

ORIGINAL

**AGREEMENT BETWEEN
LAKE COUNTY, FLORIDA AND
ROUTEMATCH SOFTWARE, INC.**

FOR INTEGRATED INTELLIGENT TRANSPORTATION SYSTEM

RFP 10-0607

This is an Agreement between Lake County, Florida, a political subdivision of the State of Florida, hereinafter referred to as COUNTY, by and through its Board of County Commissioners, and RouteMatch Software, Inc., a foreign corporation authorized to do business in the State of Florida, its successors and assigns, hereinafter referred to as CONTRACTOR.

WITNESSETH:

WHEREAS, the COUNTY has publicly submitted a Request for Proposal (RFP), #10-0607, for provision of an Intelligent Transportation System (ITS); and

WHEREAS, CONTRACTOR desires to perform such services subject to the terms of this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual terms, understandings, conditions, promises, covenants and payment hereinafter set forth, and intending to be legally bound, the parties hereby agree as follows:

Article 1. Recitals

1.1 The foregoing recitals are true and correct and incorporated herein.

Article 2. Purpose

2.1 The purpose of this Agreement is for CONTRACTOR to provide and install an integrated package of intelligent transportation system (ITS) hardware and software intended to provide ways for transit operators and managers to operate the transit system more efficiently and to provide greater levels of security and system safety monitoring in conjunction with the COUNTY's needs, herein the "Project."

Article 3. Scope of Services

3.1 On the terms and conditions set forth in this Agreement, COUNTY hereby engages CONTRACTOR to furnish all labor, material and equipment necessary for satisfactory provision and installation of ITS hardware and software for the COUNTY in accordance with the Scope of Services, attached hereto and incorporated herein by reference as **Exhibit A**, as amended by Addendum #1, dated April 7, 2010, Addendum #2, dated March 14, 2010, and Addendum #3, dated June 15, 2010, also contained within **Exhibit A**, with CONTRACTOR's technical proposal submitted on May 5, 2010, which is attached hereto and incorporated herein as **Exhibit**

C (attached as disk), and with the Software License Agreement, which is attached hereto and incorporated herein as **Exhibit D**.

3.2 This Agreement shall commence on the date of approval of the Agreement by the Board of County Commissioners, or designee, unless otherwise stipulated in the Notice of Award Letter distributed by the COUNTY's Office of Procurement Services. The initial Agreement term is three (3) years, and shall remain in effect until such time as the commodities, equipment and/or services acquired under this Agreement have been delivered and/or completed and accepted by the COUNTY, and will then remain in effect until completion of the expressed and/or implied warranty periods. The Agreement prices shall prevail for the full duration of the initial contract term.

Prior to or upon completion of the initial term of this Agreement, the COUNTY shall have the option to renew this Agreement for one (1) additional year under the same terms and conditions. Continuation of the Agreement beyond the initial period is a COUNTY prerogative and not a right of the CONTRACTOR. This prerogative may be exercised only when such continuation is clearly in the best interest of the COUNTY.

3.3 This Project will be accomplished in phases as funding from the Federal Transit Administration (FTA) becomes available. The phases will include providing and installing the intelligent transportation system for the fixed route vehicles, paratransit vehicles, and supervisor vehicles, as well as hosting and technical support for the system, and the RouteMatch scheduling system for the fixed route vehicles, as outlined in Contractor's Pricing, attached hereto and incorporated herein as **Exhibit B, which includes Exhibits B1-B5**. Each phase shall be completed within One Hundred Twenty (120) calendar days from the date the notice of commencement is issued for that phase, or as set forth in CONTRACTOR's implementation schedule submitted and approved by the COUNTY prior to or upon issuance of the notice of commencement. Technical support and hosting will be provided seven (7) days per week, twenty-four (24) hours per day for the RouteMatch system and the citrix server.

3.4 The CONTRACTOR shall coordinate, cooperate, and work with any other contractors retained by the COUNTY. Nothing herein shall be deemed to preclude the COUNTY from retaining the services of other persons or entities undertaking the same or similar services as those undertaken by the CONTRACTOR or from independently developing or acquiring materials or programs that are similar to, or competitive with, the services provided under this Agreement.

3.5 The services rendered under this Agreement shall not be deemed complete until accepted by the COUNTY and shall be in compliance with the terms herein, fully in accord with the specifications and of the highest quality. All work shall be performed in accordance with good commercial practice. All material, workmanship and equipment shall be subject to the inspection and approval of the COUNTY's project manager. When not specifically identified in the technical specifications, such materials and equipment shall be of a suitable type and grade for the purpose. Any omissions of inherent technical functions or classes of work within the scope of services or specifications shall not relieve the CONTRACTOR from furnishing, installing or performing such work where required for the satisfactory completion of the Project.

3.6 The CONTRACTOR agrees and acknowledges that this Project is funded by Federal and State grant monies, to wit:

- FTA Grant FL-90-X724-00
- FTA Grant FL-96-X017-01

As such, the CONTRACTOR agrees to cooperate with the COUNTY in order to assure compliance with all requirements of the funding entity applicable to use of the monies, providing access to and the right to examine relevant documents related to the Project and as specifically requested by the Federal or State granting agency, and receiving no payment until all required forms are completed and submitted. A copy of the requirements shall be supplied to the CONTRACTOR by the COUNTY upon request. Additionally, the CONTRACTOR shall abide by the following specific provisions of the above-referenced grant:

All clauses and certifications contained within "Lake County, Florida, Federal Funding Clause Set for FTA Grant or Stimulus Program."

Any inconsistency between the provisions of this Agreement, the Federal statutes and regulations, and the terms and conditions of the FTA grant awards shall be resolved in such a manner so as to not impair the award of the grant to the COUNTY. Further, CONTRACTOR understands and acknowledges that additional grant monies may be used to fund this Project, and the information and requirements will be made available to CONTRACTOR upon award.

Article 4. Payment

4.1 During each phase of the Project, the COUNTY shall provide periodic payments for all Software, Hardware and Professional Services completed by the CONTRACTOR and accepted by the COUNTY. Payment shall be in accordance with the pricing set forth in **Exhibit B**, and shall be made as follows:

- A. For Software and Hardware, payment shall be made upon delivery. For purposes of this Agreement, "delivery" of software means that point in time when it is installed and accessed on the centrally hosted server, and "delivery" of hardware means upon confirmation of receipt of the Hardware by the appropriate COUNTY representative and upon verification that Hardware is functional and useable by COUNTY.
- B. For Professional Services, the COUNTY shall hold ten percent (10%) of the total price for the services as retainage. Payment shall be made in two installments. Forty-five percent (45%) of the Professional Services fees will be paid upon the completion of training, and forty-five percent (45%) of the fees will be paid upon "Go Live." The remaining ten percent (10%) in fees shall be paid upon COUNTY's acceptance of the product, which shall occur within ninety (90) days after the Go Live date. For purposes of this Agreement, Go Live shall mean that point in time at which COUNTY uses the Software in its daily operations.

- C. For Customer Support, the COUNTY shall be given unlimited Customer Support, free of charge, for the first one hundred twenty (120) days after Go Live. The COUNTY shall pay fees for the first year of Customer Support within thirty (30) days after the initial 120 day period, and fees for all subsequent years of Customer Support, on the anniversary of the first payment. The COUNTY's annual Customer Support fees for each of the first three (3) years is Twelve Thousand One Hundred Forty-Four and No/100 Dollars (\$12,144.00) per year.
- D. The COUNTY shall pay for CONTRACTOR hosting service on a monthly basis. The first payment will be made when the Software has been installed in the centrally hosted server, the COUNTY has received user names and passwords which enable each user to access the Software, COUNTY staff completes initial training in the use of the Software, and the Software is fully functional and useable by the COUNTY. The COUNTY's annual hosting fee for each of the first three (3) years is Two Thousand Seven Hundred and No/100 Dollars (\$2,700.00), which shall be paid in monthly installments of Two Hundred Twenty Five and No/100 Dollars (\$225.00).
- E. Following the initial three year term, the CONTRACTOR may increase Support and Hosting fees up to an amount equal to the annual Consumer Price Index percentage increase of the COUNTY's location.

4.2 CONTRACTOR shall provide fully documented invoices to the COUNTY Public Transportation Division, copy to the COUNTY Finance Department, at P.O. Box 7800, Tavares, Florida 32778, which indicate, in addition to the basic information set forth below, the time and materials provided to the COUNTY. Such invoices shall not be authorized for payment until such time as the COUNTY has inspected and approved the completed phase of the Project.

All invoices shall contain the bid number, date and location of delivery or service, confirmation of acceptance of the goods or services by the appropriate COUNTY representative, and a detailed description of services provided. Failure to submit invoices in the prescribed manner will delay payment, and the CONTRACTOR may be considered in default of contract and its contract may be terminated. Under no circumstances shall the invoices be submitted to the COUNTY in advance of the delivery and acceptance of the service or good.

4.3 The COUNTY shall make payment on all undisputed invoices in accordance with the Florida Prompt Payment Act, Part VII, Chapter 218, Florida Statutes. The COUNTY shall not make payment on partial delivery of supplies, services, or materials.

4.4 Other than the expenses set forth in **Exhibit B**, CONTRACTOR shall not be entitled to payment for any expenses, fees, or other costs it may incur at any time and in any connection with its performance hereunder.

Article 5. Special Terms and Conditions.

5.1 Qualifications. Firms or individuals will be registered with the State of Florida and have obtained at least the minimum thresholds of education and professional experience required by

the statutes to perform the services contained herein.

5.2 Termination. This Agreement may be terminated by the COUNTY upon thirty (30) days advance written notice to CONTRACTOR. Upon receipt of such notice, the CONTRACTOR shall not incur any additional costs under this Agreement. If any work hereunder is in progress but not completed as of the date of termination, this Agreement may be extended upon written approval of the COUNTY until said work is completed and accepted.

A. Termination for Convenience. In the event this Agreement is terminated or cancelled upon the request and for the convenience of the COUNTY with the required thirty (30) day advance written notice, the COUNTY shall reimburse the CONTRACTOR for actual work satisfactorily completed.

B. Termination for Cause. Termination by the COUNTY for cause, default, or negligence on the part of the CONTRACTOR shall be excluded from the foregoing provision. Termination costs, if any, shall not apply. The 30-day advance notice requirement is waived in the event of termination for cause.

C. Termination Due to Unavailability of Funds in Succeeding Fiscal Years. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year, this Agreement shall be canceled and the CONTRACTOR shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the supplies or services/Tasks delivered under this Agreement.

5.3 Subletting of Agreement. This Agreement shall not be sublet except with the written consent of the COUNTY's Procurement Services Director. No such consent shall be construed as making the COUNTY a party to the subcontract or subjecting the COUNTY to liability of any kind to any subcontractor. No subcontract shall under any circumstances relieve the CONTRACTOR of liability and obligations under this Agreement and all transactions with the COUNTY must be through the CONTRACTOR.

5.4 Insurance. CONTRACTOR shall purchase and maintain at all times during the term of this Agreement, without cost or expense to the COUNTY, policies of insurance from a company or companies authorized to do business in the State of Florida, and which are acceptable to the COUNTY, insuring the CONTRACTOR against any and all claims, demands or causes of action whatsoever, for injuries received or damage to property relating to the performance of duties, services and/or obligations of the CONTRACTOR under the terms and provisions of this Agreement. CONTRACTOR shall not commence work under the Agreement until COUNTY has received an acceptable certificate or certificates of insurance evidencing conformance with the Agreement requirements. Such policies of insurance and confirming certificates of insurance shall insure the CONTRACTOR is in accordance with the following minimum limits and coverage:

- (i) General Liability insurance on forms no more restrictive than the latest edition of the Occurrence Form Commercial General Liability policy (CG 00 01) of the Insurance

Services Office or equivalent without restrictive endorsements, with the following minimum limits and coverage:

Each Occurrence/General Aggregate	\$500,000
Products-Completed Operations	\$500,000
Personal & Adv. Injury	\$500,000
Fire Damage	\$50,000
Medical Expense	\$5,000
Contractual Liability	Included

(ii) Automobile liability insurance, including owned, non-owned and hired autos with the following minimum limits and coverage:

Combined Single Limit	\$300,000
or	
Bodily Injury (per person)	\$100,000
Bodily Injury (per accident)	\$300,000
Property Damage	\$100,000

(iii) Workers' compensation insurance based on proper reporting of classification codes and payroll amounts in accordance with Chapter 440, Florida Statute, and/or any other applicable law requiring workers' compensation (Federal, maritime, etc.). If not required by law to maintain workers' compensation insurance, the CONTRACTOR must provide a notarized statement that if any of CONTRACTOR's employees are injured, CONTRACTOR will not hold the COUNTY responsible for any payment or compensation.

(iv) Employers Liability insurance with the following minimum limits and coverage:

Each Accident	\$100,000
Disease-Each Employee	\$100,000
Disease-Policy Limit	\$500,000

(v) Professional liability and/or specialty insurance (medical malpractice, engineers, architect, consultant, environmental, pollution, errors and omissions, etc.) as applicable, with minimum limits of \$500,000 and annual aggregate of \$1,000,000. The parties acknowledge that CONTRACTOR does not currently have, and will not have during the term of this Agreement and any extensions thereto, professional liability insurance, and it is hereby understood and agreed that such insurance is not applicable to the services performed pursuant to this Agreement.

(vi) **Lake County, A Political Subdivision Of The State Of Florida, And The Board Of County Commissioners**, shall be named as additional insured as their interest may appear on all applicable liability insurance policies.

