understandability, appropriate use of menudriven operations, user customization and intuitive operation. The System will have a life cycle of ten (10) years that is fully supportable including all upgrades. The Proposer /

Contractor (used interchangeably) shall ensure that the risk of obsolescence to the hardware is minimized through the selection of standardized parts and readily-available peripheral hardware. Mesa County is requiring an all-inclusive cost maintenance plan for the entire installed and accepted system delivered under the contract that will result from this RFP for an initial period of five (5) years with projected pricing for an additional five (5) year time period. Software, product and labor warranties shall be for a period of one (1) year. This RFP includes several optional technologies that may or may not be selected by Mesa County for deployment depending on funding availability and other factors.

4.3. PROJECT DESCRIPTION: The Proposer shall supply a complete System with all hardware, software, and services necessary to accomplish the supply, installation, testing, documentation, training, startup and going-live, including fixed-end equipment and equipment on-board vehicles. The System shall meet all specified requirements and have the capability to serve present and future operational needs, within the constraints established by commercially available systems. Proposers are urged to maximize the potential realization of the requirements / specifications while minimizing custom development.

Data transmissions to and from on-board vehicle equipment shall rely upon commercial cellular data communications carriers, and / or radio-based communications, and facility wireless network. The proposal must include pricing for service required for communication options. The selected communications network shall be capable of providing reliable signal coverage in the entire service area of GVT for the purposes of transmitting location, status, and messages between GVT vehicles and the System.

Initially, with the Proposer's assistance, scheduling information for GVT's fixed route, dial-a-ride and paratransit routes shall be entered directly into the System which shall support on-time performance tracking and reporting. However, it is also desirable that the System permit route scheduling data to be obtained (imported or linked) from the GVT's existing scheduling software (Mobilitat/Easy Rides and TimePoint). In all cases, the scheduling data shall be accessible via the Proposer-provided data exchange and shall be fully described in the proposer's submitted response. The TimePoint system will be discontinue once the new system is up and functional. We will consider the option of discontinuing use of the Mobilitat/Easy Rides system for paratransit and dial-a-ride scheduling.

The proposer's system must contain schedule and route information for GVT's fixed route, dial-a-ride and paratransit service. This is necessary to support on-time performance and route deviation tracking and reporting. Mesa County desires a System which allows this information to be imported using data and/or reports available from the existing Mobilitat/Easy Rides and TimePoint systems. In the event Mobilitat/Easy Rides is not discontinued, the proposer's system needs to maintain the ability to read information from the existing Mobilitat/Easy Rides system in order to establish these related schedules in the proposer's system. However, acceptable alternative solutions for initial entry and ongoing maintenance of this information in the System will be considered. Proposers should keep in mind Mesa County's desire to minimize cost and avoid time-intensive activities for staff. All route and stop data are available in ArcGIS shape and point files.

4.3.1. General/Background: The Mesa County Information Technology Department is requesting proposals for public transportation software designed to be compatible with Google Apps for Government email and Crystal Reports, is capable of running on Windows workstations joined to a Microsoft Active Directory domain and is compatible with Windows 7 Professional clients.

Mesa County operates a gigabit ethernet fiber backbone network to 22 buildings across the county campus serving 1000+ users. The Cisco switched network provides a 1 gb bandwidth to the desktop. The internet connection is 100 mb. Mesa County utilizes Vmware hosted Microsoft Windows servers centrally located at Mesa County's datacenter including application, web and Microsoft SQL servers. The server operating system is Microsoft server 2008 R2 or above and the database operating system is Microsoft SQL server 2008 R2 or above. Microsoft IIS is preferred for any internally hosted websites.

4.3.2. Special Conditions/Provisions: In addition to the requirements in other sections of this document, the following will also apply. Any proposal will only be given preference if the system runs on the existing environment which includes Google Apps for Government email and Crystal Reports. Vendor should describe any integration with other software systems, e.g. GIS (ESRI). Product must be capable of running on Windows workstations joined to a Microsoft Active Directory domain. It must be compatible with Windows 7 Professional clients. Please specify software and/or hardware requirements for proposed system. If the proposed system runs under a different environment, specify and identify all hardware requirements. Any new application(s) must be proven to work in the described Mesa County operating environment.

For each of the functional options, provide a cost and time estimate for both in-house hosted and cloud based solutions.

4.3.2.1. Option 1 – In-house, hardware provided by the County.

Specify:

Minimum server requirements Recommended server requirements Are virtualized servers acceptable Operating System requirements Database requirements Workstation requirements hardware, operating system/s Type of access needed for support

4.3.2.2. Option 2 – Cloud based system

Specify:

Location Bandwidth requirements (based on number of users?) Storage location/s Security, redundancy and backup procedures

4.3.2.3. **Turn-key implementation process** for both cloud and onsite solutions.

Specify:

Sample Gantt Chart Pre-project meeting and information gathering requirements Project plan, documentation and approval process Development process Testing Phase Training Phase Go-live phase Post live support and development Dedicated staff for Vendor Dedicated staff for Vendor Dedicated staff/staff involvement for County Ongoing support and upgrade process

4.4. CONCEPT OF OPERATIONS: In summary, Mesa County prefers an "out-of-the-box" System that is hosted and served from a central data center and accessible from any Internet capable desktop. Mesa County intends to utilize the system for fixed route service, dial-a-ride and paratransit for vehicle tracking, passenger information and all other proposed capabilities.

By use of both digital map-based and tabular displays, GVT's Dispatchers shall be able to track all buses. The capability to exchange status and command information between bus operators and Dispatch will result in reduced voice traffic levels and clearer instructions. When performing customer service, staff shall be able to monitor all bus locations and status in real time.

The System, as an option, shall include Automatic Passenger Counters (APC) to collect passenger loads, boarding and alighting data.

The System should have the ability to track the location versus schedule for each bus in service and advise the bus operator and Dispatch when a variance exists. In addition, the System shall generate logs and data that record the operations, shall have the capability to generate reports documenting route operations and ridership.

Mesa County is eager to deploy a robust Passenger Information System that will enable the GVT's riders to ascertain next bus arrival predictions at GVT's three (3) Transfer Facilities, large display(s) shall show the estimated arrival and departure time for each route that stops at that Transfer Facilities. Currently, the Downtown Transfer Facility has a real time display of the TimePoint bus schedule and map denoting arrival / departure times. This is facilitated by a dedicated Windows XP computer which receives data from the TimePoint system and drives the outdoor external NEC display that the public sees. This equipment is older in age and may need to be updated.

The Clifton Transfer Facility displays real time bus status. This is facilitated at the Clifton Transfer Facility via a cellular modem which receives data from the TimePoint system and sends it to an LED Sign (Daktronics AF-3200 16 X 144 which utilizes a proprietary SDK to communicate with the sign. The SDK is a .NET SDK).

The West Transfer Facility displays real time information of TimePoint bus schedules and map with arrival / departure information. This is facilitated at the West Transfer Facility

via an Intel NUC Mini PC (model D54250WYKH) attached to the Mesa County network to receive data from TimePoint to display, which then drives a large screen LCD TV via an HDMI interface. The Passenger Information System will also simultaneously broadcast vehicle location and arrival times via the Internet and cell phone or smartphone.

The system will have the ability to track revenue vehicle location and advise the operator and/ or dispatch when a variance exists, which will give Mesa County and GVT a greater understanding of where service issues effect on-time performance.

Data from system operations shall be transmitted while the vehicle is in service and if necessary, at the end of the shift/workday through a wireless network located at Mesa County's facility. This will result in a wealth of data for Mesa County to plan for new service and tailor existing service to best meet our mission and goals.

4.5. GENERAL SCOPE: The Scope of this project includes all labor, freight, software, hardware and any miscellaneous components necessary to implement a fully functioning ITS including on-board and street side components. The following components were identified by Mesa County as the most beneficial technologies to realize our project objectives. We welcome proposer recommendations that could improve the system.

The list of ITS technologies to be deployed during the project includes:

- CAD/AVL including all hardware, operating and application software;
- Automatic Passenger Counters;
- Automated on-board audio-visual announcement System;
- Predictive Arrival information for use by passengers and Mesa County/GVT;
- Integration of proposed system with the trip-planning functionality that will be incorporated into GVT's website. Mesa County currently uses two TimePoint designed web apps that integrate with the TimePoint system. It is highly desirable that the software system replacing TimePoint provides web apps with similar functionality. Details for these web apps are available at <u>http://gvt.mesacounty.us/timepoint.aspx</u>. The domain names (GVTeta.com & GVTeta.mobi) for these web apps are owned by Mesa County.
- **4.6. TECHNICAL REQUIREMENTS:** The technical requirements for implementing the proposed ITS project at Mesa County/GVT includes the following:
 - GPS based Automatic Vehicle Location
 - Real Time Computer Aided dispatch, vehicle assignment and monitoring
 - Distribution of Real Time Passenger Information
 - Integrated mobile radio communications
 - Automatic On-Vehicle audio-visual Announcement system
 - Trip Planner Interface
 - Transfer Facility passenger information displays
 - Monitoring and Management of on-time performance
 - Autom atic Passenger Counting and reporting capabilities
 - Integration to existing Luminator and Hanover Destination Headsigns
 - Integration to existing GFI Odyssey Farebox allowing Single Sign On (SSO) by the bus operator or dispatcher. It is desired that no bus operator action is required to

inform the System of a route direction change and that instead the System can make this determination based on GPS information and update both the Farebox system and Headsigns accordingly.

4.7. CONTRACTOR RESPONSIBILITIES

4.7.1. General Responsibilities: All Contractor responsibilities are outlined in this specification. However, the contract between the Contractor and Mesa County shall describe the Contractor's responsibilities, as they are agreed upon by both parties.

Generally, the Contractor's responsibilities will include the following:

- Be an active partner with Mesa County/GVT to ensure project success and satisfaction;
- Acquiring and implementing a stable and reliable integrated system able to provide
- Mesa County/GVT with the functionality described herein.
- Provide experienced staff for the life of the contract that understand the design, development, testing, integration, implementation and deployment of an ITS for public transportation, best practices, project management methodology;
- Provide a project manager to act as the single point of contact for all communication regarding work under an awarded contract;
- Coordinate all tasks with the designated Mesa County project manager; and
- Actively participate in and provide input to the development, tracking and updating of all project management documents.
- Meet or exceed all established milestones that are mutually agreed upon by Contractor and Mesa County.

4.7.2. Specific Responsibilities: Before commencing this project, the Contractor is responsible for preparing a detailed Work Plan and Schedule (including milestones) as described in these specifications with the following requirements:

4.7.2.1. Work Plan and Schedule:

- Must be in Microsoft Project (or approved equal);
- Include the following components in schedule: task ID, percent complete, task description, duration, start date, end date, predecessor tasks, resources required with percentage of time based on a work day and week agreed to by the parties;
- Take into account Mesa County's business days and holidays;
- Relate tasks back to the appropriate detail in the Work Plan by using the same task number.

4.7.2.2. **Project Management:**

- Establish project milestones identical to those shown in the Work Plan;
- Provide detailed written status reports to the designated Mesa County project manager that include, but are not limited to work completed; work in progress; scope changes; schedule changes; and issues and delays;
- Document in writing all decisions made, recommendations, results of reviews, and meetings or other appropriate communications where information is exchanged through the use of contract amendments, Contract Amendments and/or Change Orders or meeting minutes. This may be accomplished by updating the detailed Work Plan or updating other documents as appropriate and agreed upon with the Mesa County's project manager, which shall be documented in written form;

- Meet regularly with the Mesa County project manager and other staff designated to review progress, critical risk factors that may affect the project schedule or other success factors, as well as unique issues that may surface;
- Obtain signed Mesa County acceptance for all deliverables, tasks and milestones as outlined and agreed upon in the project Work Plan.

4.8. MESA COUNTY'S RESPONSIBILITIES: Mesa County will:

- Provide a Project Manager who will act as the primary point of contact with the Contractor and will participation in overall project management;
- Provide a project Steering Committee to provide project oversight, high level guidance and necessary decision making;
- Provide appropriate access to the premises, facilities, systems and Mesa County/GVT staff members assigned to the project;
- Conduct joint project team and planning meetings;
- Facilitate required meetings, and ensure availability of necessary staff and required resources;
- Provide the necessary interface requirements for other GVT transit applications;
- Assist with acquiring any necessary permits that may be required during the project implementation;
- Facilitate connectivity to the existing radio network to be used for communications; and
- Provide necessary GIS mapping data for all routes and bus stop locations.
- Updating the specifications and monitoring system development;
- Providing installation supervision assistance;
- Recommendations regarding Mesa County action(s) in response to each Contractor invoice (e.g., pay in full, pay in part, require resubmission);
- Tracking the overall invoicing and payment status for each payment milestone;
- Review of the Contractor's design and documentation, including the following:
 - o Review the detailed System Implementation Plan (SIP);
 - Participate in the design review(s);
 - Review Acceptance Test Plans;
 - o Review training materials; and
 - Review documentation and manuals; and
 - Participation in factory and field-level acceptance, including participating in factory and acceptance tests, making maintenance recommendations, and supporting the transition of all systems into full operations.
- **4.9. FUNCTIONAL SPECIFICATIONS:** The proposer shall describe the planned system architecture for this deployment in their proposal, using a combination of descriptive text and diagrams. This architecture shall represent a fully interoperating collection of distinct systems, subsystems and components.

Mesa County shall retain ownership rights to all data collected and generated by the system and the right to access this data for use in other applications. Mesa County shall be granted an irrevocable, perpetual and royalty-free license to use all software provided by the Contractor, whether such software is provided directly by the Contractor or by a third party.

Annual licensing fees for operating systems, application software, and/or device licenses must be included in the annual operating costs submitted as a part of the contractor's proposal.

The contractor shall supply all hardware, software, (maintenance and support) agreements necessary to deliver a fully functional system as specified in the Request for Proposal. Components shall not drain vehicle battery when the vehicle is not running.

The contractor shall recommend and provide options for hardware and software configurations that will accommodate initial needs and growth over a ten (10) year lifecycle. All hardware, software, maintenance and support agreements must be disclosed in the proposer's response and approved in writing by Mesa County prior to acquisition. Where necessary the contactor shall professionally close-off and finish (no rough edges, holes, etc) all openings caused by the removal of old equipment in a manner acceptable to Mesa County.

Contractor's design shall accommodate changes based on Mesa County's standards or other factors required to ensure the compatibility with Mesa County's communication and data network environment. All hardware, software, maintenance and support agreements shall be procured on behalf of Mesa County and become Mesa County property at time of system acceptance.

4.10. INTEROPERABILITY WITH OTHER SYSTEMS: The system is required to interface with several other systems in use or planned to be in use by Mesa County/GVT.

GTFS and GTFS-realtime

The system shall be capable of generating output files using the Google Transit Feed Specification and GTFS-real-time, an extension of this specification.

4.11. COMPUTER ENVIRONMENT: Should the contractor propose that Mesa County operate the servers in-house, Mesa County requests that the contractor specify and disclose pricing the following computer equipment (or approved equal), hardware and software:

The contractor is required to specify the number, type and specifications of the recommended Server(s) necessary for the implementation of their submitted system, along with recommended ancillary hardware such as network routers, switches, UPS, patch cables and power supplies. While Mesa County will entertain other options, it would be our desire that the following specifications be used:

- Dell Host servers using VMware ESXi 5.5 virtualization hardware and software
- Operating Systems to be Microsoft Windows Server 2008 R2 Standard Edition or later
- Database System to be Microsoft SQL Server 2008 R2 or later

Mesa County requires the contractor to specify the necessary user workstation configuration to enable user access to the proposed system. Mesa County desires to use workstations with Microsoft Windows 7 and Office 2010 Professional (with Internet and network LAN/WAN connectivity.)

Mesa County requires that the contractor size and price the required system on the basis of providing user access to a minimum of 10 concurrent users, with additional user access licenses if required being added in lots of 5 as necessary.

4.12. DATA COMMUNICATION: The contractor is responsible for designing a complete data network to meet the needs of a fully functioning ITS. The final design is subject to Mesa County's approval. The proposal shall describe any and all requirements for FCC license, cost, modifications, installation, optimization, testing, and maintenance of a fully integrated mobile data communications system. The proposer is responsible for delivering a fully functional data communication system for this project.

Mesa County anticipates the CAD/AVL system to be capable of sending AVL data (at least latitude, longitude, speed, time, date and direction of travel) from the vehicle to dispatch at a maximum frequency of once every 30 seconds with a desired frequency of 15 seconds or less, immediately each time to an on board alarm is activated, and every 15 seconds if the vehicle is considered off-route.

The proposer may recommend either a radio-based or commercial cellular mobile databased system for bus communication. If a commercial cellular mobile data system is recommended, the proposer must clearly indicate the carrier's wireless coverage area, the expected annual recurring charges, and the model and type of the vehicular data modem and antenna that will be utilized. The vehicular modems must be capable of withstanding normal wear and tear and weather conditions in the GVT service area associated with field use inside transit vehicles.

Mesa County GVT currently owns and uses Motorola radios that employ the Mototrbo data standard for GPS related information. There is 1 radio for each bus, two spares, 3 base station radios and 5 handheld radios for Supervisors.

Several implementation options exist to consider:

- a. Integrate the new ITS with the existing radios for GPS data.
- b. Replaced the existing radios with new and integrate them to the new ITS for GPS data.
- c. Provide new GPS data devices that interface with the new ITS.
- **4.13. COMMUNICATIONS REQUIREMENTS:** The contractor shall design and install all communications equipment necessary to have a fully functioning ITS. This includes any wiring/cabling for interfacing new equipment with Mesa County's existing equipment.

All installations shall be accomplished in accordance with best industry standards and practices. The end result will be a completely engineered, integrated and operating data communication system.

Mesa County shall provide space for the equipment. The Contractor shall install the equipment within this space and connect the units to commercial power as supplied by Mesa County. Installation cost for each particular equipment item shall and must include all hardware, racks and mountings, raceways, wiring, weatherproof connections, ancillary devices, procedures, and services required to install and/or interface existing

components or equipment to create an operating system which fulfills the requirements of this RFP.

Contractor shall comply with all federal (FCC), state and local laws, codes, regulations and ordinances applicable to the Work and the contract. Failure to comply with such requirements shall constitute a breach of contract and shall be grounds for contract termination. The Contractor shall coordinate all installation and service cutover work with Mesas County prior to commencement. The installation of any new on board equipment shall be coordinated with Mesa County to arrive at an agreeable cutover methodology and schedule to minimize disruption of services and transit operations.

- **4.14. SERVER ROOM**: For equipment located on Mesa County's premises, the ITS server equipment will be placed in an area to be agreed upon with Mesa County. The Contractor shall provide information regarding the scope and layout of all proposed dispatch equipment to Mesa County within two weeks of 'Notice to Proceed'. Mesa County will be responsible for leasing any required telephone circuit based on Contractor provided specifications. Contractors may propose their preferred server environment (hosted by contractor, hosted by server farm, purchased as a part of this requirement by Mesa County or contractor), at their option.
- **4.15. MOBILE EQUIPMENT**: The Contractor shall provide and install a vehicle logic unit (VLU) which may or may not be a Mobile Data Terminal (MDT)/control head or other device to provide the necessary interface between the vehicle equipment and central system, along with a driver interface to the data communication system.

Mesa County anticipates that Contractor staff will be able to have access for installation of their equipment during normal business hours to a minimum of 2 vehicles per day, and all vehicles per day after hours Monday – Saturday (between 9:00PM and 4:00AM) and on all day on Sunday.

Contractor shall ensure that the mounting locations of their equipment and cables shall be in "protected" locations at least three (3) inches above the floor to avoid water and chemical exposure during routine vehicle cleaning. The proposer shall provide catalog cut-sheets / technical documentation of the proposed equipment as part of their response. The proposer shall also provide a diagram depicting the proposed configuration and integration of the equipment.

If a commercial cellular mobile data system is recommended, the proposer must clearly indicate provider coverage areas, model and type of the vehicular data modem and antenna that will be utilized. Vehicle modems must withstand normal wear and tear, vehicle washings and weather conditions associated with field use inside transit and supervisory vehicles.

4.16. VEHICLE: ON-BOARD SYSTEMS

4.16.1. General: The Contractor shall be responsible for the overall integration of the on-board components into the complete system. This procurement is specifically for the Fixed Route, Dial-A-Ride and Paratransit fleet vehicles. Most GVT vehicles are

interchangeable within the system. Meaning a bus may be used on fixed route one day, paratransit the next, etc.

4.16.2. Vehicle equipment: Vehicles shall be equipped with communications cabling compliant with the standard Society of Automobile Engineers (SAE) J-1708/1587 or J-1939, or equivalent or Serial or Ethernet connections as required.

4.16.3. In-Vehicle logic unit (IVLU): IVLUs, which serve as the controlling computing device for the on-board equipment shall be capable of being remotely configured and updated wirelessly including all updates necessary for new service change implementations. A direct connected laptop computer or other programming device may also be used for performing routine diagnostic maintenance.

4.16.4. Operator Terminal (MDT or similar): The vehicle operator display shall be readable by the vehicle operator from the seated position under the full range of ambient illumination conditions. This could be accomplished through the incorporation of such measures as vehicle operator controlled brightness and/or contrast control, anti-glare coating and adjustable orientation mounting.

The device shall be able to be readable while wearing sunglasses. The vehicle operator terminal shall allow the user to adjust the speaker volume at any time while the device is operating. The application software shall be operated using either programmable function keys (contractor to define number of keys/buttons) or touch screen programmable buttons. The device speaker shall provide audible feedback when a function key or on-screen key is pressed. Function keys shall also provide tactile feedback when pressed. The vehicle operator shall not be able to manually shut off or disconnect the operator terminal power or manually shut down the application software.

The MDT provided must interface with the Genfare Odyssey Farebox and new ITS system to provide the vehicle operator the appropriate level of information and functional control.

4.16.5. Integrated GPS receiver and antenna: The on-board equipment shall incorporate an integrated GPS receiver. GPS receivers shall report latitude, longitude, speed, time, and direction of travel. The GPS receivers shall be parallel tracking receivers, capable of simultaneously tracking at least four GPS satellites in the best available geometry, while also serially tracking the four next best satellites and upcoming (rising) satellites.

The GPS receiver shall have a cold start solution time of two minutes or less and a reacquisition time of 15 seconds or less. The GPS equipment shall include multi-path rejection capabilities to help eliminate spurious signals caused by reflections of buildings or other structures. Velocity measurements provided by the GPS equipment shall be accurate to within 0.1 meters per second.

The GPS antenna shall be a low-profile unit housed in a rugged and weather tight enclosure. The GPS antenna shall be securely mounted on the exterior of the vehicle, clear of obstructions and interference-generating devices. GPS antenna location shall be determined in collaboration with Mesa County staff. The antenna, mounting and sealants shall be impervious to physical and chemical attack by automatic bus washing equipment.

While Mesa County has determined that differentially corrected GPS may provide some benefit, the cost to implement may not be an effective use of resources. Contractors may however propose differential corrected GPS at their option.

Mesa County has existing GPS receivers in service with all existing buses. The GPS receivers are the LMU-2600 fleet tracking unit. It is Mesa County's preference to maintain the existing fleet tracking units and interface them to the new ITS, if possible and cost effective.

4.16.6. Interface with existing odometers: If contractor proposed, the vehicle logic unit may be interfaced with the existing odometer, receiving the digital or analog signal and determining the distance traveled since the VLU was powered on. This functionality is optional and non-mandatory.

4.16.7. On-Board Monitoring Capability: On-vehicle monitoring shall be performed by interfacing with engine telemetry derived from the existing bus electronic control unit (ECU).

Shall provide real-time alerts to the dispatchers and/or maintenance personnel concerning overheating, low oil pressure, over speed, idle time, ignition status, etc.

Proposer shall supply the necessary hardware and software to interface with the ECU and communicate telemetry data and information.

4.16.8. Silent alarm switch and microphone: The Vehicles shall be equipped with a silent alarm switch and covert microphone operating on the separate voice radio channel. The silent alarm switch and covert microphone shall be mounted at a location agreed to by Mesa County. The silent alarm circuit shall be monitored by the system for opens and shorts and reported as an event if a fault is determined. The on-board system shall detect if the silent alarm switch circuit is closed for at least one (1) second and automatically send a silent alarm message to dispatch and place the on-board devices into silent alarm mode. This includes setting the front headsign, only, to a designated emergency message and activating the covert microphone.

When the vehicle is in the silent alarm mode, there shall be no indication on any on board device other than an unobtrusive symbol or icon. When the vehicle is in silent alarm mode, the vehicle shall automatically increase the frequency of location reports.

The silent alarm mode will be configured so that it is disarmed by command from central dispatch.

4.16.9. WLAN Card and Antenna: If required by the contractor's proposed system, each vehicle shall be equipped with a WLAN card and vehicle-mounted external antenna, to allow bulk data transfer of data that is stored on-board under the control of the bulk data transfer support software, when vehicles are at a WLAN-equipped facility.

The Contractor shall determine the appropriate number of WLAN access points needed and shall be responsible for installing the access points.

4.16.10. Installation: On-board Logic Units shall be replaceable as discrete units and identified by unique serial numbers. Each multi-terminal plastic plug connector shall be keyed or otherwise configured so as to prevent incorrect wiring during replacement.

Electrical power for on-board components shall be drawn from vehicle's unconditioned nominal power supply. All data inputs and outputs shall be designed to absorb "routine" intermittent low voltage, over-voltage and reverse polarity conditions, and to use inexpensive and easily replaceable components to open circuits in the event of "extraordinary" conditions (e.g., through the use of fuses, optical isolation).

Devices shall be securely mounted in the interior of the vehicle, so as to avoid blocking vehicle operator sightlines to front and side windows. The location of, and mounting method for the units shall be determined in collaboration with Mesa County/GVT staff.

4.17. ON-BOARD SOFTWARE

4.17.1. Logon and Logoff: The Vehicle Logic Unit should allow for a single point of logon for all existing and future on-board equipment including Genfare Odyssey fare boxes, Luminator and/or Hanover head signs, APC system and the AVAS system and other integrated devices.

Contractors are encouraged to propose alternative log-on methodologies, if their system does not rely on operator input and interaction with the Vehicle Logic Unit.

Whatever method is chosen the central system should recognize when the vehicle is ready to commence its assigned work, has started work and when it has completed work for the day.

Mesa County understands the importance of operator logon and is open to alternate approaches which can increase the reliability and accuracy of this function.

4.17.2. Text Messaging: The operator terminal if fitted should allow the vehicle operator to exchange canned or prerecorded messages with the dispatch center by selecting from a set of pre-defined messages.

The operator terminal shall store unread messages received from dispatch, indicate to vehicle operators when there are unread text messages, and allow stored messages to be viewed or deleted.

The operator terminal should allow the vehicle operator to view received messages longer than a single line by scrolling. Operators should be able to acknowledge receipt of messages by a single button or touch.

4.17.3. Bulk Data Transfer: The on-vehicle system should support bulk data transfer wirelessly via a WLAN while the vehicle is within Wi-Fi coverage area.

On-board device software or firmware upgrades and patches, or configuration data able to be uploaded to the vehicle via Wi-Fi shall preferably use the WLAN bulk data transfer system. Where Wi-Fi is not enabled the contractor shall define the method of transferring software, firmware configuration upgrades to the on-board devices. Automatic Passenger Counting system data shall be downloaded to the central system using the Wi-Fi and WLAN bulk data transfer sub system.

- **4.18. REAL TIME PASSENGER INFORMATION:** A critical component of the System will be its ability to inform our passengers about the services GVT offers. The ideal System will organize and display the following information in a user-friendly yet comprehensive fashion:
 - Internet-based live maps with pan and zoom in/zoom out capabilities with local street map and route system overlay.
 - Arrival predictions for all stops in service.
 - Real-time updates: maximum 30 second/desired 15 second or less frequency for position data.
 - Call-in IVR/voice system that can give automated arrival predictions.
 - Text/SMS system that can give automated arrival predictions.
 - Utilize current Stop numbering system to make arrival times for individual stops available by text/SMS and voice systems.
 - Specific interfaces tailored to mobile devices: iPhone, Blackberry, Android, with mobile accessible maps. Arrival predictions generated using mobile device GPS capabilities for Stop determination.

Mesa County currently has a texting feature utilizing a phone number where customers text the stop ID number to find out when the bus will be arriving. Contractor is to propose utilizing this feature or propose another option and the cost associated with each.

4.19. AUTOMATIC PASSENGER COUNTING (Option Pricing)

4.19.1. APC System: The APC system shall be integrated with the AVL system to provide Mesa County with time, location, and on-off counts.

The APC shall be designed to operate in accordance with these specifications for ambient temperatures from 0° to 122°F. The APC system shall be designed to operate in accordance with these specifications for ambient humidity from 10% to 95%, non-condensing internally. The APC system devices shall be designed to withstand the vibration and shock forces associated with transit vehicles. The APC system device shall be sealed against dust and water intrusion, in a robust enclosure and proven capable of withstanding power transients and radio frequency interference without degradation at levels that are known to exist in ordinary circumstances. Power and communications lines and the chassis may be exposed to electrostatic discharges from personnel, so the units shall be tested and proven resistant through testing in accordance with accepted industry procedures for testing computer equipment.

The APC system shall be capable of being locally configured using a laptop computer, portable programming device or wireless device. The chosen method may also be used for performing routine diagnostic maintenance.

The APC system should where possible, be interfaced with a wheelchair lift sensor, and with the number of wheelchair lift operational cycles at each stop also recorded. At each stop, a data record shall be created to record the door opening, the number of boarding and alighting passengers for each doorway and the number of wheelchair lift activations, and door closing. Each data record shall either in real time, or by post processing match the APC system data to the stop identification, trip number, route pattern, vehicle ID, time and date recorded in the central database.

Data records may be stored in either the APC system, integrated vehicle logic unit, with the contractor ensuring sufficient on-board memory capacity to allow for storage of at least 72 hours of APC data. APC data stored on-board should use non-volatile storage so that a power supply is not required to retain the stored APC data records.