(vii) Certificates of insurance shall provide for a minimum of thirty (30) days prior written notice to the COUNTY of any change, cancellation or nonrenewal of the required insurance. It is the CONTRACTOR's specific responsibility to ensure that any such notice is provided within the stated timeframe to the certificate holder.

(viii) Certificates of insurance shall identify the RFP number in the Description of Operations section of the Certificate.

(ix) The Certificate holder shall be: LAKE COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA, AND THE BOARD OF COUNTY COMMISSIONERS, P.O. BOX 7800, TAVARES, FL 32778-7800.

(x) Certificates of insurance shall evidence a waiver of subrogation in favor of the COUNTY, that coverage shall be primary and noncontributory, and that each evidenced policy includes a Cross Liability or Severability of Interests provision, with no requirement of premium payment by the COUNTY.

(xi) CONTRACTOR shall be responsible for subcontractors and their insurance. Subcontractors are to provide certificates of insurance to the CONTRACTOR evidencing coverage and terms in accordance with the CONTRACTOR's requirements.

(xii) All self-insured retentions shall appear on the certificate(s) and shall be subject to approval by the COUNTY. At the option of the COUNTY, the insurer shall reduce or eliminate such self-insured retentions, or the CONTRACTOR or subcontractor shall be required to procure a bond guaranteeing payment of losses and related claims expenses.

(xiii) The COUNTY shall be exempt from, and in no way liable for, any sums of money, which may represent a deductible or self-insured retention in any insurance policy. The payment of such deductible or self-insured retention shall be the sole responsibility of the CONTRACTOR and/or subcontractor providing such insurance.

(xiv) Failure to obtain and maintain such insurance as set forth above will be considered a breach of contract and may result in termination of the contract for default.

(xv) Neither approval by the COUNTY of any insurance supplied by the CONTRACTOR or Subcontractor(s), nor a failure to disapprove that insurance, shall relieve the CONTRACTOR or Subcontractor(s) of full responsibility for liability, damages, and accidents as set forth herein.

5.5 Indemnity. The CONTRACTOR shall indemnify and hold the COUNTY and its agents, officers, commissioners or employees harmless for any damages resulting from failure of the CONTRACTOR to take out and maintain the above insurance. Additionally, the CONTRACTOR agrees for good and valuable consideration in the amount of ten dollars (\$10.00) to indemnify, and hold the Board of County Commissioners, Lake County, Florida, and its officers, commissioners, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or

liabilities to the extent resulting from the negligent act, error or omission of the CONTRACTOR, its agents, employees or representative, in the performance of the CONTRACTOR's duties set forth in this Agreement.

5.6 Independent Contractor. The CONTRACTOR agrees that it shall be acting as an independent contractor and shall not be considered or deemed to be an agent, employee, joint venturer, or partner of the COUNTY. The CONTRACTOR shall have no authority to contract for or bind the COUNTY in any manner and shall not represent itself as an agent of the COUNTY or as otherwise authorized to act for or on behalf of the COUNTY. Additionally, the CONTRACTOR warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONTRACTOR to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the CONTRACTOR any fee, commission, percentage, gift, or other consideration contingent upon on resulting from the award or making of this Agreement.

5.7 Truth in Negotiation Certificate. For all lump-sum or cost-plus fixed fee agreements exceeding \$150,000, the firm awarded the agreement must execute a truth in negotiation certificate stating that the wage rates and other factual unit costs are accurate, complete and current, at the time of contracting. Any agreement requiring this certificate shall contain a provision that the original agreement price and any additions shall be adjusted to exclude any significant sums by which the COUNTY determines the agreement price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such agreement adjustments shall be made within one (1) year following the end of the contract. Execution of this Agreement constitutes execution of the Truth in Negotiation Certificate.

5.8 Codes and Regulations. All work completed under this Agreement shall conform to all applicable federal, state and local statutes, codes, regulations and ordinances. Additionally, all items to be purchased under this Agreement shall be in accordance with all governmental standards, to include but not be limited to those issued by the Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety Hazards (NIOSH), and the National Fire Protection Association (NFPA).

5.9 Public Records / Copyrights.

A. All electronic files, audio and/or video recordings, and all papers pertaining to any activity performed by the CONTRACTOR for or on behalf of the COUNTY shall be the property of the COUNTY and will be turned over to the COUNTY upon request. In accordance with Chapter 119, Florida Statutes, each file and all papers pertaining to any activities performed for or on behalf of the COUNTY are public records available for inspection by any person even if the file or paper resides in the CONTRACTOR's office or facility. The CONTRACTOR shall maintain the files and papers for not less than three (3) complete calendar years after the project has been completed or terminated, or in accordance with any grant requirements, whichever is longer. Prior to the close out of the Agreement, the CONTRACTOR shall appoint a records custodian to handle any records request and provide the custodian's name and telephone number(s) to the COUNTY.

B. Any copyright derived from any agreement derived from this Agreement shall belong to the author. The author and the CONTRACTOR shall expressly assign to the COUNTY nonexclusive, royalty free rights to use any and all information provided by the CONTRACTOR in any deliverable and/or report for the COUNTY's use which may include publishing in COUNTY documents and distribution as the COUNTY deems to be in the COUNTY's best interests. If anything included in any deliverable limits the rights of the COUNTY to use the information, the deliverable shall be considered defective and not acceptable and the CONTRACTOR will not be eligible for any compensation.

5.10 Public Entity Crimes. A person or affiliate who has been placed on the convicted vendor list following a conviction of a public entity crime may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity in excess of the threshold amount provided in Florida Statutes, section 287.017 for Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

5.11 Prohibition Against Contingent Fees. The CONTRACTOR warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONTRACTOR, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONTRACTOR, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the award or making of this Agreement.

5.12 Right to Audit. The COUNTY reserves the right to require CONTRACTOR to submit to an audit by any auditor of the COUNTY's choosing. CONTRACTOR shall provide access to all of its records, which relate directly or indirectly to this Agreement at its place of business during regular business hours. CONTRACTOR shall retain all records pertaining to this Agreement and upon request make them available to the COUNTY for three (3) years following expiration of the Agreement. CONTRACTOR agrees to provide such assistance as may be necessary to facilitate the review or audit by the COUNTY to ensure compliance with applicable accounting and financial standards.

5.13 Acceptance of Goods and Services. Any goods and/or service(s) rendered under this Agreement shall remain the property of the CONTRACTOR, and services rendered under this Agreement will not be deemed complete until a physical inspection and actual usage of the product(s) and/or service(s) is (are) accepted by the COUNTY and shall be in compliance with the terms herein, fully in accord with the specifications and of the highest quality. Any goods and/or services purchased under this Agreement may be tested/inspected for compliance with specifications. The COUNTY will not be responsible to pay for any product or service that does not conform to the contract specifications.

5.14 Correction of Deficiencies in the Work. The CONTRACTOR is responsible for the professional quality, technical accuracy, timely completion and coordination of all the services furnished hereunder. In the event that any aspect of the goods or services provided does not conform to the specifications or is found to be defective, the COUNTY reserves the right to require corrective action as appropriate which may include, but is not limited to, returning any

non-compliant goods to the CONTRACTOR at the CONTRACTOR's expense, requiring the CONTRACTOR to either provide a direct replacement for the item or a full credit for the returned item, ordering re-performance of service, or the termination of the Agreement for default. The CONTRACTOR shall, without additional compensation, promptly correct or revise any errors, omissions or other deficiencies in its work, and/or any work that fails to conform to the contract documents regardless of project completion status. Any corrections shall be made within ten (10) calendar days after such rejected defects, deficiencies or non-conformances are verbally reported to the CONTRACTOR by the COUNTY, who may confirm all such verbal reports in writing. CONTRACTOR shall bear all costs of correcting such rejected work. If the CONTRACTOR fails to correct the work within the period specified, the COUNTY may, at its discretion, notify the CONTRACTOR in writing that the CONTRACTOR is subject to contractual default provisions if the corrections are not completed to the satisfaction of the COUNTY within seven (7) calendar days of receipt of the notice. If the CONTRACTOR fails to correct the work within the period specified in the notice, the COUNTY shall place the CONTRACTOR in default, obtain the services of another contractor to correct the deficiencies, and charge the CONTRACTOR for these costs through a deduction from the final payment owed to the CONTRACTOR. If the CONTRACTOR fails to honor this credit memo, the COUNTY may terminate the contract for default. In any month in which the COUNTY has outages such that the system is unusable, CONTRACTOR shall credit the COUNTY for hosting fees on a daily pro rata basis if the outages exceed twenty-four (24) hours total in a one month period.

5.15 Warranty. CONTRACTOR agrees that the products and services provided under this agreement shall be covered by a one (1) year warranty, and the rights and remedies provided herein are in addition to said warranty and do not limit any right afforded to the COUNTY by any other provision of this Agreement. The CONTRACTOR hereby acknowledges and agrees that all materials, except where recycled content is specifically requested, supplied by the CONTRACTOR under this agreement, shall be new, warranted for their merchantability, and fit for a particular purpose.

5.16 Grant Funding. This agreement is being supported in whole or in part by Federal funding, e.g., Federal Transit Administration grant award. Therefore, this Agreement incorporates and includes all provisions related to various specific federal grant requirements. The grant requirements and provisions will be made available to the CONTRACTOR upon request.

5.17 Conflict of Interest. CONTRACTOR agrees that it will not engage in any action that would create a conflict of interest in the performance of its obligations pursuant to this Agreement or which would violate or cause others to violate the provisions of Part III, Chapter 112, Florida Statutes, relating to ethics in government. Further, CONTRACTOR hereby certifies that no officer, agent, or employee of COUNTY has any material interest either directly or indirectly in the business of CONTRACTOR conducted here and that no such person shall have any such interest at any time during the term of this Agreement.

5.18 Business Hours of Operation. No work shall be done on Saturday, Sunday, COUNTY holidays, or on any days between the hours of 5:00 P.M. and 8:00 A.M. except when such work is necessary for the proper care and protection of the work already performed and when

permission to do such work is secured from the COUNTY department representative. No overtime work shall be started without prior approval of the immediate project manager or the appropriate COUNTY department representative.

5.19 Clean-Up. All unusable materials and debris shall be removed from the premises at the end of each workday and disposed of in an appropriate manner. Upon final completion, the CONTRACTOR shall thoroughly clean up all areas where work has been involved as mutually agreed with the associated COUNTY department representative.

5.20 Training Courses and Manuals. CONTRACTOR shall provide an intensive training program to a minimum of ten (10) COUNTY employees and two (2) MV Transportation, Inc. employees regarding the use of the products or services supplied herein. The CONTRACTOR shall bear all costs of registration fees, manuals, texts, or other instructional materials or fees associated with the required training. Additionally, the CONTRACTOR shall supply the COUNTY with a minimum of twelve (12) comprehensive training manuals which describe the appropriate use of the equipment purchased by the COUNTY under this Agreement. The manuals shall be supplied prior to, or upon, delivery of the equipment. Final payment shall be withheld until such time as these manuals are received by the COUNTY.

5.21 Customer Support.

A. **Phone Support.** CONTRACTOR will provide technical support by phone twenty-four (24) hours a day, seven days a week. Customer Support Personnel will be available for live consultation from 7:00 AM – 8:00 PM(EST) and will return all calls within two (2) hours. After hours and emergency support will be available via a pager by which, upon COUNTY leaving a message on the CONTRACTOR Support Voice Mail, a customer support technician will contact the customer within two (2) hours. Upon the initiation of a support event, email alert notifications will be sent to COUNTY containing a unique tracking identification number.

B. **Updates.** For purposes of this Agreement, the term “Updates” refers to fixes and minor changes to the Software, which are indicated by internal, incremental numeric changes smaller than “1” unit (i.e. release 1.1 to 1.2). If and so long as COUNTY has paid in full an annual technical support fee for the then current Support Term of this Agreement, and COUNTY is not otherwise in breach of or default under the terms of this Agreement, CONTRACTOR shall, at no additional charge or fee to COUNTY, provide COUNTY with all Updates issued and disseminated by CONTRACTOR. CONTRACTOR will provide all Updates to COUNTY without charge. These updates and patches will be provided on CD or other acceptable electronic means. Any updates provided shall be compatible with current Lake County Transit System components and shall not render any system components inoperable or obsolete.

C. **Upgrades.** For purposes of this Agreement, the term “Upgrades” means and refers to major changes or to a new release of the Software, including without limitation any new major release of the Software. Upgrades to the Software are normally indicated by incremental numeric changes as “1” whole units (i.e. release 1.0 to 2.0). If and so long as COUNTY has paid in full an annual technical support fee for the then current Support Term of this Agreement, and COUNTY is not otherwise in breach of or default under the terms of this Agreement,

CONTRACTOR shall, at no additional charge or fee to COUNTY, provide COUNTY with all Upgrades issued and disseminated by CONTRACTOR. CONTRACTOR will provide all Upgrades to COUNTY without charge. These upgrades will be provided on CD or other acceptable electronic means. Any upgrades provided shall be compatible with current Lake County Transit System components and shall not render any system components inoperable or obsolete.

D. Customer Support Website. CONTRACTOR will provide COUNTY access through a unique, secure password to the Customer Support Website (“CSW”). The CSW will be maintained for customers only and contain information regarding the Software, Services, and other helpful information. The CSW will also provide access to the most up to date documentation, new case submittal forms, and available releases. Customers submitting cases or requests through the CSW will receive confirmation of receipt within one business hour of submittal.

E. User Groups. COUNTY will be permitted to participate in regional user groups for COUNTY’s region, if available, free of charge.