Utility software shall be provided, for use on a laptop computer connected via a suitable (serial or Ethernet connection) to either the APC system, vehicle logic unit which supports calibration of the doorway sensors and review of stored data records.

Activated by the central system, data records shall be uploaded from the APC subsystem via the WLAN bulk data transfer system. The APC subsystem shall not erase or allow the overwriting of data records until confirmation is received from the central system that the data records were successfully received.

4.19.2. APC Doorway Sensors: The doorway sensors shall be designed to operate in accordance with these specifications for ambient temperatures from 0° to 122°F. The doorway sensors shall be designed to operate in accordance with these specifications for ambient humidity from 10% to 95%, non-condensing internally. The doorway sensors shall be designed to withstand the vibration and shock forces associated with transit vehicles and be protected against dust and water intrusion. The doorway sensors shall be proven capable of withstanding power transients and radio frequency interference without degradation, at levels that are known to exist in ordinary circumstances.

All equipment modules, cables, mounting hardware and connectors shall be designed to withstand the full range of operating environments found in the areas in which they are to be installed, and shall not interfere with the operation of existing and future equipment. Each connector in a given physical location shall be keyed or otherwise configured as to prevent incorrect wiring during installation or maintenance.

Each electronically addressable component/module/subsystem shall be electronically identified by a unique serial number.

The doorway sensors shall be able to count and differentiate between boarding and alighting passengers. The doorway sensors for all doorways shall be connected to a single APC gateway, controller or data logger. The doorway sensors shall enable the number of passengers boarding and alighting at each stop to be calculated, either in real time or later by post processing. MESA COUNTY expects that the accuracy of the proposed system with be within +/- 5%. System contractors shall define the expected accuracy and error rates of their proposed Passenger Counting subsystem.

4.19.3. Installation: APC sensors shall be mounted so as to avoid any protrusions into the doorway passage, with sealed windows for the infrared beams. Cabling to the doorway sensors shall be shielded and routed to avoid sources of electromagnetic interference, such as fluorescent lighting ballasts. The doorway sensors and APC controller shall be mounted in locations that are not accessible to the vehicle operator or transit passenger.

Sensors should be factory calibrated and verified for optical alignment and sensitivity. After correct installation, on-board sensors should operate in accordance with factory settings.

4.19.4. Integration: The APC system shall be integrated with the on-board vehicle logic unit, using standard connectivity such as SAE J-1708/J-1587 or J-1939 VAN, Serial or Ethernet at contractor's option.

4.19.5. Reporting: The system shall be capable of generating a wide range of analytical and administrative reports. This will allow Mesa County to utilize passenger count data for planning and operational purposes including real-time passenger loads displayed to users of the system. Proposers are encouraged to highlight the capabilities of their reporting systems and the benefits they will provide to Mesa County.

4.20. AUTOMATED ON-BOARD ANNOUNCEMENT SYSTEM (Option Pricing): The system shall be designed to operate in accordance with these specifications for ambient temperatures from 0°F to 122°F and for ambient humidity from 5% to 95%, non-condensing internally. The system shall be designed to withstand the vibration and shock forces associated with transit vehicles.

The system shall be capable of being locally programmed and maintained using a laptop computer, portable programming device or wirelessly when the vehicle is in the yard or in service. This chosen method may also be used for performing routine diagnostic maintenance.

All equipment modules, cables, mounting hardware and connectors shall be designed to withstand the full range of operating environments found in the areas in which they are to be installed, and shall not interfere with the operation of existing and future equipment.

Each connector in a given physical location shall be keyed or otherwise configured as to prevent incorrect wiring during installation or maintenance.

The system shall meet or exceed all Americans with Disabilities Act (ADA) requirements found in 49CFR Parts 37.167 and 38.35, as well as the requirements of the current version of the ADAAG at the time of implementation.

The controller shall provide audio and visual announcements to riders on-board and those waiting to board. As each GVT vehicle approaches a stop or other designated location, an announcement shall be automatically made over the existing on-board public address (PA) system speakers and displayed on one or two visual display units inside the vehicle to inform passengers about upcoming stops, when a stop has been requested, major intersections and landmarks.

No vehicle operator interaction shall be required to operate the system. The vehicle operator shall have the ability to manually trigger the activation of any pre-recorded announcements if needed.

Vehicle operator use of the on-board PA system shall override any automated announcements, but the operator should not be able to disable the automated announcement.

The location information announced/displayed shall provide the stop name, transfer opportunities and other information to be determined at a later date (e.g., nearby points of interest) stipulated by Mesa County.

The system should be triggered by the AVL system to determine the appropriate announcements on-board the vehicle whenever the vehicle enters a "trigger zone." A trigger zone is a user-defined area that is located just prior to each stop location. For example, the trigger zone may begin 800 feet before a stop or 60 seconds before a stop as well as at predefined other locations. Trigger zones will be pre-defined by the central software and downloaded to the system.

The system shall be capable of making time-based, location-based and vehicle operator initiated announcements/ displays. Time-based announcements/displays shall be programmed to be made on-board the vehicle at specific times of the day or at a set frequency within specified time periods, on specific days of the week.

Location-based announcements/displays shall be programmed to be made on-board the vehicle when that vehicle passes any designated location(s).

Vehicle operator-initiated announcements/displays (e.g., safety-related announcements) shall be programmed to be made at the vehicle operator's discretion. The system shall be able to store the required announcements/displays for the vehicle's daily duty either on the vehicle logic unit, MDT or other device based on announcements of up to 20 seconds duration each. Automated announcements shall continue to operate normally when the vehicle is in silent alarm mode.

In the event that a vehicle is operating off-route, the automated announcements/displays shall not be made. Once the route is reacquired, the system shall automatically determine and announce the next valid bus stop or other designated location. Off-route and on-route detection and recovery shall be automatic and not require vehicle operator intervention or action.

4.20.1. On Board Message Signs: As each GVT vehicle approaches a stop or other designated location, variable text as determined by the system shall be displayed on the message sign(s) inside the vehicle. Each sign shall consist of one row providing at least twenty (LED) variable characters with an overall height of at least 1-1½ inches.

The sign face and variable characters shall comply with the requirements of the current version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) at the time of implementation, to maximize readability distance, but at a minimum should be

viewable at better than 40 feet at an angle of 60 degrees horizontal and 60 degrees vertical. Sign messages shall be readable by a person with 20/20 corrected vision within the cone of maximum intensity at up to 30 feet from the sign face under the full range of ambient illumination conditions.

Signs shall be designed to operate in accordance with these specifications for ambient temperatures from 0-14°F to 122°F.

Signs shall be designed to operate in accordance with these specifications for ambienthumidity from 5% to 95%, non-condensing internally. Signs shall be designed to withstand the vibration and shock forces associated with transit vehicles. Signs shall be sealed against dust and water intrusion, certified in compliance with the IP44 standard (or better).

Signs shall be proven capable of withstanding power transients and radio frequency interference without degradation at levels that are known to exist in ordinary circumstances. All equipment modules, cables, mounting hardware and connectors shall be designed to withstand the full range of operating environments found in the areas in which they are to be installed, and shall not interfere with the operation of existing and future equipment. Each connector in a given physical location shall be keyed or otherwise configured as to prevent incorrect wiring during installation or maintenance.

4.20.2. Installation: On Board visual displays shall be installed so as to be visible from a seated or standing position from any location within the vehicle passenger compartment. Actual location of Dynamic Message Signs (DMS) installation shall be agreed by the Mesa County staff for each vehicle type.

4.21. CENTRAL SYSTEM

4.21.1. General: All software shall use a Commercial Off The Shelf (COTS) relational database management system (RDBMS) for all database applications. All software shall provide a comprehensive purge capability that minimizes database storage requirements and purges archived records from online storage, so as to satisfy Mesa County's records management policies.

The Central Back Office application software will be the interface for administration, management and, operations staff to view and monitor the operation of the bus system. The Back Office system shall integrate with and store all operational data including; timetable, schedule, trip, route, timing point, bus stop, and vehicle information and will collect and compare data from the AVL system to provide the necessary functionality.

Schedule and Route Adherence - The System will use the information from the AVL System to alert the Dispatcher when vehicles deviate from established routes and schedules, service interruptions, vehicle breakdowns and communication gaps based upon user defined parameters. The schedule and route adherence alarms must be presented in real time. The Dispatcher will be able to clear as well as set and control all alarms.

Incidents – The System shall be capable of presenting and storing system-generated Operational alerts along with the manual entry of user-defined incidents such as switchouts, passenger incidents, and accidents. It is desired that these incidents be categorized as either a new incident or a follow-up/update to one already entered. As many of these incident types will require timely notification to appropriate staff, we desire the capability to automatically send email and/or SMS text messages to appropriate staff members based on incident type.

Automatic Vehicle Monitoring - The System will display all vehicle locations on a geographic map of the GVT transit service area.

The vehicle location map shall allow the user to click or hover over a vehicle icon to view more detailed information in real time. Vehicle icon shape and color on the map will indicate the vehicle status and vehicle type. The icons should be user definable to allow for future types of vehicles in the vehicle inventory. The reported locations will be accurate within 10 meters and shall be updated based on user defined intervals (preferably one minute or less).

Vehicle Arrival Forecasting - Real time vehicle arrival times will be available to passengers viewing the Dynamic Message Signs (DMS) at the three transfer facilities and via the website for every bus stop serviced by GVT.

Operational Hours - The entire System will be available for customers 24 hours per day, 7 days per week. There will be no more than 1 hour unplanned system down time per calendar quarter including all devices and /or subsystems.

A draft Service Level Agreement should be included in the contractor's proposal detailing proposed fault remedy response times.

Data availability - Management and Supervisory users shall have the ability to view and query "live" data collected over a rolling minimum of thirty (30) days and to view/query consolidated data archived for a period not to exceed five (5) years from contract completion and acceptance by Mesa County.

- At a minimum, the CAD/AVL system should:
 - Track AVL equipped transit vehicles; reporting; displaying to system users; and recording for real time/historical use; the following data:
 - Vehicle identification
 - Vehicle location and time of update
 - Driver initiated Alarms
 - Contractor should describe how their system caters to the following requirements: the frequency at which vehicle locations are updated, whether the location update parameters are user configurable, and what and, how other data may be collected from the vehicle, displayed and stored. Contractors should define how their system interfaces to third party scheduling and rostering systems, and GIS Mapping solutions.
 - Contractors must describe in detail how their tracking solution will deliver predictive arrival information to the existing display signs at the transfer facilities, and Web site and vehicle arrival prediction accuracy.

- How often predictions will be updated and delivered to the signs and Web site
- What other distribution options are available from the contractor and their relative merits.
- Provide dispatch and management system users with a choice of GIS Map based, and tabular/textual format views of all vehicles being tracked.
- o Uniquely identify each vehicle being tracked.
- o Identify vehicles in "alert" condition.
- Display Schedule adherence for every vehicle.
- Display Route adherence for every vehicle.
- Display latest vehicle position and time.
- Support user definable choice of icons/colors.
- Allow users to view:
 - Multiple vehicles on a map.
 - Single vehicles on a map.
 - Single vehicle on individual route pattern.
 - Multiple vehicle on individual route pattern.
 - Last known position of all vehicles at a user defined time (hh:mm).
- Alert users to system faults.
- Contractors must describe how their proposed system caters to these requirements, what parameters are user configurable, and how information will be presented to system users.
- Collect performance information on each vehicle and store in a database supporting creation of performance reports including:
 - Schedule adherence.
 - Time point travel times.
 - Trip Travel Times.
 - Passenger Count On/Off at each stop.
 - Emergency events.
 - Vehicle and driver identity.
 - o Date/time of alarm.
 - Type of alarm.
 - Event Clearance information.
- Vehicle communication problems such as date/time of lost contact, date/ time regained contact.

The contractor shall be responsible for resolving any compatibility issues between software and any other existing installed software. The contractor shall implement all applicable and available software upgrades and patches during the implementation and warranty periods, and be responsible for resolving any compatibility issues with other parts of the overall system due to such upgrades or patches.

Proposals must identify how the product(s) is/are licensed, as well as how many seats of the product(s) are being recommended, the type and cost of each product (cost shall be

indicated on your Pricing Proposal Form), and the annual support cost (also shall be indicated on your Pricing Proposal Form).

Proposals must offer descriptions and pricing options for the full range of technical support agreements alternatives offered. Proposals must describe the Contractor's support system (e.g., website, remote, help desk, phone or other), the exact hours of support, and any/all fees associated with the support (indicate fees on the Pricing Proposal Form).

4.22. COMPUTER AIDED DISPATCH/AUTOMATIC VEHICLE LOCATION (CAD/AVL) SOFTWARE

4.22.1. General: The CAD/AVL software shall be installed and initially provide user access to a minimum of ten (10) concurrent users that allows authorized workstations on the Mesa County network to access the CAD/AVL software, with location tracking, schedule adherence monitoring and location playback functionality only, without needing to have the full application software installed on the workstation.

4.22.2. Vehicle Dispatch Assignment: The system shall log all outgoing and received data in a real time database, including date/time, vehicle number, route number, trip number, and odometer reading (if enabled), GPS location latitude and longitude. Consolidated data should be regularly transferred to a historic database for archival purposes and statistical analysis.

The historical database shall be read-only. Historical data shall be available in a format that is directly accessible by or importable into common database management and analysis tools. In addition to on bus logon the system shall be capable of central assignment of vehicles to Blocks, Trips/Runs, and shall not necessarily require vehicle operators to activate the system. It is Mesa County's desire that the system log-on error rate be less than 5%. Mesa County recognizes that reliance on bus operator system log on can be prone to error. Contractors are encouraged to propose alternative, proven methods that will ensure vehicles are recognized by the system as having logged-on.

4.22.3. Location Tracking: The system shall display on the map the last reported location for all vehicles, using an icon indicating route direction and labeled with the vehicle ID, route ID or Block ID as selected by the user. The display shall provide an indication if the last reported location is older than the current reporting interval.

4.22.4. Route and Schedule Adherence Tracking: Based on configurable thresholds, the system shall use the reported vehicle location data updates to determine schedule adherence data to designate when vehicles are "early," "late" or "on time." Based on thresholds configurable by Mesa County, the system shall designate when vehicles are deemed off-route.

The system shall highlight to the dispatcher those vehicles that are operating early, late or off route, using tabular and map displays to indicate their current schedule and route adherence status. The tabular display entries and the map display symbols for these vehicles shall use distinct and configurable color codes for early, late and off-route status. The system shall provide a real-time output of the current location and schedule adherence for all fleet vehicles, for use by the next stop prediction software. The Contractor shall describe how this functionality is met by their proposed system.

4.22.5. Voice Call Set Up: The system shall allow the dispatcher to view Request To Talk (RTT) and Priority Request To Talk (PRTT) messages received from revenue vehicles on a tabular display, together with the time received.