F. On-Line Training Sessions. Up to five (5) of COUNTY’s authorized users will be allowed to participate in two (2) web-based, on-line training sessions each year. Upon COUNTY’s request CONTRACTOR will schedule a training session on the subject matter requested by COUNTY at an agreed upon date and time.

G. Scheduled Web Training Classes. Each year, CONTRACTOR will provide up to five (5) of COUNTY’s authorized users access to five (5) of CONTRACTOR’s regularly schedule Web-Training classes free of charge. CONTRACTOR will routinely publish a schedule of available training classes and subjects on the CSW. Additional access can be purchased at the then applicable rate for Premium Support customers.

H. Annual User Conference. CONTRACTOR will hold an Annual Users Conference one time each year. Up to five (5) of COUNTY’s authorized users are eligible to attend the annual CONTRACTOR’s User Conference free of charge. All expenses and costs included those associated with travel, lodging, and meals are not included.

Article 6. Miscellaneous Provisions

6.1 This Agreement is made under, and in all respects shall be interpreted, construed, and governed by and in accordance with, the laws of the State of Florida. Venue for any legal action resulting from this Agreement shall lie in Lake County, Florida.

6.2 Neither party may assign any rights or obligations under this Agreement to any other party unless specific written permission from the other party is obtained.

6.3 The captions utilized in this Agreement are for the purposes of identification only and do not control or affect the meaning or construction of any of the provisions hereof.

6.4 This Agreement shall be binding upon and shall inure to the benefit of each of the parties and of their respective successors and permitted assigns.

6.5 This Agreement may not be amended, released, discharged, rescinded or abandoned, except by a written instrument duly executed by each of the parties hereto.

6.6 The failure of any party hereto at any time to enforce any of the provisions of this Agreement will in no way constitute or be construed as a waiver of such provision or of any other provision hereof, nor in any way affect the validity of, or the right thereafter to enforce, each and every provision of this Agreement.

6.7 During the term of this Agreement CONTRACTOR assures COUNTY that it is in compliance with Title VII of the 1964 Civil Rights Act, as amended, and the Florida Civil Rights Act of 1992, in that CONTRACTOR does not on the grounds of race, color, national origin, religion, sex, age, disability or marital status, discrimination in any form or manner against CONTRACTOR employees or applicants for employment. CONTRACTOR understands and agrees that this Agreement is conditioned upon the veracity of this statement of assurance.

6.8 CONTRACTOR shall at all times comply with all Federal, State and local laws, rules and regulations.

6.9 The employee(s) of CONTRACTOR shall be considered at all times its employee(s) and not an employee(s) or agent(s) of COUNTY. CONTRACTOR shall provide employee(s) capable of performing the work as required. The COUNTY may require the contractor to remove any employee it deems unacceptable. All employees of the CONTRACTOR shall wear proper identification.

6.10 Any individual, corporation, or other entity that attempts to meet its contractual obligations with the COUNTY through fraud, misrepresentation or material misstatement, may be debarred for up to five (5) years. The COUNTY as a further sanction may terminate or cancel any other contracts with such individual, corporation, or entity. Such individual or entity shall be responsible for all direct or indirect costs associated with termination or cancellation, including attorney's fees.

6.11 With the written consent of CONTRACTOR, other agencies and third parties may make purchases in accordance with this Agreement. Any such purchases shall be governed by the same terms and conditions as stated herein with the exception of the change in agency name. In addition, although this solicitation is specific to a COUNTY Department, it is agreed and understood that any COUNTY department may avail itself of this contract and purchase any and all items specified herein at the contract price(s) established herein. A contract modification shall be issued by the COUNTY identifying the requirements of the additional COUNTY department(s).

6.12 CONTRACTOR shall act as the prime contractor for all required items and services and shall assume full responsibility for the procurement and maintenance of such items and services. CONTRACTOR shall be considered the sole point of contact with regards to all stipulations,

including payment of all charges and meeting all requirements of this Agreement. All subcontractors will be subject to advance review by the COUNTY in terms of competency and security concerns. No change in subcontractors shall be made without consent of the COUNTY. CONTRACTOR shall be responsible for all insurance, permits, licenses and related matters for any and all subcontractors. Even if the subcontractor is self-insured, the COUNTY may require the CONTRACTOR to provide any insurance certificates required by the work to be performed.

6.13 The CONTRACTOR shall either be registered or have applied for registration with the Florida Department of State in accordance with the provisions of Chapter 607, Florida Statutes.

6.14 The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

6.15 Wherever provision is made in this Agreement for the giving, service or delivery of any notice, statement or other instrument, such notice shall be in writing and shall be deemed to have been duly given, served and delivered, if delivered by hand or mailed by United States registered or certified mail or sent by facsimile, addressed as follows:

If to CONTRACTOR:

RouteMatch Software, Inc.
Elizabeth B. Simons
Atlantic Center Plaza
1180 West Peachtree Street, Suite 1130
Atlanta, Georgia 30309

If to COUNTY:

County Manager
Lake County Administration Building
315 West Main Street, Suite 308
P.O. Box 7800
Tavares, Florida 32778

cc: Ken Harley

Each party hereto may change its mailing address by giving to the other party hereto, by hand delivery, United States registered or certified mail notice of election to change such address.

Article 7. Scope of Agreement

7.1 This Agreement is intended by the parties hereto to be the final expression of their Agreement, and it constitutes the full and entire understanding between the parties with respect to the subject hereof, notwithstanding any representations, statements, or agreements to the contrary heretofore made.

7.2 This Agreement contains the following Exhibits, all of which are incorporated herein:

Exhibit A	Scope of Services, Addendum #1, Addendum #2, and Addendum #3
Exhibit B	Contractor's Pricing
B1:	Fixed Route
B2:	20 Paratransit/Supervisor Vehicles (Vehicles 1-20)
B3:	20 Paratransit/Supervisor Vehicles (Vehicles 21-40)
B4:	20 Paratransit/Supervisor Vehicles (Vehicles 41-60)
B5:	10 Paratransit/Supervisor Vehicles (Vehicles 61-70)

Exhibit C Contractor's Technical Proposal
Exhibit D Software License Agreement

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: COUNTY through its Board of County Commissioners, signing by and through its Chair, authorized to execute same by Board Action on the 15 day of February, 2011, and by CONTRACTOR through its duly authorized representative.

CONTRACTOR

ROUTEMATCH SOFTWARE, INC.

Elizabeth B. Simons
Name: Elizabeth B. Simons
Title: Director of Contracts

This 13th day of January, 2011.

COUNTY

LAKE COUNTY, through its
BOARD OF COUNTY COMMISSIONERS

ATTEST:

Neil Kelly for NK
Neil Kelly, Clerk of the Board
of County Commissioners of
Lake County, Florida

Jennifer Hill
Jennifer Hill, Chair
This 15 day of Feb., 2011.

Approved as to form and legality:

[Signature]

**EXHIBIT A
SCOPE OF SERVICES**

General: The County desires a system that is as non-proprietary in nature as practicable. Ideally, hardware component items will be generally available in the marketplace from multiple sources to ensure reasonableness of price, ease of maintenance, and supportable over a long term. A reliance and emphasis on use of software that is available and supported within the general commercial market is considered highly desirable. Vendors shall address this consideration and factor within their proposals, and clearly indicate the relative degree of use of proprietary and non-proprietary hardware and software associated with the system proposed by the vendor.

Functional Capabilities

Specifications are included for an integrated system incorporating the following elements.

- Provide and install Global Positioning System (GPS)-based automatic vehicle location (AVL) system for tracking all LakeXpress and Lake County Connection vehicles (fixed route, paratransit, and supervisors);
- Provide and install vehicles with mobile data terminals (MDTs) – (fixed route, paratransit, and supervisors);
- Provide and install the appropriate interfaces with existing operations software (RouteMatch 5.2)
- Provide and install an integrated Automated Annunciation System (AAS) to include the head signs and internal signs (fixed route vehicles);
- Provide and install fixed route revenue operating vehicles with automated passenger counters (APCs) to generate necessary NTD and management reports and to provide service planning information; and
- Provide and install security cameras on operating vehicles (real-time recording, with an option to broadcast real-time video on demand).

Transit Fleet

Table 1A lists fixed route vehicles to be equipped with AVL, Automatic Annunciation Systems, APC, Security Cameras and applicable onboard equipment.

Table 1A Fixed Route Vehicles

VIN Numbers	Mfg./Model	Year
90564 - 1HVBTA FM36W325192	Int'l 31' Cutaway	2006
90561 - 1GBE4V1267F404682	Chevy 25' Cutaway	2007
90589 - 1HVBTA FM27W384901	Int'l 29' Cutaway	2008
1BAGEBPA96W100477	Bluebird Ultra LF	2006

VIN Numbers	Mfg./Model	Year
1BAGEBPA66W100484	Bluebird Ultra LF	2006
1BAGEBPAX6W100486	Bluebird Ultra LF	2006
1BAGEBPA86W100485	Bluebird Ultra LF	2006
1BAGEBPA16W100487	Bluebird Ultra LF	2006
1N9MNAC688C084085	El Dorado EZ Rider II	2008
1GBE4V1G27F424505	Chevy 26' Cutaway	2008
1N9MNAC679C084225	El Dorado 32' EZ Rider II	2009
1N9MNAC659C084224	El Dorado 32' EZ Rider II	2009

Table 1B lists the paratransit vehicles that are to be equipped with MDTs, AVC, and Security Cameras.

Table 1B Paratransit Fleet

VIN Numbers	Mfg./Model	Year
185848 - 1FDLE40F5THB57423	Ford 25' Cutaway	1996
185859 - 1FDXE40F8WHB46048	Ford 25' Cutaway	1998
185860 - 1FDXE40F3WHB50914	Ford 25' Cutaway	1998
185861 - 1FDXE40F1WHB50913	Ford 25' Cutaway	1998
185863 - 1FDXE40F7WHB50916	Ford 25' Cutaway	1998
185864 - 1FDXE40F5WHB19079	Ford 25' Cutaway	1998
185865 - 1FDXE40F6WHB50924	Ford 25' Cutaway	1998
92549 - 1FDXE40F3XHC23278	Ford 25' Cutaway	1999
92550 - 1FDXE40F5XHC23279	Ford 25' Cutaway	1999
92551 - 1FDXE45F7YHA23076	Ford 25' Cutaway	1999
92552 - 1FDXE40FXXHC23259	Ford 25' Cutaway	1999
92553 - 1FDXE40F6XHC23257	Ford 25' Cutaway	1999
92554 - 1FDXE40F6XHC23260	Ford 25' Cutaway	1999
93518 - 1FDXE45F52HB65594	Ford 25' Cutaway	*2003
93519 - 1FTSS34L73HA11429	Ford 22' Cutaway	2003
93520 - 1FTSS34L53HA11428	Ford 22' Cutaway	2003
93524 - 1FDXE45F03HA62276	Ford 25' Cutaway	*2003
93525 - 1FDXE45F43HA62278	Ford 25' Cutaway	*2003
90502 - 2G1WF52EX59357366	Chevy Impala Sedan	2005
90503 - 2G1WF52E759356479	Chevy Impala Sedan	2005
90504 - 2G1WF52E959356628	Chevy Impala Sedan	2005
90506 - 2G1WF52EX59362101	Chevy Impala Sedan	2005
90508 - 2G1WF52E859360279	Chevy Impala Sedan	2005
90509 - 2G1WF52E659357252	Chevy Impala Sedan	2005
90510 - 2G1WF52E559360143	Chevy Impala Sedan	2005
90513 - 1FDWE35L95HB24823	Ford 18' Van	2005
90514 - 1FDWE35LO5HB24824	Ford 18' Van	2005
90515 - 1FDWE35L55HB24821	Ford 18' Van	2005

90516 - 1FDWE35L25HB19897	Ford 18' Van	2005
90517 - 1FDWE35L75HB24822	Ford 18' Van	2005
90518 - 1FDWE35L45HB19898	Ford 18' Van	2005
93574 - 1FDWE35F43HB88114	Ford 22' Cutaway	2005
93575 - 1FDWE35L44HA33991	Ford 22' Cutaway	2005
93580 - 1FDWE35L44HA37036	Ford 22' Cutaway	2005
93581 - 1FDXE45S74HA92244	Ford 25' Cutaway	2005
93582 - 1FDXE45S44HA92248	Ford 25' Cutaway	2005
90571 - 1GBE4V1927F424487	Chevy 23' Cutaway	2007
90572 - 1GBE4V1947F424510	Chevy 23' Cutaway	2007
90573 - 1GBE4V1917F424755	Chevy 23' Cutaway	2007
91505 - 1GBJG31K081231122	Chevy 21' General	2009
91506 - 1GBJG31K181233249	Chevy 21' General	2009
91507 - 1GBJG31K181232294	Chevy 21' General	2009
91535 - 1GBE4V1G49F412245	Chevy 25' Cutaway	2009
91536 - 1GBE4VGX9F412184	Chevy 25' Cutaway	2009
BCC 22810 - 1FDLE40G3THB57381	Ford 25' Cutaway	1996
1FBSS31L8WHB01427	Ford E350 Cutaway	1998
1FBSS31S0WHB71236	Ford E350 Cutaway	1998
1FBSS31L5WHA90774	Ford E350 Cutaway	1998
1FBSS31L71HA92583	Ford E350 Cutaway	2001
1FTSS34L71HB38582	Ford E350 Cutaway	2001
1FTSS34L02HA91039	Ford E350 High Top	2002
1FTSS34L62HA50088	Ford E350 High Top	2002
1FBSS31L92HA28501	Ford E350 Cutaway	2002
1FTNS24112HA10072	Ford E350 High Top	2002
1FTSS34LX1HB66893	Ford E350 Cutaway	2002
1FTSS34L63HB39936	Ford E350 Cutaway	2003
1FTSS34L13HB72942	Ford E350 Cutaway	2003
1FBSS31L43HA77509	Ford E350 Cutaway	2003
1FTSS34L23HB63067	Ford E350 Cutaway	2003
1FDXE45S43HB39941	Ford 25' Cutaway	2003
1FDXE45P44HA74473	Ford 25' Cutaway	2005
1FDXE45S96HA09335	Ford 25' Cutaway	2006
1GBE4V12X7F404247	Chevy 23' Cutaway	2007
1GBE4V1267F404262	Chevy 23' Cutaway	2007
1GBE4V1G69F409735	Chevy 25' Cutaway	2009
1GBJG31K781153938	Chevy 21' General	2008
1GBJG31K381153838	Chevy 21' General	2008
1GBJG31K781234079	Chevy 21' General	2009
1GBJG31KX81231872	Chevy 21' General	2009
1GBJG31K381233107	Chevy 21' General	2009
1GBJG31K281232563	Chevy 21' General	2009
1GBJG31K781234261	Chevy 21' General	2009

1GBJG31K781234504	Chevy 21' General	2009
1GBJB31K881234317	Chevy 21' General	2009
1GBJG31K391129797	Chevy 21' General	2009

Table 1C lists other vehicles (street supervisors) that are to be equipped with MDTs and Security Cameras.

Table 1C Supervisory Vehicles

VIN Numbers	Mfg./Model	Year
90502 - 2G1WF52E559357162	Chevy Impala Sedan	2005
90507 - 2G1WF52E159358096	Chevy Impala Sedan	2005
90539 - 1GBJG31U161225196	Chevy 23' Turtle	2006

General Functional Requirements

The Contractor shall be responsible for providing a complete, fully operational and integrated ITS system. Failure on the part of Lake County to specify precisely each and every item necessary for the system shall not relieve the Contractor of total system responsibility.

This RFP outlines the functional, operational and minimum technical parameters of the required ITS deployment. This RFP is considered the minimum requirement of Lake County Public Transport. The RFP covers all equipment and operational constraints to the maximum depth possible. It does not, however, in any way relieve the Contractor from its responsibility to provide a totally installed system including all brackets, nuts, bolts, connectors, and all integration and installation services that are necessary to provide a completely operational system. Proposers will include in their proposals all costs required to design, provide, install, test, and maintain a complete ITS package in accordance with their offer.

By submitting a proposal, Proposers warrant that all equipment quoted within shall constitute a complete system in accordance with its proposal, and insofar as system components exist, all such components are compatible with all other system components provided under the contract or compatible with components provided by others as an integral part of the system. Integration with existing Lake County Public Transport systems is also required to perform the specified functions, as noted in this specification. Proposers further warrant that the system is fit for the use intended.

Mobile Data Terminals (MDTs)

General

The Contractor shall provide identical in-vehicle MDTs for all Lake County fixed route and paratransit vehicles.

The MDT shall be integrated with a GPS receiver, mobile data communications radio modem, bulk data transfer Wireless Local Area Network (WLAN) interface card, vehicle odometer

output, covert alarm switch, covert microphone, and voice radio, and shall utilize a SAE J1708 or J1939 interface to support integration with other future in-vehicle technologies.

The supported Message Identifiers (MID) and Parameter Identifiers (PID), available for communications with future on-board devices using the J-1708/1587 interface implemented in the MDT, shall be fully documented (or equivalent information for a J-1939 interface).

The MDT shall turn on automatically when the vehicle ignition is turned on, and shall shut down a programmable time after the vehicle ignition is turned off.

The MDT display shall use a color backlit Liquid Crystal Display (LCD), readable by the driver from the seated position under the full range of ambient illumination conditions, through the incorporation of such measures as driver-operated brightness/contrast control, anti-glare coating and adjustable orientation mounting.

The display shall be large enough to allow the paratransit application software to simultaneously display the name and address information for at least four pickups and/or drop-offs.

The MDT application software shall be operated using either at least eight programmable function keys or touch screen programmable buttons. Function keys shall also provide tactile feedback when pressed.

The driver shall not be able to manually shut off or disconnect the MDT power or manually shut down the application software.

All MDT clocks must sync with the systems to provide consistency and accuracy of the entire system. Proposers shall describe how the clock time will be maintained.

Integrated GPS Receiver

GPS receivers shall report latitude, longitude, speed, time, direction of travel and whether the GPS position is classified as “good” given the current Horizontal Dilution of Precision (HDOP).

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.

Onboard GPS receivers must be Wide Area Augmentation System (WAAS)-capable, providing position accuracy within three meters 95 percent of the time.

The GPS receiver shall have a cold start solution time of two minutes or less and a re-acquisition time of 15 seconds or less.

The GPS equipment shall include multi-path rejection capabilities to help eliminate spurious signals caused by reflections off 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 Lake County staff. The antenna, mounting and sealants shall be impervious to physical and chemical attack by automatic bus washing equipment.

Installation

MDTs shall be replaceable as discrete units and identified by unique serial numbers. Each connector shall be keyed or otherwise configured so as to prevent inadvertent miss-wiring during MDT replacement.

Electrical power for MDTs and all other on-board components shall be drawn from vehicle unconditioned nominal 12V DC 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, transorbs, optical isolation).

MDTs and all other on-board components shall meet the requirements of this specification under all conditions encountered in transit vehicle operations.

MDTs and all other on-board components shall be designed to operate in accordance with these specifications for ambient temperatures from -30°C to +60°C

MDTs and all other on-board components shall be designed to operate in accordance with these specifications for ambient humidity from 5% to 80%, non-condensing.

MDTs and all other on-board components shall be designed to withstand the vibration and shock forces associated with transit vehicles.

MDTs and all other on-board components shall be sealed against dust and water intrusion, certified in compliance with the NEMA 4 or IP65 standard (or better).

MDTs and all other on-board components shall be shielded to avoid radiating electromagnetic interference so as to have no negative effect on the operation of any other equipment in Lake County vehicles or in the ambient environment Lake County vehicles encounter in normal operations. This shall include, but not be limited to, certified compliance with FCC Part 15 Class A rules (including all internal integrated components such as the GPS receiver and the radio modem).

MDTs and all other on-board components shall be shielded to avoid its operation being affected by any electromagnetic interference in the ambient environment Lake County vehicles encounter in normal operations.

MDTs and all other on-board components shall be housed in enclosures which cannot be opened with standard hand tools.

MDTs shall be securely mounted in the interior of the vehicle, so as to avoid blocking driver sightlines to front and side windows. The location of and mounting method for the MDT units shall be determined in collaboration with LakeXpress staff.

Integration

The MDT/AVL system shall provide a single log-on for and be capable of exchanging data with the following Lake County systems and on-board equipment:

- In-vehicle automatic passenger counting (APC) equipment; and
- Transit signal priority emitters (future requirement).
- Vehicle head signs;
- In-vehicle fare collection equipment (future requirement);
- In-vehicle video monitoring;
- Vehicle maintenance monitoring system;
- Employee proximity identification card; and
- In-vehicle automated annunciation system.

The supported Message Identifiers (MID) and Parameter Identifiers (PID), available for communications with future on-board devices using the J-1708/1587 interface implemented in the MDT, shall be fully documented (or equivalent information for a J-1939 interface).

AVL Tabular Display

The contractor shall provide the capability of displaying AVL data in tabular format. At a minimum, the tabular display shall provide the capability to display windows that contain the following information:

- All vehicles equipped with AVL;
- Early and late buses highlighted with different colors;
- Early and late paratransit vehicles with different colors;
- Off-route vehicles;
- Characteristics of vehicle(s) that has/have activated a silent alarm condition; and
- Characteristics of vehicle(s) with vehicle systems alarm conditions.

AVL Data Recording and Retrieval

All vehicle location and status data transmitted to dispatch shall be maintained online or on removable backup media for a period of six months for future retrieval, display and printing. This historical information shall include all data transmitted from vehicles to dispatch (log-on/log-off data, emergency alarms, vehicle system alarms, location data, and data transmitted from other equipment on-board the vehicles); and all user logins and log-offs. Online data will reside in a fault-tolerant storage system that ensures data integrity in the event of a drive failure. In addition, the system must include a means of backing up transaction data while the system is in operation. It should not be necessary to shut down the database to perform a successful backup.

The stored data shall be time and date stamped, and shall contain sufficient information to enable selective sorting and retrieval based on user-specified selection criteria. At a minimum, the following sorting and selection criteria shall be supported for accessing the historical data from both the short-term and long-term archive storage:

- Operator ID
- Vehicle ID
- Route Number
- Run number
- Dispatcher ID
- Date and time
- Type of data (e.g., off-schedule)
- Incident type (where needed)

Historical data shall be read-only. That is, modification of this data shall not be permitted. Historical data shall be available in a format that is directly accessible by or importable into common database management and analysis tools.

Proposer shall clearly describe proposed backup methodology.

Fixed Route Scheduling Software

LakeXpress will use RouteMatch for fixed route scheduling purposes. The contractor must integrate with RouteMatch or offer an equal or better software solution in their proposal. Fixed route scheduling functionality is described below.

Bus Stops

- The system shall be capable of defining an unlimited number of bus stops and nodes.
- The system shall permit the user to define bus stops using a variety of methods, including direct entry of GPS determined coordinates, and citing the stop location with a mouse click.
- The system shall allow stops to be positioned relative to intersections (i.e., upstream or downstream as a defined distance from the cross street on a particular roadway).
- The system shall be capable of allowing the user to determine the presence of stop amenities (e.g., bench, shelter) and other supplemental data with each stop.

Reporting

- The system shall generate a report for each trip pattern, listing the distances between timepoints.
- The system shall generate detailed timetables for each route and for each service day type.
- The system shall generate timetables suitable for providing schedule information to the customers (e.g., in pocket timetables).
- The system shall generate a report listing the block numbers and detailing the sequence of trips for each.
- The system shall generate a report detailing the block/trip for the sequence of work pieces comprising the each run.

- The system shall generate a report listing the set of runs in each roster, in a suitable format for driver signup.
- The report files shall be easily exported to formats that can be opened and edited in Microsoft Word and Excel.

Fixed Route Location and Schedule Adherence Tracking

- The system shall receive incoming messages from MDTs where the driver has logged on to a fixed route run. The incoming message types are logon, logoff, location and schedule adherence reports, covert alarm messages and text messages.
- The system shall log all outgoing and received data in a historical database, including date/time, vehicle ID, trip ID, driver ID, dispatcher ID, location, odometer, schedule adherence, message type, and message content. 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.
- The system shall show on the map display the last reported location for all vehicles that have an MDT logged in to a fixed route run, using a vehicle icon indicating route direction and labeled with the vehicle ID, trip ID or driver ID as selected by the user. The display shall provide an indication when the last reported location is older than the reporting interval.
- Based on configurable thresholds, the system shall use the reported schedule adherence data to designate when vehicle are “early” or “late”, and list these exception vehicle IDs in a tabular display with their current schedule adherence. These tabular display entries and the map display symbols for these vehicles shall use distinct and configurable color codes for early and late status.
- If a vehicle must be removed from service, the system shall allow the dispatcher to associate a newly assigned vehicle with the run.
- The dispatcher shall be able to review the chronological sequence of reported locations for a specified vehicle over a specified time period on the map display, including controls to view the entire sequence from the beginning of the time period or step through the sequence incrementally forwards or backwards.

Fixed Route MDT Application Software

- When a driver is logged in to a run, the MDT shall display the name of the next upcoming time point, and the schedule adherence status as of the most recently passed time point (e.g., -0.4 to signify 0.4 minutes behind schedule).
- The MDT shall send a location report, indicating its current GPS location, odometer reading and schedule adherence status, once a programmable number of minutes have passed since the previous location report.
- The MDT shall allow the driver to send a text message to dispatch by selecting from a set of pre-defined messages. LakeXpress shall be able to modify the text for these pre-defined messages, if stored in the MDTs.
- The MDT shall store up to ten text messages received from dispatch, display to drivers when there are unread text messages, and allow stored text messages to be viewed or deleted. The MDT shall allow the driver to view received text messages that are longer than can fit on one line of the display. The MDT shall automatically send an

acknowledgement message to dispatch, once the driver has viewed a message flagged by dispatch as requiring acknowledgement.

- The MDT shall store the most recent location received from the GPS receiver, so that the “last known good” location will remain available if the GPS receiver ever is not able to report a location classified as “good”.
- The GPS location indicated in a report sent by an MDT to dispatch shall indicate whether the location is the current location from the GPS receiver or the last known good GPS location.
- The MDT shall allow the driver to logoff after pull-in, and send a logoff message.

Paratransit Location Tracking

- The system shall receive incoming messages from MDTs where the driver has logged on to a paratransit run. The incoming message types are logon, pull-out, pull-in, location reports, trip event reports, covert alarm messages and text messages.
- The system shall log all outgoing and received data in a historical database, including date/time, vehicle ID, run ID, driver ID, dispatcher ID, location, odometer, message type, and message content. 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.
- The system shall provide a real-time output of the historical database in Extensible Markup Language (XML) format using the HTTP protocol. The Contractor shall document this XML schema and provide it to the County.
- The system shall receive location reports from the Mobile Data Computers (MDTs) and display the last reported location on the map display. The display shall provide an indication when the last reported location is older than the reporting interval.
- The dispatcher shall be able to review the chronological sequence of reported locations for a specified vehicle over a specified time period on the map display, including controls to view the entire sequence from the beginning of the time period or step through the sequence incrementally forwards or backwards.