The voice call functionality shall allow the dispatcher to set up a voice call response to the initiating vehicle operator by first selecting RTT or PRTT from the tabular display. The system shall allow the dispatcher to initiate a voice call by selecting vehicles individually; by selecting a set of vehicles from the vehicle list or running on a specific route; or by selecting all vehicles running on routes within a rectangular map display area. The system shall require the dispatcher to establish a timeout interval for any voice call, after which the radio will revert to mobile data transmission.

Mesa County/GVT's radio system is Motorola that employs the Mototrbo data standard for GPS related information. We are open to replacing our existing voice radio network as a part of this procurement. Proposers should discuss how their proposed system might accommodate using the existing radio system as well as proposing a new system.

4.22.6. Location Playback: The dispatcher shall be able to review on the map display the chronological sequence of reported locations for a specified vehicle over a specified time period. The software shall provide controls to view the entire sequence of reported locations for the selected time period or to step through the sequence incrementally forward or backward.

4.22.7. Messaging: The system shall allow the dispatcher to view received messages in a tabular display that also indicates the vehicle ID and the time of the message. The system shall allow the dispatcher to send a message to a single vehicle, a predefined group of vehicles, all vehicles within an area selected or all vehicles operating on the same route.

The system shall allow the dispatcher to select one of a set of predefined messages or enter a free text message. The system shall allow for any message sent by dispatch to be flagged as requiring vehicle operator acknowledgement, and shall allow the dispatcher to view a list of such messages that have not yet been acknowledged.

4.22.8. Silent Alarm Handling: The system shall notify the dispatcher that a silent alarm message has been received using an Mesa County-approved user interface visual method. There shall also be a Mesa County approved audio notification method, which Mesa County shall be able to configure as on or off.

The system shall not allow the dispatcher to send voice or data transmission to a vehicle in the silent alarm mode.

In voice mode, the vehicle shall be capable of sending updated location information more frequently than once every minute should the vehicle move more than a defined distance from when the alarm is activated.

The system shall allow the dispatcher to command the on-board logic unit to activate covert microphone transmission using the vehicle voice radio, only when the vehicle is in the silent alarm mode.

The system shall allow the dispatcher to command the VLU to terminate the silent alarm state.

4.22.9. Data Logging and Retrieval: Information storage and retrieval requirements fall into two (2) categories the real time information and the non-real-time information. Real-time information is that which must be processed when available and upon which a particular and immediate course of action may be dependent. Nonreal-time information is that which is either static, not in a constantly changing state, or which can be processed offline, after the fact.

The proposed system shall have capabilities for processing both real-time, and non-realtime information as appropriate and for being able to store and retrieve such information. All real time vehicle location and status data transmitted to the central system shall be maintained online for immediate retrieval, analysis, display and printing. This information shall include all data transmitted from vehicles to dispatch (logon/log-off data, emergency alarms, vehicle system alarms, location data, and data transmitted from other equipment, such as APC system on-board the vehicles). The online data storage system shall ensure data integrity in the event of a computer disk drive failure.

In addition, the system shall include a means of archiving transaction data, while the system is in operation. It shall not be necessary to shut down the database to perform a successful transfer to a historical information database. Historical information may be consolidated to store timing point data rather than every location update in order to conserve storage requirements.

Historical data shall be read-only with modification permitted only to individual predefined fields.

4.22.10. On-Board Device Alarm Monitoring: The system shall display all alarm messages received from on-board devices to the dispatcher using a tabular display, and shall display a modified vehicle icon on the map display when an alarm condition is in effect.

4.22.11. Mobile Data Communication Gateway Software: The system shall be interfaced with the mobile data communications gateway support software to exchange data in real-time with vehicles.

4.22.12. Bulk Data Transfer Support Software: The system shall be interfaced with the bulk data transfer support software to exchange bulk data with vehicles while they are in range of the WLAN.

4.22.13. Unprocessed Data: Unprocessed APC data received from vehicles shall be stored without alteration in database tables. The system shall retain unprocessed APC data after post-processed APC data has been developed for a minimum period to be defined by Mesa County.

4.22.14. Post-processed Data: The system shall associate each unprocessed APC record with the correct nearest stop, based on an algorithm that uses the recorded GPS latitude and longitude, the route, and the stops assigned to preceding and following data records.

If the latitude and longitude recorded for a stop are not within 160 feet (approximately 50 meters) of a stop on the current route, a stop ID shall not be added to the data record. The system shall initially flag in the unprocessed data (1) any "outlying" data; (2) instances where the calculated vehicle occupancy becomes negative; and (3) instances where the total number of boardings and alightings over the course of a route are not equal. The software shall allow the user to set and adjust parameters controlling the automatic flagging of "outlying" data.

The system shall allow the user to review the flagged data and offer post-processing options. At a minimum, these options will include (1) eliminating or adjusting "outlying" data; (2) proportionally adjusting boarding and alighting counts data to avoid a negative occupancy condition; and (3) proportionally weighting boarding and alighting counts to equalize the total number of boarding's and alightings.

The system shall store the post-processed version of the APC data received from vehicles in a, database table.

4.22.15. Interfaces: All database tables shall be made available in a compliant format, with the data dictionary provided to Mesa County, so that Mesa County can import this data for analysis and reporting purposes into a common database management and analysis tool (e.g., Microsoft Access, Excel). Contractors may propose an alternative solution for analysis and report extraction

4.23. AVAS MANAGEMENT SOFTWARE

4.23.1. Announcement preparation: The system shall allow the user to create onboard next stop announcement text messages, using Text-to-Speech (TTS) functionality and associate these with a specific stop.

4.23.2. Trigger zone configuration: A trigger zone is a user-defined area that is located just prior to each stop location. The system shall provide a utility that allows the user to configure next stop announcement trigger zones on a global basis (e.g., 500 feet before each stop) and set or adjust trigger zones individually by stop.

In addition to defining the trigger zone geographical area, the utility shall allow a system action such as an advertising message to be defined for trigger zone entry or exit.

4.24. MOBILE DATA COMMUNICATION GATEWAY SOFTWARE

4.24.1. Data message processing: The gateway shall ensure that the specific mobile data communications method used is transparent to the server and application software implemented. Mobile data communications system shall incorporate a firewall and authentication security services to ensure that messages and data can only be exchanged with the designated bus.

4.25. WIRELESS LOCAL AREA NETWORK

4.25.1. Hardware: The WLAN shall provide mutual authentication to ensure that only authorized vehicles and access points can participate in the WLAN. The WLAN shall employ supplementary encryption for all WLAN communications using a dynamic session encryption key.

The WLAN shall have the capability to communicate in both point-to-point and point-tomultipoint configurations. The interface between the WLAN and the rest of Mesa County network shall be protected by a firewall with port and IP address filtering.

4.25.2. Installation: The WLAN shall include multiple access points to ensure the vehicles have sufficient coverage to achieve the following:

- a) Ensure performance data from the vehicle to the fixed end is uploaded daily.
- b) Ensure updates from the fixed end to the vehicle are downloaded at the next available opportunity to communicate with the bus.

The selection of access point installation locations shall be coordinated with and acceptable to Mesa County staff, providing for (1) ready access for maintenance, (2) protection from vandalism, and (3) protection from accidental damage.

4.25.3. Bulk data transfer support software: The bulk data transfer software shall use file transfer software and a WLAN to complete a daily bulk data transfer process when each vehicle is at the GVT facility. The bulk data transfer system shall be capable, at a minimum, of the following tasks: (1) download software updates/patches for onboard devices; (2) download all updated schedule and trigger zone locations data required for operation of the MDT fixed route application software; (3) upload APC data; and (4) download updated trigger zones locations and announcement sign messages for automated annunciation systems on-board announcements.

The software shall be configurable to determine frequency and types of data transfers. The bulk transfer system shall automatically initiate WLAN communications with any vehicle once it arrives within communications range of the bulk data transfer system at the Mesa County facility, without any vehicle operator interaction being required.

Once WLAN communications is established with the vehicle, the bulk data transfer system shall automatically initiate all required file transfers. A validation process shall ensure multiple attempts are made to complete all required file transfers until acknowledgement has been received that the file transfer was successfully completed.

4.26. PREDICTIVE ARRIVAL SYSTEMS: One of the main outcomes of this procurement is to acquire predictive arrival information for every bus stop in the GVT transit system.

This information will be made available to passenger via the Internet, mobile device(s), and telephone based system.

4.27. TRANSFER FACILITIES ELECTRONIC MESSAGE SIGNS

4.27.1. Hardware: Mesa County has one existing display at each of the three transfer facilities as described in Section 4.4 and would prefer these continued to be utilized if integration is possible and is cost effective.

If not able to integrate with existing displays, the contractor's proposal shall provide for the supply and installation of three displays. Proposers are required to provide pricing for the cost of signs, installation including any structural or civil works, and electrical power and other connectivity requirements. For the purposes of this procurement, contractor estimates or "range of costs" is required. Final locations and firm pricing will be determined with the successful contractor.

Contractors are encouraged to propose a range of display sign options along with recommendations as to where each sign type would be best suited.

The Displays are required to present real time arrival data to the waiting passengers with an arrival "window" of at least 30 minutes. The bus stop displays shall provide real time information related to all transit vehicles scheduled to arrive at the stop where the display is installed in the correct sequence of arrival. The displays shall be capable of being easily read in daylight and under artificial lighting conditions. Other requirements of the bus stop display are:

The display device should be protected from the environment by a NEMA Type 4 or higher enclosure with weatherproof (dust, rain, etc.) connections. The device must be able to function and operate with direct exposure to rain, fog, and direct sunlight without malfunctioning.

The displays or enclosures shall be constructed of materials (pinned torx security screws) that are resistant to vandalism and be designed to withstand severe abuse without malfunction from, but not limited to repetitive strikes from wood and metal objects. Device shall include wireless communications link. The contractor shall propose the most cost-effective approach for Mesa County. The recommended communications method shall be capable of adapting to suit the electronic signs to the various installation locations.

The sign shall include adequate intelligence to manage communications and organized format, traveler messaging in terms of arrival times.

Estimated arrival times in whole minutes shall be received by the sign from the central system with the arrival times displayed, matching the arrival sequence of the vehicles due at the stop.

4.27.2. Software: Next arrival prediction messages shall be generated automatically, based on the incorporation of variable arrival time prediction data received from the central system into a standard message template applicable to the sign for that stop.

The format of the message template shall be "Service" "Destination" "Departing" and "nn Minutes" or an approved alternative format agreed to by Mesa County. When the sign receives a message from the central system indicating that current prediction data is not available, the sign shall display an approved alternate message approved by Mesa County.

Variable Message Terminus Displays shall be capable of displaying messages on multiple sequential "pages". For example, displaying a next arrival message and a general message with a one-row sign would use an alternating sequence of two one-row message "pages." The signs shall include ongoing self-diagnostics and shall send an alarm message to the central system in the event that a diagnostic fault is identified.

Audio sign messages shall be constructed in real-time by the sign in a manner that avoids the need to send audio data over the radio system, by concatenating a prerecorded message segments for the numeral selected based on the variable arrival time prediction data received from the central system, with prerecorded message segments for route numbers, route names, destinations and fixed wording within the message templates.

4.27.3. Installation: All signs shall be mounted at a location to be agreed with Mesa County. Signs shall be mounted using hardware (pinned torx security screws) that allows the vertical and horizontal orientation to be adjusted as part of and subsequent to installation. The contractor will be responsible for the Terminus/Station type variable message displays being connected to the local power supply provided by Mesa County at each sign location.

4.28. CENTRAL ARRIVAL INFORMATION DISTRIBUTION: The central system shall combine vehicle location data from the CAD/AVL system with other relevant data to continuously update predictions on when the next vehicle will arrive at each stop. Mesa County requires proposers to submit in their proposals a description of the algorithm(s) that would be utilized to determine next bus arrival predictions, including the data used as input and the outputs provided.

The percent error for next vehicle arrival time predictions at a given stop shall be calculated as: absolute value of (predicted time to next arrival minus observed time to next arrival) divided by (observed time to next arrival). For example, if the observed time to next arrival was 7 minutes relative to a predicted time to next arrival of 8 minutes, the percent error would be 1/7 (i.e., 14%).

The system shall provide current next vehicle arrival information to the signs through an automated process at an update rate to each sign of at least twice per minute.

The system shall detect when the current next vehicle for a stop arrives within the defined stop zone and command the sign to change the message to indicate that the vehicle is "due". The system shall detect when the current next vehicle for a stop departs

the defined stop zone and clear that vehicle from the display within a 30 second period. After previous message clearing, the system will automatically change the displayed data to reflect the next vehicle arrival.

Messages about arrival predictions where multiple routes approach a stop, or additional text messages, shall be displayed on multiple sign rows where available or in an alternating manner for a single row sign. The system shall allow the user to adjust the time period for which each part of an alternating message sequence is shown. The system shall display any alarm messages received from the signs to the dispatcher using the tabular display.

4.29. WEBSITE: Contractor should support using iframe insertion with Grand Valley Transit's web site to provide "real-time" information to the Public. The website shall allow customer to choose a stop and display the next arrivals for route(s) serving that stop. Mesa County currently uses two TimePoint designed web apps that integrate with the TimePoint system. It is highly desirable that the software system replacing TimePoint provides web apps with similar functionality. Details for these web apps are available at http://gvt.mesacounty.us/timepoint.aspx. The domain names (GVTeta.com & GVTeta.mobi) for these web apps are owned by Mesa County and may or may not be repurposed.

4.30. PROJECT MANAGEMENT

4.30.1. General: The contractor shall, for all deliverables, include the filename in the document footer and include in the filename the file release date. The contractor shall prepare all deliverables in described in this section in both Microsoft Office (Word, Excel or PowerPoint) and Adobe PDF formats, with Mesa County granted full rights to reprint as needed.

The major documents to be produced are as follows with descriptions of their content and the processes used to develop them are as follows:

- Project Schedule
- System Requirements Document
- System Design Document
- Installation and Test Plan

4.30.2. Project Schedule: The Contractor is required to develop and maintain a detailed Project Schedule that incorporates the major milestones listed below in this section of the Scope of Work. The contractor's sequencing of tasks should be flexible enough to accommodate modifications in Scope or changes in the time lines such as early completions or delays that would normally be expected in a multi-stage deployment.

4.30.3. Kick-Off Meeting

Mesa County will hold a "kick-off" meeting with the contractor within one week from the Notice to Proceed for the Project. The contractor shall attend the kick-off meeting and shall also ensure any subcontractors and their appropriate personnel are present at the meeting. The administrative and technical aspects of the Project will be discussed as the

kick-off meeting. Prior to the kick-off meeting, the Contractor's Project Manager will provide an agenda to all potential meeting participants.

The contractor shall submit a Project Schedule within 10 days from the kick-off meeting that explains its proposed methodology to completing the Project scope and its approach to work including design, customization of software, implementation, training and ongoing support. The project schedule shall be in sufficient detail to demonstrate the contractor's clear understanding of the Scope of Work.

4.30.4. Requirements Gathering (System Requirements Document)

The contractor shall conduct one or more system requirements review meetings with Mesa County staff and staff from our contract operator, MV Transportation. The purpose of the requirements review is to review the preliminary system requirements contained in this specification, to ensure the documented requirements reflect the current knowledge of the customer and market requirements, to identify requirements that may not be consistent with product development constraints, to create and develop the System Requirements Document, and to put this document under version control to serve as a stable baseline for continued development of the system requirements.