Paratransit MDT Application Software

- When a driver is logged in to a run, the MDT shall display manifest data for the next several upcoming pickup and drop-offs, received via the mobile data communications system from the paratransit scheduling and dispatch software.
- The MDT shall allow the driver to indicate when the vehicle is about to pull-out to begin the run or has just pulled in to complete the run.
- The MDT shall allow the driver to select a single pickup or drop-off, to view all additional manifest details, and to return from these details to the view of multiple upcoming pickups and drop-offs.
- The MDT shall allow the driver to indicate when the vehicle has arrived onsite or is departing, for pickups or drop-offs.
- When the driver selects to complete a pickup event, the driver shall be able to update the MDT manifest data to reflect (1) the actual fare collected; (2) whether there was a companion; and (3) the actual number of accompanying minors.

- When the driver selects a pull-out, pull-in, pickup or drop-off trip event, the MDT shall send the name, address, time, GPS location and odometer reading to the paratransit scheduling and dispatch software.
- If the MDT does not receive an acknowledgement for pull-out, pull-in, pickup or drop-off trip event data sent to dispatch, the MDT shall store this data for later bulk data transfer to the paratransit scheduling and dispatch software.
- The MDT shall send a location report, indicating its current GPS location, once a programmable number of minutes have passed since the previous location or trip event report.
- The MDT shall allow the driver to send a text message to dispatch by selecting from a set of pre-defined messages.
- The MDT shall store up to ten text messages received from dispatch, indicate to drivers when there are unread text messages, and allow stored text messages to be viewed or deleted. The MDT shall allow the driver to view received text messages that are longer than can fit on one line of the display.
- The MDT shall store the most recent location received from the GPS receiver, so that if the GPS receiver ever is not able to report the location the “last known good” location will remain available.
- The GPS location indicated in a report sent by an MDT to dispatch shall indicate whether the location is the current location from the GPS receiver or the last known good GPS location.

Text Messaging

The system shall allow the dispatcher to view received text 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 text message to a single MDT, a predefined group of MDTs or all MDTs within a rectangular area selected on the AVL map display. The system shall allow the dispatcher to select one of a set of predefined text messages or enter a free text message. The system shall allow for any message sent by dispatch to be flagged as requiring driver acknowledgement.

APC System

The Contractor will equip all (100%) of the fixed route fleet with APCs.

Functional Requirements

The Automatic Passenger Counting (APC) subsystem in each equipped vehicle shall provide the following general functionality:

- Count the number of passengers boarding and alighting at each stop, separately for each doorway;
- Store the boarding and alighting counts on-board, for each stop and doorway, including the GPS latitude and longitude for the stop location as well as the current date, time, block, route and trip;

- Maintain the current vehicle occupancy, based on the cumulative boardings and alightings;
- Assign counts records to stops based on the GPS locations;
- Transfer the stored counts data to the central transit management system, via the Wireless Local Area Network (WLAN) at the depot;
- Receive and implement APC subsystem software and data updates, from the central transit management system, via the Wireless Local Area Network (WLAN) at the depot;
- Support data post-processing to improve the accuracy of the APC data;
- Provide a combination of pre-defined reports and the ability to create ad-hoc reports based on the APC data; and
- Provide interface between APC post-processed data and County's GIS system for service planning analysis.
- Collect all data necessary for NTD including Unduplicated Passenger Trips (UPT) and Passenger Miles Travelled (PMT).

Physical Requirements

Each doorway on an equipped vehicle shall be fitted with one or more APC sensors.

The APC sensors for each doorway may be mounted either beside or above the doorway passage, involving the use of infrared beam technology and no need for direct contact with passengers.

Floor treadles shall not be incorporated into the doorway sensor design.

Interface Requirements

The APC sensors for each doorway shall be connected to a single APC controller.

The APC controller shall be connected to the J1708 Vehicle Area Network (VAN), to enable communications with the MDT.

The APC sensors may alternatively be each connected directly to the J1708 Vehicle Area Network (VAN), to enable communications with the MDT without any intermediate APC controller.

Performance Requirements

The doorway sensors shall be able to count and differentiate between boarding and alighting passengers.

The doorway sensors shall be able to separately count successive passengers that are walking as close together as is practicable, either one behind the other or side by side.

The doorway sensors shall be able to count moving passengers with heights between 1 meter in height and the maximum height of the doorway.

The doorway sensors shall be able to count moving passengers with speed between 0.1 and 3 meters per second.

The doorway sensors shall be able to separately count a small child being carried by another passenger.

The doorway sensors shall not register as multiple passengers the passage of a single passenger that reaches into or out of the doorway passage, or is swinging their arms, while passing through the sensor beams.

The doorway sensors shall not separately count objects carried by passengers, such as shopping bags or umbrellas.

Boarding and alighting counts shall only be recorded when the doorway is open. This will avoid any counting of passengers moving in the vicinity of the doorway passages between stops.

Boarding and alighting counts shall only be recorded when the vehicle MDT is logged into a revenue service run. If there is a bus breakdown and passengers need to transfer to a replacement bus, this will allow the passenger transfer to be done with both buses logged out of the run so that the transferring passengers are not erroneously double-counted.

The percent error for boarding or alighting counts at a given doorway, measured at a given stop, shall be calculated as: absolute value of (measured count minus observed count) divided by (observed count). For example, if 7 passengers were observed boarding through the front door at the stop and the APC system recorded 8 passengers boarding, the percent error would be 1/7 (i.e., 14%).

The average percent error for both boardings and alightings for each vehicle doorway shall be 5%, under the full range of ambient illumination conditions and for ambient temperatures. A sample of at least 50 percent error observations shall be collected at various revenue service stops, for both boardings and alightings at each vehicle doorway, and the average percent error for each sample shall be within the range 3% to 7%.

The APC subsystem shall be interfaced with a wheelchair lift sensor, with the number of wheelchair lift operational cycles at each stop is also recorded.

For each stop, a data record shall be created to store the number of boarding and alighting passengers for each doorway and the number of wheelchair lift activations.

Each data record shall also include the current GPS latitude and longitude (if the GPS receiver indicates that it currently has GPS lock), as well as the current date/time, block, route and trip.

The date/time of any separate APC controller shall be updated at least one per day from the MDT.

Data records may be stored in either the APC controller or the MDT, with sufficient on-board memory capacity to allow for storage of at least 72 hours of APC data. On-board memory shall use non-volatile storage so that a power supply is not required to retain the stored APC data records.

Boarding counts in progress as a door closes shall be correctly processed and included in the correct data record.

Alighting counts in progress as a door opens shall be correctly processed and included in the correct data record.

Utility software shall be provided, for use on a laptop computer connected via a serial communications connection to either the APC controller or the MDT, which supports calibration of the doorway sensors and review of stored data records.

Upon command from the WLAN subsystem, the data records shall be transferred from the APC subsystem.

The APC subsystem shall not erase or allow the overwriting of data records until confirmation is received from the WLAN subsystem that the data records were successfully received.

The latitude and longitude of bus stops shall be used to add the stop ID to the data record, based on the route/trip and the latitude and longitude (if recorded). This stop association may be performed either on-board or after the data has been transferred from the vehicle.

If the latitude and longitude recorded for a stop are not within 50 meters of a stop on the current route/trip, a stop ID shall not be added to the data record. GPS accuracy is such that this would only be expected to occur if the passenger counts occurred between official stops or on a detour.

Upon command from the WLAN subsystem, APC software or configuration data updates shall be transferred to the APC subsystem and installed in the MDT or APC controller.

Upon successful receipt of a file from the WLAN subsystem, the APC subsystem shall provide an acknowledgement to the WLAN subsystem.

The APC subsystem shall provide a backup method for bi-directional data transfer between vehicles and the central system, involving one or more portable devices that can be connected with the APC controller or MDT in each vehicle and with a device on the central system network (e.g., portable computer, memory cards). This backup data transfer method would be used when the WLAN subsystem is temporarily unavailable. If battery power is required, the portable device(s) shall be rechargeable and have sufficient battery capacity to operate over an eight-hour shift between recharges. The portable device(s) shall have sufficient memory capacity to carry data to be uploaded to all vehicles and up to 72 hours worth of APC data from all vehicles by the end of the shift.

Utility software shall be provided to analyze the APC data, implementing algorithms that further improve the accuracy of the APC data, in particular to address any systematic relative over counting or undercounting of boardings and alightings. At minimum, these algorithms would proportionally weight the boarding and alighting counts to avoid instances where the calculated vehicle occupancy becomes negative or where the total number of boardings and alightings over the course of a run are not equal.

Utility software shall be provided with the ability to create both a suite of standard reports and customized ad-hoc reports.

Standard reports shall include at least:

- Boardings and/or alightings by route for a given time period;
- Boardings and/or alightings by trip for a given route and time period;
- Boardings and/or alightings by stop for a given route and time period;
- Boardings and/or alightings by trip for a given route, stop and time period;
- Boardings and/or alightings by stop for a given route, trip and time period;
- Vehicle doorways for which the daily volume or standard deviation of boardings and alightings has changed significantly from the historical norm (i.e., to assist in spotting a doorway whose sensors have become faulty or miss-calibrated).

The ad-hoc reporting utility software shall allow for the creation of report template files that define: (1) the selection of database fields to be included in the report; (2) the formatting, filtering, and sorting of these fields; (3) the use of these fields to calculate new fields; and (4) the ability to present the results in both tables and graphs.

Both pre-processed and post-processed data shall be retained and available for data reporting.

Installation Requirements

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 driver.

The alignment of the doorway sensors shall be calibrated after installation, to establish the alignment settings for each vehicle that achieve the most accurate performance (and the calibration settings for each vehicle shall be documented for future Lake County reference).

Test Requirements

The Test Procedures shall be prepared by the Contractor and accepted by Lake County prior to the start of any acceptance testing.

The Test Procedures shall define which specification performance requirements are to be demonstrated through each of the following stages of acceptance testing.

The Test Procedures shall define for each performance requirement the test stage, test procedure and the test result that would constitute a successful demonstration of the performance requirement.

- Factory Acceptance Testing
 - Factory Acceptance Testing shall be completed prior to any installations of the APC subsystem.
 - Factory Acceptance Testing shall use a complete bench test configuration for the APC subsystem that would be installed on a single vehicle, at a facility provided by the Contractor such as their factory.
 - The bench test configuration shall include at minimum the following components: (1) doorway sensors installed in two doorway passages with dimensions corresponding to the doorway passages in the actual LakeXpress vehicles to be used; (2) integration of the doorway sensors with the APC controller and MDT (or directly with the MDT), to allow the boarding and alighting counts for test passages through each doorway to be reviewed; and (3) integration with simulated doorway closure sensors.
- Proof Of Performance Testing
 - Proof of Performance Testing shall be completed after APC subsystem installation for each vehicle.
 - Proof of Performance Testing shall use the complete configuration for the APC subsystem installed on each single vehicle, at the vehicle installation facility provided to the Contractor by Lake County Public Transportation.
 - The installed vehicle configuration shall include at minimum the following components: (1) doorway sensors installed and calibrated in all doorway passages; (2) integration of the doorway sensors with the installed APC controller and MDT (or directly with the MDT), to allow the boarding and alighting counts for test passages through each doorway to be reviewed; and (3) integration with the doorway closure sensors.
- Subsystem Integration Testing

- Subsystem Integration Testing shall be completed after the APC subsystem has been integrated with the on-board and central systems.
- Subsystem Integration Testing shall use the APC subsystem installed on all equipped vehicles, with the central system at the Lake County Public Transport Division.
- The installed test configuration shall include at minimum the following components: (1) integration of the doorway sensors (and any APC controller) with the MDT on the vehicles; and (2) integration of the depot WLAN with the central system capabilities for bulk data exchange with vehicles and for performing post-processing and reporting for APC data.

Automated Annunciation System

The following subsections describe the functional requirements of the Automated Annunciation/ Signage System (AAS) to be satisfied by the Contractor.

Lake County requires an AAS in order to:

- Meet the requirements of the Americans with Disabilities Act (ADA);
- Automatically announce and display recorded information about each stop, major intersection, key locations, transfer opportunities, and route destination in each Lake County fixed route vehicle prior to arriving at that location; and
- Provide the ability for authorized personnel to record the announcements and construct the related text at a centrally-located location, transferred to buses and to have those announcements associated with the appropriate trip.

General AAS Requirements

An AAS shall be installed on each Lake County fixed-route vehicle. The system shall meet or exceed all ADA requirements found in 49CFR Parts 37.167 and 38.35. The system shall provide audio and visual announcements to on-board riders and those waiting to board. The system shall be fully integrated with the on-board AVL system (see Section 7), based on SAE J1587/J1708 standards.

The AAS shall function as follows. As each Lake County fixed route vehicle approaches a stop, major intersection, or other designated location, a digitally-recorded announcement shall be automatically made over the on-board public address (PA) system speakers (it is the responsibility of the proposers to test the vehicle PA system speakers for proper operation and provide speakers or replace speakers as needed) and displayed on an LED sign inside the vehicle to inform passengers about the next stop. The volume of the announcements shall be automatically adjusted according to the noise level on the vehicle at the time. No vehicle operator interaction shall be required to operate the annunciation system. However, the vehicle operator shall have the ability to manually operate the system whenever it is deemed appropriate to do so. Further, the vehicle operator's use of the on-board PA system shall override any automated announcements.

In the event that a vehicle is operating off-route, the automated announcements/displays shall not be made. The system shall detect reacquisition of the route, at any point along the route, and 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 operator intervention or action, nor shall it require the vehicle to be driven to special reacquisition points.