Following the requirements gathering process, Mesa County will arrive at a decision on whether to deploy each of the available optional items covered by this Scope of Work and the contractor's proposal. The contractor's cost proposal shall be valid for a minimum of 180 days from the solicitation closing date, and Mesa County reserves the right to select additional option items for deployment at a future date, subject to negotiation with the contractor.

4.30.5. Finalization of the System Requirements

The contractor shall incorporate any optional functionality selected by Mesa County into the System Requirements Document and submit to Mesa County for written approval. Upon approval the System Requirements Document shall be the basis for the development of the System Design Document.

4.30.6. Design Process and Unstructured Testing (System Design Document)

The contractor shall conduct a series of software "walkthroughs" to serve as progress reviews and to solicit and obtain inputs from Mesa County during the development and customization of the ITS. The intent of these design reviews is to help ensure that the final product will meet Mesa County's technical and operational requirements specified in the System Requirements Document and to develop the System Design Document. This approach shall also ensure that Mesa County is familiar with the product thus expediting the testing process. Periods of informal testing shall be permitted to be witnessed by the Mesa County staff to verify proper design of the ITS under development by contractor. These "unstructured" tests are not specifically included in the approved test procedures.

4.30.7. Software Development (Customization of the Software)

To the extent that customized software development for the proposed Intelligent Transportation System is needed, the contractor shall establish and maintain an effective software design and development process to ensure compliance with the specifications of this Scope of Work.

4.30.8. Content of the System Design Document

The System Design Document shall include the following materials: (1) an overview of the equipment, system and configuration proposed for implementation; (2) detailed technical documentation for each equipment item; (3) detailed technical documentation on all software, addressing the functions of each module, the format of all user interface screens, the format of all reports, the data fields to be included in all data exchange interfaces and any other software aspects warranting advance agreement with Mesa County prior to system customization/configuration; and (4) a table detailing the approach taken in the design to address each individual requirement in the System Requirements Document.

4.30.9. Approval of System Design: Toward the end of the design process, the contractor shall arrange for a final design review meeting that shall include an update of all of the design activity to date and presentation of the System Design Document to Mesa County for written approval. All major subcontractors and key personnel shall attend the presentation. Approval of the System Design Document will allow the contractor to complete its customizations of the software to an approved specification. Any unapproved modifications and implementation efforts conducted before the approval of the System Design Document will be at the contractor's own risk.

4.30.10. Installation and Test Plan Document: After approval of the System Design Document, the contractor shall prepare and submit an Installation and Test Plan Document that shall become the governing document from which all elements of the System will be installed, tested and verified. More detailed installation drawings and test procedures will be developed throughout the Project life cycle and shall conform to the framework of the Installation and Test Plan.

The contractor shall submit the Installation and Test Plan Document for written approval from Mesa County prior to undertaking any installations. They shall provide text, Catalog cut sheets, diagrams, drawings, illustrations and images using adequate detail to allow for quality installation by a technician without further training in conjunction with other installation instructions provided by the contractors of individual equipment components. It shall include details on:

- 1. Rate of installation (completed buses per day)
- 2. Composition of installation crew(s)
- 3. Approximate dates at the facility
- 4. Cutover scheme
- 5. Asset/Inventory accounting
- 6. Equipment installation locations/mounting
- 7. Routing, conductors, color-coding, labeling, and connectors for power, communications and vehicle ground circuits
- 8. Connections with, any required modifications to and restoration of existing infrastructure
- 9. Work area and equipment storage requirements
- 10. Methods and quality standards
- 11. Supervision and quality assurance procedures.

This installation section of this document shall encompass all of the requirements in the following sections:

- 4.31 General Installation Requirements
- 4.32. AVL Installation Scheme
- 4.33. Installation On New Buses
- 4.34. Removal of Prior ITS Equipment
- 4.35. Wiring and Wiring Practices
- 4.36. Equipment Identification
- 4.37. Equipment Installation
- 4.38. Corrosion
- 4.39. Brackets and Fasteners

The test plan section of this document shall encompass all of the requirements of the following Sections:

- 4.40. Evaluation
- 4.41. Inspection and Test
- 4.42. Acceptance Tests
- 4.43. Acceptance of the System as a Whole.
- **4.31. GENERAL INSTALLATION REQUIREMENTS:** Mesa County will require a successful demonstration of all ITS components on the first vehicle as described earlier, before installation sign off will be granted. Installations shall be performed on days and times agreed to by Mesa County and the contractor.

At the request of the contractor and with no less than two (2) days advance notice, Mesa County may permit installations at other times.

The contractor shall install and configure the entire system, including Mesa Countyprovided computer hardware and integration with existing systems.

The contractor shall provide all necessary personnel, tools, test equipment, transportation, hardware, freight, materials and supplies for the successful and complete installation of all equipment and software, as approved by Mesa County. The contractor shall be responsible for their own and subcontractors' performance and safety. Installations shall be performed in accordance with all Federal, State and Local laws and regulations.

The contractor shall supply any electrical equipment necessary to operate system components using existing DC electrical power available on Mesa County vehicles and existing AC electrical power at fixed facilities. If existing power arrangements are unsatisfactory, the Contractor must specify any proposed alterations.

Mesa County reserves the right to allow no more than 10% of its vehicle fleet to be out of service within any given 24 hour period to accommodate vehicle installations. Mesa County also reserves the right to when necessary; allow less of its vehicle fleet to be out of service if needed in order to avoid disruption to revenue service requirements in conjunction with maintenance requirements.

The contractor shall ensure that all vehicles made available for overnight installation work are ready for revenue service by the start of the next day. The buses must be fully functional including radio capable when returned to service.

The capabilities or availability of existing infrastructure affected by or to be integrated into the new system, such as the Mesa County LAN, WAN and WLAN facilities, shall not be reduced at any time by system implementation unless coordinated through the Mesa County IT department.

The contractor shall only be authorized to undertake installations after Mesa County's written approval of a pre-installation inspection documenting the existing condition of any existing infrastructure that may be affected by the installation.

The contractor shall be responsible for the security of equipment prior to installation. Mesa County will provide space for the contractor to establish secure storage facilities adjacent to each installation area.

Mesa County will provide space for central system installations and vehicle installations. Mesa County will provide light and electrical service at all installation locations, as well as access to compressed air at vehicle installation locations. Mesa County will provide sufficient staff to move vehicles to and from the installation locations. Mesa County will complete agreed upon modifications to existing infrastructure required to support the installations.

The contractor shall prepare all deliverables in both Microsoft Office (Word, Excel or PowerPoint) and Adobe PDF formats, with Mesa County granted full rights to reprint as needed. The contractor shall for all deliverables include the filename in the document footer and include in the filename the file release date.

- **4.32. AVL INSTALLATION SCHEME:** The contractor shall design an installation scheme for the AVL equipment that will optimize the operation, service life, reliability, availability, and maintainability of the equipment without interference to passenger movement or driver functions. The contractor shall consider the following information when designing the equipment installation scheme for the AVL equipment:
 - The only electronic installations that have remained dry are those above the floor level of the bus.
 - The location(s) on the buses proposed by the contractor for installation of AVL components shall operate reliably in the bus environment with its susceptibility to vibration, shock, electromagnetic interference, water, and bus cleaning operations. Methodology shall be submitted to Mesa County for review and approval, as part of the Installation and Test Plan Document.
 - Security of bus communication components and equipment is a continuing problem; therefore, every exposed AVL component shall be resistant to tampering and vandalism. Tamper-resistant fasteners (pinned torx security screws) shall be used at all locations. Cables shall be run in hidden and protected spaces, which require prior written approval from Mesa County. Microphone cords, control heads, and cabinets

shall incorporate vandal resistant designs at all AVL installations. Submittals shall be provided to Mesa County for written approval prior to ordering and installation.

- The emergency alert button in vehicles shall be located in a position convenient to the driver; exact locations shall be coordinated with Mesa County for each type of vehicle.
- **4.33. INSTALLATION ON NEW BUSES:** In the event that Mesa County purchases new buses, Mesa County may elect to negotiate with the contractor for the provision and installation of additional ITS vehicle units during the building of its bus orders at the bus manufacturers' plants. This may include, but not be limited to installation of wiring and connection to all peripherals and onboard processors.

The contractor would be required to deliver the ITS equipment F.O.B. to the bus manufacturers' plant and provide technical assistance and instructions, as needed, to permit the bus manufacturer to install and fully test the ITS hardware before the buses are delivered to Mesa County.

- **4.34. INSTALLATION ON EXISTING BUSES:** The security of the new equipment during the installation and transport period shall be the responsibility of the contractor unless otherwise notified by Mesa County in writing. Mesa County will provide a secure area for the storage.
- **4.35. WIRING AND WIRING PRACTICES**: Wires and cables shall be installed according to the following:
 - 1. All conductors shall be pure copper, of not less than 99% conductivity. The use of aluminum conductors shall not be permitted.
 - 2. Conductors shall be continuous without splices.
 - 3. Conductor gauge, insulation, and shielding shall be designed according to industry Standards and Accepted engineering practice for the intended purpose.
 - 4. Industry standard color-coding shall be used throughout.
 - 5. All applications requiring physical movement and flexing shall use stranded conductors.
 - 6. All crimp lugs shall be copper, or plated copper. The use of aluminum lugs is not permitted. Connections shall be made only with the manufacturers approved crimping tools. All crimp connections shall be made to the manufacturers recommended compression. The tool die shall embed the manufacturer's impression and listing.
 - 7. Unless installed in conduit, wiring within console cabinets, shall be neatly installed, bundled with appropriate wire-ties
 - 8. All wiring in plenum spaces shall comply with the requirements of Article 800 of the National Electrical Code.
 - 9. In dispatch centers, signal and control wiring, and connection of devices referenced in these specifications, shall be installed in conduits or raceways, other than that installed in the equipment room, and shall be included as part of the work to be performed by the proposer. Wiring shall be accessible for maintenance. Wiring installed in modular furniture shall be run in the trays or channels designed for that purpose. All wiring in communications sites shall be installed in accordance with all standards referenced in this specification.

- 10. Cable and wiring penetrations through metal cabinets shall be insulated with dielectric grommets.
- 11. Wiring in dropped ceiling areas shall not lie on top of light fixtures or ceiling tiles, and shall comply with Article 800 of the National Electrical Code.
- 12. All transmission lines shall be submitted to MESA COUNTY for approval prior to being installed. All transmission lines shall be installed in full accordance with the manufacturer's recommended minimum bending radius, and length of span at any point of the installation. All connectors shall be installed according to the manufacturer's instructions and specifications. All connectors must be manufactured by the same manufacturer as the cable, no substitutions will be allowed.
- 13. Cables, wiring forms, and terminal blocks shall be identified by permanent labels, tags, or other appropriate means. Marking shall clearly indicate the function and source. Cables shall be identified at both ends with indications of the source and destination of that cable run. The cable identification shall agree with the wiring and interconnect diagrams.
- 14. Components and/or entire system will be clearly identified, tagged, documented, and diagrammed. The contractor is not authorized to change, modify or remove any existing jumpers or patch cables, lines, or wires unless otherwise authorized in written format.

4.36. EQUIPMENT IDENTIFICATION

- 1. Controls, adjustment points, displays, connectors, terminal strips, and circuit boards shall be legibly and clearly labeled, diagrammed and indicating the function.
- 2. Legends on control panels and other equipment shall be permanent, resistant to fading or peeling, and capable of withstanding repeated cleaning without degradation or loss of legibility.
- 3. Legends shall be applied to equipment by silk-screening, etching, engraving, or other approved method. Stencil transfer letters, hand applied letters, or embossed strips are not permitted.
- 4. Labels shall be the equivalent in quality, legibility. Proposers shall submit samples of labeling for approval by Mesa County before commencement of any labeling. Labels shall be protected from deterioration, and "smearing" by a protective surface.

4.37. EQUIPMENT INSTALLATION: The following shall apply to all fixed equipment:

4.37.1. Option 1 - Mesa County Preferred: Any servers required as part of the new ITS shall be hosted by Mesa County IT's existing VMware environment located within the Mesa County IT data center.

4.37.2. Option 2 - Infrastructure for any physical equipment associated with the new ITS, that requires rack mounting, shall be hosted within the existing Mesa County IT data center. Mesa County IT will provide the necessary server rack space necessary to support operations for the new ITS.

4.38. CORROSION: Contact surfaces of dissimilar metals shall be treated to prevent galvanic corrosion (rust).

4.39. BRACKETS AND FASTENERS: All metal used as part of the antenna system shall be hot dip galvanized or made of stainless steel. Materials shall not be galvanized until all shop operations upon it have been completed, except as specified for nuts. Galvanizing of shapes and plates shall be in accordance with ASTM Specification A123. Galvanizing of bolts, nuts, washers, locknuts, and similar hardware shall be in accordance with ASTM Specification A153.

4.40. EVALUATION

- 1. Mesa County shall be responsible for evaluating the installed Intelligent Transportation System. The contractor may be requested to provide explanations concerning the validity of collected data. Mesa County's decision on the validity of the collected data will be final.
- 2. The contractor shall not repair, replace or modify any piece of equipment without the knowledge and written approval by Mesa County. All work performed by the contractor shall be reported to Mesa County and documented by the contractor.
- 3. The evaluation will be conducted with the contractor's system in actual revenue service.
- 4. The system shall be evaluated as follows:
 a. Hardware: that component operates as designed.
 b. Software: that the design and application provides the functionality described in the System Design Document.
- **4.41. INSPECTION AND TEST:** Mesa County shall have the right to observe and inspect any and all installation activities and/or completed systems, at will. Mesa County shall have the right to test any component or piece of equipment furnished, in a lab of Mesa County's choice. If a type of equipment does not meet the manufacturer's specifications as stated in the proposer's accepted proposal, it will be the proposer's responsibility to correct the problem in all pieces of that type of equipment furnished, at no additional cost to Mesa County.
- **4.42. ACCEPTANCE TESTS:** Milestone payments, by Mesa County to the contractor, will be contingent upon inspection, verification and acceptance of the contractor's completed deliverables for each milestone by Mesa County, according to the following testing requirements:

4.42.1. Task Responsibilities

1. The contractor shall establish and implement a test program that will ensure all communication and data systems, whether mobile or fixed and/or related subsystems, components, equipment, hardware, software, material, and services furnished during the performance of this contract meet the performance and technical requirements, specifications and standards, as specified within this RFP. Contractor will be required to perform and pass all tests. Tests listed below may include, but not be limited to the following listed items for this project. All tests are to be performed and pass for the completion and acceptance of the provided system.

a. Measure and validate all radio parameters to ANSI/TIA/EIA 603 latest edition.