The location information announced/displayed shall be the name of the stop, the location of the stop (if different from the stop name), transfer opportunities (if the potential route is currently operating), and other information to be determined at a later date (e.g., points of interest located close to the stop). The annunciation system shall use the vehicle location information from the AVL system (described in Section 7) to trigger these 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 configurable by the vehicle on both a global basis or as superseded on a stop-specific basis. For example, the trigger zone may begin 800 feet before each stop or other announcement location.

Optionally, at each stop, as the doors are opened for passenger boarding, a route/destination announcement shall be made outside the LakeXpress vehicle. The volume of the external announcement must be able to be set globally dependent on the time of day and location that the announcement is being made.

In addition to next stop announcements/displays, the annunciation 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, days of the week, or within specified time periods. Separate announcements/displays shall be programmed to be made on-board the vehicle when that vehicle is at a specific 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 up to a total of 99 time-based, location-based and vehicle operator-initiated announcements/displays on the MDT.

Proposers shall describe the planned system architecture for the Automated Annunciation/Signage system. This architecture shall represent a fully interoperating collection of distinct systems, subsystems and components linked over the J1708 data bus.

In-Vehicle Hardware Requirements

The AAS shall utilize the AVL MDT to the extent possible to provide the following capabilities:

- Automatically initiate audio announcements and sign displays;
- Communicate with the AVL system and other on-board systems, as necessary; and
- Provide the vehicle operator with manual control of the system, if necessary;
- Further minimum hardware requirements for the annunciation system are as follows:

- Dual-channel high fidelity audio capable of playing simultaneous internal (and optional external) announcements;
- Two built-in 20-watt amplifiers; or whatever size to sufficiently be audible.
- Noise-sensing device for each audio channel, which shall automatically and independently adjust each channel's volume as appropriate in response to ambient noise detected; and
- Independent volume control for each audio channel, automatically adjusted for ambient noise.

The internal display sign for each Lake County fixed route vehicle shall display coordinated text for next stop and other audio announcements. The sign shall meet all ADA requirements for internal signage. Proposers are required to describe the type of internal sign being proposed (LED is the preferred type), along with the sign's dimensions and programming characteristics. Further, Proposers are required to specify how displayed messages are scrolled and/or single frame modes are utilized.

The internal display signs shall be constructed to withstand the harsh transit environment.

Workstation Hardware Requirements

Software for a computer workstation should be provided that allows authorized personnel to record announcement audio, to specify internal sign text, and to define route-stop structures. This software shall allow establishment of a workstation capable of performing these functions and to output the results to vehicle MDTs via the communications medium. This workstation shall capture all audio data in an industry standard format using non-proprietary hardware. Proposers shall describe how users will make the changes identified above, including a description of the interface and including screen-print.

The Contractor shall create the initial sets of audio and visual messages in English and Spanish for the entire fixed route system. Lake County shall have the right to approve scripts and to select a "voice" to be used system wide from among five professional announcers. Local production, to reflect local pronunciation, is preferred. Data shall be created for one route, in both directions, and tested on the first Radio/ITS system-equipped bus, in revenue service for, at least, five (5) days. Development of system wide scripts shall not commence until after this test.

On-Board Cameras

The Contractor shall propose to install cameras on Lake County fixed route vehicles. The Contractor is invited to propose as an option, installation of cameras on the County paratransit vehicles. The Contractor should assume placement of six cameras per fixed route vehicle. Placement shall provide views of the driver, out the windshield, each doorway and the length of the interior. Proposer shall make a recommendation for the cameras on the paratransit vehicles.

General

The following subsections describe the functional requirements of the on-board camera system to be satisfied by the successful Contractor under the resulting contract, except for those

requirements that are identified as future requirements. For future requirements, the Contractor must demonstrate the capability to satisfy these requirements in the future by describing how hardware and software provided under the resulting contract will interface with future hardware and software identified in this RFP.

Lake County requires an on-board camera system in order to:

- Monitor the activities of passengers on-board a transit vehicle;
- Monitor passengers as they board and alight through the stairwells;
- Monitor traffic through windshield;
- Allow voice recording;
- Allow user to prevent deletion of certain portions of the data; and
- Preview and playback saved images.
- Record day or night hours

System Requirements

The on-board camera system, including on-board equipment, fixed-end equipment and associated software, shall perform its functions in a seamless fashion transparent to vehicle operators.

Cameras

The basic camera specifications are as follows:

- The contractor shall install the camera system on a total of 10 fixed route vehicles; provide as proposed for sixty-five (65) paratransit vehicles.
- The system shall be a digital recording system;
- All images captured by the system shall be in full-color;
- All cameras shall be installed inside buses;
- Each bus shall be equipped with six (6) cameras. Five (5) cameras locations have been identified as follows:
 - One (1) at the windshield capturing road image;
 - One (1) facing the front door stairwell;
 - One (1) facing the rear door stairwell;
 - One (1) at the front of the bus facing the rear of the bus; and
 - One (1) at the rear of the bus facing the front of the bus;
- Aside from the windshield camera, the other four cameras shall provide complete coverage to monitor the entire interior of the bus;
- The cameras shall be designed for the harsh transit environment, which includes operating effectively throughout temperature extremes, and withstanding the vibration and shock forces associated with transit vehicles;

- The cameras shall be capable of operating in typical transit vehicle interior daylight and nighttime lighting conditions;
- The cameras shall record at high resolution, full view, and full motion (30 frames per second) quality;
- The cameras shall automatically and instantly adjust aperture to compensate for sudden bright or dark images;
- The final location of each camera on each bus type shall be determined in collaboration with Lake County staff;
- The cameras shall operate on 12 or 24 volts;
- The cameras shall be mounted using the appropriate bracket, and shall not interfere with or impede access to other system components;
- Brackets, or other mounting elements, shall allow only authorized users to adjust the cameras on both the vertical and horizontal planes;
- Clearance from the bus floor to the bottom of camera shall be adequate so as not to impede the free movement of passengers and not to cause injuries to the passengers;
- The cameras shall be available in a range of mounts including flush, angled, and surface recessed; and
- The cameras shall be housed in splash-and tamper-proof enclosures.

Microphones

- Each camera shall have a microphone mounted as part of its housing unit or near it;
- The microphone shall pick up and record normal conversations within a five (5) foot radius;
- Voice recording shall be stored digitally in the system;
- Voice recording of each microphone shall be synchronized with the video recording of the camera associated with it;
- In the process of recording, the system shall filter out vehicle noise to provide quality high quality and easily understood voice.

On-board Recording Unit Requirements

The on-board recording unit shall act as an on-board central processing unit that receives and stores all images from all on-board cameras and all voice data from all on-board microphones.

The on-board recording unit specifications are as follows:

- Be designed for the harsh transit environment, which includes operating effectively throughout temperature extremes, and withstanding the vibration and shock forces associated with transit vehicles;
- The on-board recording unit shall be housed in splash-and tamper-proof enclosures;
- The on-board recording unit shall include protection against damage due to electrical overload per SAE J1292;

- The system shall automatically start recording whenever transit power comes on;
- The system shall allow for a delayed shutdown for a programmed number of minutes after vehicle power is turned off;
- Each recorded image frame shall be identified with visible date, time and bus number;
- Electrical overload protection shall open the electrical supply circuit of affected modules and subsystems before additional damage to said modules and subsystems, or to other modules, subsystems or power supplies, can occur. Over load protection devices in modules and subsystems shall not be automatically reset. The respective current rating of any overload protection device shall be clearly indicated on each such device;
- The on-board recording unit shall have, at a minimum, a 120 Gigabyte hard-drive capacity;
- The system shall have the capability to accommodate at least eight (8) cameras;
- Authorized users shall be able to easily remove hard-drives to allow data transportability;
- The removable hard-drive units shall be of modular design with no access to the recording media or internal components;
- The removable hard-drive units shall be housed in splash-and tamper-proof enclosures;
- The removable hard-drive units shall be designed for the harsh transit environment, which includes operating effectively throughout temperature extremes, and withstanding the vibration and shock forces associated with transit vehicle
- Once images and audio are recorded, the quality of images and audio shall never deteriorate over time, no matter how many times it is played;
- The on-board recording units shall allow for wireless transmission of images and audio through the proposed WLAN;
- The system shall allow incidents to be protected from being overwritten once the emergency alarm switch is activated;
- The area of the hard-drive containing an incident shall be protected for a programmed amount of time from up to five (5) minutes prior to the incident to up to fifteen (15) minutes after the incident;
- The system shall provide a “quick reference” flag of triggered incidents for quicker future review;
- As an option, the on-board recording unit shall be equipped with an internal battery backup to enable the system to capture images and audio even if all vehicle power to the system is cut off due to an accident or other incident;
- Two portable units will be provide for onboard viewing and data transfer by Maintenance or Supervisor staff; and
- The final location of on-board recording units on each bus type shall be determined in collaboration with Lake County staff;

Playback Station Requirements

The following specification covers the requirements of the Playback Station:

- The on-board camera system shall also include two (2) Playback Stations with associated hardware and software to view recorded images and listen to recorded audio data;
- The Playback Station shall include a dedicated PC, and a 19” LCD Flat Panel monitor or larger;
- The location of the Playback Station shall be determined in collaboration with Lake County staff;
- The Playback Station shall allow users to simultaneously display images from up to four (4) cameras on the monitor;
- Authorized users shall be able to review recorded images one frame at a time (freeze frame) or at slow or high video speeds in both forward and reverse mode;
- Authorized users shall be able to jump directly to a specific date, time and bus number, or to a tagged incident;
- Authorized users shall be able to rotate, enlarge, adjust brightness, or adjust contrast of recorded images;
- The system shall allow recorded images and audio to be transferred to a CD, DVD, video tape, and/or PC hard drives at high output; and
- The Playback Station shall allow users to print images.

General

The following subsections describe the functional requirements of a bus stop CCTV camera system to be satisfied by the successful Contractor. except for those requirements that are identified as future requirements. For future requirements, the Contractor must demonstrate the capability to satisfy these requirements in the future by describing how hardware and software provided under the resulting contract will interface with future hardware and software identified in this RFP.

Lake County requires a CCTV camera system in order to:

- Provide remote monitoring at five (5) bus stop locations;
- Transmit images to a central location in real-time;
- Record captured images using digital video recorders (DVR);
- Allow preview and playback of recorded images; and
- Allow remote control of cameras (e.g., pan/tilt/zoom).

Remote Cameras

Specifications for the Bus Stop CCTV Camera System are as follows:

- Each camera shall be a solid-state high-resolution color video camera using an interline transfer charge coupled device (CCD) image sensor with DSP (Digital Signal Processing);

- Each camera shall capture images in full-color;
- Each camera shall record at full motion speed (30 frames per second or higher);
- Each camera shall be capable of producing a minimum of 480 TV lines resolution with a sensitivity of 0.2 foot candles (2.1 lux);
- Each camera's integrated lens shall have a 22X focal range (4-84mm);
- Each lens shall provide auto focus, auto aperture, auto white balance with remote manual control capacity;
- Camera mounting must be possible in a variety of configurations (e.g., from the top, the sides, the back);
- Each camera shall be housed in a protective enclosure, dome-shaped or other shape approved by Lake County;
- Each camera shall be mounted on variable speed pan and tilt drives;
- Each drive unit shall allow for 360-degree continuous rotation;
- Each drive unit shall have a built-in receiver and shall be capable of being integrated into an RS422 communications format with half duplex communication;
- Pan speed shall be 1-270°/sec;
- Tilt speed shall be 1-90°/sec;
- Pan/Tilt/Zoom (PTZ) shall be compliant with the industrial standard control format (RS485 and RS232);
- The drive unit shall operate from 110/120 VAC;
- Each camera housing unit shall be equipped with a 110/120 VAC heater and blower to reduce condensation;
- A clear outer dome over each camera shall be environmentally sealed to prevent moisture from entering the housing;
- Each camera shall operate effectively throughout temperature extremes;
- Each camera shall operate under Florida extreme weather conditions without building up condensation;
- The "video out" shall comply with NTSC standard 60f/s;
- There shall be a minimum of 32 programmable preset positions available;
- Each camera's view shall be programmable for a maximum of 16 sectors. Each sector shall have the capability to be blanked out (no video display). The number and size of sectors shall be programmable and have a custom title;
- The location of each camera at each bus station shall be determined by Lake County staff;
- The Contractor shall be responsible for providing required power to each camera if power is not readily available at the bus stops;

- Each camera shall be connected to a central monitoring and control system, and recorders via fiber optics; and
- The Contractor shall be responsible for obtaining required permits and coordinating any trenching or construction work in the right-of-way with local public work departments or other appropriate agencies.

Central Monitoring and Control System

Specifications for the central monitoring and control system are as follows:

- The central monitoring and control system shall allow only authorized personnel to operate all controls and all cameras connected to the system;
- The central monitoring and control system shall be a digital control and microprocessor-based system capable of automatically routing video signals from a requested camera position to a specified monitor;
- The system shall accommodate up to 32 camera inputs and will support, at a minimum, six (6) monitor outputs;
- The system shall be self-contained with its own on-board central processing unit (CPU) so as not to require a “host computer” to operate;
- The system will be equipped with an RS232 port;
- Control of the system shall be accomplished by its own built-in keypad or by an external keypad;
- Manual and sequential switching, between cameras shall be supported, including ascending order and random order switching;
- Switching modes will include salvo or zone switching. Each salvo can have a unique combination of camera, monitor, and preset position;
- The system shall provide the ability to program “tours” for each camera, directing it to move to a series of preset positions at a designated speed, time sequence, and duration, and being able to take time stamped “snapshots” or storing video clips automatically at each preset view position;
- The date, time and location shall be stamped on each recorded image frame;
- The date and time shall be sync to a central time to provide consistency;
- Each camera and each monitor shall be capable of having a 20-character title;
- Pan/Tilt/Zoom control shall be accomplished using a RS422 Receiver keypad or joystick control;
- The system shall provide full controls for the selection of an individual camera to be viewed, and provide search and play back function for recorded video;
- Camera controls shall allow for manual focus, manual brightness, manual contrast, and manual backlighting;

- The system shall include industry-standard software that will allow users to search recorded video by camera, date and time;
- The Contractor shall supply two 20 inch flat-screen monitors connected to the central monitoring and control system;
- Monitors shall be configured to view up to 16 cameras per screen;
- Each monitor shall display in color and have high resolution of 480 lines or better;
- Each monitor shall be **National Television System Committee (NTSC)** compliant;
- Each monitor shall provide video-in and video-out with RCA or BNC connections;
- The monitoring and control system shall be located at a location to be determined by Lake County staff.