- b. Validate that the radio transmission and reception is equal to the current system. (Mesa County will provide information on the levels to the contractor)
- c. Validate that data messages can be transmitted and acknowledged by the operations control workstation.
- d. Validate that data messages can be transmitted and acknowledged by buses throughout the coverage area.
- e. Validate that each segment of the In-Vehicle Logic Unit (IVLU) functions as specified on each bus.
- f. Validate that buses can transmit pre-emption requests, and that signal controllers can receive messages.
- g. Perform an overall system operation validation by utilizing all available data messages to and from a bus and the operations control workstation.
- h. Verify that interior bus signs and synthesized voice modules perform accurately and reliably; and receive data messages from the operations control work station for special announcements, and display/vocalize these announcements.
- i. Verify that fare collection systems perform accurately and reliably; and that stored data is available daily for reporting purposes.
- j. Validate that bus exterior signs can be controlled reliably and accurately from the onboard processor, and remotely by data messages from the operations control workstation.
- k. Validate that the transfer feature functions as required by this RFP.
- 2. The following task requirements are the contractor's responsibility for the test program:
- a. Develop comprehensive test plans detailing methods and test procedures to be utilized to ensure compliance with all applicable requirements. Submit to Mesa County for review and approval.
- b. Develop detailed test procedures for each individual test within each category of testing. Submit to Mesa County for review and approval.
- c. Submit all test plans and their respective procedures for written approval by Mesa County prior to use for evaluation and testing.
- d. Furnish personnel, calibrated test equipment, tools, and miscellaneous supplies as necessary to perform all approved tests and retests, and to maintain all systems and equipment during the test period and until written acceptance by Mesa County. Certificates of proof calibration traceable to NIST shall be provided to Mesa County, if so requested.
- e. Coordinate unified test program activities with all current and future schedules and activities of contractor's sub-contractor(s) or other Mesa County employed contractors, if applicable, and with Mesa County to avoid conflicts with operational requirements.
- f. Prepare detailed test reports, summary reports and progress reports beginning within ten (10) days after Mesa County's approval of test plans.
- g. Submit all raw test data, test results, evaluations, and summary reports for review by Mesa County.
- h. Prepare and submit revised test procedures and test plans to correct procedural and technical errors or omissions discovered in those documents after their initial Mesa County review.
- i. Furnish labor and material to correct and/or effect RFP compliance. This shall occur without unreasonable delay.

- j. Participate in Mesa County's final acceptance activities. Except for the equipment already installed on the buses, clean the equipment and worksite, secure the equipment, and remain responsible for prompt repair or replacement in the event of loss or damage, until acceptance by Mesa County. Furnish inventory services and demonstrate system or equipment operation in support of requests by Mesa County. Provide support and access so that Mesa County technicians and mechanics can inspect and test any portion of the work during normal work hours.
- k. Document all performed test and inspections as detailed in the approved test procedures and plans. Submit all written approval documentation to Mesa County.

3. The contractor shall advise Mesa County, in writing, two (2) weeks prior to the date(s) of scheduled tests and inspections. Mesa County will witness these tests. Two (2) certified copies of installation completion test and inspection data shall be submitted to Mesa County within seven (7) days after test completion for review and acceptance.

4. Mesa County reserves the right to perform additional non-destructive tests and inspections at any time during the course of the contract work. Results indicating deficiencies involving non-compliance with these RFP requirements will be reported to the contractor for corrective action.

4.42.2. Deficiencies: If Mesa County determines from test data acquired from any category of test or tests that the system, equipment, component, materials, software, technical documentation, or services furnished do not conform to intent of the RFP and its requirements, the contractor shall begin appropriate remedial action based on an analysis of test results within fifteen days after receipt of Mesa County's notice of deficiency. When such recommendations relate to engineering deficiencies, the contractor shall, upon receipt of approval, make the necessary changes to all equipment and documentation of that type to be delivered or previously delivered (even if previously accepted) during the course of the contract, at no additional cost.

When recommendations relate to other deficiencies such as quality control and installation workmanship, the contractor shall correct all deficiencies at no additional cost to Mesa County. Retesting after the changes or upgrades have been completed (factory tests and inspections, installation completion tests and inspections, and technical documentation verifications) shall be required in whole or part; as determined by Mesa County, at no additional cost to Mesa County.

4.42.3. Categories of Tests: Tests and inspections shall include, but not be limited to the following listed categories:

- a. Custom developed equipment tests and inspections
- b. Installation completion tests and inspections
- c. System and integration tests
- d. System validation tests (Mesa County conducted program)
- e. Technical documentation verification inspections
- f. Substantial completion acceptance tests and inspections (Mesa County conducted program)
- g. Final acceptance tests and inspections (Mesa County conducted program).

4.42.4. Custom Developed Equipment Tests and Inspections: Where required, two (2) copies of test results certified by the manufacturer shall be furnished to Mesa County for review and acceptance.

4.42.5. Installation Completion Tests and Inspections: Installation completion tests and inspections shall be performed after each phased (bus, system or sub-system) installation to ensure that equipment and materials were properly and professionally installed and functioning in accordance with this RFP, parameters, and best commercial and/or industry practice in use today. Installation completion tests and inspections shall consist of, but may not be limited to:

- 1. Visual inspection to verify the following:
 - Full compliance with requirements detailed in the RFP, Proposer's Submitted Response and final negotiated contract terms and conditions;
 - Use of only approved products;
 - Installation of equipment in accordance with approved installation drawings and diagrams;
 - Location and workmanship of wire and cable terminations, identification, routing, and color code.
- 2. Detailed testing will be required to demonstrate that material and equipment installed meet the criteria, and possess the characteristics and parameters contained in the contract documents and in the manufacturer's published specifications.
- 3. The testing of all components, equipment, material and systems may include, but may not be limited to: electrical, mechanical, operational, and functional parameters. Such parameters include, but may not be limited to: levels of voltages, currents, power, distortion, noise, cross-talk, insulation resistance, continuity, attenuation (optical and electrical), physical strength, suitability of mounting method, paint and marking quality, graphics quality and style, location of operating controls and adjustments, maintainability, etc.
- 4. These tests shall be performed after the final material and equipment are installed and shall be in addition to any tests and inspection previously performed. The contractor shall perform all necessary alignments, adjustments, maintenance, replacements prior to the scheduling of final installation completion tests and inspections.

4.42.6. System and Integration Tests

- 1. System and integration tests shall be on-site performance tests to verify that all operating parameters and functions perform as specified and that each system and subsystem performs as specified in conjunction with each system or subsystem with which it interfaces. The contractor shall demonstrate that all components, equipment and material elements of each installed system function together to meet the-system criteria as specified. Each major subsystem (excludes vehicle systems) shall be powered a minimum of 40 hours (five (5) eight (8) hour days) prior to commencing system and integration tests.
- 2. The contractor shall be responsible for meeting all system and integration test requirements including testing and documenting interface compatibility and integration with existing Mesa County owned and existing systems and equipment.

- 3. Each and every interface shall be verified as to operation, functions, levels, and voltages, as specified. The contractor shall test across the interface points; however, these tests shall only be made under the observation of authorized Mesa County personnel. When minor adjustment to, or reconfiguration of, existing equipment is required, the contractor shall notify Mesa County, in writing, of the required adjustment or reconfiguration. An authorized Mesa County representative will make the adjustment or reconfiguration in the presence of the contractor. The contractor shall be responsible for the necessary adjustments or reconfiguration of contractor-furnished equipment to ensure proper functioning as specified.
- 4. The successful completion of all specified tests and inspections, including installation completion tests and inspections, and the correction of all outstanding discrepancies and subsequent retesting, is required as a prerequisite to system and integration tests.
- 5. The tests will vary with each specific subsystem (and ITS interface with other systems); however, each test shall include all operating parameters and functions. Tests shall be conducted on each subsystem installed, including vehicle installations with all failures and discrepancies noted. The contractor shall not engage in further testing until Mesa County has verified that the contractor has taken necessary corrective action with respect to those failures and discrepancies. The contractor shall retest after each successive failure and make any corrective actions necessary to verify specification compliance.

4.42.7. Specific Required System and Integration Tests: In addition to other testing requirements, the contractor shall conduct the following specific system and integration tests:

- 1. Bus Stop Communications Test: This bus stop communications test is intended to demonstrate uniform radio system coverage over the entire Mesa County operating area. In this test, 2-way data communications will be demonstrated between the AVL and each bus stop on each bus route in Mesa County operating area. The contractor shall record relative signal quality between a typical bus and the operations control workstation.
- 2. Voice Channel Access Test: The voice channel access test is intended to provide a measurement and record of the time required by a bus operator to access a voice channel at various times during a normal operating weekday. The contractor shall measure and record the time required to access a radio voice channel every 15 minutes over the period from 0430 to 2200 hours on a single normal business weekday.
- 3. Voice Channel Priority Access Test: The contractor shall test the ability of the bus drivers to transmit an emergency signal and automatically access a voice channel during the time of the day that the radio channels are busiest. The times required for emergency access to the radio system shall be measured every 15 minutes for at least six (6) hours of the day when the radio channels are busiest.

4.42.8. System Validation (Mesa County conducted test): System validation will be performed by Mesa County, to verify performance at each installation, as follows:

The subsystem validation is a Mesa County program and will be scheduled and performed for the vehicle, OCIS, and traveler subsystems. The contractor may furnish a representative for the duration of such tests. If the contractor elects not to furnish a representative or the representative is absent during scheduled test(s), Mesa County will not accept claims of discrepancies in the test(s) results. Mesa County will evaluate subsystem validation results.

In the event that the test results are unacceptable, the contractor shall correct all deficiencies. Mesa County may retest when the contractor's correction of deficient work is completed.

4.42.9. Test Conditions: The test period shall be a minimum duration of 50 consecutive days, extended by corrective maintenance, or at the discretion of Mesa County for a maximum period of 70 test days (subject to contract scheduled limitations). Each test day shall nominally consist of eight (8) consecutive hours. Exact test starting and finishing times shall be designated by Mesa County. ITL shall be continuously powered on an operational-day basis for the entire system validation period, unless otherwise directed herein or by Mesa County.

NOTE: IF AT ANY TIME DURING THE 50 DAYS THE TEST FAILS FOR A REASONABLE PERIOD OF TIME, MESA COUNTY MAY REQUIRE THE TEST PERIOD TO BEGIN AGAIN AND CONTINUE UNTIL A SATISFACTORY TEST IS COMPLETED.

Mesa County shall endeavor to perform at least the minimum of test operations specified during each test day. A test operation failure shall be recorded in the test data when a detected cessation or error in the specified response of the system being tested occurs.

The failure of the system to furnish all correct responses to a test operation in accordance with each and every applicable specification requirement shall result in the recording of a test operation failure for that entire test operation.

Limited preventative and corrective maintenance actions in the form of repairs and/or replacements involving specific component parts, wiring, or minor internal equipment assemblies and adjustments, shall be allowed during test operations. The replacement or interchanging of whole equipment units, plug-in subassemblies, or major material items shall be allowed once during each test operation. If a unit fails more than two (2) times during each test operation that specific unit shall be replaced. The unit to be supplied shall be a new factory fresh unit with no additional costs to Mesa County.

A Mesa County authorized representative shall witness each test operation attempt and resulting system responses throughout the test period.

Optionally, Mesa County may perform more than the specified minimum number of test operations per day, total test operations, and number of test days, so long as all data collected is recorded and included in the test computations. A maximum test period as specified shall be allowed. The contractor may be allowed to start, stop, and restart, the system validation tests. Mesa County will record and report a test failure, discontinue testing, and after the contractor completes the correction, the testing begins. After the

second such attempt, Mesa County will require a detailed examination of contractor discrepancy correction efforts and all specification compliance related actions to date, prior to further testing. Equipment replacement or other extensive corrective measures may be required in accordance with all applicable specification provisions.

4.42.10. Final Acceptance: Final acceptance is a Mesa County-conducted program. Mesa County accepts the systems, equipment, and material furnished, as being complete and in accordance with this Specification. All discrepancies (if any) documented at substantial completion and any other discrepancies discovered thereafter, shall be corrected prior to final acceptance and payment.

The contractor shall participate in Mesa County's final acceptance activities by providing applicable support that may include, but not be limited to the following:

- 1. Produce records, copies of documentation, etc. for inspection
- 2. Furnish the original copy of all test logs and data to Mesa County
- 3. Furnish all applicable manufacture model information, catalog cut sheets, approved submittals and warranties.
- 4. Furnish all electrical and or system drawings, diagrams.
- 5. Furnish all software documentation, licenses and warranties.
- 6. Correct all discrepancies that are not in compliance with the RFP, Proposer's Submitted Response and final contract terms and conditions, Contract Amendments and/or Change Orders.
- **4.43. ACCEPTANCE OF THE SYSTEM AS A WHOLE:** If the system as a whole does not meet all of the requirements described in the System Requirements Document or perform in accordance with the System Design Document, or comply with the final contract terms and conditions, contract amendments and/or Contract Amendments and/or Change Orders, even where Mesa County has previously paid for deliverables, Mesa County reserves the right to either reject the whole system and get a complete refund from the contractor, and/or accept the system (with its defects) at a negotiated discount and/or be reimbursed by contractor for all costs necessary to bring the system to a level that will meet Mesa County's operational and performance needs.
- **4.44. INSTRUCTION AND TRAINING:** Contractor shall perform training per the following requirements:

4.44.1. Purpose: The contractor shall provide a comprehensive (all inclusive costs) onsite training program that prepares Mesa County and GVT staff, mechanics, technicians and operating personnel to properly operate, administer, diagnose, troubleshoot and maintain the ITS provided in accordance with an awarded contract. The contractor shall furnish operating instruction manuals and training materials for the purchased system. Contractor shall also furnish operating manuals in the following formats: PDF, reproducible hardcopy, and MS Word file(s) (including charts, graphs, etc.) on flashdrives. Each manual shall contain the procedures for the normal use of the installed equipment showing step by-step cause and effect results of each action taken by the user. Equipment troubleshooting and reversion to manual modes will be included in the training process. The contractor will prepare such written and practical (hands-on) tests that will assure system fluency. The contractor shall use demonstrations and visual aids (including working models, where practical) for training; however, adequate handouts shall be available for each student attending the classes.

4.44.2. Scope of Training Program: The training program shall be devoted primarily to instruction on key items of equipment. The training shall be a combination of formal and hands-on training, including demonstrations and testing. Formal classroom and hands-on training will be conducted at Mesa County's facility, while hands-on training and demonstrations will be conducted in the bus garage or other designated locations.

Maintenance training shall be provided in two (2) levels: field and shop. Field maintenance covers configuration, interconnection and alignment, and "quick-fix" troubleshooting techniques utilizing the concept of lowest unit replacement. Shop maintenance shall be equipment oriented and include subsystem testing, equipment and component troubleshooting techniques and equipment and component repair, calibration and final testing.

Operations training shall be provided at bus operator, field supervisor operations controller and management levels. "Train the trainer" strategies may be utilized to deliver training to some levels as approved by Mesa County.

The contractor shall submit a training concept plan/program for written approval from Mesa County. It shall include the subject matter to be covered, a tabulation of the hours of instruction to be provided and the equipment to be included in the training program.