Recorder/Multiplexer Requirements

Specifications for the recorder/multiplexer system are as follows:

- The digital recorder/multiplexer shall be one or a series of digital video recorders (DVRs) and software utilizing an optimized Moving Picture Experts Group (MPEG-4) compression algorithm;
- The DVRs shall also offer features including 16-camera simultaneous digital video display and record input channels, a convenient and secure user interface, rack mount case design, composite and digital video outputs, hard disk MPEG-4 storage, floppy disk Joint Photographic Experts Group (JPEG) portable storage, Local Area Network (LAN) connectivity, Wide Area Network (WAN) and Internet connectivity, integrated Graphical User Interface (GUI), and a built-in intelligent Uninterruptible Power Supply (UPS);
- Each DVR shall be a 120 VAC/60 Hz unit;
- Each DVR shall use a minimum 120 Gigabyte hard drive capable of continuous 16-channel recording at a minimum 30 frames per second for approximately 7 days before it overwrites in a First In, First Out format;
- Each DVR shall have a minimum of 16 video inputs;
- Each DVR shall have a key locked security panel containing all necessary controls and indicators to setup and operate the system;
- Each DVR shall have a VGA video output where all digital video shall be displayed in addition to providing the full software user interface;
- Each DVR shall include on-screen support of pan-tilt-zoom type camera drives and focus, iris and preset camera functions;
- Each DVR shall offer a full multi-user authorization login application;
- All image recording shall have authentication to prevent image tampering;
- Each DVR shall have a built-in UPS power conditioner capable of intelligent power management and safe shutdown during power outages;

- Each DVR shall be capable of creating copies of the recorded data on to CD, DVD, video tape, or PC hard drives;
- The system shall allow simultaneous viewing, recording, and playback; and
- The recorder/multiplexer station shall be located at a location to be determined by Lake County staff.

Wire and Connections

Specifications for connectivity between cameras and central monitoring station are as follows:

- Each camera shall be connected to the central location via fiber optics;
- To insure proper connection, only two or three splices will be allowed from one end of the fiber (e.g., camera) to the other (central location).

Maintenance of Transit System Infrastructure Items

This solicitation and the resulting contract award require vendor provision and installation of a wide array of equipment and related services/software intended to support the County's public transportation system. In addition to the stated turnkey "provide and install" requirements, the County may choose to require that the awarded vendor provide long term support and maintenance on a single point-of-contact basis in support of all individual components and all systems provided under the contract. It is specifically noted that if the County chooses this option, the responding vendor will be the party responsible for the satisfactory performance of any equipment or software item or system, to include single point-of-contact responsibility for resolution and correction of any performance issue during any designated third party warranty period.

To this end, the responding vendor shall provide, as part of their initial proposal, a comprehensive maintenance and support plan. The plan shall, as a minimum, include:

- a. A list of all equipment and systems, provided by or through the awarded vendor, whose operational performance after acceptance is fully warranted (repair/replacement at no cost to the County) by the awarded vendor or a third party manufacturer or dealer. The list shall identify the specific party providing the warranty and shall include a statement defining the duration of such warranty coverage for each listed equipment item or system, and a statement defining how continuing service, to include preventative maintenance and actual item/system repair, will be provided after conclusion of the stated full warranty period.
- b. A list of equipment and systems that do not fall within the scope of paragraph "a" above, with a description of how service, to include preventative maintenance and actual item/system repair, will be provided in the event of performance failure of any listed item or system.

The responding vendor is required to provide fixed annual pricing for full system maintenance support on a turn-key single-point-of-contact basis with such support to be paid in arrears on a monthly basis for the first five years after the system as a whole is accepted. Pricing for further

optional years of service is desired as well. The format for such pricing input is as set forth in the Pricing Section of this solicitation.

The responding vendor is invited to provide alternate pricing or organizational structures that maintain the turn-key single point-of-contact maintenance structure required by the County.

Responding vendors are advised that the maintenance structure and pricing will be considered during the award and evaluation process. However, the County retains the right and option to seek and secure third party maintenance services anytime after expiration of the initial warranty periods.

(c) Installation. Licensee agrees that an Information Technology, manager-level representative, will be available to assist RouteMatch during the installation period. Licensee further agrees to provide RouteMatch with one (1) hour of down time per work station to be equipped with the Software, in which RouteMatch has complete, uninterrupted access to said work station.



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ADDENDUM NO. 1

Date: April 7, 2010

RFP No. 10-0607, Integrated Intelligent Transportation System (ITS)

This addendum is being issued to make the following changes, corrections, clarifications and additions to the bidding document. The information in this addendum modifies and changes the original bidding documents and takes precedence over the original documents. **Respondents shall acknowledge receipt of this addendum by completing this form and returning it with the response. Failure to acknowledge this addendum may preclude consideration of the bid proposal award.**

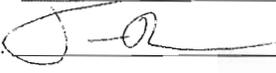
The following are answers to questions that were asked at the pre-proposal meeting March 30, 2010.

- 1- The county has asked for a single MDT for all vehicles provided. Is this a requirement or a desire and how will it be evaluated?
We would like for there to be a different type MDT unit for the fixed route, paratransit and for supervisor vehicles.
- 2- Does the county want to provide the supervisor vehicles with access to the AVL system from a dispatch point of view? **Yes** This would necessitate the use of a ruggedized laptop as opposed to the MDT that is provided for other vehicles. It would show as a tracked vehicle on the AVL but also allow the supervisor to view other vehicle locations and alarms or data. **We would like to have four rugged laptops for supervisor vehicles.**
- 3- Please provide, for the fixed route vehicles, the destination signs make and if they are J1708 compatible.
The head signs are J1798 compatible.
- 4- Please confirm what hardware the client will provide in terms of fixed end servers, wireless and desk top components. We can provide hardware specs if the county wishes to purchase or we can provide but typically the county has existing relationships that can provide quality hardware at better prices than our providers.

Vendor to provide us with the system requirements and the county make a separate purchase for the hardware needed.

The following is an update in regards to number and type of vehicles:

Para-transit: 59 installed, 6 spares
Fixed route: 13 installed, 5 spares
Supervisor vehicles: 4 rugged laptops.

Firm Name: RouteMatch Software, Inc. Date: 4/30/10
Signature:  Title: Exec. Vice Pres.
Typed/Printed Name: Tim Quinn

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DISTRICT TWO
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DISTRICT THREE
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DISTRICT FIVE
WELTON G. CADWELL



LAKE COUNTY
FLORIDA

OFFICE OF PROCUREMENT SERVICES
315 WEST MAIN STREET, SUITE 416
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www.lakegovernment.com

ADDENDUM NO. 2

Date: March 14, 2010

RFP No. 10-0607, Integrated Intelligent Transportation System (ITS)

This addendum is being issued to make the following changes, corrections, clarifications and additions to the bidding document. The information in this addendum modifies and changes the original bidding documents and takes precedence over the original documents. **Respondents shall acknowledge receipt of this addendum by completing this form and returning it with the response. Failure to acknowledge this addendum may preclude consideration of the bid proposal award.**

The following are questions that have been asked and answered prior to the pre-proposal meeting:

Question 1 – Reference to Addendum 1

1- The county has asked for a single MDT for all vehicles provided. Is this a requirement or a desire and how will it be evaluated?

Answer: The MDT units can be the same type, however they should provide separate software applications for the fixed route, paratransit and for supervisor vehicles. The units for the supervisor vehicles should be ruggedized laptops.

Is the county referring to specific software applications should be different for the MDT device depending on type of service or the physical device itself? It typically is in the best interest of the agency to be consistent across the fleet with physical device, but run a specific application for the type of service.

Answer: The software application should be different for the MDT depending on the type of service.

Question 2 - Does the County have a preferred wireless carrier?

Answer: The County currently uses Sprint as its wireless carrier.

Question 3 - Does the County have a preferred mobile equipment installer and if yes, please provide the name of the provider as well as any pertinent contact information (name, title, phone, email) for the account representative responsible for working with the County. Alternatively, the County may elect to have internal maintenance staff manage the installation of the proposed equipment.

Answer: I would like for the successful vendor to be responsible for the installation. (This may be negotiated with the vendor that is going to be recommended for award during firm and final discussions.)

Question 4 – Please confirm that MDT's will be equipped on both paratransit and fixed route vehicles?

Answer: Yes, MDT's will be equipped on paratransit and fixed route vehicles and ruggedized laptops for supervisor vehicles.

Question 5 – If the proposed APC system collects the data and transmits it in real time, the bulk data transfer most likely will not be needed. Therefore can we propose it as an option?

Answer: Please propose it as an option.

Question 6 – Please provide as much information as possible regarding the radio communication infrastructure that was discussed at the pre bid meeting?

Answer: At the meeting there was discussion about using the County's 800 megahertz system. This may or may not be an option. We would recommend that the bid show all options. (This would be discussed with the vendor that is going to be recommended for award during firm and final discussions.)

Question 7 – Do Lake County vehicles for either service travel out of the county? If so, can we propose a public data modem instead to ensure we have coverage for vehicles that may travel out of radio coverage area.

Answer: Lake County vehicles for paratransit travels out of the County. Yes you may propose a public data modem as an option.

Question 8 – Will the closed circuit TV remain a required component? If so, can you provide detailed information as to the type of location, communication, power options, etc... this will need to be installed?

Answer: No, we will delete closed circuit TV requirement.

Question 9 - On-board Recording Unit Requirements - The on-board recording units shall allow for wireless transmission of images and audio through the proposed WLAN;

Answer: We would like the ability to allow for wireless transmissions, but it may be cost prohibitive.

Can you explain further the intent, are you looking for the system to have the ability to do this in the future, or are you looking for that ability to download incidents, when the vehicle returns to the yard?

Answer: Yes, we are looking for the ability to download the incidents when the vehicle returns to the yard or be able to go to the scene and download the information.

Question 10 – Since the county is already planning to purchase the required hardware in terms of fixed end servers, wireless and desk top components per addendum #1, would the county be willing to purchase the ruggedized laptops for the supervisor vehicles per the vendor's requirements. The theory is the county through a government contract can most likely get the laptops much cheaper.

Answer: Yes, the county will be willing to purchase the ruggedized laptops for the supervisor vehicles per the vendor's requirements.

Question 11 - Section 2, page 33, CAMERAS states " Each bus shall be equipped with six (6) cameras. Five (5) camera locations have been identified as follows:" Camera locations one through 5 are then described. Can the County clarify five (5) or six (6) cameras per Transit Vehicle?

We want six camera's to be provided. We would request that the vendor recommend the location of the 6th camera.

Question 12 - Section 2, page 36, Bus Stop Closed Circuit Television Camera System states; "The Contractor shall propose to install CCTV cameras at five (5) key bus stop locations to be identified by Lake County." Can the County clarify the locations and provide drawings of the stations as well as provide the number of cameras desired at each location.

Please delete this section.

Question 13 - Can the County provide an extension to the RFP?

; have no problem with extending the RFP if it will allow for more vendors to participate.

CHANGE: RFP 10-0607, Integrated Intelligent Transportation System (ITS) Opening Date to Wednesday, May 5, 2010 @ 3:00PM (EST)

Firm Name: RouteMatch Software, Inc. Date: 4, 30/10

Signature:  Title: Exec. Vice Pres.

Typed/Printed Name: Tim Quinn

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ADDENDUM NO. 3

Date: June 15, 2010

RFP No. 10-0607, Integrated Intelligent Transportation System (ITS)

This addendum is being issued to make the following changes, corrections, clarifications and additions to the bidding document. The information in this addendum modifies and changes the original bidding documents and takes precedence over the original documents. Respondents shall acknowledge receipt of this addendum by completing this form and returning it with the response. Failure to acknowledge this addendum may preclude consideration of the bid proposal award.

The attached change is to receive costs from pre-qualified vendors for certain modules that can be implemented with the opportunity of adding additional features in the future.

The closing date and time to receive these quotes in a sealed envelope is June 30, 2010 at 3:00PM (EST).

Firm Name: _____ Date: _____

Signature: _____ Title: _____

Typed/Printed Name: _____

"Earning Community Confidence Through Excellence in Service"

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Fixed Route							
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total
1) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking all LakeXpress (15 fixed route vehicles)							\$ -
2) Provide and install an integrated Automatic Annunciation System (AAS) to include the head signs and internal signs (15 fixed route vehicles)							\$ -
3) Provide and install fixed route revenue operating vehicles with automatic passenger counters (APCs) to generate necessary NTD and management reports and to provide service planning information. (15 fixed route vehicles)							\$ -
4) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand) (15 fixed route vehicles)							\$ -
5) Provide and install the appropriate interfaces with existing operations software (Route Match 5.2)							
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 Paratransit/Supervisor Vehicles (Vehicles 1-20)							
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total
6) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (paratransit, and supervisors)							\$ -
7) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)							\$ -
8) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)							\$ -
9) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors)							\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 Paratransit/Supervisor Vehicles (Vehicles 21-40)							
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total
10) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (paratransit, and supervisors)							\$ -
11) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)							\$ -
12) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)							\$ -

13) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors)								\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 Paratransit/Supervisor Vehicles (Vehicles 41-60)								
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)		Total
14) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (paratransit, and supervisors)								\$ -
15) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)								\$ -
16) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)								\$ -
17) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors)								\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10 Paratransit/Supervisor Vehicles (Vehicles 61-70)								
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)		Total
18) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 10 Lake County Connection vehicles (paratransit, and supervisors)								\$ -
19) Provide and install 10 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)								\$ -
20) Provide and install the appropriate interfaces with existing operations software for 10 vehicles (Route Match 5.2)								\$ -
21) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(10 Paratransit, and supervisors)								\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

EXHIBIT B
CONTRACTOR'S PRICING

Exhibit B1: Fixed Route

Exhibit B2: 20 Paratransit/Supervisor Vehicles (Vehicles 1-20)

Exhibit B3: 20 Paratransit/Supervisor Vehicles (Vehicles 21-40)

Exhibit B4: 20 Paratransit/Supervisor Vehicles (Vehicles 41-60)

Exhibit B5: 10 Paratransit/Supervisor Vehicles (Vehicles 61-70)

ROUTE MATCH		Fixed Route							Total
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air-time for cell phone, etc)		Total	
1) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking all LakeExpress (15 fixed route vehicles) (10 second poll rate)	\$ 38,000	\$ 34,101	\$ 17,800	\$ 6,000	\$ 9,144	\$ 2,872	\$	\$ 107,917	
1.1 (30 second poll rate) Cost not shown in total column.						\$ 1,972	\$	NA	
1.2 (1 minute poll rate) Cost not shown in total column.						\$ 1,972	\$	NA	
2) Provide and install an Integrated Automatic Announcement System (IAAS) to include the head signs and internal signs (15 fixed route vehicles)	\$ 10,000	\$ 33,820	\$ 58,300	\$ 6,750	\$ 1,500			\$ 110,370	
3) Provide and install fixed route revenue operating vehicles with automatic passenger counters (APCS) to generate necessary NTD and management reports and to provide service planning information. (15 fixed route vehicles)	\$ 10,000	\$ 33,820	\$ 49,370	\$ 6,750	\$ 1,500			\$ 101,440	
4) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand) (15 fixed route vehicles) (5 camera option) (two microphone option) (no back up power supply)	\$ 327		\$ 56,745	\$ 10,500				\$ 67,572	
4.1 (6 camera option)			\$ 59,655	\$ 12,000				NA	
4.2 (3 microphone option)								NA	
4.3 (backup power supply)			\$ 472					NA	
5) Provide and install the appropriate interfaces with existing operations software (Route Match 5.2)	\$ 58,327	\$ 101,741	\$ 190,915	\$ 30,900	\$ 12,144	\$ 6,816	\$	\$ 387,299	
Total									

20 Paratransit/Supervisor Vehicles (Vehicles 1-20)

Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total
6) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (Paratransit, and supervisors) (10 Second poll rate)	\$ 12,000 \$	4,400 \$	21,895 \$	9,000 \$	4,884 \$	3,828 \$	56,007
6.1 (30 second poll rate) Cost not shown in total column.							
6.2 (1 minute poll rate) Cost not shown in total column.							
7) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)	\$ 12,000 \$	4,400 \$	37,380 \$		5,204 \$	2,628 \$	58,984
8) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)							
9) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors) (4 camera option) (2 microphone option)(no back up power supply)	327		54,000 \$	12,000			66,327
9.1 (5 camera option)			56,745 \$	14,000			NA
9.2 (6 camera option)			59,655 \$	16,000			NA
9.3 (3 microphone option)			1,600				NA
9.4 (backup power supply)							NA
Total	24,327 \$	8,800 \$	113,275 \$	21,000 \$	10,088 \$	3,828 \$	181,318

20 Paratransit/Supervisor Vehicles (Vehicles 21-40)									
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total		
10) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (Paratransit, and supervisors) (10 second poll rate)	\$ 12,000		\$ 21,895	\$ 9,000	\$ 3,120	\$ 3,828	\$ 49,843		
10.1 (30 second poll rate) Cost not shown in total column.						\$ 2,628	NA		
10.2 (1 minute poll rate) Cost not shown in total column.						\$ 2,628	NA		
11) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)	\$ 12,000		\$ 37,380		\$ 3,440		\$ 52,820		
12) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)							\$ -		
13) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors) (4 camera option) (2 microphone option)(no back up power supply)	\$ 327		\$ 54,000	\$ 12,000			\$ 66,327		
13.1 (5 camera option)			\$ 56,745	\$ 14,000			NA		
13.2 (6 camera option)			\$ 59,655	\$ 16,000			NA		
13.3 (3 microphone option)							NA		
13.4 (backup power supply)			\$ 5,334				NA		
Total	\$ 24,327	\$ -	\$ 113,275	\$ 21,000	\$ 6,560	\$ 3,828	\$ 168,990		

20 Paratransit/Supervisor Vehicles (Vehicles 41-60)									
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total		
14) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 20 Lake County Connection vehicles (Paratransit, and supervisors) (10 Second poll rate)	\$ 12,000		\$ 21,895	\$ 9,000	\$ 3,120	\$ 3,828	\$ 49,843		
14.1 (30 second poll rate) Cost not shown in total column.						\$ 2,628	N/A		
14.2 (1 minute poll rate) Cost not shown in total column.						\$ 2,628	N/A		
15) Provide and install 20 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)	\$ 12,000		\$ 37,380		\$ 3,440		\$ 52,820		
16) Provide and install the appropriate interfaces with existing operations software for 20 vehicles (Route Match 5.2)							\$ -		
17) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(20 Paratransit, and supervisors)(4 camera option)(2 microphone option)(no back up power supply)	\$ 327		\$ 54,000	\$ 12,000			\$ 66,327		
17.1 (5 camera option)			\$ 56,745	\$ 14,000			N/A		
17.2 (6 camera option)			\$ 59,665	\$ 16,000			N/A		
17.3 (3 microphone option)							N/A		
17.4 (backup power supply)							N/A		
Total	\$ 24,327	\$ -	\$ 113,275	\$ 21,000	\$ 6,560	\$ 3,828	\$ 168,990		

10 Paratransit/Supervisor Vehicles (Vehicles 61-70)									
Item from Scope of Services	Software	Implementation	Hardware	Third Party (Install, Software, and Hardware)	Annual Maintenance	Other (Air time for cell phone, etc)	Total		
18) Provide and install Global Positioning System (GPS) based automatic vehicle location (AVL) system for tracking 10 Lake County Connection vehicles (Paratransit, and supervisors) (10 Second poll rate)	\$ 6,000		\$ 11,185	\$ 4,500	\$ 1,560	\$ 1,914	\$ 25,159		
18.1 (30 second poll rate) Cost not shown in total column.						\$ 1,314	NA		
18.2 (1 minute poll rate) Cost not shown in total column.						\$ 1,314	NA		
19) Provide and install 10 vehicles with mobile data terminals (MDTs) (Paratransit, and supervisors)	\$ 6,000		\$ 18,690		\$ 1,720		\$ 26,410		
20) Provide and install the appropriate interfaces with existing operations software for 10 vehicles (Route Match 5.2)							\$ -		
21) Provide and install security cameras on operating vehicles (real time recording, with an option to broadcast real time video on demand)(10 Paratransit, and supervisors) (4 camera option)(2 microphone option)(no back up power supply)	\$ 327						\$ 33,327		
21.1 (5 camera option)							NA		
21.2 (6 camera option)							NA		
21.3 (3 microphone option)							NA		
21.4 (backup power supply)							NA		
Total	\$ 12,327	\$ -	\$ 56,875	\$ 10,500	\$ 3,280	\$ 1,914	\$ 84,896		
Monthly Web Based Hosting Services (Three Users)									
	\$225								

EXHIBIT B-5

EXHIBIT C

CONTRACTOR'S TECHNICAL PROPOSAL

[See attached disk]

EXHIBIT D SOFTWARE LICENSE AGREEMENT

The Software and Documentation are licensed to Lake County, Florida, herein "Licensee" and the Professional Services and Customer Support are provided to Licensee under the additional Terms and Conditions set forth in this Exhibit D, the terms of which are incorporated into and made a part of the Agreement.

1. LICENSEE'S OBLIGATIONS. Licensee shall provide the following labor support to RouteMatch:

(a) General. Licensee shall name a point of contact representative (the "Point of Contact") responsible for all communications between RouteMatch and Licensee throughout the installation, data conversion, training, and technical support process. The Point of Contact will be responsible for scheduling all appointments; delivering and receiving all correspondence related to installation, data conversion, training and technical support; and, arranging communications and support from RouteMatch representatives, as requested.

(b) Project Plan. Licensee acknowledges that time is critical in the performance of the implementation Project Plan. Licensee further acknowledges and agrees that any delay in the implementation due to the acts or omissions of Licensee, its employees, subcontractors, agents and/or client(s) (persons other than RouteMatch representative), shall not constitute a delay in RouteMatch's performance and shall not delay or prevent payment of any amount that would have been due to be paid to RouteMatch under the contract.

(c) Installation. Licensee agrees that an Information Technology manager-level representative will be available to assist RouteMatch during the installation period. Licensee further agrees to provide RouteMatch with one (1) hour of down time per work station to be equipped with the Software, in which RouteMatch has complete, uninterrupted access to said work station. Said one (1) hour down time will not be provided during regular business hours, Monday through Friday 8:00 a.m. to 5:00 p.m.

(d) Data Conversion. If RouteMatch is to provide data conversion services, Licensee is solely responsible for presenting all of its business and other data to be used with the Software in an acceptable format (Microsoft Excel, template to be provided by RouteMatch) to expedite data conversion services to be provided by RouteMatch.

(e) Training. Licensee agrees to make all of its personnel that are considered by Licensee to be "trainees" on the use of the Software or who are to receive training as part of the Professional Services available for the agreed upon number of uninterrupted, dedicated eight (8) hour training days as set forth in the Project Plan.

(f) Technical Support. During the Term of this Agreement, Licensee agrees to follow and comply with the RouteMatch Customer Support Program provided to Licensee, direct all technical support questions and communications through the Point of Contact, and provide the necessary and qualified personnel, as requested by RouteMatch, to assist in completing the technical solution.

2. SCOPE OF LICENSE RIGHTS AND RESTRICTIONS.

THE SOFTWARE IS COPYRIGHTED AND LICENSED (NOT SOLD). ROUTEMATCH DOES NOT SELL OR TRANSFER TITLE TO, OR ANY OWNERSHIP INTEREST IN, THE SOFTWARE OR DOCUMENTATION TO LICENSEE. LICENSEE'S LICENSE OF THE SOFTWARE WILL NOT

COMMENCE UNTIL LICENSEE HAS EXECUTED THIS AGREEMENT AND AN AUTHORIZED REPRESENTATIVE OF ROUTEMATCH HAS RECEIVED, APPROVED AND EXECUTED A COPY OF IT AS EXECUTED BY LICENSEE.

(a) The license granted to Licensee under this Agreement entitles Licensee to use, and Licensee agrees to use, the Software and Documentation solely as set forth below:

(i) Store, install and access the Software, in machine readable form, through an internal network using those computers and software specified in the Agreement, or access the Software via the Internet on one server only, but in either case only for use by that number of users specified in this Agreement and only for the purpose of serving the internal needs of the business of Licensee;

(ii) In support of Licensee's authorized use of the Software, store the Software's machine-readable instructions or data in, transmit it through, and display it on machines associated with the computer(s) specified in the Agreement;

(iii) make one copy of the Software in machine-readable, object code form, for nonproductive backup purposes only, provided that RouteMatch's proprietary legend is included; and,

(iv) use the Documentation solely to assist Licensee in its authorized use of the Software.

(b) The license granted to Licensee under this Agreement does not grant to Licensee the right to, and Licensee acknowledges and agrees that it does not have the right to and that it will not, to the extent permitted by Florida law:

(i) copy (except as expressly permitted in Section 2(a)(iii) above), change, disassemble, decompile, reverse engineer, sublicense, assign, timeshare, sell, give away, loan, rent, lease, transfer (electronically or otherwise), display, disclose, or provide any third party with access to or use of, the Software; directly or indirectly create or attempt to create software that emulates the Software; prepare derivative works of the Software; or separate the components of the Software;

(ii) copy or provide any third party with access to or use of any of the Documentation without the prior written consent of RouteMatch;

(iii) transfer any of Licensee's rights or obligations under this Agreement without the express, advance, written consent of an officer of RouteMatch, and then only if: (i) Licensee keeps no copies of the Software or Documentation; (ii) Licensee transfers Licensee's entire rights and obligations under this Agreement in or to the Software and Documentation; and, (iii) the transferee agrees in writing to the terms and conditions of this Agreement, after which time Licensee will no longer have the right to use the Software. Any attempted transfer or assignment of any of Licensee's rights or obligations under this Agreement shall be null and void unless it is in full compliance with this Section 2(b)(iii);

(iv) remove any proprietary or copyright legend from any material contained in or on the Software or the Documentation;

(v) publish or disclose to any third party any reports or the results of any benchmark tests run on the Software or its components; or,

(vi) use any trademarks or service marks of RouteMatch.

3. PROPRIETARY RIGHTS AND RESTRICTIONS.

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