The contractor shall furnish all required training aids and material necessary for the training program. The contractor shall provide copies of each course outline, instructor's guide(s), student workbooks, models for hands-on demonstration, and hardware cutaways. All material used for training shall become property of Mesa County after training is completed. Printed training materials shall be prepared on personal computer word processing equipment, as practical and digital data files for all materials shall be delivered on flash drives. "Digital files shall be in the current Microsoft "Word For Windows" and PDF formats.

4.44.3. Trainer's Experience: Fully qualified instructors, fluent in the English language, shall conduct the contractor's training program. The instructors shall have thoroughly mastered the specific specialized subject matter involved and shall have the ability to impart equipment and system technical information to others in easily understood terms.

4.44.4. Training Aids and Materials: The contractor shall furnish all required training aids and materials necessary for the training program. All material used for training, such as lesson plans, study guides, student handouts, etc. and training aids such as DVD's, transparencies, slides, photographs, dynamic mockups, test fixtures and test equipment, models for hands-on demonstration, training and hardware cut-away shall become property of Mesa County after training is completed. Printed training materials shall be prepared on personal computer word processing equipment, as practical and digital data

files for all materials shall be delivered on flash drives." Digital files shall be in the current Microsoft Word for Windows" and PDF formats.

4.44.5. Training Deliverables

- 4.44.5.1. **Instructor's guide**: An instructor's guide shall be provided which contains the information and directions necessary for an effective presentation. It shall include adequate guidelines to conduct a comprehensive training program. Individual lessons within the course shall be organized as separate blocks (or modules), which may be taught as a unit. The instructor guide shall contain, but not be limited to:
 - 1. A discussion of student prerequisites (if any)
 - 2. Program overview
 - 3. A statement of overall program goals
 - 4. Lesson plans (a session by session outline) containing:
 - a. Student learning objectives, stated in measurable terms
 - b. Overview of each lesson
 - c. Suggested instructional methods/learning activities
 - d. Required equipment and/or resources
- 4.44.5.2. **Student workbooks:** Student workbooks shall be provided that include all materials for the student to interact in the learning situation. It shall contain, but not be limited to:
 - 1. Program overview/introduction
 - 2. Statement of overall program goals
 - 3. Learning objectives, stated in measurable terms that specifically describe desired behaviors or knowledge to be gained. A fully developed prose treatment (not outline format) of content presentation, developed in the same modular format as the instructor's guide
 - 4. Illustrations, charts, or graphics, as needed to enhance content presentation
 - 5. Problems/questions related to lesson content, as appropriate
 - 6. The repair guide in checklist format, showing all tools, parts (with part numbers), and steps in operation.
- 4.44.5.3. **Audio-visual aids:** The contractor shall provide all necessary handouts, transparencies, slides, DVDs and mock-ups.

4.44.6. Instructional Deliverables

4.44.6.1. **Instructor qualifications:** A description of instructor's qualifications, a resume or other description of instructor qualifications must be submitted to Mesa County upon submission of the Proposer's Response.

Description shall document the instructor's thorough knowledge of the equipment being taught, understanding of the adult learning process, and demonstrated experience in vocational instruction.

If an Instructor is replaced prior to the scheduled training seminars, contractor must submit all new qualifications, Mesa County shall have the right to reject the proposed instructor and request one more fully qualified.

4.44.7. Course Length

- 1. The contractor shall specify the proposed number of hours necessary for the training of one group consisting of controllers/supervisors/dispatchers and totaling no more than three (3) instructors, to acquaint them with the functions and features of the AVL work station.
- 2. The contractor shall specify the proposed number of hours necessary for the instructor training of Mesa County's designated personnel ("train the trainer") to familiarize each participant with the AVL mobile equipment and fixed terminal interfaces. Instructors will be responsible for the training of operating personnel.
- 3. The contractor shall provide training for Mesa County's information systems and technical support personnel adequate to acquaint them with system interfaces and software functionality.
- 4. The contractor shall provide training for Mesa County's maintenance personnel adequate to enable them to perform routine preventative maintenance tasks on the system.

4.44.8. Student qualifications: The contractor, for the purposes of course development and presentation, shall assume all Mesa County students are high school graduates (or equivalent), and that maintenance personnel will possess the ability to use basic hand tools and electronic test equipment.

4.44.9. Testing: Instructors must give written, oral, and/or practical tests as a measuring device to determine knowledge transference. Tests shall use a multiple-choice or short answer format, and have been validated in a pilot course or by some other means agreed to by Mesa County. Whenever possible, a practical hands-on test and oral shall be developed to demonstrate the transference or operational/mechanical skills.

4.44.10. Training schedule: The contractor shall submit proposed training schedules, offers of training to be provided, instructor qualifications and proposed assignment of instructors for the various portions of the training program to Mesa County for review and approval. Training shall be scheduled on a noninterfering basis to Mesa County operations and maintenance requirements.

Mesa County will exercise wide latitude in approving or directing changes to contractor training schedule submissions at no additional cost to Mesa County. Mesa County requires that the contractor supply system training the quantity and quality of which is sufficient to fully train Mesa County's personnel in the complete operation of the system.

As a part of this document, Mesa County specifies numbers of days or hours of required training in this regard, the number of days or hours so stated shall be understood to be suggested minimums. The actual number of days or hours required shall be whatever is necessary in order to provide sufficient training as judged by Mesa County.

4.45. SUPPORT AND MAINTENANCE

1. Proposer shall provide Mesa County with a complete listing of available service and support plans. Listing may include, but not be limited to:

- a. Technical Support– Hours of Operation Response Time.
- b. Help Desk Hours of Operation Response Time.
- c. After Hours Support, Remote Support
- d. On-site Support Policy.
- e. Required Response Time (not exceeding 2 hrs).
- f. Hardware Replacement Policy.

2. The listings shall include the range of offered services including all levels of support plus an escalation plan. As follows:

- a. An itemized list of services required.
- b. Proposer to provide detail of local support, hours or limits of coverage for service and repairs.
- c. Proposer to provide their maintenance plan options with two (2) hours or less response times.
- d. All inclusive one (1) year warranty period. Period shall include, but not limited to replacement or repair of all failed components, equipment and systems; licensing, software version upgrades and other associated maintenance (freight, taxes, labor, travel (food, lodging, per diem and transportation)) costs.
- e. All inclusive licensing and maintenance costs for the years two (2) through five (5) year time period.
- f. Forecast all maintenance costs from year six (6) to year ten (10).
- g. Provide guarantee that software maintenance costs shall be 5% or less per year from years six (6) to year ten (10).
- h. Provide software (operating system, etc.) upgrade plans inclusive in Maintenance.

4.46. RFP Tentative Time Schedule:

 Request for Proposal available 	July 27, 2015
 Inquiry deadline, no questions after this date 	August 18, 2015
 Addenda Issued by 	August 21, 2015
 Submittal deadline for proposals 	August 27, 2015
 Final selection 	Mid-September
 Insurance Certificates and Bonding Due 	Within 7 Business days
 Board of County Commissioners Approval 	Early October

4.47. Questions Regarding Scope of Services:

Nicholas C Jones, Buyer Nickj@gjcity.org

4.48. Contract: A sample contract has been attached to this solicitation (Attachment B). By submitting a response to this Request for Proposals, the proposer acknowledges that work performed under this contract is contingent upon the applicable fiscal year funding and appropriations by the Mesa County Board of County Commissioners.

SECTION 5.0: PREPARATION AND SUBMITTAL OF PROPOSALS

Submission: Each proposal shall be submitted in electronic format only, and only Rocky Mountain through the E-Purchasing website (https://www.rockymountainbidsystem.com/default.asp). This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.) Please view our "Electronic Vendor Registration Guide" at http://www.gjcity.org/BidOpenings.aspx for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor **MUST** contact RMEPS to resolve issue prior to the response deadline; 800-835-4603). For proper comparison and evaluation, the City requests that proposals be formatted as directed. Offerors are required to indicate their interest in this Project, show their specific experience and address their capability to perform the Scope of Services in the Time Schedule as set forth herein. For proper comparison and evaluation, the Owner requires that proposals be formatted A to G.

- A. Cover Letter: Cover letter shall be provided which explains the Firm's interest in the project. The letter shall contain the name/address/phone number/email of the person who will serve as the firm's principal contact person with Owner's Contract Administrator and shall identify individual(s) who will be authorized to make presentations on behalf of the firm. The statement shall bear the signature of the person having proper authority to make formal commitments on behalf of the firm. By submitting a response to this solicitation the Contractor agrees to all requirements herein.
- **B. Qualifications/Experience/Credentials:** Proposers shall provide their qualifications for consideration as a contract provider to the City of Grand Junction/Mesa County and include prior experience in similar projects.
- **C. Strategy and Implementation Plan:** Describe your (the firm's) interpretation of the Owner's objectives with regard to this RFP. Describe the proposed strategy and/or plan for achieving the objectives of this RFP. The Firm may utilize a written narrative or any other printed technique to demonstrate their ability to satisfy the Scope of Services. The narrative should describe a logical progression of tasks and efforts starting with the initial steps or tasks to be accomplished and continuing until all proposed tasks are fully described and the RFP objectives are accomplished. Include a time schedule for completion of your firm's implementation plan and an estimate of time commitments from Owner staff.
- **D. References:** A minimum of three (3) **references** with name, address, telephone number, and email address that can attest to your experience in projects of similar scope and size within the last 5 years.
- **E. Fee Proposal:** Provide a complete and detailed list of costs and fee schedules. A Solicitation Response Form found in Section 7 shall also be completed.

F. Required Federal Certifications (Attachment A)

G. Additional Data (optional): Provide any additional information that will aid in evaluation of your qualifications with respect to this project.

SECTION 6.0: EVALUATION CRITERIA AND FACTORS

- **6.1 Evaluation:** An evaluation team shall review all responses and select the proposal or proposals that best demonstrate the capability in all aspects to perform the scope of services and possess the integrity and reliability that will ensure good faith performance.
- **6.2 Intent:** Only respondents who meet the qualification criteria will be considered. Therefore, it is imperative that the submitted proposal clearly indicate the firm's ability to provide the services described herein.

Submittal evaluations will be done in accordance with the criteria and procedure defined herein. The Owner reserves the right to reject any and all portions of proposals and take into consideration past performance. The following parameters will be used to evaluate the submittals (in no particular order of priority):

- Responsiveness of submittal to the RFP
- Understanding of the project and the objectives
- Experience
- Necessary resources
- Strategy & Implementation Plan
- System Capabilities and Specifications
- Warranty/Support
- References
- Fees

The Owner will undertake negotiations with the top rated firm and will not negotiate with lower rated firms unless negotiations with higher rated firms have been unsuccessful and terminated.

- **6.3 Oral Interviews:** The Owner may invite the most qualified rated proposers to participate in oral interviews.
- **6.4 Award:** Firms shall be ranked or disqualified based on the criteria listed in Section 6.2. The Owner reserves the right to consider all of the information submitted and/or oral presentations, if required, in selecting the project Contractor.

SECTION 7.0: SOLICITATION RESPONSE FORM

RFP-4077-15-NJ "Intelligent Transportation System for GVT" Offeror must submit entire Form completed, dated and signed.

1) Total cost to provide all labor, parts, supplies, equipment and installation necessary for to provide an Intelligent Transportation System for GVT per specifications:

TOTAL COST \$_____

WRITTEN: ______dollars.

The Owner reserves the right to accept any portion of the work to be performed at its discretion

The undersigned has thoroughly examined the entire Request for Proposals and therefore submits the

The undersigned has thoroughly examined the entire Request for Proposals and therefore submits the proposal and schedule of fees and services attached hereto.

This offer is firm and irrevocable for sixty (60) days after the time and date set for receipt of proposals.

The undersigned Offeror agrees to provide services and products in accordance with the terms and conditions contained in this Request for Proposal and as described in the Offeror's proposal attached hereto; as accepted by the Owner.

Prices in the proposal have not knowingly been disclosed with another provider and will not be prior to award.

- Prices in this proposal have been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
- No attempt has been made nor will be to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The individual signing this proposal certifies they are a legal agent of the offeror, authorized to represent the offeror and is legally responsible for the offer with regard to supporting documentation and prices provided.
- Direct purchases by Mesa County are tax exempt from Colorado Sales or Use Tax. Tax exempt No. 98-04241. The undersigned certifies that no Federal, State, County or Municipal tax will be added to the above quoted prices.
- Prompt payment discount of ______ percent of the net dollar will be offered to the Owner if the invoice is paid within ______ days after the receipt of the invoice. Payment Terms

RECEIPT OF ADDENDA: the undersigned Contractor acknowledges receipt of Addenda to the Solicitation, Specifications, and other Contract Documents.

State number of Addenda received: ______.

It is the responsibility of the Proposer to ensure all Addenda have been received and acknowledged.

Company Name – (Typed or Printed)

Authorized Agent Signature

Authorized Agent – (Typed or Printed)

Phone Number

Address of Offeror

E-mail Address of Agent

City, State, and Zip Code

Date

SECTION 8 – FEDERAL TRANSIT ADMINISTRATION (FTA) CLAUSES

APPROPRIATION AND THE AVAILABILITY FUNDING: The Contractor acknowledges and understands that this contract is funded in whole or in part by the Federal Transit Administration (FTA) and administered by the County. Both the County and the Contractor are Parties to this Contract. In accordance with the Colorado Constitution, Article X, Section 20, and the County Charter, performance of the County's obligations under this Contract is expressly subject to appropriation of funds by the FTA and/or the County's Board of County Commissioners for this contract and the availability of those appropriated funds for expenditure. Further, in the event that funds are not appropriated in whole or in part sufficient for performance of the County's obligations under this Contract, or appropriated funds may not be expended due to the County, Constitutional or the FTA spending limitations, then the County may terminate this Agreement without compensation to the Contractor. Performances of the Contractor's obligations under this contract are expressly subject to appropriation of funds by the County and/or the FTA and the availability of those funds for the payment of obligations incurred under this contract. Further, in the event that County and/or FTA funds are not appropriated in whole or in part sufficient for performance of the Contractor's obligations under this Contract, or appropriated funds may not be expended due to legal limitations on non-availability, then the County may terminate this Contract without compensation to the Contractor.

NO FEDERAL GOVERNMENT OBLIGATION TO THIRD PARTIES

(1) The Purchaser and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

ACCESS TO RECORDS

The following access to records requirements apply to this Contract:

1. Where the Purchaser is not a State but a local government and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 18.36(i), the Contractor agrees to provide the Purchaser, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.

2. Where the Purchaser is a State and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 633.17, Contractor agrees to provide the Purchaser, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at \$100,000.

3. Where the Purchaser enters into a negotiated contract for other than a small purchase or under the simplified acquisition threshold and is an institution of higher education, a hospital or other non-profit organization and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 19.48, Contractor agrees to provide the Purchaser, FTA Administrator, the Comptroller General of the United States or any of their duly authorized representatives with access to any books, documents, papers and record of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions.

4. Where any Purchaser which is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 U.S.C. 5325(a) enters into a contract for a capital project or improvement (defined at 49 U.S.C. 5302(a)1) through other than competitive bidding, the Contractor shall make available records related to the contract to the Purchaser, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

5. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

6. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the Purchaser, the FTA Administrator,

the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

7. FTA does not require the inclusion of these requirements in subcontracts.

FEDERAL CHANGES

Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

CIVIL RIGHTS REQUIREMENTS

The following requirements apply to the underlying contract:

1. <u>Nondiscrimination</u> - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

2. <u>Equal Employment Opportunity</u> - The following equal employment opportunity requirements apply to the underlying contract:

- (a) Race, Color, Creed, National Origin, Sex In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq ., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
- (b) <u>Age</u> In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
- (c) <u>Disabilities</u> In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal

Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1 are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Mesa County requests which would cause Mesa County to be in violation of the FTA terms and conditions.

ENERGY CONSERVATION REQUIREMENTS

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

TERMINATION PROVISIONS

a. **Termination for Convenience (General Provision)** Mesa County may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to Mesa County to be paid the Contractor. If the Contractor has any property in its possession belonging to Mesa County, the Contractor will account for the same, and dispose of it in the manner Mesa County directs.

b. **Termination for Default [Breach or Cause] (General Provision)** If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, Mesa County may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

c. **Opportunity to Cure (General Provision)** Mesa County in its sole discretion may, in the case of a termination for breach or default, allow the Contractor 10 calendar days in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If Contractor fails to remedy to Mesa County's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within ten (10) calendar days after receipt by Contractor of written notice from Mesa County setting forth the nature of said breach or default, Mesa County shall have the right to terminate the Contract without any further obligation to Contractor. Any such

termination for default shall not in any way operate to preclude Mesa County from also pursuing all available remedies against Contractor and its sureties for said breach or default.

d. **Waiver of Remedies for any Breach** In the event that Mesa County elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by Mesa County shall not limit Mesa County's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

e. **Termination for Convenience (Professional or Transit Service Contracts)** Mesa County, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the County shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

f. **Termination for Default (Supplies and Service)** If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, Mesa County may terminate this contract for default. Mesa County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County.

g. **Termination for Default (Transportation Services)** If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, Mesa County may terminate this contract for default. Mesa County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Contractor has possession of the County's goods, the Contractor shall, upon direction of the Mesa County, protect and preserve the goods until surrendered to the County or its agent. The Contractor and Mesa County shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of Mesa County.

h. **Termination for Default (Construction)** If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, Mesa County may terminate this contract for default. Mesa County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the County may take over the work and compete it by contract or

otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the County resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the County in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if:

1. The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the County, acts of another Contractor in the performance of a contract with the County, epidemics, quarantine restrictions, strikes, freight embargoes; and

2. The contractor, within ten (10) calendar days from the beginning of any delay, notifies the County in writing of the causes of delay. If in the judgment of Mesa County, the delay is excusable, the time for completing the work shall be extended. The judgment of Mesa County shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the County.

i. Termination for Convenience or Default (Architect and Engineering) Mesa County may terminate this contract in whole or in part, for the County's convenience or because of the failure of the Contractor to fulfill the contract obligations. Mesa County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

If the termination is for the convenience of the County, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

If the termination is for failure of the Contractor to fulfill the contract obligations, the County may complete the work by contact or otherwise and the Contractor shall be liable for any additional cost incurred by the County.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County.

j. **Termination for Convenience of Default (Cost-Type Contracts)** Mesa County may terminate this contract, or any portion of it, by serving a notice or termination on the Contractor. The notice shall state whether the termination is for convenience of Mesa County or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to

perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from Mesa County), or property supplied to the Contractor by Mesa County. If the termination is for default, Mesa County may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to Mesa County and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of Mesa County the Contractor shall be paid its contract closeout costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, Mesa County determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, Mesa County after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

DEBARMENT AND SUSPENSION

This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by Mesa County. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to Mesa County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

BUY AMERICA REQUIREMENTS - 49 U.S.C. 5323(j); 49 CFR Part 661

The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification (below) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers

that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 C.F.R. Part 661.5.

Date	
Signature	
Company Name	
Title	
<i>Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)</i> The bidder or offeror hereby certifies that it cannot comply with the requirements of 4 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.	

Date	
Signature	
Company Name	
Title	

BREACHES AND DISPUTE RESOLUTION 49 CFR Part 18 FTA Circular 4220.1

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of the County. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the County. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the County shall be binding upon the Contractor and the Contractor shall abide be the decision.

Performance During Dispute - Unless otherwise directed by the County, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the County and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the County is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the County or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

LOBBYING 31 U.S.C. 1352; 49 CFR Part 19; 49 CFR Part 20

Clause and specific language herein are mandated by 49 CFR Part 19, Appendix A.

Modifications have been made to the Clause pursuant to Section 10 of the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, *et seq.*]

- Lobbying Certification and Disclosure of Lobbying Activities for third party contractors are mandated by 31 U.S.C. 1352(b)(5), as amended by Section 10 of the Lobbying Disclosure Act of 1995, and DOT implementing regulation, "New Restrictions on Lobbying," at 49 CFR § 20.110(d)

- Language in Lobbying Certification is mandated by 49 CFR Part 19, Appendix A, Section 7, which provides that contractors file the certification required by 49 CFR Part 20, Appendix A.

Modifications have been made to the Lobbying Certification pursuant to Section 10 of the Lobbying Disclosure Act of 1995.

- Use of "Disclosure of Lobbying Activities," Standard Form-LLL set forth in Appendix B of 49 CFR Part 20, as amended by "Government wide Guidance For New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96) is mandated by 49 CFR Part 20, Appendix A.

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." 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 any 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 the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the County.

APPENDIX A, 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned _____ [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

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

The Contractor,	, certifies or affirms the truthfulness and accuracy of each statemen
of its certification and dis	losure, if any. In addition, the Contractor understands and agrees that the
provisions of 31 U.S.C. A 3	01, et seq., apply to this certification and disclosure, if any.
Date	

Signature _____

Company Name _____

Title

CLEAN AIR 42 U.S.C. 7401 et seg 40 CFR 15.61 49 CFR Part 18

1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each

violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA

CLEAN WATER REQUIREMENTS 33 U.S.C. 1251

1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et . The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

<u>CARGO PREFERENCE</u> (Involving property that may be transported by ocean vessel for rolling stock, construction, and material and supplies contracts)

Use of United States-Flag Vessels - The contractor agrees: a. <u>to use</u> privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b. <u>to furnish within</u> 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of -lading in English for each shipment of cargo <u>described in the preceding paragraph</u> to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (<u>through the contractor in the case of a subcontractor's bill-of-lading.</u>) c. <u>to include these</u> requirements in <u>all subcontracts issued pursuant to this contract may involve the transport of equipment, material, or commodities by ocean vessel.</u>

FLY AMERICA REQUIREMENTS 49 U.S.C. § 40118; 41 CFR Part 301-10

(Involving foreign transport or travel by air)

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

The Fly America requirements apply to the transportation of persons or property, by air, between a place in the U.S. and a place outside the U.S., or between places outside the U.S., when the FTA will participate in the costs of such air transportation. Transportation on a foreign air carrier is permissible

when provided by a foreign air carrier under a code share agreement when the ticket identifies the U.S. air carrier's designator code and flight number. Transportation by a foreign air carrier is also permissible if there is a bilateral or multilateral air transportation agreement to which the U.S. Government and a foreign government are parties and which the Federal DOT has determined meets the requirements of the Fly America Act. Micro-purchases are defined as those purchases under \$2,500. These requirements do not apply to micro-purchases. The Fly America requirements flow down from FTA recipients and subrecipients to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are in compliance. The relevant statutes and regulations do not mandate any specified clause or language. FTA proposes the following language.- The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

BONDING REQUIREMENTS

Performance and Payment Bonding Requirements (Non-Construction)

The Contractor may be required to obtain performance and payment bonds when necessary to protect the County's interest.

(a) The following situations may warrant a performance bond:

1. The County property or funds are to be provided to the contractor for use in performing the contract or as partial compensation (as in retention of salvaged material).

2. A contractor sells assets to or merges with another concern, and the County, after recognizing the latter concern as the successor in interest, desires assurance that it is financially capable.

3. Substantial progress payments are made before delivery of end items starts.

4. Contracts are for dismantling, demolition, or removal of improvements.

(b) When it is determined that a performance bond is required, the Contractor shall be required to obtain performance bonds as follows:

1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the County determines that a lesser amount would be adequate for the protection of the County.

2. The County may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The County may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) A payment bond is required only when a performance bond is required, and if the use of payment bond is in the County's interest.

(d) When it is determined that a payment bond is required, the Contractor shall be required to obtain payment bonds as follows:

1. The penal amount of payment bonds shall equal:

(i) Fifty percent of the contract price if the contract price is not more than \$1 million;

(ii) Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or

(iii) Two and one half million if the contract price is increased.

Advance Payment Bonding Requirements

The Contractor may be required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. The County shall determine the amount of the advance payment bond necessary to protect the County.

Patent Infringement Bonding Requirements (Patent Indemnity)

The Contractor may be required to obtain a patent indemnity bond if a performance bond is not furnished and the financial responsibility of the Contractor is unknown or doubtful. The County shall determine the amount of the patent indemnity to protect the County.

Warranty of the Work and Maintenance Bonds

1. The Contractor warrants to County, the Architect and/or Engineer that all materials and equipment furnished under this Contract will be of highest quality and new unless otherwise specified by County, free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards shall be considered defective. If required by the Project Manager, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by the County and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to the County. As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment, furnish separate Maintenance (or Guarantee) Bonds in form acceptable to the County written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this Contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT (100%) of the CONTRACT SUM, as adjusted (if at all).

DISADVANTAGED BUSINESS ENTERPRISES

- This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. Mesa County's overall goal for DBE participation is 3%. A separate contract goal has not been established for this procurement.
- 2. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Mesa County deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).
- 3. The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.
- 4. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from Mesa County. In addition, the contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed.
- 5. The contractor must promptly notify Mesa County, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of Mesa County.

RECYCLED PRODUCTS 42 U.S.C. 6962; 40 CFR Part 247; Executive Order 12873

Recovered Materials - The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

PRIVACY ACT 5 U.S.C. 552

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

ATTACHMENT A - REQUIRED FEDERAL CERTIFICATIONS – 1 OF 2

BUY AMERICA REQUIREMENTS - 49 U.S.C. 5323(j); 49 CFR Part 661

The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification (below) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 C.F.R. Part 661.5.

Date
Signature
Company Name
Title

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Date
Signature
Company Name
Title

ATTACHMENT A – CERTIFICATION OF COMPLIANCE WITH FEDERAL LOBBYING REQUIREMENTS – 2 OF 2 (49 CFR PART 20) To be submitted with each Bid/Proposal or offer of Bidder/Proposer exceeding \$100,000

The undersigned _____ [Contractor] certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

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

The Contractor, ______, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.

Date	 	
Signature	 	
Company Name	 	
Title		

Attachment B





CITY OF GRAND JUNCTION/MESA COUNTY, COLORADO

CONTRACT

This CONTRACT made and entered into this ____ day of 2015 by and between Mesa County, Colorado, a government entity in the State of Colorado, hereinafter in the Contract Documents referred to as "Owner" the hereinafter in the Contract Documents referred to as the and "Contractor."

WITNESSETH:

WHEREAS, the Owner advertised that sealed Responses would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the Project described by the Contract Documents and known as <u>Intelligent</u> <u>Transportation System for GVT RFP-4077-15-NJ</u>.

WHEREAS, the Contract has been awarded to the above named Contractor by the Owner, and said Contractor is now ready, willing and able to perform the Work specified in the Notice of Award, in accordance with the Contract Documents;

NOW, THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual covenants hereinafter set forth and subject to the terms hereinafter stated, it is mutually covenanted and agreed as follows:

ARTICLE 1

<u>Contract Documents</u>: It is agreed by the parties hereto that the following list of instruments, drawings, and documents which are attached hereto, bound herewith, or incorporated herein by reference constitute and shall be referred to either as the "Contract Documents" or the "Contract", and all of said instruments, drawings, and documents taken together as a whole constitute the Contract between the parties hereto, and they are fully a part of this agreement as if they were set out verbatim and in full herein:

The order of contract document governance shall be as follows:

- a. The body of this contract agreement
- b. Solicitation Documents for the Project; RFP-4077-15-NJ;
- c. Intent to Award
- d. Contractors Response to the Solicitation

Attachment B ARTICLE 2

<u>Definitions:</u> The clauses provided in the Solicitation apply to the terms used in the Contract and all the Contract Documents.

ARTICLE 3

<u>Contract Work:</u> The Contractor agrees to furnish all labor, tools, supplies, equipment, materials, and all that is necessary and required to complete the tasks associated with the Work described, set forth, shown, and included in the Contract Documents as indicated in the Solicitation Document.

ARTICLE 4

<u>Contract Price and Payment Procedures:</u> The Contractor shall accept as full and complete compensation for the performance and completion of all of the Work specified in the Contract Documents, the sum of **Amount Written (\$Amount Numerical).** If this Contract contains unit price pay items, the Contract Price shall be adjusted in accordance with the actual quantities of items completed and accepted by the Owner at the unit prices quoted in the Solicitation Response. The amount of the Contract Price is and has heretofore been appropriated by the Grand Junction City Council or Mesa County Board of County Commissioners for the use and benefit of this Project. The Contract Price shall not be modified except by Change Order or other written directive of the Owner. The Owner shall not issue a Change Order or other written directive which requires additional work to be performed, which work causes the aggregate amount payable under this Contract to exceed the amount appropriated for this Project, unless and until the Owner provides Contractor written assurance that lawful appropriations to cover the costs of the additional work have been made.

Unless otherwise provided in the Solicitation, monthly partial payments shall be made as the Work progresses. Applications for partial and Final Payment shall be prepared by the Contractor and approved by the Owner in accordance with the Solicitation.

ARTICLE 5

<u>Bonds:</u> The Contractor shall furnish currently herewith the Bonds required by the Contract Documents, such Bonds being attached hereto. The Performance Bond shall be in an amount not less than one hundred percent (100%) of the Contract Price set forth in Article 5. The Payment Bond shall be in an amount not less than one hundred (100%) of the Contract Price set forth in Article 4.

ARTICLE 6

<u>Contract Binding:</u> The Owner and the Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contract Documents constitute the entire agreement between the Owner and Contractor and may only be altered, amended or repealed by a duly executed written instrument. Neither the Owner nor the Contractor shall, without the prior written consent of the other,

Attachment B

assign or sublet in whole or in part its interest under any of the Contract Documents and specifically, the Contractor shall not assign any moneys due or to become due without the prior written consent of the Owner.

ARTICLE 7

<u>Severability:</u> If any part, portion or provision of the Contract shall be found or declared null, void or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having the authority thereover, only such part, portion or provision shall be effected thereby and all other parts, portions and provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, City of Grand Junction/Mesa County, Colorado, has caused this Contract to be subscribed and sealed and attested in its behalf; and the Contractor has signed this Contract the day and the year first mentioned herein.

The Contract is executed in four counterparts.

MESA COUNTY, COLORADO	
By: Title:	Date
ATTEST:	
By: Title:	
(Contractor's Name)	
Bv:	
By: Title:	Date
ATTEST:	
By:	

Title: