ORIGINAL

Automatic Vehicle Location Devices

# Radio Satellite Integrators, Inc.

Proposal to

## State of West Virginia

RFP# FLT12006

February 21, 2012

Radio
Satellite
Integrators, Inc.

19144 Van Ness Avenue
Torrance, CA 90501
310-787-7700
Fax 310-787-7435
www.radsat.com

**February 21, 2012**

Krista Ferrell
Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, WV 25305-0130

**Re: RFP# FLT12006 – Automatic Vehicle Location Devices**

Dear Ms. Ferrell,

Please find our attached response for **RFP# FLT12006 – Automatic Vehicle Location Devices.** Radio Satellite Integrators (RSI) is a world leader in the manufacturing and implementation of vehicle tracking systems using GPS technology. We have a long history of experience with GPS-based Automatic Vehicle Location systems and have been manufacturing and implementing systems since 1990. RSI has unparalleled experience implementing systems for all types of vehicle fleets. We currently have systems in place all over the country with large municipal governments such as: City of Houston, City of Oklahoma City, Miami-Dade County, City of Phoenix, Boston Water & Sewer, among many others.

With more than 250 systems and thousands of mobile units in place throughout the world, we urge you to learn more about how our approach allows us to offer a superior product that will best suit your needs at a great value.

Please feel free to contact me with any questions, concerns, or requests.

Proposer Contact:

Brett Lim
Phone: (310) 787-7700
Fax: (310) 787-7435
email: blim@radsat.com
Web page: www.radsat.com

Sincerely,

Brett Lim
Director of Marketing

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

# Request for Quotation

| RFQ NUMBER | PAGE |
|---|---|
| FLT12006 | 1 |

ADDRESS CORRESPONDENCE TO ATTENTION OF:
KRISTA FERRELL
304-558-2596

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE
Radio Satellite Integrators
19144 Van Ness Ave
Torrance, CA 90501

SHIP TO
DEPARTMENT OF ADMINISTRATION
FLEET MANAGEMENT OFFICE
2101 WASHINGTON STREET, EAST
BUILDING 17
CHARLESTON, WV
25305 304-558-0086

| DATE PRINTED | TERMS OF SALE | SHIP VIA | F.O.B. | FREIGHT TERMS |
|---|---|---|---|---|
| 12/14/2011 | | | | |

BID OPENING DATE: 01/26/2012 BID OPENING TIME 01:30PM

| LINE | QUANTITY | UOP | CAT. NO. | ITEM NUMBER | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|---|
| 0001 | 1 | EA | | 550-91 | | |

AUTOMATIC VEHICLE LOCATION DEVICES

REQUEST FOR QUOTATION
(RFQ)
OPEN END CONTRACT

THE WEST VIRGINIA STATE PURCHASING DIVISION FOR THE AGENCY, THE WEST VIRGINIA FLEET MANAGEMENT OFFICE, IS SOLICITING BIDS FOR AN OPEN END CONTRACT TO PROVIDE THE AGENCY WITH AUTOMATIC VEHICLE LOCATION DEVICES PER THE ATTACHED SPECIFICATIONS.

A MANDATORY PRE-BID WILL BE HELD ON JANUARY 06, 2012 AT 1:00 PM AT THE AGENCY'S LOCATION AT 2101 WASHINGTON STREET, EAST IN CHARLESTON, WEST VIRGINIA. ALL INTERESTED PARTIES ARE REQUIRED TO ATTEND THIS MEETING. FAILURE TO ATTEND THE MANDATORY PRE-BID SHALL RESULT IN DISQUALIFICATION OF THE BID. NO ONE PERSON MAY REPRESENT MORE THAN ONE BIDDER.

AN ATTENDANCE SHEET WILL BE MADE AVAILABLE FOR ALL POTENTIAL BIDDERS TO COMPLETE. THIS WILL SERVE AS THE OFFICIAL DOCUMENT VERIFYING ATTENDANCE AT THE MANDATORY PRE-BID. FAILURE TO PROVIDE YOUR COMPANY AND REPRESENTATIVE NAME ON THE ATTENDANCE SHEET WILL RESULT IN DISQUALIFICATION OF THE BID. THE STATE WILL NOT ACCEPT ANY OTHER DOCUMENTATION TO VERIFY ATTENDANCE. THE BIDDER IS RESPONSIBLE FOR ENSURING THEY HAVE COMPLETED THE INFORMATION REQUIRED ON THE ATTENDANCE SHEET. THE PURCHASING DIVISION AND THE STATE AGENCY

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

| SIGNATURE | TELEPHONE | DATE |
|---|---|---|
| | 310-787-7700 | 2/16/2012 |

| TITLE | FEIN | ADDRESS CHANGES TO BE NOTED ABOVE |
|---|---|---|
| Director of Marketing | 33-0477102 | |

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

## GENERAL TERMS & CONDITIONS
## REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.

2. The State may accept or reject in part, or in whole, any bid.

3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required $125 fee.

4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.

5. Payment may only be made after the delivery and acceptance of goods or services.

6. Interest may be paid for late payment in accordance with the ***West Virginia Code.***

7. Vendor preference will be granted upon written request in accordance with the ***West Virginia Code.***

8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.

10. The laws of the State of West Virginia and the ***Legislative Rules*** of the Purchasing Division shall govern the purchasing process.

11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.

12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.

13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at **www.state.wv.us/admin/purchase/vrc/hipaa.html** and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.

14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.

15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

---

## INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.

2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.

3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.

4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
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# Request for Quotation

| RFQ NUMBER | PAGE |
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| FLT12006 | 2 |

ADDRESS CORRESPONDENCE TO ATTENTION OF:
KRISTA FERRELL
304-558-2596

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE
Radio Satellite Integrators
19144 Van Ness Ave
Torrance, CA 90501

SHIP TO
DEPARTMENT OF ADMINISTRATION
FLEET MANAGEMENT OFFICE
2101 WASHINGTON STREET, EAST
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WILL NOT ASSUME ANY RESPONSIBILITY FOR A BIDDER-S FAILURE TO COMPLETE THE PRE-BID ATTENDANCE SHEET. IN ADDITION, WE REQUEST THAT ALL POTENTIAL BIDDERS INCLUDE THEIR E-MAIL ADDRESS AND FAX NUMBER.

ALL POTENTIAL BIDDERS ARE REQUESTED TO ARRIVE PRIOR TO THE STARTING TIME FOR THE PRE-BID. BIDDERS WHO ARRIVE LATE, BUT PRIOR TO THE DISMISSAL OF THE TECHNICAL PORTION OF THE PRE-BID WILL BE PERMITTED TO SIGN IN. BIDDERS WHO ARRIVE AFTER CONCLUSION OF THE TECHNICAL PORTION OF THE PRE-BID, BUT DURING ANY SUBSEQUENT PART OF THE PRE-BID WILL NOT BE PERMITTED TO SIGN THE ATTENDANCE SHEET.

TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO KRISTA FERRELL IN THE WEST VIRGINIA STATE PURCHASING DIVISION VIA FAX AT 304-558-4115 OR VIA EMAIL AT KRISTA.S.FERRELL@WV.GOV.

DEADLINE FOR ALL TECHNICAL QUESTIONS IS JANUARY 12, 2011 AT THE CLOSE OF BUSINESS.

ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL WRITTEN ADDENDUM TO BE ISSUED AFTER THE DEADLINE HAS LAPSED.

VERBAL COMMUNICATION:ANY VERBAL COMMUNICATION BETWEEN THE VENDOR AND ANY STATE PERSONNEL IS NOT BINDING, INCLUDING THAT MADE AT THE MANDATORY PRE-BID MEETING. ONLY INFORMATION ISSUED IN WRITING AND ADDED TO THE RF SPECIFICATIONS BY FORMAL WRITTEN ADDENDUM IS BINDING.

NO CONTACT BETWEEN THE VENDOR AND THE AGENCY IS PERMITTED WITOUT THE EXPRESS WRITTEN CONSENT OF THE STATE BUYER. VIOLATION MAY RESULT IN THE REJECTION OF THE BID. THE STATE BUYER NAMED ABOVE IS THE SOLE

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

| SIGNATURE | TELEPHONE | DATE |
|---|---|---|
| | 310-787-7700 | 2/16/2012 |

| TITLE | FEIN | ADDRESS CHANGES TO BE NOTED ABOVE |
|---|---|---|
| Director of Marketing | 33-0477102 | |

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Department of Administration
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CONTACT FOR ANY AND ALL INQUIRIES AFTER THIS RFQ HAS BEEN RELEASED.

EXHIBIT 10

REQUISITION NO.: .....

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 .....

NO. 2 .....

NO. 3 .....

NO. 4 .....

NO. 5 .....

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.

VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.

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|---|---|---|---|---|---|---|

SIGNATURE

Radio Satellite Integrators, Inc
COMPANY

2/16/2012
DATE

NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.

REV. 09/21/2009

EXHIBIT 3

LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON AWARD AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE.

UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.

RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.

CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.

OPEN MARKET CLAUSE: THE DIRECTOR OF PURCHASING MAY AUTHORIZE A SPENDING UNIT TO PURCHASE ON THE OPEN MARKET, WITHOUT THE FILING OF A REQUISITION OR COST ESTIMATE, ITEMS SPECIFIED ON THIS CONTRACT FOR IMMEDIATE DELIVERY IN EMERGENCIES DUE TO UNFORESEEN CAUSES (INCLUDING BUT NOT LIMITED TO DELAYS IN TRANSPORTATION OR AN UNANTICIPATED INCREASE IN THE VOLUME OF WORK.)

QUANTITIES: QUANTITIES LISTED IN THE REQUISITION ARE APPROXIMATIONS ONLY, BASED ON ESTIMATES SUPPLIED BY THE STATE SPENDING UNIT. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACT SHALL COVER THE QUANTITIES ACTUALLY ORDERED FOR DELIVERY DURING THE TERM OF THE CONTRACT, WHETHER MORE OR LESS THAN THE QUANTITIES SHOWN.

ORDERING PROCEDURE: SPENDING UNIT(S) SHALL ISSUE A WRITTEN STATE CONTRACT ORDER (FORM NUMBER WV-39) TO THE VENDOR FOR COMMODITIES COVERED BY THIS CONTRACT. THE ORIGINAL COPY OF THE WV-39 SHALL BE MAILED TO THE VENDOR AS AUTHORIZATION FOR SHIPMENT, A SECOND COPY MAILED TO THE PURCHASING DIVISION, AND A THIRD COPY RETAINED BY THE SPENDING UNIT.

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE

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CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.

THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.

REV. 05/26/2009

PURCHASING CARD ACCEPTANCE: THE STATE OF WEST VIRGINIA CURRENTLY UTILIZES A VISA PURCHASING CARD PROGRAM WHICH IS ISSUED THROUGH A BANK. THE SUCCESSFUL VENDOR MUST ACCEPT THE STATE OF WEST VIRGINIA VISA PURCHASING CARD FOR PAYMENT OF ALL ORDERS PLACED BY ANY STATE AGENCY AS A CONDITION OF AWARD.

EXHIBIT 4

LOCAL GOVERNMENT BODIES: UNLESS THE VENDOR INDICATES IN THE BID HIS REFUSAL TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO COUNTY, SCHOOL, MUNICIPAL AND OTHER LOCAL GOVERNMENT BODIES, THE BID SHALL EXTEND TO POLITICAL SUBDIVISIONS OF THE STATE OF WEST VIRGINIA. IF THE VENDOR DOES NOT WISH TO EXTEND THE PRICES, TERMS, AND CONDITIONS OF THE BID TO ALL POLITICAL SUBDIVISIONS OF THE STATE, THE VENDOR MUST CLEARLY INDICATE SUCH REFUSAL IN HIS BID. SUCH REFUSAL SHALL NOT PREJUDICE THE AWARD OF THIS CONTRACT IN ANY MANNER.

REV. 3/88

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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Post Office Box 50130
Charleston, WV 25305-0130

# Request for Quotation

| RFQ NUMBER | PAGE |
|---|---|
| FLT12006 | 7 |

ADDRESS CORRESPONDENCE TO ATTENTION OF:
KRISTA FERRELL
304-558-2596

VENDOR
RFQ COPY
TYPE NAME/ADDRESS HERE
Radio Satellite Integrators, Inc
19144 Van Ness Ave
Torrance, CA 90501

SHIP TO
DEPARTMENT OF ADMINISTRATION
FLEET MANAGEMENT OFFICE
2101 WASHINGTON STREET, EAST
BUILDING 17
CHARLESTON, WV
25305 304-558-0086

| DATE PRINTED | TERMS OF SALE | SHIP VIA | F.O.B. | FREIGHT TERMS |
|---|---|---|---|---|
| 12/14/2011 | | | | |

BID OPENING DATE: 01/26/2012 BID OPENING TIME 01:30PM

| LINE | QUANTITY | UOP | CAT. NO. | ITEM NUMBER | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|---|

NOTICE

A SIGNED BID MUST BE SUBMITTED TO:

DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
BUILDING 15
2019 WASHINGTON STREET, EAST
CHARLESTON, WV 25305-0130

THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:

SEALED BID

BUYER: KRISTA FERRELL-FILE 21

RFQ. NO.: FLT12006

BID OPENING DATE: 01/26/2012

BID OPENING TIME: 1:30 PM

PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:

(310) 787-7435

CONTACT PERSON (PLEASE PRINT CLEARLY):

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

| SIGNATURE | TELEPHONE | DATE |
|---|---|---|
| | (310) 787-7700 | 2/16/2012 |

| TITLE | FEIN | ADDRESS CHANGES TO BE NOTED ABOVE |
|---|---|---|
| Director of Marketing | 33-0477102 | |

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

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| LINE | QUANTITY | UOP | CAT. NO. | ITEM NUMBER | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|---|
| | Brett Lim | | | | | |
| | ****** THIS IS THE END OF RFQ FLT12006 ****** TOTAL: | | | | | |

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

| SIGNATURE | TELEPHONE | DATE |
|---|---|---|
| | 310-787-7700 | 2/16/2012 |

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Rev. 09/08

**FLT12006**

State of West Virginia

# VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with ***West Virginia Code***, §5A-3-37. (Does not apply to construction contracts). ***West Virginia Code***, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the ***West Virginia Code***. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
____ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
____ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. **Application is made for 5% resident vendor preference for the reason checked:**
____ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
____ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
____ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

**Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.**

**Bidder:** Radio Satellite Integrators **Signed:** _____

**Date:** 2/16/2012 **Title:** Director of Marketing

**Check any combination of preference consideration(s) indicated above, which you are entitled to receive.*

RFQ No. **FLT12006**

STATE OF WEST VIRGINIA
Purchasing Division

# PURCHASING AFFIDAVIT

**West Virginia Code §5A-3-10a states:** No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**DEFINITIONS:**
"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (***West Virginia Code*** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: Radio Satellite Integrators, Inc

Authorized Signature: _____ Date: 2-16-12

State of California

County of Los Angeles, to-wit:

Taken, subscribed, and sworn to before me this 16th day of Feb, 2012.

My Commission expires July 30, 2012.

**AFFIX SEAL HERE**

DONG GUYN KIM
Commission # 1805718
Notary Public - California
Los Angeles County
My Comm. Expires Jul 30, 2012

**NOTARY PUBLIC** _____

Radio Satellite Integrators, Inc.

# State of West Virginia


## AVL Devices

**RFP# FLT12006**

February 9, 2012

ESRI Technology

AUTHORIZED BUSINESS PARTNER

# Title Page

**Company:**

Radio Satellite Integrators, Inc.

**Contacts:**

Brett G. Lim
Director of Marketing
blim@radsat.com
310.787.7700

19144 Van Ness Avenue
Torrance, California 90501 USA

**Date:**

February 9, 2012

**Subject:**

RSI Response to State of West Virginia RFP# FLT12006: AVL Devices.

# Table of Contents

# Executive Summary

## Our Commitment

Radio Satellite Integrators (RSI) has provided Automatic Vehicle Location (AVL) and mobile data systems that work to the highest levels of performance, reliability, and scalability since 1990. We are one of the oldest and most experienced AVL systems manufacturers and integrators in the industry and we have notable experience with local government and various utility fleets. Radio Satellite Integrators stands ready to support our services and products with the high standards demanded by entities like State of West Virginia.

## Our AVL Experience

RSI has implemented over 250 AVL systems in several thousand vehicles and has the largest breadth of AVL experience of any company in the world. RSI leverages this real world experience with municipal and government fleets similar to State of West Virginia to offer you the highest performing and most reliable systems on the market.

## State of West Virginia Objectives:

State of West Virginia seeks an Automatic Vehicle Location system to meet the unique requirements of its vehicle and dispatch operations for its vehicles. In addition, the customer can have this enterprise system fully integrated with ESRI ArcGIS, work order, or other fleet management systems. These systems provide the customer with the tools for faster and more efficient dispatching along with real-time and historical data that can be used for a variety of administrative tasks or analysis.

State of West Virginia desires to implement an AVL system to enhance the ability to efficiently manage the assignment of vehicle operations; to use the AVL and Mobile Data system to increase safety, productivity, and service to the citizens in your area of operations.

## The RSI Solution:

The RSI AVL system will establish a wireless gateway between your vehicle fleet and your base dispatch. The RSI AVL system will provide real-time vehicle location and status data on an ESRI ArcGIS Server based map interface (hosted servers).

An RSI Mobile unit will provide vehicle location and status data for the system as well as serve as the wireless link between vehicle and base. The mobile GPS device can be equipped with serial ports and sensors to integrate to virtually any devices and external status signals, such as ignition on/off, door open/shut, lights, arm, data terminal, navigation device, etc.

## RSI System Equipment

An RSI AVL solution consists of in-vehicle equipment and base applications and equipment. The ***In-Vehicle Equipment*** is centered on the RSI Mobile Unit, a self-contained unit integrating GPS location and sensor technologies, as well as wireless communications. The GPS unit can be connected to any devices or sensors including lights, ignition, doors open/closed, alarms, etc. In addition, any variety of in-vehicle computing devices such as Navigation Devices or MDT's can be connected to the mobile unit and mounted for a driver interface to the system in the future.

The ***Base Application*** is based on ESRI ArcGIS Server and can be implemented in a variety of configurations including either hosted or local Web browser based applications. Users interact with the system through industry-standard ESRI GIS mapping tools as well as customized reporting applications. The base application servers are typically hosted off-site by RSI.

The In-Vehicle Equipment and Base Application are linked via two-way cellular wireless communications, allowing for timely data transmission between the field and dispatch center.

## Wireless Communications

- **RSI can use virtually any wireless carrier for the communications portion of this system. We are proposing both GPRS from AT&T and CDMA from Verizon.**

RSI has worked with more communications technologies in our 20 years of technology leadership than any other vendor in this marketplace. RSI AVL systems can use any type of public data network (cellular) including: GPRS, GSM, EV-DO, Nextel/iDEN, CDMA, and many others.

Using various types of mobile units, RSI also has the capability to field hybrid solutions, which use a combination of multiple communications mediums simultaneously such as satellite, WiFi, two-way radio, and others.

**Please see the Wireless Communications Section in the proposal.**

## Third Party System Integration

One of the main differences between RSI and other AVL providers is our unparalleled experience with integrating our AVL and mobile data systems with third party applications. RSI has worked with dozens of third party providers of scheduling, dispatch, work order management, maintenance, as well as "home-grown" applications for various agencies.

RSI has extensive experience interfacing with all types of third party applications such as:

- Work Orders
- Maintenance
- Scheduling
- Dispatch
- Routing
- GIS

RSI is able to leverage its vast engineering experience to allow for the easy integration and real-time sharing of all system data with third party applications. In addition, the RSI AVL system provides a wireless gateway for these systems to share and update data from a driver interface in the vehicle. RSI has written interface programs specific to a number of such applications (using methods such as COM/DCOM, ODBC, XML, SOAP, TCP/IP sockets, CORBA, data queues in an AS/400 environment, network files, etc.).

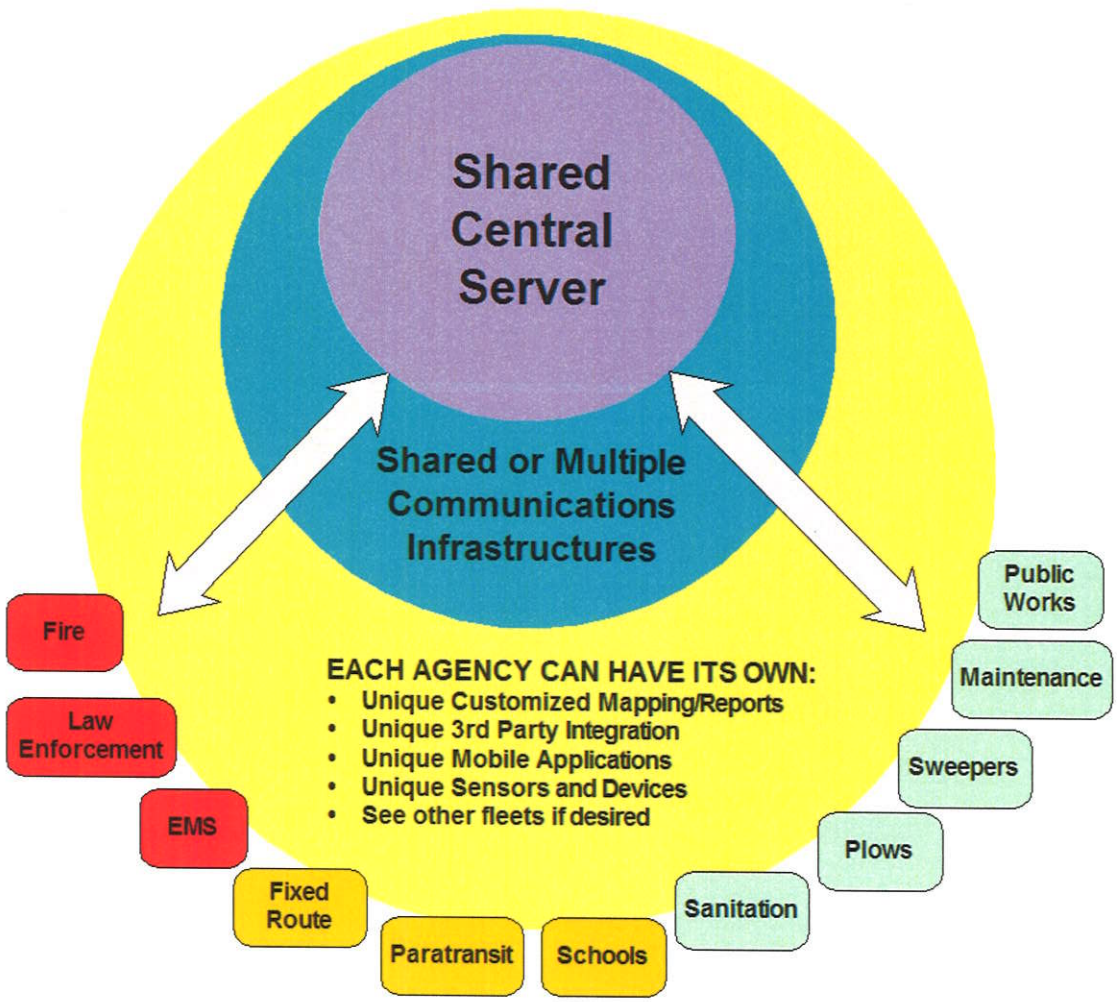
With dozens of customized integrated systems in place throughout the world, full system integration is just par for the course with the RSI system.

## Enterprise Shared Multi-Agency Systems

RSI has extensive experience implementing large enterprise systems that can be shared by several agencies within one organization, city, county, etc. The RSI system can be configured so that specific users only view their own vehicle fleet group, but the system will share the same backbone, servers, communications, etc.

For instance a city may only have to invest in one system yet their fire, transit, and public works departments can all use and share that same system.

RSI has implemented these shared enterprise systems for a variety of cities and counties through out the country including many of the largest metro governments in the country.



# Company Profile

## Company Overview:

Radio Satellite Integrators, Inc. (RSI) designs, manufactures and implements integrated vehicle tracking and mobile data systems utilizing the Global Positioning System (GPS) and wireless communications. Based in Torrance, California, the company was founded with the mission of providing high-performance, low-cost systems for tracking mobile assets with GPS. RSI has focused its research, product engineering, and design efforts on the development of systems that are reliable, easy to use, and fully customizable.

## Company History:

RSI was founded in 1990 to address the emerging needs of integrating GPS technology with wireless communication systems and Geographic Information System (GIS) digital mapping technology. The company has more than 250 tracking systems and thousands of mobile units in place worldwide.

## Company Products:

RSI is continually developing, upgrading, and customizing its core product: The RSI AVL System featuring the RSI Mobile unit. RSI currently ships several different models of mobile units which represents the most advanced vehicle tracking technology on the market for fleet management and AVL systems. Designed to keep one step ahead of the ever-evolving world of wireless communications, RSI has the capability to use multiple communications systems for vehicle data reporting. An upgrade path is also provided to new or additional communications methods as they are developed. The RSI unit can utilize virtually any communications link including: cellular, GSM/GPRS, CDMA, two-way radio, and satellite solutions.

RSI Mapping applications offer a choice of true client/server or browser based Web applications. RSI has extensive expertise customizing ESRI GIS mapping products as well third party application integration.

## Company Background:

RSI is privately held with senior management and outside investors as the primary shareholders. It has maximized its capabilities by building key strategic relationships with other vendors to allow for an end product that is truly the result of the combined efforts of hundreds of individuals. Products are developed and designed by RSI and its partners and manufactured in state of the art facilities for guaranteed low cost and reliability. Installation and implementation is typically overseen by RSI staff at a client's site.

# Experience

**Miami-Dade County**: Miami-Dade County has the largest population in Florida and the 8th largest in the United States. RSI is implementing a large countywide AVL system for several departments and agencies including Public Works, Building Inspectors, Neighborhood Compliance, Solid Waste, Fire, Consumer Services, Water, and Community Action. Using RSI's new ESRI ArcGIS Server based Web browser interface, county departments are able to better manage their mobile assets and provide improved customer service. With over 1000 vehicles installed, the system is constantly growing department by department.

**State of South Carolina- Department of Education:** RSI is currently installing a state-wide AVL system for the State of South Carolina DOE that will encompass 6000 school buses across the state. The State owns all 6000 school buses and is going to use the RSI AVL system to insure the districts are operating and reporting on the buses in a satisfactory manner. Some of the several dozen school districts will have the option to use the AVL system for their own operations if desired. The RSI system will track virtually every device and sensor imaginable on each bus including doors, lights, arms, emergency exits, etc.

**City of Phoenix:** RSI has installed a customized AVL and Mobile Data system to the City of Phoenix Department of Public Works. The system is equipped on the City's solid waste fleet and publis works fleet of approximately 400 vehicles. Each vehicle is equipped with an RSI mobile unit as well as a customized Garmin unit that will be used for messaging as well as individual route navigation for the drivers. The system allows fleet administrators to monitor the vehicles in real time as well as view reports on vehicle activity such as speed and location of armature lifts. The messaging terminals give the drivers the ability to instantly mark/record locations where there is a damaged or missing container.

**City of Houston**: The City of Houston, Texas is the fourth largest city in the United States centered in a metro area of nearly 6 million residents. RSI currently has a city-wide contract for multiple departments including Solid Waste, Fire, Public Works, Parks & Recreation, and others. The Web browser based AVL system is accessible by the individual departments and used in their own unique ways. Some of the various departments even have different reports, mobile hardware, and system configuration customized for their own unique needs.

**City of Oklahoma City**: The City of Oklahoma City has implemented an RSI AVL system over several departments including Water, Solid Waste, and Street Maintenance. Encompassing a wide variety of vehicles, the RSI AVL system provides different reports for different groups and vehicles. Some departments are using the RSI customized Garmin messaging terminal to provide instant communication between driver and dispatcher. In addition the RSI AVL system is tracking various sensor and events on certain vehicles such as lights, signs, and PTO activation.

**City of Jacksonville:** RSI has implemented a city-wide Automatic Vehicle Location system for the City of Jacksonville. The multi-agency system spans across several departments and various types of vehicle fleets including public works and various city agencies. Each department will has their own AVL interface to the system but will share some of the more expensive and transparent aspects of the system such as the communications backbone and centralized servers. The system is currently being expanded to additional city departments and agencies.

**City of Fresno:** RSI has implemented a full scale multi-agency AVL system for the City of Fresno. With a fast growing population around 1 million people in the greater metro area, the city looked to RSI to provide a customized AVL system for the Water, Sewer, and Planning agencies within the City. Spanning over 300 vehicles and dozens of computer workstations, the system is integrated with the City's extensive ESRI GIS mapping programs. The system has several key features including sensors on the sanitation vehicle loading arms.

**Boston Water and Sewer Commission:** RSI has implemented a turn-key Automatic Vehicle Location system for Boston Water and Sewer Commission. The (BWSC) currently operates water and sewer services for the City of Boston. RSI is implementing full end-to-end AVL system utilizing 2-way radio for wireless communications. With over 200 vehicles in the service fleet, the RSI AVL system uses a combination of ArcView and ArcGIS 9 for vehicle tracking using BWSC base maps.

**Dallas Area Rapid Transit (DART):** Dallas Area Rapid Transit (DART) serves Dallas and 12 surrounding cities with public transportation including rail and bus services. The DART network of services moves more than 200,000 passengers per day across the 700-square-mile service area. Each of the 800 DART buses is installed with the RSI V-Track™ unit. Each V-Track™ unit is interfaced with a GFI GenFare fare box and also prompts the on-board headsigns and annunciators.

**Erie County Water Authority**: The Erie County Water Authority (ECWA) is responsible for the upkeep and supply of water to 640,000 residents in the greater Buffalo, NY area. Using the RSI AVL system and Kenwood two-way radios, the ECWA is able to track and monitor its fleet for a variety of dispatching, supervisory, and security uses. Viewed on RSI's powerful mapping software, ECWA administration can see detailed real-time and archived location data for the fleet of technician, supervisor, meter reader, emergency, and other operations vehicles.

**Consolidated Utility District:** The Consolidated Utility District of Rutherford County supplies water to over 30,000 residents of Rutherford County, Tennessee-one of the fastest growing counties in the nation. Radio Satellite Integrators installed a turn-key AVL system for their vehicle fleet using a stand-alone 2-way radio system. The Steuben County AVL system uses the ESRI ArcGIS mapping software as the underlying engine to the RSI AVL customized application.

**Town of Mansfield Public Works:** The Town of Mansfield, Connecticut is located in the northeast corner of the state of Connecticut. With a population of 21,000 covering 45 square miles, public works are just as important to this small town as they are to any city, especially with their harsh winters. Mansfield has the RSI AVL system in their multi-use public works vehicles for snow plowing, spreading, salting, sanding, and various public works duties. The system uses a public data network for wireless communications.

**Richland County, SC:** Richland County is home to the state capitol of Columbia and is the second most populous county in South Carolina with approximately 340,000 people. The RSI AVL System will provide county-wide GPS tracking of their vehicles, concentrating on their public works fleets. The RSI AVL system combines GPS, two-way radio, and customized mapping software to provide real-time vehicle fleet location data to dispatchers and administrators. The AVL project was spearheaded by the County's GIS (Geographic Information Systems) department, who selected RSI based on several factors including RSI's expertise in using ESRI ArcGIS 9 software.

**British Petroleum** (BP America Production Company): RSI has implemented the first phase of a highly customized AVL system for a set of BP's vehicles that maintain wellheads in various remote areas of the southwest United States. Often times off paved roads or out of cellular coverage, the RSI AVL system uses a highly rugged hybrid mobile unit that can switch between cellular and satellite communications networks. These irregular conditions made it imperative that the system utilize BP's actual ESRI GIS map data as well guaranteed wireless communications. The system also incorporates multiple emergency panic buttons including a wireless handheld panic button that can be relayed via satellite when necessary.

**St. Lucie County Fire Rescue:** Radio Satellite Integrators has been selected by the St. Lucie County Fire Rescue to implement a fully integrated Automatic Vehicle Location (AVL) and mobile data system. The turn-key system will include 43 of the District's fire rescue vehicles and operate over a standard 2-way radio system that covers the entire county. The system will also include fully ruggedized Mobile Data Computers running RSI's SPOT (Site Preplan On-board Technology) mobile fire response software. The AVL system will be integrated with the existing CAD system from HTE Inc.

**City of Visalia – Department of Public Works**: Located in California's San Joaquin Valley, the City of Visalia is a central hub for the state's thriving agricultural industry and home to more than 123,000 people. As one of the fastest growing cities in the country, Visalia needed help managing its fleet of public works and solid waste vehicles. Using a combination of RSI AVL and ESRI ArcGIS, the city can monitor and manage vehicle fleet activity to improve operational efficiency as well as customer service.

**Hawaii County Mass Transit:** Based in Hilo on the Big Island of Hawaii, The Hele-On buses run by Hawaii County Mass Transit provides public transportation all around the island servicing approximately 400,000 passengers per year. RSI has provided Hawaii County Mass Transit an AVL and Mobile Data Terminal System allowing administrators to track as well as communicate with the buses in real time using a Web based interface. RSI's newly updated Web based AVL interface uses ESRI ArcGIS Server as the underlying mapping engine for the AVL map interface.

**District of Columbia Public Schools:** As the local school district for our nation's capitol in Washington D.C., DCPS faces unique challenges in transporting its students throughout the year. In order to optimize the operation of nearly 800 school buses over this sprawling urban city, DCPS enlisted the help of vehicle tracking and routing technologies from Radio Satellite Integrators and the Trapeze Group. RSI and Trapeze were brought in to immediately take over and replace a competitor's routing and AVL solution that was not meeting the District's needs. The new integrated solution now provides valuable operational data such as planned versus actual route performance as well as door and light/arm activity on the buses.

**City of Tampa Fire Rescue:** RSI implemented a complete AVL and Mobile Data system for the City of Tampa, Florida. The system operates over existing Tampa frequencies and towers, and is fully integrated to the Astra CAD system running on an IBM AS/400 system. RSI was able to implement its SmartSlot technology utilizing GPS time synchronization which allows for vehicle updates as fast as 5 per second using the City's existing Ericsson voice radios and allocated voice frequencies. Another critical project component was interfacing to the City's Computer Aided Dispatch (CAD) system from Astra software of North Carolina.

**Horry County, SC:** Horry County is located on the eastern most tip of the South Carolina coast and is home to the popular tourist destination city of Myrtle Beach. The Horry County government is currently implementing a multi-department AVL system for various fleets and agencies within the County. After witnessing the overwhelming success of the RSI AVL system in nearby Richland County, Horry County procured a system of their own.

**CEMIG:** Supplying energy to 17 million people, CEMIG is Brazil's largest electric utility company and one of the largest in all of Latin America. CEMIG covers the State of Minas Gerais expanding 560,000 square kilometers, which is equivalent in size to the entire country of France. To efficiently manage a utility workforce that can service this entire state requires a complex yet cost-effective logistical solution. In order to take on this gargantuan task, CEMIG contracted Radio Satellite Integrators to implement an AVL and mobile data system utilizing their existing E.F. Johnson MultiNet Trunking radio system. The initial phase of the project encompasses 400 of CEMIG's 2000 vehicles.

**Duval County Public Schools:** Duval County Public Schools is the 15th largest school district in the country with an enrollment of more than 155,000 students. Mainly consisting of the City of Jacksonville, DCPS contracted STA Inc. to handle its student transportation services. STA uses a combination of Trapeze software and RSI's AVL solution to track nearly 300 district school buses. Using the AVL system provided by RSI and Trapeze Software, the integrated solution provides valuable data to transportation operations such as doors sensors and also allows them to compare planned versus actual route performance.

**Chugach Electric Association**: Based in Anchorage, Alaska, the Chugach Electric Association provides power and electrical services to over 81,000 retail customers in the state of Alaska. The Chugach Electric Association ranks among the largest of the more than 900 electric cooperatives in the country. Utilizing RSI's AVL system, Chugach Electric is able to monitor their vehicle fleet in relation their own ESRI GIS data and infrastructure.

**City of Torrance Fire Department:** RSI has implemented a custom GPS-based Vehicle Tracking System for the Torrance FD using existing VHF frequencies. The system is integrated with the City's Tritech CAD system and includes RSI's SPOT (Site Preplan On-Board Technology) software for Pre-Incident Planning and In-Vehicle Navigation running on ruggedized mobile computers in the vehicles. Torrance FD has seen a significant decrease in on-site response times since the implementation of the AVL system.

**South Coast Air Quality Management District (AQMD):** The South Coast Air Quality Management District (AQMD) serves as the air quality regulation and enforcement agency for an area of 12,000 square miles covering four counties in southern California. RSI has implemented two separate GPS systems for AQMD, first in the late 1990's and more recently in 2008. RSI initially tracked AQMD inspector vehicles and now has implemented a customized AVL system to monitor hundreds of heavy duty vehicles for Carl Moyer funding compliance reports. These reports show the AQMD the exact engine hours and mileage of these vehicles (and thereby emission/pollution levels) within the South Coast basin.

# References

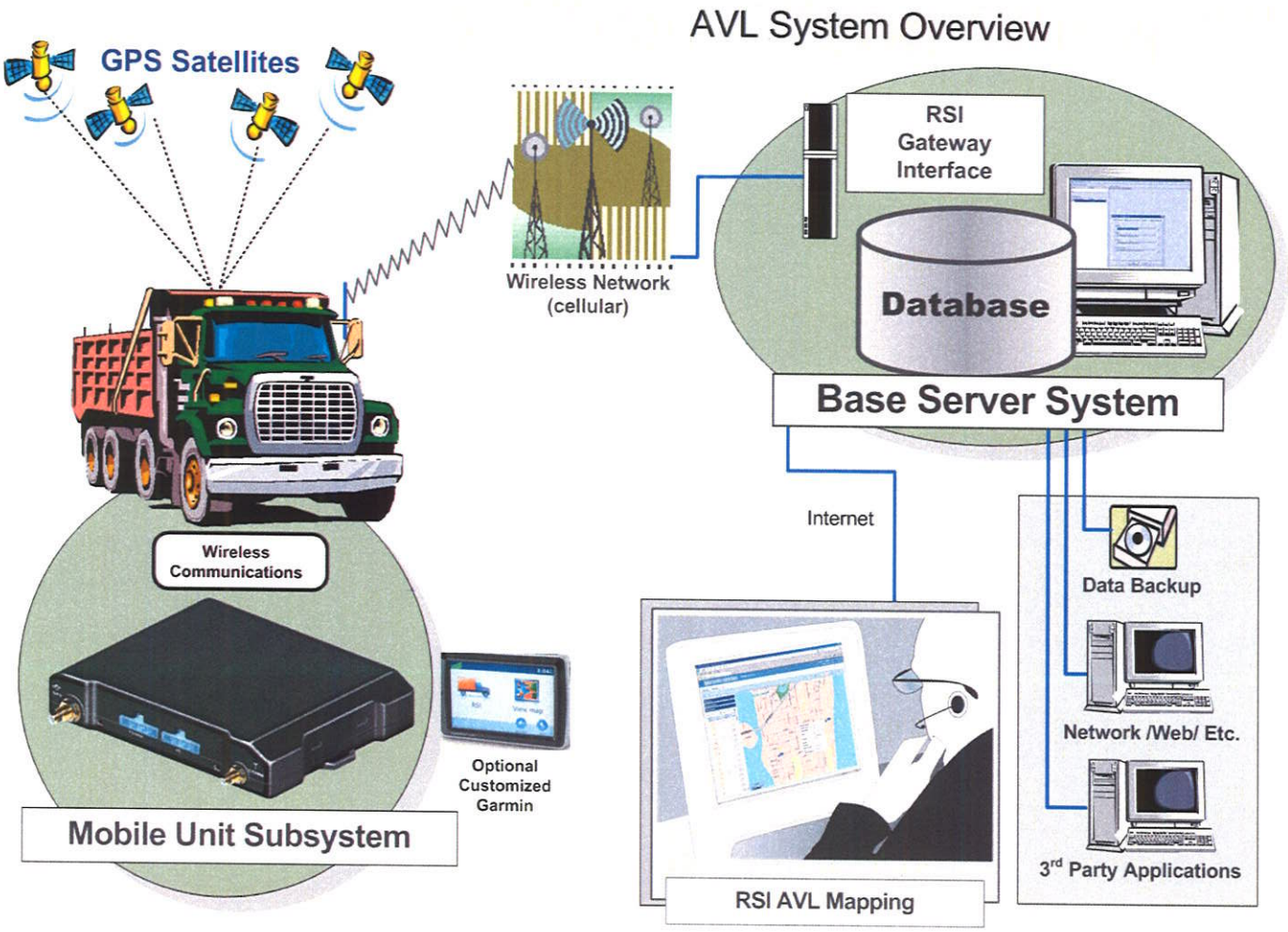
**Miami-Dade County**
Miami, FL
Phone: 305-514-6691
Contact: Daniel Diaz
Division Director Fleet Mgmt.
ddiaz@miamidade.gov

**City of Oklahoma City**
Oklahoma City, OK
Phone: 405-297-2237
Contact: Bobbie Borchardt
bobbie.borchardt@okc.gov

**City of Phoenix**
**Department of Public Works**
Phoenix, AZ
Phone: (602) 534-2524
Contact: Larry Lasco
larry.lasco@phoenix.gov

**Boston Water & Sewer Commission**
Boston, MA
Phone: 617-989-7522
Contact: Ronald Sitcawich
SitcawichRJ@BWSC.ORG

# Technical Overview




## Radio Satellite Integrator's AVL System

An RSI AVL solution consists of in-vehicle equipment and base applications and equipment. The **In-Vehicle Equipment is centered on the RSI Mobile Unit,** a self-contained "black box" device integrating GPS location and sensor technologies, as well as wireless communications. The mobile device can be connected to any device or sensor including lights, ignition, doors open/closed, alarms, etc. In addition, any variety of in-vehicle computing devices such as laptops or MDT's can be connected to the unit and mounted for a driver interface to the system.

The Mobile unit is responsible for the reporting of vehicle location and status information in addition to acting, if desired in the future, as a transparent communications gateway between the Base and Mobile Data or other onboard devices such as alarms, etc.

The ***Base Application*** will be a configurable Web-browser based application based on ESRI ArcGIS Server hosted offsite by RSI. Users interact with the system through industry-standard mapping tools as well as customized reporting applications. The RSI AVL program will use the client's existing ESRI GIS map data if it's available.

The Base Server manages all fleet communications and configuration, acts as a messaging and data transfer gateway between base-side applications and in-vehicle devices, and archives and distributes the vehicle location and status information to the mapping application over the Internet. The Base Server will be hosted by RSI in our state-of-the-art server hosting facilities.

# Wireless Communications Options

RSI has worked with more communications technologies in our 20 years of technology leadership than any other vendor in this marketplace.

There are several options for wireless communications and RSI is proficient with all of them.

| | |
|---|---|
| **Public Data Network (Cellular)** | • GPRS/GSM/EDGE (AT&T, T-Mobile, Rogers, etc.)<br>• CDMA/EV-DO/1xRTT (Verizon, Alltel, etc.)<br>• Others: Sprint/Nextel/iDEN/<br>• High Speed Broadband Networks (3G/4G) |
| **Other Options** (hybrid communications) | • WiFi (802.11)<br>• Satellite (Iridium, Inmarsat, etc.)<br>• Two-way radio (AVL data dedicated systems) |

- **RSI can use virtually any wireless carrier for the communications portion of this system. We are proposing both GPRS from AT&T and CDMA from Verizon.**

## Hybrid Communications Option

RSI specializes in engineering customized AVL systems that can use a combination of wireless communications technologies. Our mobile units can support any combination of: cellular, satellite, two-way radio, WiFi, as several others. RSI has unparalleled experience in the design and implementation of these complicated customized hybrid systems.

# Public Data Network Options

The recommended and most cost efficient means to send wireless data is through a cellular or public data network. Public data networks are wireless data networks that are provided by all the major cellular phone companies. The wireless data networks generally have the same coverage areas as their voice and mobile phone coverage areas.

## Wireless Carriers

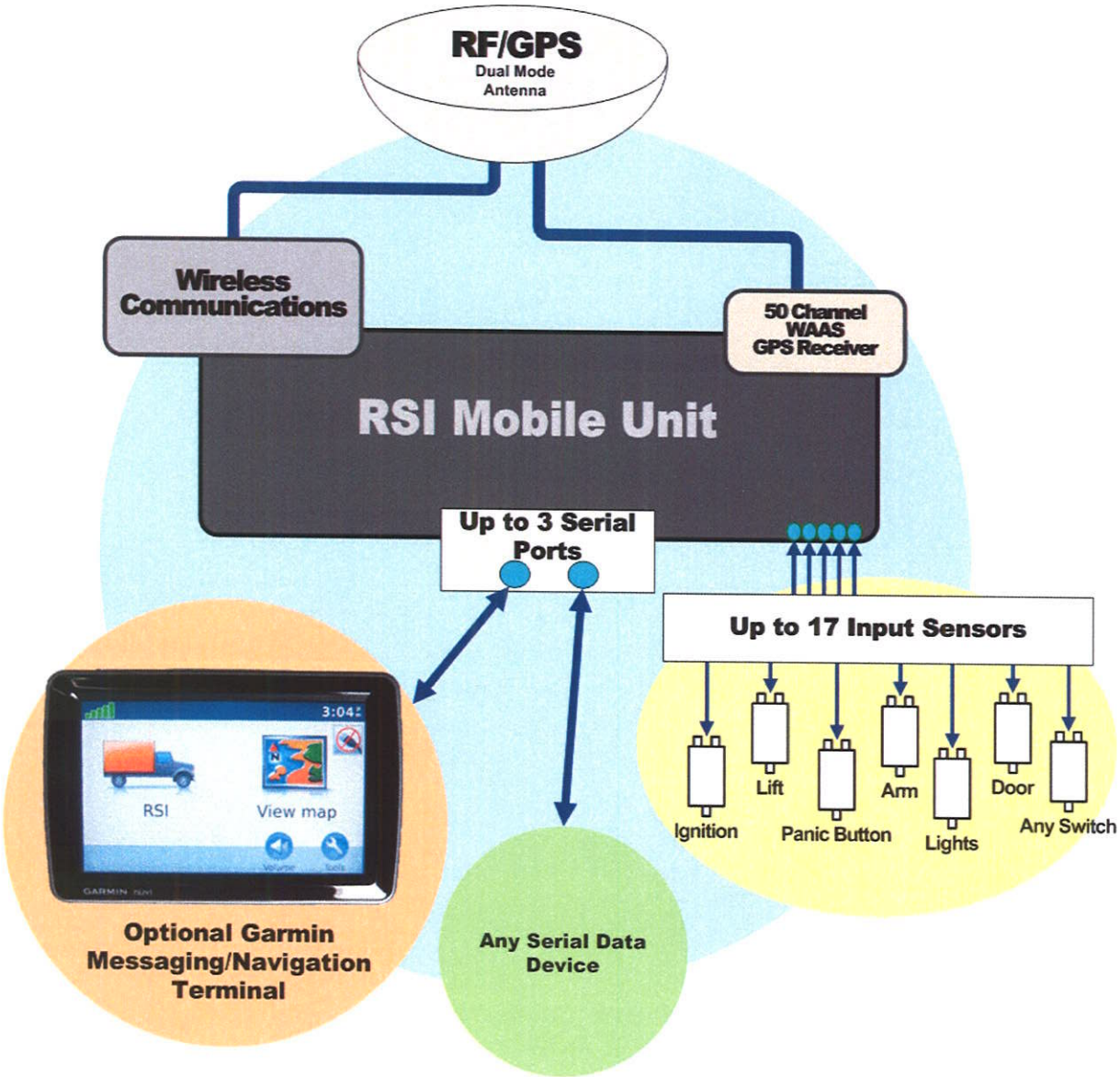
RSI has partnerships and capabilities with every major wireless carrier. Choosing a carrier depends on several factors including availability in your area, quality of coverage, rate plans, and existing contracts/discounts. Some technologies have higher upfront equipment costs but lower data plans, and vice versa.

## Update Rate

The update rate you need will depend on how frequently you want your location and other data from the vehicles. Update rates can adjust dynamically depending on factors such as vehicle status or the triggering of an on-board sensor.

RSI will work with you to help determine a wireless technology, carrier, and update rate for you as we have extensive experience implementing AVL systems with fleets just like yours.

# RSI Mobile Unit



## RSI Mobile Unit

The recommended RSI Mobile Subsystem consists of a RSI Mobile Unit; GPS and RF antennas and associated cabling; all required data, sensor, and power connections.

Each RSI Mobile Unit contains a 50 channel GPS receiver (or greater), wireless communications, and multiple external data and sensor ports. To ensure reliability and availability of the entire system, the critical mobile units are built to exacting military standards to resist vibration, climate, and electromagnetic interference. First-quality components, extensive RF/EMI shielding, and specialty power conditioning circuits protect the GPS receiver and micro-controller in the "computer hostile" vehicular environment.

Each RSI Mobile Unit will be equipped with a state-of-the-art 50 channel, WAAS enabled, all-in-view GPS receiver. This GPS receiver delivers superior performance and field-proven reliability and provides for fast signal reacquisition, position accuracy, and the filtering of spurious and erroneous data. The GPS accuracy is 2 meters (7 feet).

RSI is offering two types of mobile units with similar functionality that support different amounts of inputs/outputs: up to 5 (standard) and up to 17 (optional).

## Interface to Devices and Sensors

The RSI Mobile Unit is capable of interfacing to a wide variety of external mobile data terminals, mobile computing devices, in-vehicle peripherals, and various sensor systems. The RSI Mobile Unit serves as a mobile gateway, paying particular attention to supporting a variety of devices. The RSI Mobile Unit will be connected to the on-board vehicle power and any sensor signals as desired such as:

- Ignition on/off
- Door open/locked
- Lights on/off
- Any device/event/switch/data source
    - Armature/device up/down
    - RF ID or Card Swipe Reader
    - Vehicle Engine Diagnostics
    - Brooms/Plows/Spreaders
    - Landmarking
    - Siren/Light Bar/Flashers
    - PTO
    - Etc.

## Vehicle Diagnostics Option

As an option, an interface to engine diagnostics can be added to the RSI AVL system giving you real-time access to engine trouble codes and other vehicle information for either light duty or heavy duty vehicle types.

## Panic Button Feature

The RSI Mobile Unit can be equipped with an emergency panic button configuration that is a dashboard-mounted button that sends a priority signal over-the-air to the dispatch interface or real-time alert. RSI can also offer a wireless handheld panic button that can be activated up to 300 feet from the vehicle.

## Antennas, Cables, and Connectors

The GPS/RF antenna is typically an active low-profile micro-strip, two-in-one "hockey-puck" type and is connected to the RSI Mobile Unit with low-loss coaxial cable. The high gain antenna increases the ability for the GPS to receive weak signals under trees or canopy, while its very small design presents little or no profile for tampering or inadvertent damage. The RSI Mobile Unit can use any type of GPS antenna that is required or specified. The RSI Mobile Unit comes with all bracketing, cabling, and connectors required for full installation. RSI configures the system so it cannot be easily disabled by the driver and/or user.

# RSI Mobile Unit (5 I/O)

- GSM/GPRS or CDMA 1xRTT radio configurations
- Internal or External Cellular and GPS antenna options for easy installation
- High Sensitivity GPS
- 3-Axis Precision Accelerometer
- 20,000 Buffered Message Log
- 32 Geo-fence capability
- 5 Inputs/3 Outputs/1-wire® Interface for Driver ID, Temperature Sensors, and more.
- Dual serial ports
- Garmin® FMI support
- Power management sleep modes
- Automatic, over-the-air configuration, firmware download, and device management

## Communication Specifications

| | |
|---|---|
| GSM/GPRS Quad-Band | 850/900/1800/1900 MHz |
| GSM/GPRS Output Power | 850: 2 Watts (Class 4) |
| | 900: 2 Watts (Class 4) |
| | 1800: 1 Watt (Class 1) |
| | 1900: 1 Watt (Class 1) |
| CDMA Dual-Band | 800/1900 MHz |
| CDMA Output Power | 800: +24 dBm |
| | 1900: +24 dBm |
| Data Support | SMS, GPRS or CDMA 1xRTT packet data |

## Certifications

Fully certified FCC, CE, IC, PTCRB, Cellular Carriers

## Location Specifications

| | |
|---|---|
| Location Technology | 50 Channel GPS |
| | SBAS: WAAS, EGNOS, MSAS |
| Location Accuracy | 2.0 meter CEP (with SBAS) |
| Tracking Sensitivity | -162 dBm |
| Acquisition Sensitivity | -147 dBm |
| AGPS capable | |

## Comprehensive I/O

| | |
|---|---|
| Inputs | 5 (2 fixed bias low, 3 fixed bias high) |
| Outputs | 3 Relay Driver (150 mA) |
| Serial Interfaces | 2 (1 TTL serial, 1 switched power TTL) |
| A/D Inputs | 2 (1 internal, 1 external) |
| 1-Wire® Interface | Driver ID |
| | Temperature Sense |
| Status LEDs | GPS and Cellular |

## Connectors, SIM Access

| | |
|---|---|
| I/O, Power, Programming | 20-pin Molex-type fused power harness |
| GPS Antenna | External SMA (w/ tamper monitoring, 3V) or Internal |
| Cellular Antenna | External SMC or Internal |
| SIM Access | Internal (GSM/GPRS variant only) |

## Electrical Specifications

| | |
|---|---|
| Operating Voltage | 6-32 VDC |
| Power Consumption | <3 mA @ 12 V (Deep Sleep) |
| | <10 mA @ 12 V (Sleep on Network with SMS) |
| | <20 mA @ 12 V (Sleep on Network with GPRS) |
| | < 70 mA @ 12 V (Active Tracking) |

## Physical Specifications

| | |
|---|---|
| Dimensions | 2.0 x 4.0 x 0.85 inches (51 x 102 x 22 mm) |
| Weight | 74 g (external), 85 g (internal) |

## Environmental Specifications

| | |
|---|---|
| Operating Temperature | -30° to +75° C |
| Storage Temperature | -40° to +85° C |
| Humidity | 95% R.H. @ 70° C non-condensing |
| Shock and Vibration | U.S. Mil. Std. 202G and 810F, SAE J1455 |
| EMC/EMI: | SAE J1113 |

## Mounting

Tie-wrap, Adhesive, or Velcro
Screw Mounting Bracket

## Optional Features/Functions

- Driver ID with 1-Wire® protocol
- Temperature Sensing via 1-Wire® protocol
- Backup Battery
- External GPS and Cellular Antennas
- Internal GPS and Cellular Antennas
- NMEA data via serial
- External A/D input
- Serial Cables
- jPOD™ truck ECU interface
- Garmin® FMI compatible interface cable
- Piezo speaker, panic button, and privacy button
- Power harness with two (2) 3A Fuses

*Specifications Subject to Change.*

# RSI Mobile Unit (17 I/O)

- GSM/GPRS, CDMA 1X, or HSPA cellular configurations
- Dual reporting 20,000 buffered message log
- Built-in 3-axis accelerometer for motion sensing, hard braking, impact detection
- 32 built-in Geo-Zones, plus any combination of circle or polygon zones, up to 5400 points
- Web-Based Device Management diagnostic tools
- Garmin, MDT, and other advanced peripherals support

## Location Specifications

| | |
|---|---|
| Location Technology | 50 Channel GPS (with SBAS)<br>SBAS: WAAS, EGNOS, MSAS, GAGAN |
| Location Accuracy | 2.0 meter CEP (with SBAS) |
| Tracking Sensitivity | -160dBm |
| Acquisition Sensitivity | -147dBm |
| Kick Start | 3 Sec @ -130dBm |
| AGPS capable | |

## Communications Specifications

| | |
|---|---|
| Data Support | SMS, GPRS (UDP), CDMA 1X packet data |
| Cellular/PCS: | FCC– Parts 22, 24; PTCRB |
| GPRS | Up to class 12 |
| GPRS Quad-Band | 850/900/1800/1900 MHz |
| CDMA Dual-Band | 800/1900 MHz |
| HSPA/UMTS Tri-Band | 850/1800/1900 MHz<br>HSUPA 2.0 Mbps<br>HSDPA 7.2 Mbps |

## Comprehensive I/O

| | |
|---|---|
| Ignition Input | 1 |
| Inputs | 7 (high/low selectable 0-30 VDC) |
| Outputs | 5 (open collector relay 150mA) |
| Current Limited Outputs | 2 (20mA) |
| A/D Inputs | 4 (0 - 30VDC, +/-0.1V accuracy) |
| 1-Wire® Interface | Driver ID<br>Temperature Sense |
| Status LEDs | GPS and Cellular |

## Optional Features (with add-in daughter boards)

| | |
|---|---|
| WiFi | 802.11b/g/i |
| jPOD Truck ECU Interface | J1708, J1939 |

## Certifications

Fully certified FCC, CE, IC, PTCRB, CARRIERS

## Electrical Specifications

| | |
|---|---|
| Operating Voltage | 6 - 32V DC |
| Power consumption | < 4 mA @ 12VDC (Deep Sleep)<br>< 10 mA @ 12VDC (Sleep on Network (SMS))<br>< 20 mA @ 12VDC (Sleep on Network (GPRS))<br>< 70 mA @ 12VDC (Active Tracking) |

## Physical Specifications

| | |
|---|---|
| Dimensions | 4.3 (L) x 3.2 (W) x 0.86" (H), (110 x 81 x 22mm) |
| Weight | 4 oz, (113 g) |

## Environmental Specifications

| | |
|---|---|
| Temperature | -30° C to 70° C (Operating), -40° C to 85° C (Storage) |
| Humidity | 95% RH @ 50° C non-condensing |
| Shock and Vibration | U.S. Military Standard202G and 810G, SAE J1455 |
| EMC/EMI | SAE J1113 |

## Connectors, SIM Access

| | |
|---|---|
| SIM Access | Internal |
| External Cellular | SMC |
| External GPS | SMA (with tamper monitoring, 3.0v) |
| WiFi option | RP-SMA |
| Vehicle Bus option | DB-15 |
| 4-Pin Molex | Power, Ground, Ignition, A/D |
| 2 5-Pin Molex | Switched Power Serial |
| 16-Pin Molex | Expansion port |
| 22-Pin Molex | I/O connection |

## Optional Features/Functions

- External antennas (GPS, cellular, combined GPS/cellular)
- Serial adapter cable RS-232 8-wire (PPP, AT Commands, NMEA GPS output)
- jPOD dongle for truck ECU interface
- Connectorized I/O wiring harnesses

*Specifications subject to change*

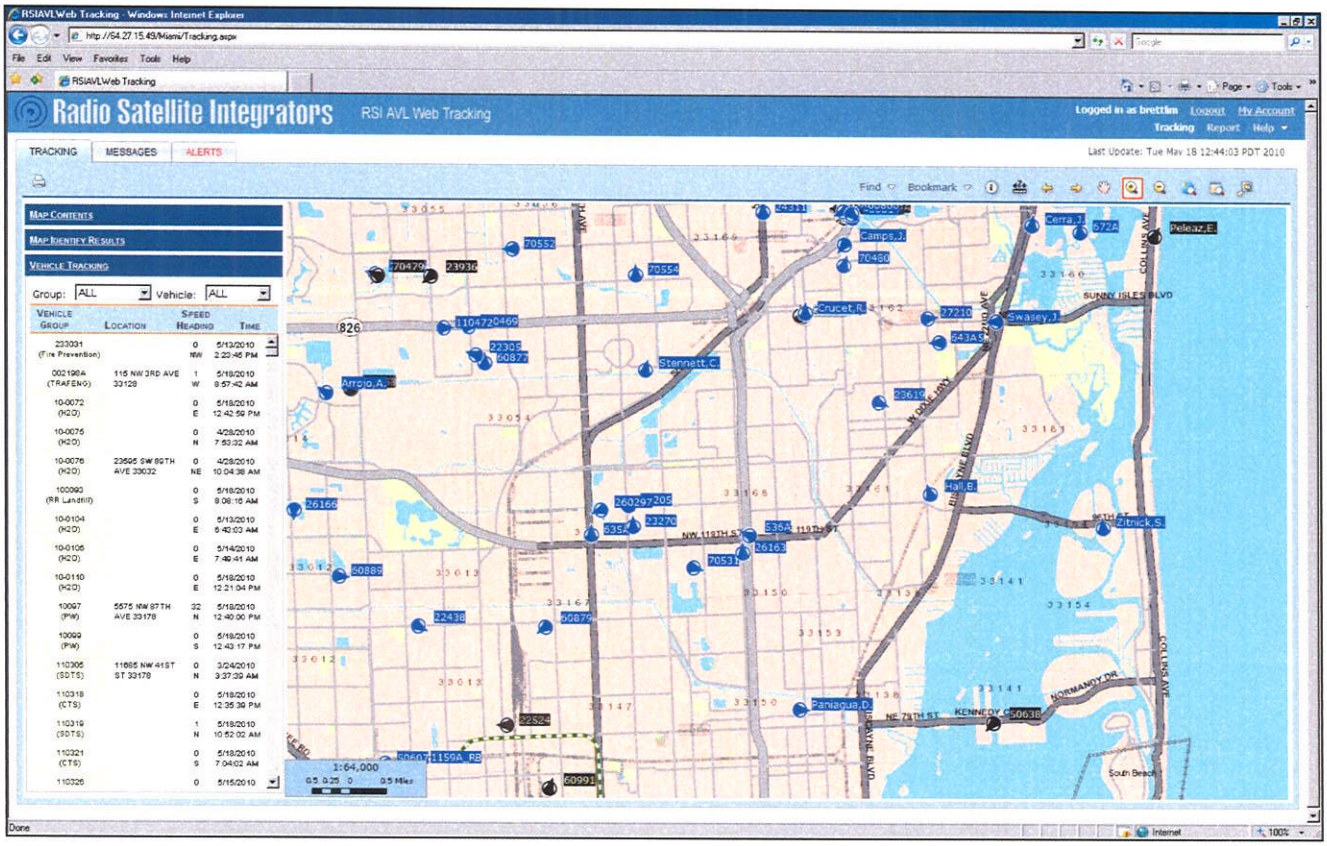
# Mapping and Display Application

Our powerful mapping and display application, RSI AVL, will provide operations personnel the capability to rapidly, geographically analyze the GPS information and make critical decisions. This application is based on an ESRI ArcGIS Server Geographic Information System (GIS), which displays data collected from the mobile units at the Base Server. They run the tools and controls that enable the operations personal to quickly adapt the information they are collecting and analyzing the views they are using to manage evolving situations.

The Mapping and Display Application provides valuable AVL Management tools:

- Real-Time Vehicle Tracking (map-based)
- Report Generation (tabular or map-based)

The assignment of user-permission levels allows access to appropriate sub-sets of the installed functionality.

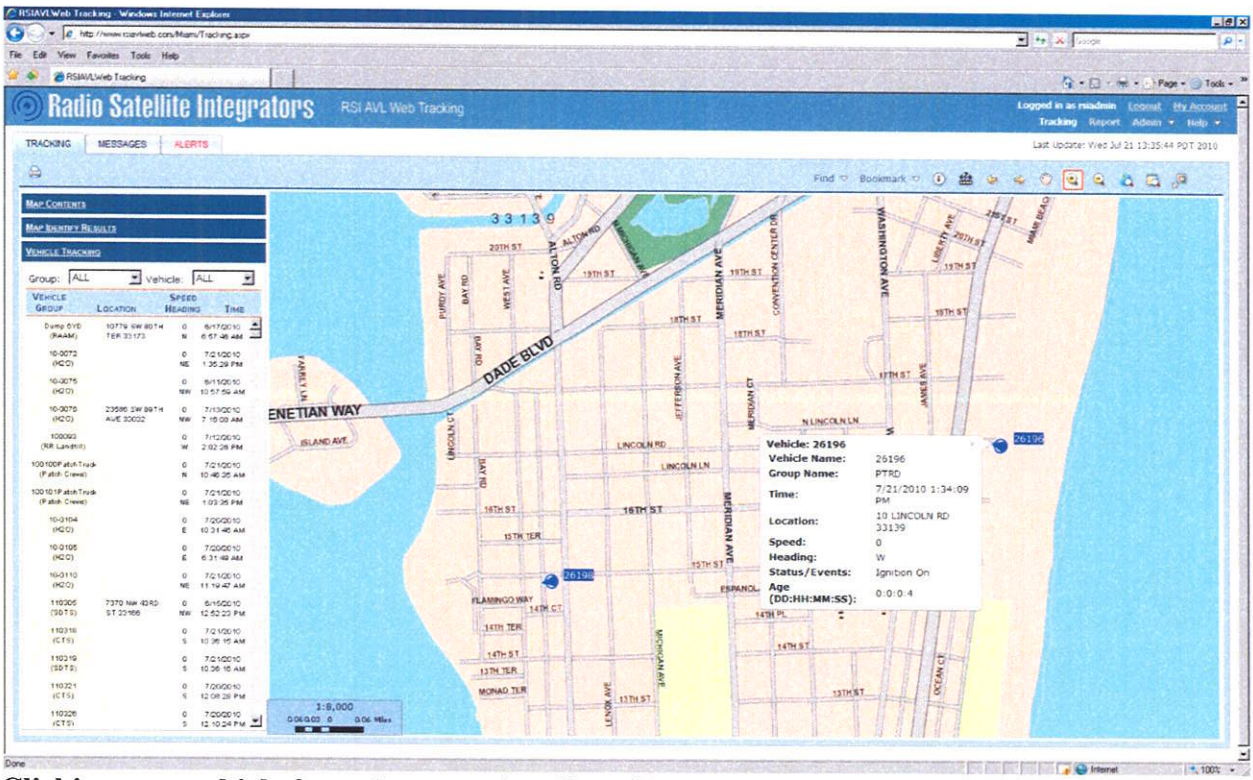



*Note: Your user interface will differ depending on customized configuration and preferences.*

## Real-Time Vehicle Tracking

The RSI AVL Application displays the current location and status of the vehicle fleet, along with address, route, and other attribute information, over both raster and vector-based maps (as desired). The use of a powerful ESRI ArcGIS Server engine along with the incorporation of vector map data allows for almost endless display and analysis possibilities. A wide variety of customizable functionality is available and is described below.

The vehicle icons may be configured to indicate (using colors, directional symbols, labels, and size) various vehicle attributes (such as ID, status, speed, heading, etc.). All of the vehicle attribute data may be instantly queried and displayed in a pop-up box using a standard identify tool. Further, alarm and event notification may be set to notify the user of a status change for a particular vehicle.



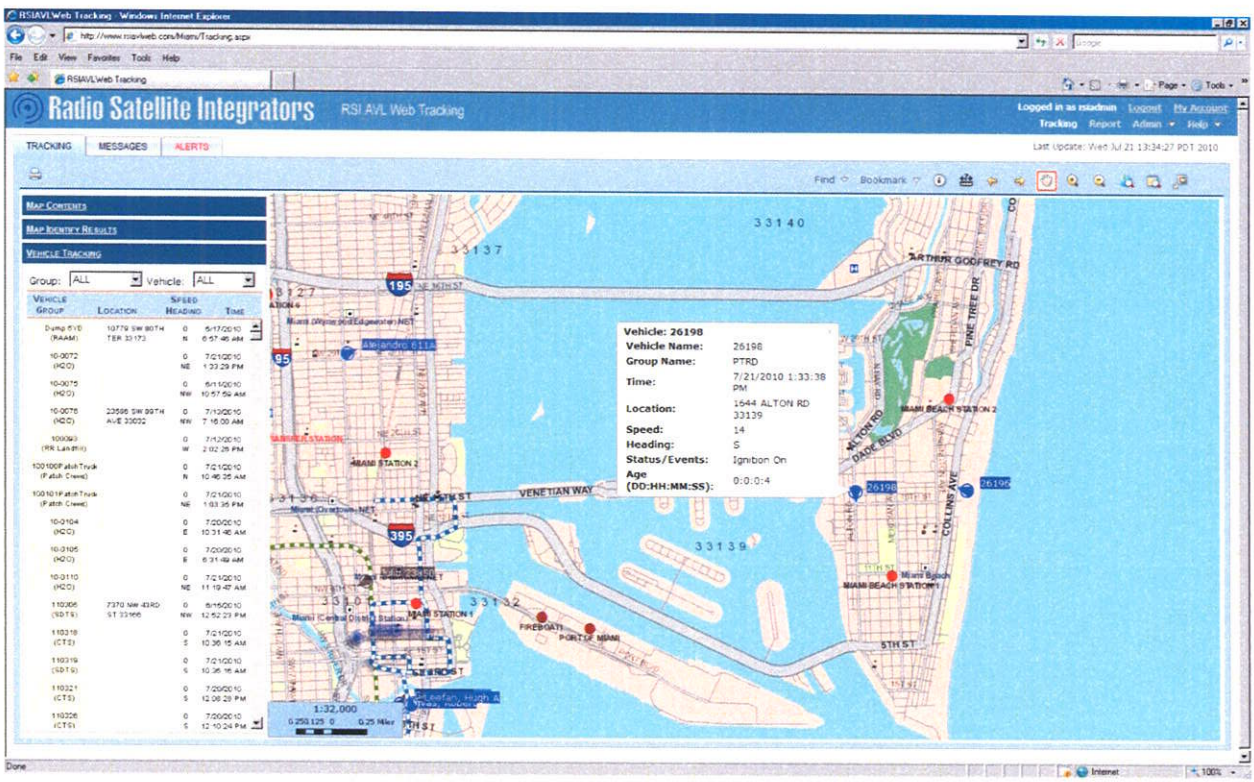

**Clicking on a vehicle from the menu bar list will reveal more options for that specific vehicle.**

## Map Viewing Features

The RSI AVL Application displays the vehicle data in a "map window." The map window can be set to display a particular area, route, stop, or address, or to track a specific sub-set of the entire fleet (from the entire fleet to an individual vehicle). In RSI AVL the map display window possesses a full-set of map manipulation and query functionality. Map manipulation tools and buttons are available to zoom, pan, and center the display on a particular vehicle, route, stop, or address. Additional tools are available to enable or disable labeling, to customize the map display according to user preferences, and to enter points and attributes (for incidents, etc.). Map query options include the ability to locate an address, vehicle, or stop, along with the capability to identify the closest available vehicle(s) to any entered point, address, or incident.

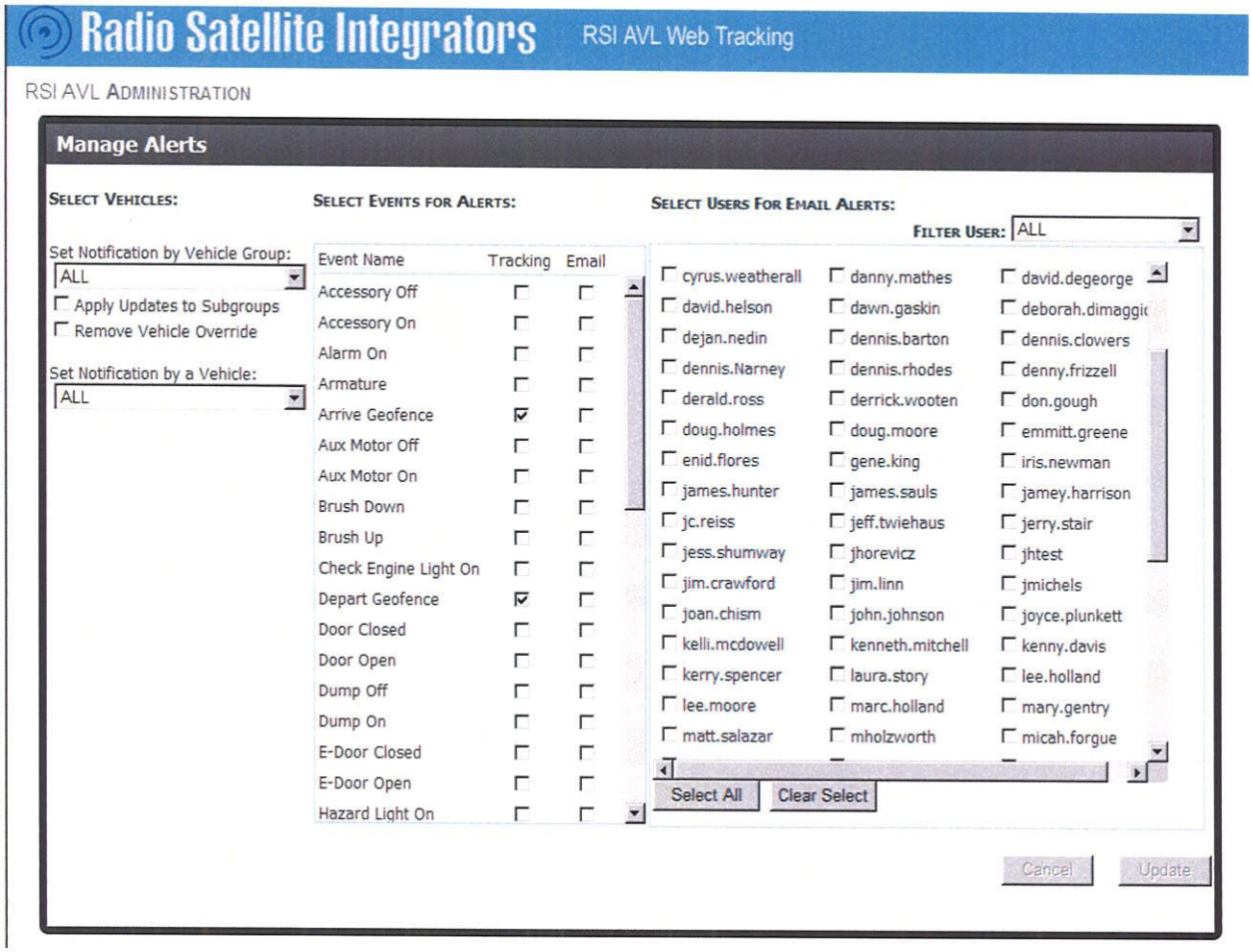
## GeoFencing

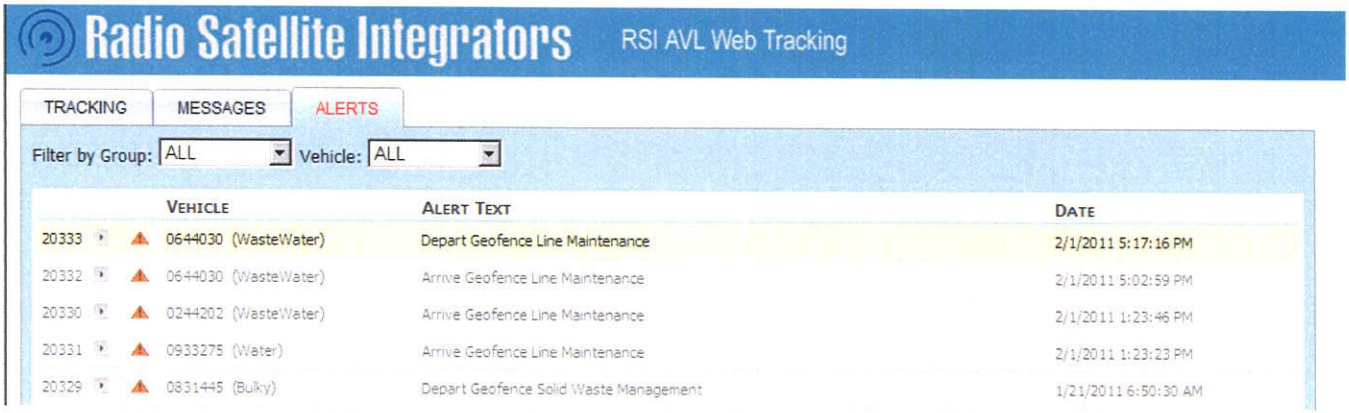
The RSI AVL system allows the user to set geo-fences on the map display. This geofence will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Geofences can be created as polygons or a configurable radius from a specific point, as well as created from existing boundaries, landmarks or zones within your GIS.



## Real-Time Alerts

The RSI AVL system allows authorized administrators extensive control over system features including alerts and alarms. The system can be configured to notify selected users when specific events occur with any of the vehicles. This includes geofences, hours of operation, idle, panic buttons, etc. Notifications can be sent as an e-mail, SMS, or to the alert screen on the software.



## ESRI

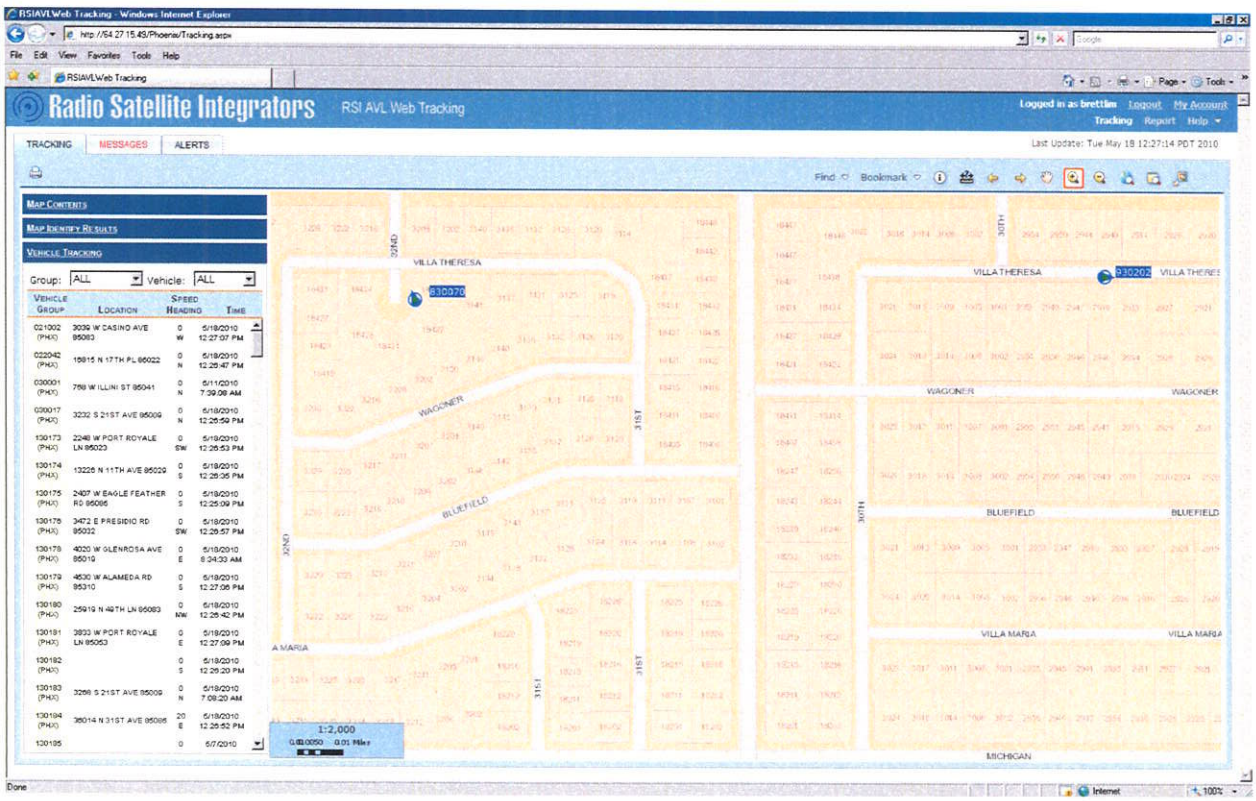
The RSI AVL Mapping application is based on mapping and GIS engines from ESRI, the largest GIS software vendor in the world, and a pioneer of the technology. Their systems are in use throughout the world by utilities, governments, and large companies, in thousands of applications, which rely on analysis of spatially referenced data. RSI AVL was the first system in the world to implement a real-time GPS interface into ArcView. The RSI AVL application is based on the actual ESRI ArcGIS Server software, but no licenses are needed by the customer.

ESRI Technology

AUTHORIZED BUSINESS PARTNER

## Using YOUR Map Data

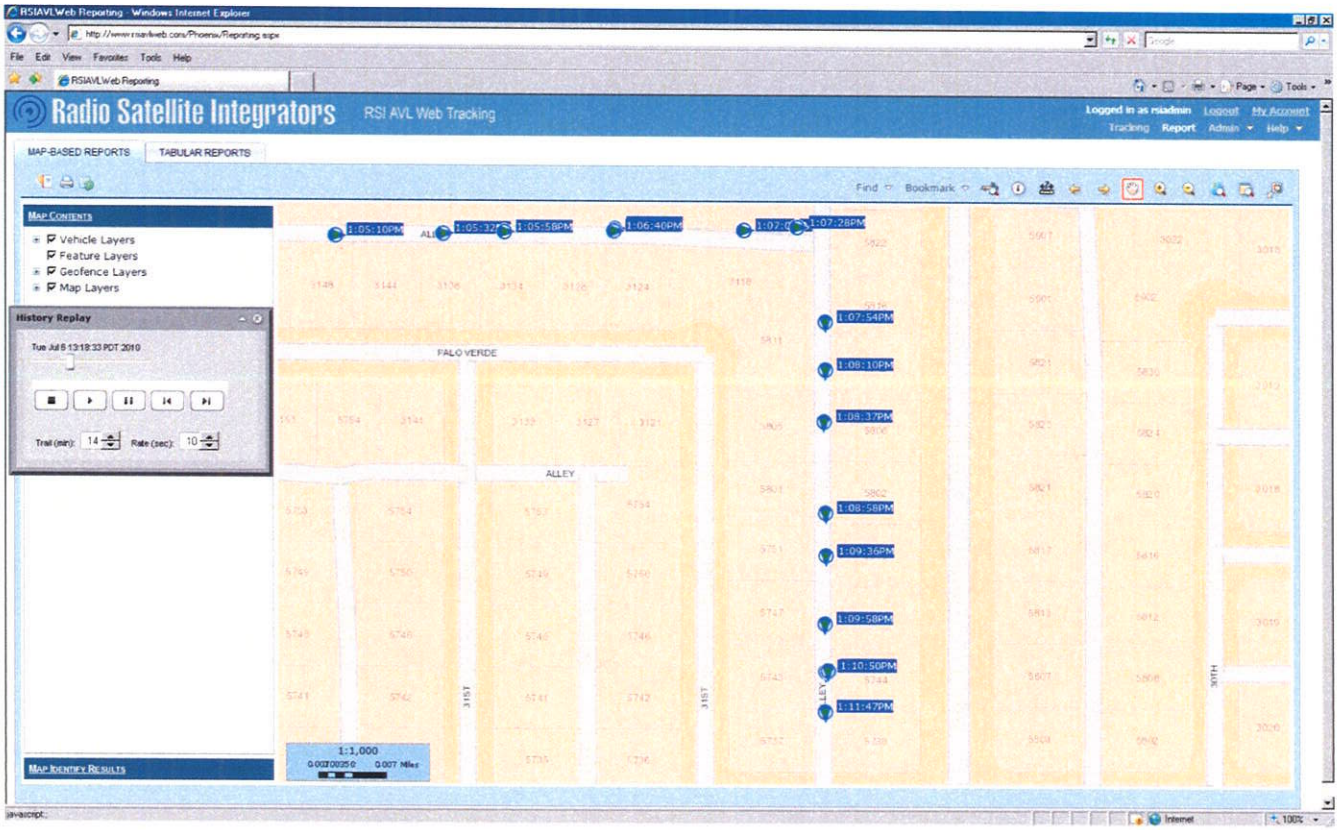
The RSI AVL system can use virtually any type of map data, but in particular our software can overlay our AVL information on your own ESRI GIS maps. RSI allows you to utilize your existing investment of time and labor that went into your ESRI map data. The RSI AVL system relates real-time vehicle location and status data to the infrastructure, assets, boundaries, updates, routes, parcels, landmarks, and other critical elements of your constantly changing GIS map data. RSI has extensive experience working with ESRI data and environments in all forms (.shp files, SDE, etc.). As an option, RSI can actually access your GIS map data in real time via Map Services.



## Leveraging GIS Technology

Because Radio Satellite Integrators uses a powerful ESRI GIS as the basis for both display and analysis, operations has the capability to perform complex "spatial query" analysis that capitalizes on the geographic referencing or correlation of the GPS location and velocity data collected with the base map. Our use of vectorized maps allows the user to analyze space and time components in entirety. Query capabilities are virtually unlimited. For example, RSI AVL includes a unique algorithm developed by RSI, which selects and recommends a vehicle for dispatch based on real-time location.

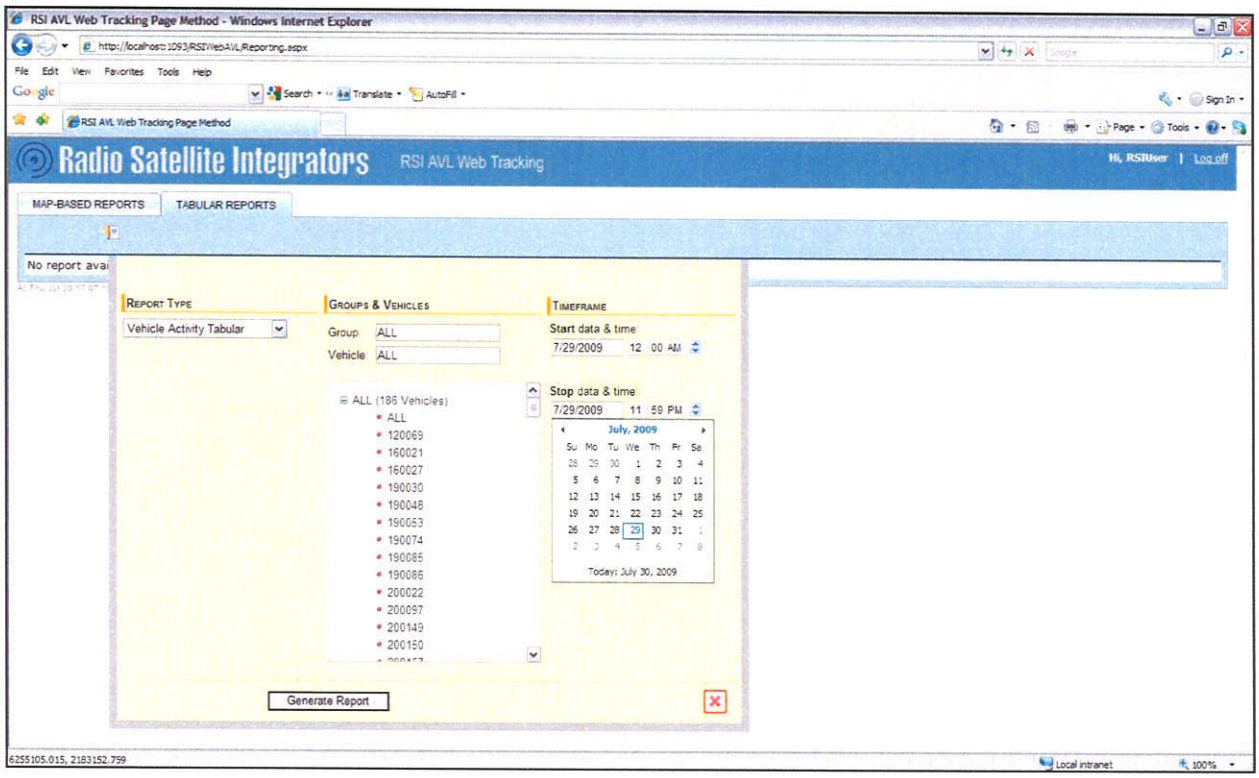
All of the real-time tracking functionality is available through the menus, buttons, and tools of the graphical user interface (which is easily customized to accommodate specific desires and requirements).

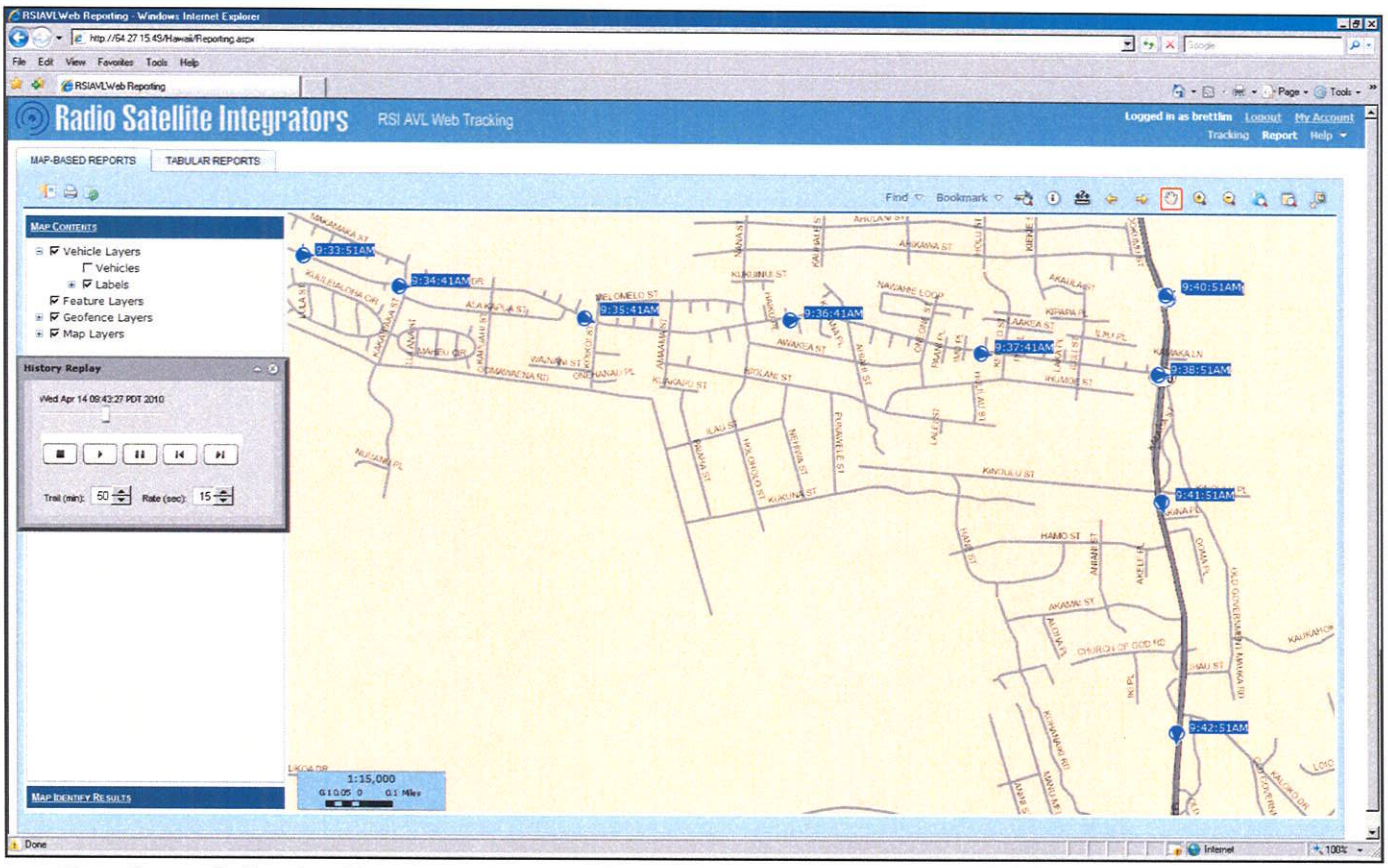


# Reporting Functions

The Report Generation Application is an extension to the Real-Time Vehicle Tracking Application described above, and can generate both tabular and graphical map-based reports based on archived vehicle location and status data. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. The **Map-based report** displays allow users to visually display or re-trace a vehicle's route and status, and include the same map manipulation and query functionality as the real-time vehicle tracking displays. **Tabular reports** display unit location and activity in a text-based spreadsheet or table. Such reports may be exported into virtually any format including .CSV and MS Excel files.

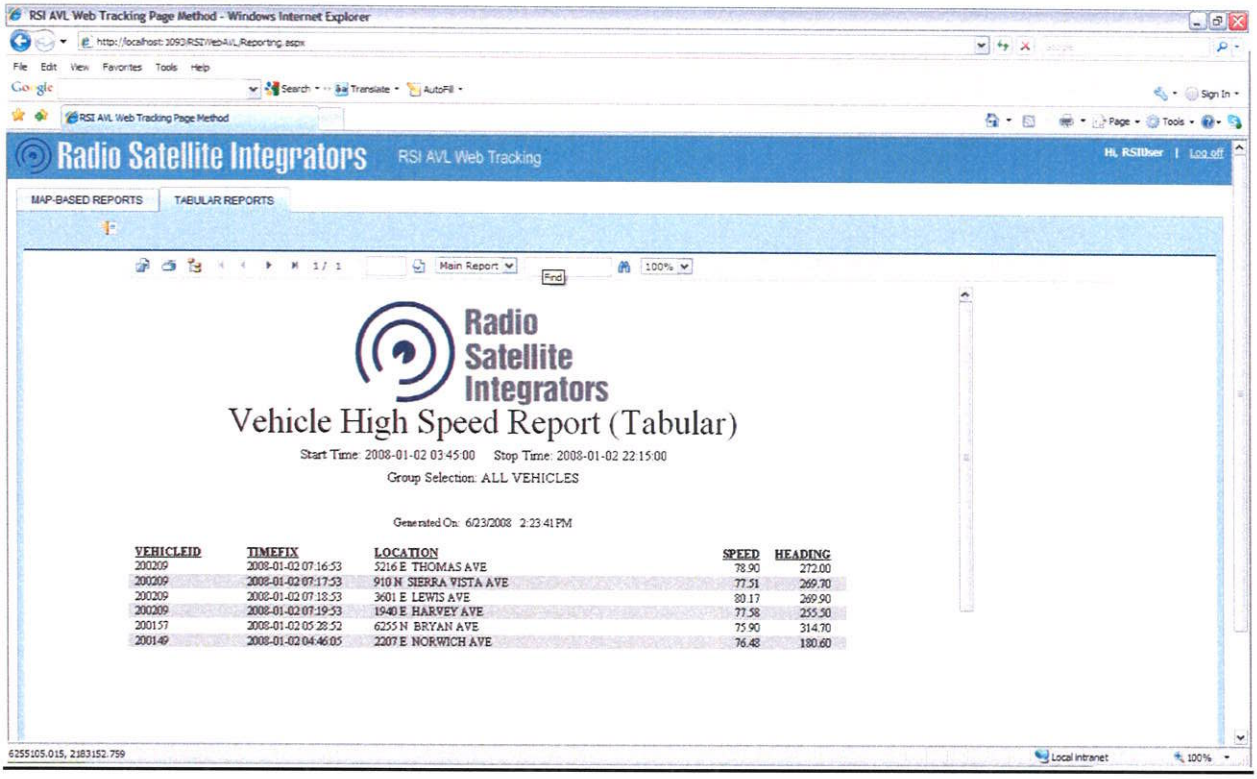
**Specific types of reports will be customized to the customers' guidelines as part of initial system design review.**






## Breadcrumb Replay Feature

The RSI AVL system allows you to watch a historical "replay" of any portion of a vehicle's activity history at various speeds. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles' movement and behavior including location, device activities, alerts, status changes, events, etc. Each breadcrumb icon represents a vehicle position and all its underlying data including address, direction, speed, and status. Breadcrumb icons can be customized to represent various statuses and events, such as ignition off/on, or a device is activated (broom, plow, armature, PTO, etc.)




*Note: Your user interface will differ depending on customized configuration and preferences.*

## Reports

The RSI AVL system comes with a suite of standard graphical and tabular reports that cover all the main vehicle activities that one would expect from an industry leading AVL system. We have spent years working with hundreds of fleet customers to refine our report offerings to encompass the most useful and important reports. Some of our standard reports are:

- Vehicle Activity
- Travel & Stop
- Speed
- Geofence
- Vehicle Usage (Mileage & engine hours)
- Vehicle Inactivity (Idle time)
- Sensor Reports (armatures, PTO, broom, plows, etc.)

## Custom Reports

RSI will work with the customer to supply a number of customized reports with the system. RSI uses industry standard database and reporting tools (Crystal Reports) so the customer can generate their own customized reports if desired.

Radio Satellite Integrators

# Vehicle Activity Report

**2004-09-04**
Vehicle ID: **M01**
Group: **A**

Generated On: 11/11/2004 12:50:52PM

| Time | Description | Location | Stopped Time | Moving Time | Dwell Time |
|---|---|---|---|---|---|
| 00:00:27 | En Route | 12874-12949 Ext - 44111 | | 00:01:55 | |
| 00:02:22 | Stopped | 4234-4251 130th St - 44135 | 00:00:14 | | |
| 00:02:36 | En Route | 4234-4251 130th St - 44135 | | 00:00:47 | |
| 00:03:23 | Stopped | 12700-12799 Leeila Ave - 44135 | 00:02:39 | | |
| 00:06:02 | En Route | 12700-12799 Leeila Ave - 44135 | | 00:01:23 | |
| 00:07:25 | Stopped | 12900-12999 Bellaire Rd - 44135 | 00:00:25 | | |
| 00:07:50 | En Route | 12900-12999 Bellaire Rd - 44135 | | 00:07:35 | |
| 00:15:25 | Stopped Ignition OFF | 17909-17909 Groveland Ave | 00:28:56 | | |
| 00:43:20 | | | | | |
| 00:43:41 | | | | | |
| 00:43:51 | | | | | |
| 00:44:21 | | | | | |
| 00:45:39 | | | | | |
| 00:46:09 | | | | | |
| 00:49:35 | | | | | |

Radio Satellite Integrators

# Vehicle Armature Report B (Tabular)

Start Time: 2007-01-26 06:00:00 Stop Time: 2007-01-26 12:00:00
Group Selection: 3800046

Generated On: 1/26/2007 12:13:49PM

Vehicle ID: **3800046** | Group: **A**

| TIMEFIX | LOCATION | COUNT |
|---|---|---|
| 2007-01-26 06:00:04 | 0-1235 GRIFFITH WAY - f | 1 |
| 2007-01-26 06:00:29 | 905-1070 GRIFFITH WAY - f | 4 |
| 2007-01-26 06:03:53 | 0-3992 TEILMAN AVE - f | 2 |
| 2007-01-26 06:04:34 | 0-3946 TEILMAN AVE - f | 1 |
| 2007-01-26 06:04:59 | 0-0 TEILMAN AVE - f | 3 |
| 2007-01-26 06:06:25 | 0-3745 TEILMAN AVE - f | 1 |
| 2007-01-26 06:07:39 | 1006-1036 DAKOTA AVE - f | 2 |
| 2007-01-26 06:08:19 | 1046-1105 DAKOTA AVE - f | 1 |
| 2007-01-26 06:08:42 | 1106-1146 DAKOTA AVE - f | 3 |
| 2007-01-26 06:09:59 | 0-3795 WEST AVE - f | 2 |
| 2007-01-26 06:10:23 | 0-3709 WEST AVE - f | 1 |
| 2007-01-26 06:10:50 | 1317-1448 GARLAND AVE - f | 2 |
| 2007-01-26 06:11:46 | 1508-1648 GARLAND AVE - f | 8 |
| 2007-01-26 06:14:05 | 0-3753 CRYSTAL AVE - f | 5 |
| 2007-01-26 06:15:50 | 0-3753 CRYSTAL AVE - f | 1 |
| 2007-01-26 06:16:05 | 0-0 WARREN AVE - f | 5 |
| 2007-01-26 06:17:40 | 0-3795 WEST AVE - f | 3 |

Radio Satellite Integrators, Inc.

Start Time: August 4, 2008 Stop Time: August 8, 2008

## Vehicle Mileage and Idle Time Report

Group Selection: Group A

Generated On: 8/15/2008 4:45:30PM

| VEHICLE ID | TOTAL MILEAGE | ENGINE HOURS | IDLE TIME (>2 min) |
|---|---|---|---|
| 360045 | 23.2 | 2:12:00 | 0:52:10 |
| 360055 | 156.7 | 19:10:34 | 0:58:00 |
| 360056 | 98.0 | 15:05:40 | 0:35:30 |
| 360061 | 80.5 | 14:30:04 | 0:29:51 |
| 360063 | 134.8 | 20:13:30 | 1:07:56 |
| 360069 | 130.1 | 13:37:13 | 2:42:03 |
| 360070 | 17.6 | 5:30:10 | 0:56:04 |
| 360071 | 202.9 | 17:25:21 | 1:24:30 |
| 360072 | 0 | 0:00:00 | 0:00:00 |

Radio Satellite Integrators

## Vehicle High Speed Report (Tabular)

Start Time: 2008-01-02 03:45:00 Stop Time: 2008-01-02 22:15:00

Group Selection: ALL VEHICLES

Generated On: 6/23/2008 2:23:41 PM

| VEHICLEID | TIMEFIX | LOCATION | SPEED | HEADING |
|---|---|---|---|---|
| 200209 | 2008-01-02 07:16:53 | 5216 E THOMAS AVE | 78.90 | 272.00 |
| 200209 | 2008-01-02 07:17:53 | 910 N SIERRA VISTA AVE | 77.51 | 269.70 |
| 200209 | 2008-01-02 07:18:53 | 3601 E LEWIS AVE | 80.17 | 269.90 |
| 200209 | 2008-01-02 07:19:53 | 1940 E HARVEY AVE | 77.58 | 255.50 |
| 200157 | 2008-01-02 05:28:52 | 6255 N BRYAN AVE | 75.90 | 314.70 |
| 200149 | 2008-01-02 04:46:05 | 2207 E NORWICH AVE | 76.48 | 180.60 |

# Vehicle Spreader Utilization

Generated On: 8/2/2011 4:09:14PM



Group Selection: ALL VEHICLES | Start Time: 2011-03-01 00:00:00 Stop Time: 2011-03-31 23:59:59 |

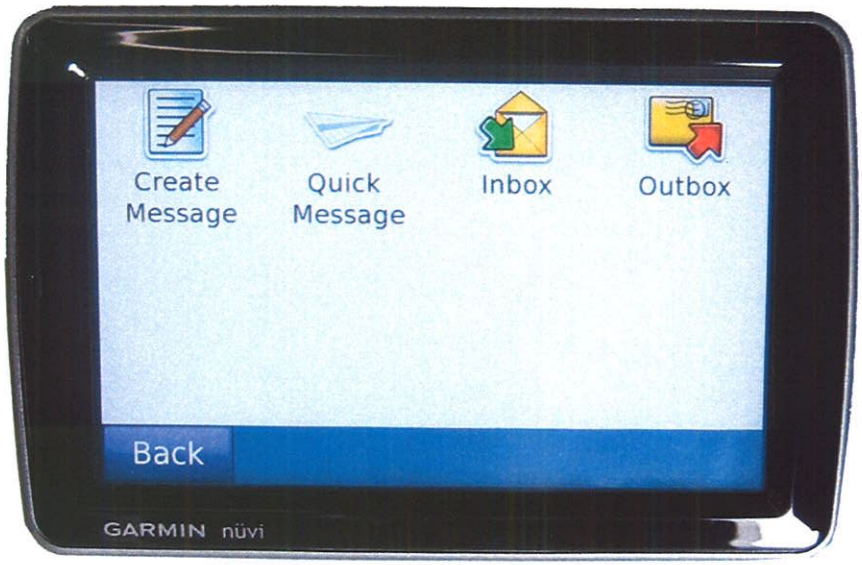
| Timefix | Spreader Status | Granular | | | Direct | | |
|---|---|---|---|---|---|---|---|
| | | Spread Rate Index | Material Setting (lbs/mi) | Material Total (lbs) | Spread Rate Index | Setting (gal/mi) | Total (gal) |
| **PLOW** | | | | | | | |
| Vehicle ID: **42356** | | | | | | | |
| 03/29/11 08:34:07 | P | 0 | 0 | 0 | 0 | 0 | 72657 |
| 03/29/11 08:34:08 | O | 0 | 0 | 0 | 0 | 0 | 72657 |
| 03/29/11 08:34:42 | S | 0 | 0 | 0 | 9 | 100 | 72657 |
| 03/29/11 08:34:55 | S | 0 | 0 | 0 | 6 | 60 | 72660 |
| 03/29/11 08:34:55 | S | 0 | 0 | 0 | 6 | 60 | 72660 |
| 03/29/11 08:34:55 | S | 0 | 0 | 0 | 6 | 60 | 72660 |
| 03/29/11 08:34:56 | S | 0 | 0 | 0 | 0 | 140 | 72661 |
| 03/29/11 08:35:12 | S | 0 | 0 | 0 | 0 | 140 | 72662 |
| 03/29/11 08:36:01 | O | 0 | 0 | 0 | 0 | 0 | 72691 |
| 03/29/11 08:36:08 | S | 0 | 0 | 0 | 0 | 140 | 72691 |
| 03/29/11 08:37:09 | S | 0 | 0 | 0 | 9 | 100 | 72762 |
| 03/29/11 08:37:19 | S | 0 | 0 | 0 | 0 | 140 | 72770 |
| 03/29/11 08:39:12 | O | 0 | 0 | 0 | 0 | 0 | 72902 |
| 03/29/11 08:40:29 | S | 0 | 0 | 0 | 0 | 140 | 72902 |
| 03/29/11 08:43:10 | O | 0 | 0 | 0 | 0 | 0 | 73089 |
| 03/29/11 08:43:10 | O | 0 | 0 | 0 | 0 | 0 | 73089 |
| 03/29/11 08:44:50 | S | 0 | 0 | 0 | 8 | 80 | 73094 |
| 03/29/11 08:44:51 | S | 0 | 0 | 0 | 7 | 70 | 73094 |
| 03/29/11 08:44:52 | S | 0 | 0 | 0 | 8 | 80 | 73095 |
| 03/29/11 08:44:52 | S | 0 | 0 | 0 | 9 | 100 | 73096 |
| 03/29/11 08:49:05 | O | 0 | 0 | 0 | 0 | 0 | 73307 |
| 03/29/11 08:54:28 | S | 0 | 0 | 0 | 9 | 100 | 73307 |
| 03/29/11 08:57:59 | B | 0 | 0 | 0 | 0 | 100 | 73307 |
| 03/29/11 08:58:04 | S | 0 | 0 | 0 | 9 | 100 | 73310 |

# Optional Custom Garmin Messaging Terminal

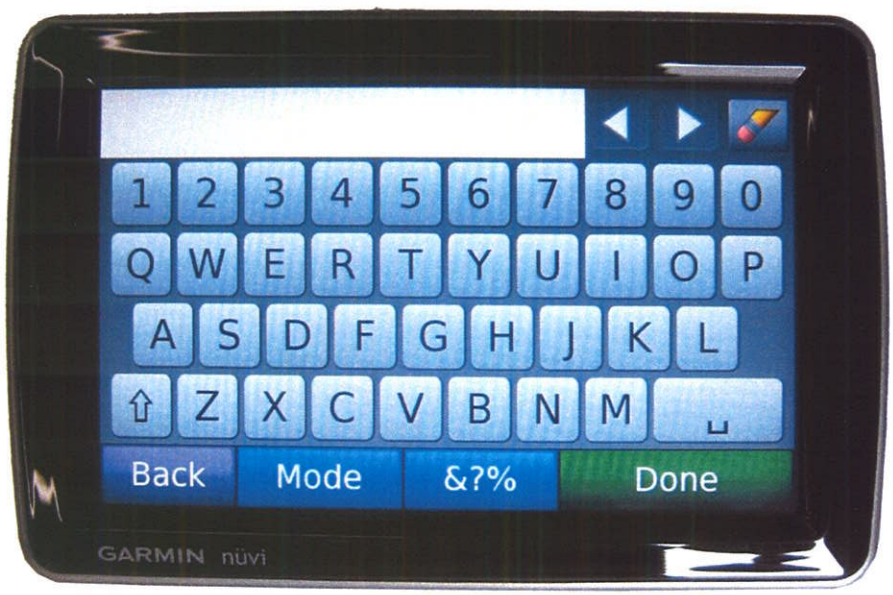
For systems that require integrated messaging and navigation capabilities for its drivers, RSI offers a customized Garmin navigation solution. This customization process allows us to use the Garmin unit as a messaging terminal providing both free form and pre-programmed status messages between the driver and the dispatch user. Leveraging the universally familiar Garmin color touch screen interface, RSI creates a powerful messaging and data terminal for your drivers. In addition to providing the standard Garmin navigation tools, the RSI customization allows the mobile user to receive dispatched destinations, way points and routes from the base directly to the Garmin unit, which will then navigate them to that location. Drivers can login to the system using a Driver and Route Login form, as well as send any variety of free form or preprogrammed status message to the base. The customization options are endless. RSI will work with you to determine how we can implement a system that fits your needs at the lowest cost possible.


GARMIN™

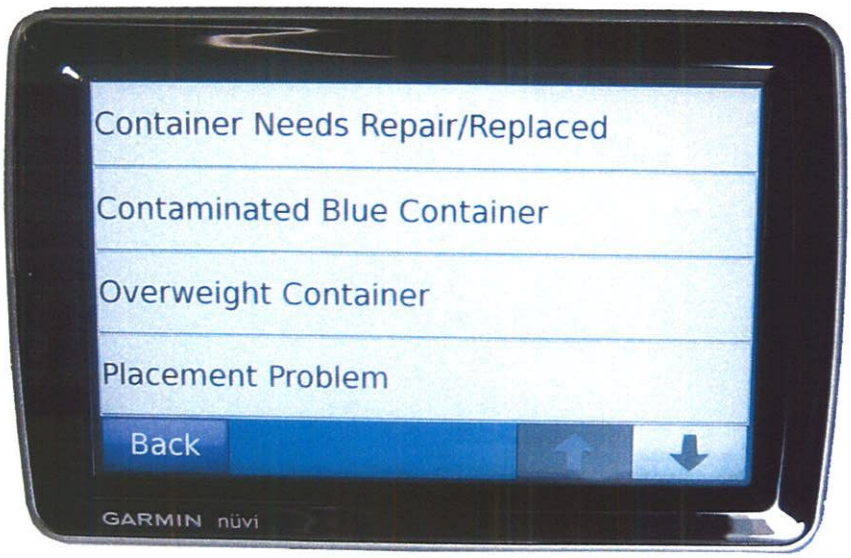
## Customized Messaging Terminal




The RSI Garmin Unit can be configured to provide a simple two-way messaging interface between the driver and AVL mapping operator. All messages sent by the driver are time and location tagged and can be used for a variety of status updates and activity reporting.

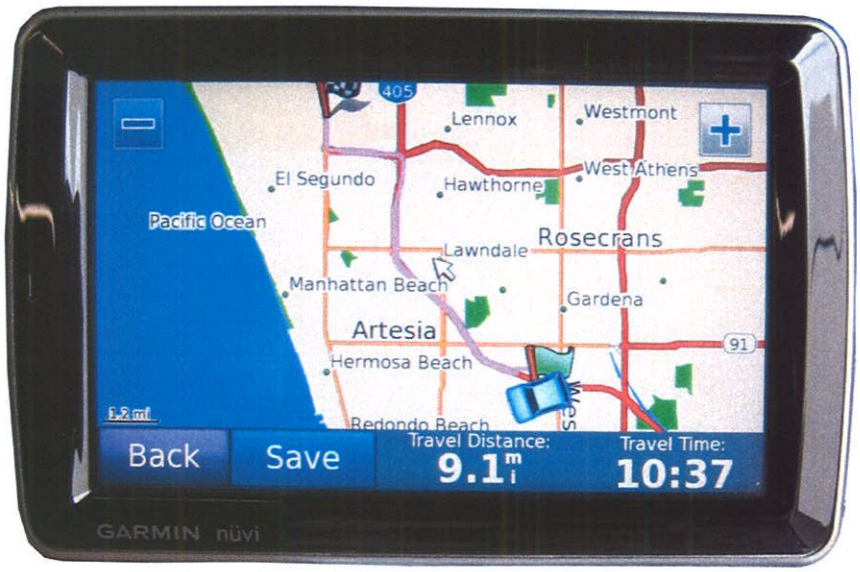



Messaging can be either free form text messages or preprogrammed (canned) status messages.




Canned messages can be custom created by RSI for any of your fleet's unique operations, priorities, and terminology. The driver simply selects a preprogrammed message to be sent back to the operator and system.

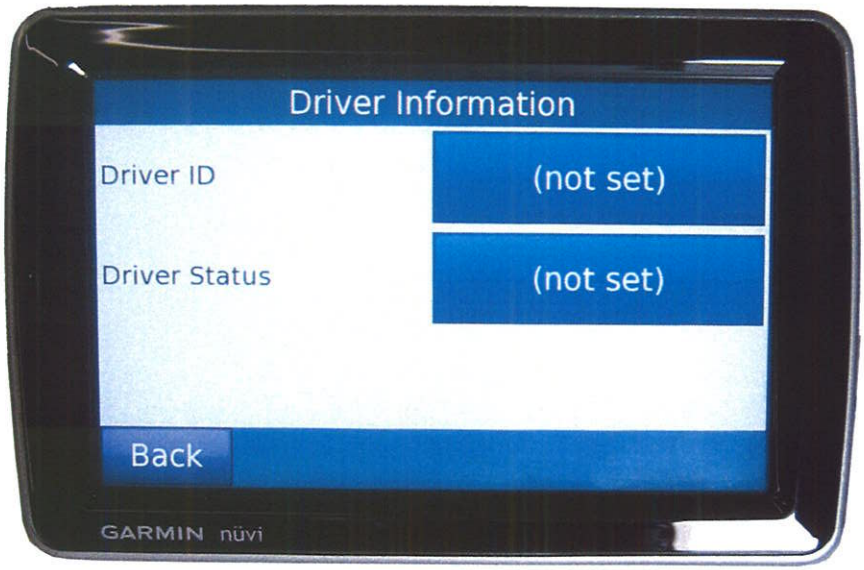
## Garmin Navigation Tools




The RSI Garmin Unit also retains its core Garmin navigation functionality that provides voice guided turn by turn directions to the desired destination.


The RSI Garmin Unit has multiple settings for a viewing the map and route as the driver is guided to the destination

## Driver ID Entry




The RSI Garmin Unit allows the driver to log in to a vehicle with a unique ID as well as status.

# Proposed Work Plan

Radio Satellite Integrators will determine an appropriate implementation schedule for each specific project and customer. Here is a typical schedule to implement the system as outlined below. Some key milestones follow. (This is an example subject to change. A detailed and accurate project work plan cannot feasibly be created without meeting with the customer to determine specific configurations, preferences, processes, priorities, resources, etc.)

Pre-Implementation Planning and Engineering

- Contract Award
- Develop Statement of Work
  - Requires Agency Assistance
- Kick Off Meeting (TBD)
- Final Design Review (TBD)

Hardware and Component Sourcing

- In-House Testing & Configuration
- Shipping

Initial System Field Test

- Test Units

Final Installation and Implementation

- Full Installation
- Training

Acceptance

# Typical Base Project Plan

| | | | | | |
|---|---|---|---|---|---|
| 1 | **0%** | **AVL Project Completion** | **101 days** | Dpd | |
| 2 | 0% | Receipt of Order | 1 day | | Customer |
| 3 | | | | | |
| 4 | **0%** | **Initial Phase** | **15 days** | | |
| 5 | **0%** | **Design Review** | **15 days** | | |
| 6 | 0% | Develop Design Review | 10 days | 2 | RSI |
| 7 | 0% | Submit Design Review | 5 days | 6 | RSI |
| 8 | 0% | Design Review Acceptance | 0 days | 7 | Customer PM |
| 9 | **0%** | **Base station System Install/Config** | **10 days** | | |
| 10 | 0% | Base Servers | 10 days | 2 | RSI |
| 11 | 0% | GIS Map Data | 5 days | 2 | Customer GIS |
| 12 | | | | | |
| 13 | **0%** | **Acceptance Test Plan (ATP)** | **15 days** | | |
| 14 | 0% | Develop ATP | 10 days | 2 | RSI |
| 15 | 0% | Submit ATP | 5 days | 14 | RSI |
| 16 | 0% | ATP Acceptance | 0 days | 15 | Customer PM |
| 17 | **0%** | **Rollout Phase** | **100 days** | | |
| 18 | **0%** | **System Delivery** | **29 days** | | |
| 19 | **0%** | **Mobile Unit Build Procurement** | **24 days** | | |
| 20 | **0%** | **Building and Procurement** | **19 days** | | |
| 21 | 0% | Mobile Units | 19 days | 2 | RSI |
| 22 | **0%** | **Testing** | **5 days** | | |
| 23 | **0%** | Mobile Units | 5 days | 24 | RSI |
| 24 | 0% | **Shipping** | **5 days** | | |
| 25 | **0%** | Mobile Units | 5 days | 26 | RSI |
| 26 | 0% | **System Completion** | **71 days** | | |
| 27 | **0%** | **Configuration** | **10 days** | | |
| 28 | 0% | **AVL Software Customization** | **10 days** | | |
| 29 | **0%** | Base Station (Software) | 10 days | 27 | RSI |
| 30 | **0%** | **Installation** | **60 days** | | |
| 31 | 0% | Mobile Units | 60 days | 31 | RSI/Sub Contractor |
| 32 | **0%** | **Testing** | **1 day** | | |
| 33 | 0% | Complete ATP | 1 day | 33 | All |
| 34 | 0% | **User Training** | **8 days** | | |
| 35 | **0%** | Develop User Training Plan | 5 days | 32 | RSI / Customer PM |
| 36 | 0% | Complete User Training Plan | 3 days | 39 | RSI |

*RSI will work with your team to determine specific timelines based on your particular project scope. Your actual project plan will differ from this one.*

# Key RSI Staff

**Project Manager**

Brian Burda, Vice President Technology

Education: B.S. Computer Science, University of Southern California

Experience:

Consultant, Process Control and Software Development, Clients include H.J. Heinz, United Airlines, ORE-IDA Foods, Weight Watchers, and the Marriott Hotel Corporation

*Brian has 20 years of experience implementing AVL and tracking systems using GPS.

***Brian will serve as the lead project manager for the AVL implementation. Brian has extensive experience implementing AVL systems and will oversee the development of the Scope of Work and Implementation Work Plan.***

**Lead Software and Hardware Integration Manager**

Mark Holzworth, Director of Software Engineering

Education: B.S. Electrical Engineering, University of California at Santa Barbara

Experience:

Software engineer, Professional Products, Magellan Systems Corporation

*Mark has over 18 years of experience in developing software to interface GPS and GIS, and embedded network communications control systems for AVL.

***Mark will oversee all integration efforts for this system. Mark has extensive experience interfacing various back end applications with the RSI AVL system.***

**Executive Contact**

Jonathan Michels, President

Education: B.S. Economics, Wharton School of the University of Pennsylvania
M.B.A., AGSM, University California at Los Angeles

Experience:

Director, Professional Products Division, Magellan Systems Corporation (GPS Manufacturer)
Vice President, Cellularm, radio frequency data network operator
GIS Analyst, Toyota Motor Sales, USA

*Jon has over 24 years of experience in GIS, 21 years in RF communications and data, and 20 years in GPS technology.

***Jon will serve as the main point of contact for all contractual and administrative matters for this system.***

# Installation

If desired, RSI can be responsible for the installation of all equipment furnished under this contract. RSI will perform the installation and provide local support. RSI will require the client's cooperation and assistance in coordinating vehicle access and availability.

All work will be executed in the manner best calculated, according to local conditions, to promote rapidity and accuracy; to secure safety to life, personnel and property; to assure safe and continuous operation of the existing dispatch, computer, and daily operations; and, to reduce to a minimum any interference with the public and with other contractors in or about the property.

## Management and Installation

The installation team manages all aspects of the installation of these units by working closely with client representatives. Together, the installation team and client will identify vehicles and schedule installations on a on a non-intrusive basis. Installation of RSI Mobile hardware units will be verified by inspections. Typically, we perform a physical checkout of the installation, which includes ensuring proper form, fit, security, and location of the unit. In addition, a communications check is performed to ensure that the modem is operational.

## Operational Checkout

Upon completion of a small subset of the entire installation, we will perform a complete operational checkout of the hardware and firmware. This checkout will ensure bi-directional communication between the RSI Mobile hardware unit and RSI Base Server and verify the accuracy of receive/transmit (RX/TX) event data shared between the RSI Mobile hardware units and The RSI Base Server software. Upon successful completion of this test, the units and vehicles are tagged as "ready for integration."

# Training

## RSI Training Methodology

RSI will provide live training sessions on the entire AVL system sufficient to ensure complete understanding and operations proficiency by the desired client staff and administrative personnel. The client will receive training to be provided to the entire staff exposed to the system, with an intensive "train-the-trainer" approach for selected personnel in order to maximize long-term worker productivity. The training sessions shall be held at locations specified by the client for administrative, driver, dispatch, executive, maintenance, and all other relevant parties. All materials and manuals will be provided in both printed and electronic format.

## Training Program Overview

RSI and the other team members will work with the customer's team to define the required courses and a reasonable number of attendees/course duration during the implementation phase of the project.

## Training Program

The RSI AVL Training Program is designed to indoctrinate all employees in the use of the RSI AVL System.

All training will be specific, where appropriate, to the RSI AVL system, and will include practical user instruction, hands-on sessions using RSI AVL specific equipment and data, and vendor observation of live operations following system startup. The training sessions will be presented over the course of the project, and will enable customer personnel to assume the responsibility of the system upon Substantial Completion.

In concert with the customer Project Manager, RSI will develop and conduct a one-time operational overview of the entire RSI AVL operating system, which will provide Management with a practical, working knowledge of the RSI AVL system and its operational, customer, and functional capabilities.

The development of the Training and Orientation Program and the scheduling of the actual training sessions will take into consideration customer staff availability due to shift assignments and logistics. RSI AVL will coordinate with the customer Project Manager to ensure that personnel are available when the Training Programs are to be conducted. Furthermore, it is assumed that all attendees will be familiar with the basic concepts of the Windows Operating System, knowledge that is essential in order to be able to take full advantage of the courses offered. A workable understanding of Windows will be a pre-requisite for all attendees.

## Advanced Training

During the installation and testing process there will be a need for certain customer personnel (drivers, dispatchers and supervisors) to become familiar with some of the fundamental aspects of the system so they can participate in the testing process and in the evaluation of the software and system's performance. For this reason, a number of courses will be provided in advance of the Regular Training program. The content of the courses will focus on familiarizing select RSI AVL staff with the basic functionality and operational features of the system, together with 'hands-on' training in the use of the hardware to the extent necessary to support the initial Testing. RSI will provide Advance Training as necessary to support initial testing and integration.

The customer's Project Manager will designate the specific individuals who will participate in this training when RSI indicates it is time to begin the Advance Training Course.

RSI will supply the specified manuals and documentation in both hard and soft copy.

## Instruction Manuals

User/Operating Procedure manuals, specific to the RSI AVL System, will be provided to each trainee. The User/Operating Procedure manuals will consist of the generic capabilities for each component as well as all the necessary amendments that describe customer's specific modifications and enhancements. Course Training Manuals, for each functional or technological area of training, will be provided to the customer Project Manager, along with master copies of all training and orientation documents in order to facilitate duplication of materials for future training purposes. Vendor equipment manuals relating to the specific software and hardware utilized in the project will also be delivered to the customer's Project Manager. (Note: Any duplication of materials is for internal use on the RSI AVL Project and may NOT be distributed to outside sources without the written approval of the vendor.)

All such printed training/orientation materials will be:

- Approved by the customer Project Manager prior to their use or distribution
- Customized and specific to the RSI AVL Project and the products used therein and the systems operating therein.
- Complete and current as of the date of Substantial Completion of the RSI AVL Project.
- Easily understandable, detailed and focused to the inherent knowledge levels of each of the below-described staff categories based on their individual 'need to know'.
- Updated, as necessary, consistent with any maintenance and support agreements to this Project.

## Personnel To Be Trained

There will be several levels of staffing associated with the RSI AVL operation; therefore, the training and orientation program will focus on both the required ('need to know') and inherent technical expertise of each of the employee groups or individuals, as follows:

### Drivers

Anticipated staff (final count TBD)

An in depth orientation in the AVL System function, usage, and dispatching requirements at the vehicle level.

A basic orientation in AVL System functionality and trouble shooting (when to ask for help).

A practical orientation in System capabilities as they relate to overall operations and customer services.

### Dispatchers

Anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and dispatch center levels.

An in-depth orientation in data entry and retrieval, report design, generation and production.

### Supervisors

An anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center level.

The ability to train new drivers, dispatchers and supervisors in the use of and overall understanding of system functionality as it relates to all components and features of the RSI AVL technology.

### Operator Management

An anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center levels.

An orientation in systems management, the interoperability of the overall RSI AVL system capabilities, customer service features and potential report development and generation.

Maintenance monitoring requirements of the equipment and software and system repair and service procedures.

**Client Management**

An anticipated staff (final count TBD), including the Director, Information Systems Manager and administrative staff. (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center levels.

An orientation in systems management, the interoperability of the overall RSI AVL system capabilities, customer service features and potential report development and generation.

Maintenance monitoring requirements of the equipment and software and system repair and service procedures.

*Note: The Information Systems Manager will be trained to a significantly higher technical level. This individual will perform technical maintenance, hardware repair/replacement, troubleshoot problems, investigate communication system problems (LAN, WAN, etc.) and deal with all technical problems and upgrades in cooperation with RSI.*

# Test and Implementation Plan

The major purpose of the Implementation Plan is to define a process for deploying the technical elements of the RSI AVL Project, and then schedule the integration of these elements into each agency's operating system. This transition not only calls for a partial re-deployment and enhancement of the current rolling stock, but also for the smooth integration and deployment of the AVL technology that is specified in the Scope of Work. In order to make the transition as smooth as possible and overcome any functional, technical, operational, and communication difficulties as they arise, RSI will utilize a phased approach.

At the same time, in order to ensure the final delivery of a system that conforms to the Project requirements, significant emphasis will be placed on the importance of achieving the operational and technological functionality defined in this Scope of Work and other 'Contract Documents'. The Implementation and Test Plan represents the vehicle through which RSI shall examine each operating function of the RSI AVL system to:

- Verify compliance with the system specifications, level of service standards and operating performance criteria

- Obtain client's acceptance.

RSI will be responsible for component specific testing. As integration of the technical components begins, client's Project Manager (& necessary staff) will oversee and coordinate the implementation of the integration testing in order to ensure compliance with the overall project and performance objectives set forth herein. The anticipated dates for conducting the required testing are defined in the Project Work Plan and will be finalized during the Design Review.

Two levels of system testing will be employed during the course of the RSI AVL Project, as follows:

> Laboratory: individual module testing followed by integration testing to ensure the functionality of the components and the interoperability of the data interfaces between each component prior to deployment.
>
> Acceptance Testing: the final test to ensure that each technical component of the system as well as the total system (technical components and operating services) conforms to system specifications, level of service standards and operating performance criteria.

As each service element comes on-line during the Test, it will remain on-line at the conclusion of the test and be operated in parallel by the Dispatch Center with the other elements that are already operational. The same will hold true for the activated functionalities of the project technologies mentioned above. Due to the linear approach of the project plan, if any of the elements fail during testing, further elements cannot be deployed until the problem has been resolved.

At the conclusion of each formal testing phase, RSI will provide client with written certification of the test results and performance compliance for each of the system components. In the event of testing problems, client, RSI and the appropriate agencies will meet and confer on the results of the testing performed. Subsequent decisions to proceed with the project must be approved by all parties. All the participants must attend scheduled meetings through means of conference calls or on-site visitations.

Also, final details of the Laboratory and Acceptance Tests will be confirmed with the Stakeholders before implementation of the testing in order to ensure client service level does not degrade below current service levels during the testing process.

Finally, in addition to the above formal testing procedures, there will be a comprehensive demonstration of the operating system to client. This demonstration (Acceptance Test) is necessary in order to satisfy the parties that Substantial Completion has been achieved.

## Acceptance Testing

There are two fundamental aspects to the Acceptance Testing – functional and operational. The functionality of the RSI AVL System will have been completely tested by the Test phase of the project. To a lesser extent, the ability of the user to change the operational parameters in order to change the service provided will have also been demonstrated. As a consequence, the Acceptance Test is largely a confirmation of the functional requirements and a stress / full loading test of the operation as the service parameters are changed based upon real time public demand.

Because of the inherent inability to predict the need for service changes, it is only by observing the system over a period of time that we can be reasonably assured that all the possible combinations and scenarios have been considered. During the Acceptance Testing the performance of the System will also be evaluated, with regard to the ability of the system to respond in a timely and efficient manner to customer oversight and customer requests.

# Warranty

As an expression of confidence in our products to continue meeting the high standard of reliability and performance that our customers have come to expect, Radio Satellite Integrators products are covered by the following warranty.

Radio Satellite Integrators warrants all products against defects in materials and workmanship for a period of one year from the date of factory sale, or the term outlined in an extended warranty agreement. During the warranty period Radio Satellite Integrators provides the warranty service. Radio Satellite Integrators will, at its option, either repair or replace products which prove to be defective. The Customer shall prepay shipping charges for products returned to Radio Satellite Integrators for warranty service and RSI shall pay for return of products to Customer. However, the Customer shall pay all shipping charges, duties, and taxes for products returned to Radio Satellite Integrators from outside the United States. This warranty shall not apply to damage resulting from:

- Improper or inadequate maintenance by the Customer
- Customer-supplied interfacing
- Unauthorized modification or misuse
- Operation outside of the product environmental specifications
- Improper installation, where applicable

No other warranty is expressed or implied. Radio Satellite Integrators specifically disclaims the implied warranties of merchantability and fitness for a particular purpose. Remedies provided herein are Customer's sole and exclusive remedies. Radio Satellite Integrators shall not be liable for any direct, indirect, special incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

# Service Response Plan

**The following is RSI's standard Customer Support Plan:**

RSI will maintain all equipment and support software for one year, parts and labor. In addition, RSI will provide two options to help ensure smooth operation of the system:

**1) Phone Support** During the warranty period, RSI will provide unlimited phone support via our toll-free number [(866) 869-7700]. After hours support is available 24/7 through the 911 option on our telephone system.

**2) Remote Access Support**

This option allows RSI staff to check in on system health, troubleshoot problems on-line with customer staff and monitor the system remotely via dial-up or TCP/IP (VPN) access.

Any travel required to support on-site service is not included.

| Severity | Time Reported | Target Response Time | Response Method |
|---|---|---|---|
| 1 | 7x24 | <4 Hours | Phone Call (Follow-up with Remote Access Troubleshooting as Necessary) |
| 2 | Regular Hours | <3 Hours | Phone Call (Follow-up with Remote Access Troubleshooting as Necessary) |
| 2 | After Hours | Next Business Day | Phone Call (Follow-up with Remote Access Troubleshooting as Necessary) |
| 3 | Regular Hours | <8 Hours | Phone Call (Follow-up with Remote Access Troubleshooting as Necessary) |
| 3 | After Hours | Next Business Day | Phone Call (Follow-up with Remote Access Troubleshooting as Necessary) |

The Customer acknowledges and understands that the Service Provider's ability to respond within these times is dependent on the Customer's fulfillment of its obligation to provide remote access. * Response time targets are measured from receipt of first notification by telephone to our Main Office Number [(310) 787-7700] or toll-free number [(866) 869-7700]. For after hours calls follow our instructions for Emergency Service, directory 911. A page will go out to an on-call support provider.

***Regular Hours are defined as Monday through Friday, 9 A.M. to 5 P.M. Pacific Time, excluding holidays. After Hours are all non-Regular Hours.*

**Problem Severity Definitions**

a. **Severity 1** – A Severity 1 Problem is a catastrophic failure that severely impacts the Customer's ability to conduct its core business – i.e., the Customer's Automatic Vehicle Locator and/or Mobile Data System are down or not functioning and no procedural workaround exists.

b. **Severity 2** - A Severity 2 Problem is a high-impact Problem that disrupts important functions of the Customer's operation, but the Customer can still remain productive and maintain necessary business-level operations.

c. **Severity 3** - A Severity 3 Problem is a Problem that is of lesser magnitude than a Severity 1 or 2 Problem.

**Problem Resolution Targets**

a. **Severity 1** - When working a "Severity 1" Problem, the objective is to resolve the Problem entirely or to downgrade the Problem's Severity designation (*i.e.*, provide Customer sufficient functionality so that the Problem may be reclassified as Severity 2 or 3) within 24 hours after the Problem is reported. Efforts to isolate, diagnose, and effect a work-around for, repair, or downgrade a "Severity 1" Problem shall be continuous (i.e., around-the-clock) between Customer, Service Provider and RSI (as needed), provided that Customer performs all of its obligations hereunder, including providing remote access to its systems. Periodic phone contact and progress updates will be provided at regular intervals during problem resolution. When the severity level has been changed to "Severity 2" or "Severity 3," the guidelines cited below are followed.

b. **Severity 2** – When working a "Severity 2" Problem, the objective is to have a solution and/or fix to the Customer within fifteen (15) business days. Efforts to isolate, diagnose, and affect a work-around or repair to a "Severity 2" Problem shall be continuous during Regular Hours. Customer resources may need to be available after hours and/or weekends upon mutual agreement between Customer and Service Provider, on a case-by-case basis.

c. **Severity 3** - When working a "Severity 3" Problem, the objective is to get the Customer a fix to the Problem or develop a workaround acceptable to the Customer within thirty (30) business days. Such a fix will typically be provided via a software patch or upgrade from RSI.

# Response to Specifications

## 4.0 SCOPE OF WORK

4.1 The Vendor(s) will provide a basic device package for purchase by the State. The equipment package shall include a state-selected device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) mounting set/kits/outfits (based on selection), external antenna (based on selection), ancillary equipment based on selection, Battery for asset and employee tracker selection, AC and car adapter/charger for asset and employee tracker selection, device installation (if appropriate), and user manual.

**Comply.**

4.2 Basic equipment with engine diagnostics capabilities shall be powered by the vehicle and include engine on/off detection; accelerometer, gyroscopic, geospatical location capability; may be upgradable to support additional functionality e.g, door open/closed, plow up/down, seatbelt on/off, etc.; and may be interoperable with other non-engine diagnostic devices such as employee tracker with panic feature; GPS device, laptop/notebook/notepad computer; driver behavior monitoring device; and vehicle inspection compliance device (RFID equipped vehicle), etc.

**Comply. As an option, integration with vehicle inspection systems and hardware is possible although it may require additional cost and customization from both vendors.**

4.3 Basic equipment without engine diagnostics will be powered by the vehicle, or self-contained device battery, or by car charger and include accelerometer, gyroscopic, geospatial location capability, may be interoperable with other AVL devices allowing for retransmission of a panic signal, use of GPS device; driver behavior monitoring device; and vehicle inspection compliance device (RFID equipped vehicle), etc.

**Comply. As an option, integration with vehicle inspection systems and hardware is possible although it may require additional cost and customization from both vendors.**

4.4 Vendor(s) shall provide the following services at no additional cost.

4.4.1 For data loggers with engine diagnostics: Browser client-server application for real-time reporting of device location, stop-detail, speed, fuel economy or use, odometer, vehicle inspection compliance (RFID equipped vehicle) and engine diagnistc codes. Additional functionality to

modify organizational hierarchy /device/driver, use of dynamic application filtering, and ad-hoc reporting including breadcrumb, geofence, landmark, odd hours, etc.

**Comply. RSI AVL is a Web browser based AVL system hosted by RSI. The RSI AVL system is accessed via Internet. The RSI AVL system monitors, displays, and logs real time vehicle location and status data. Reports may be produced for selected vehicles (or groups of vehicles) according to location.**

**The RSI AVL system can support unlimited simultaneous users. The RSI AVL System provides for multiple access levels for users. Certain privileged users will have the ability to adjust parameters for the AVL system and to configure certain system functions, while others will have limited functionality. The RSI system can be configured so that specific users only have access to specific functionality or vehicle information.**

**Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. The Map-based report displays allow users to visually display or re-trace a vehicle's route and status, and include the same map manipulation and query functionality as the real-time vehicle tracking displays. The RSI AVL system allows you to watch a historical "replay" of any portion of a vehicle's activity history at various speeds. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles' movement and behavior including location, device activities, alerts, status changes, events, etc. Each breadcrumb icon represents a vehicle position and all its underlying data including address, direction, speed, and status.**

**The RSI AVL system allows the user to set geo-fences on the map display. This geofence will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Geofences can be created as polygons or a configurable radius from a specific point, as well as created from existing boundaries, landmarks or zones within your GIS.**

**Integration with vehicle inspection systems and hardware is possible although it may require additional cost and customization from both vendors.**

4.4.2 For data loggers without engine diagnostics" Browser client-server application for real-time reporting of device location, vehicle inspection compliance (RFID equipped vehicle) and stop-detail. Additional functionality to modify organizational heirarchy/device/employee, use of dynamic application filtering and ad-hoc reporting including breadcrumb, geofence, landmark, odd-hours, etc.

**Comply.**

**Integration with vehicle inspection systems and hardware is possible although it may require additional cost and customization from both vendors.**

4.4.3 No roaming charges or fees for data transmission service plans within West Virginia and the bordering counties of adjoining states.

**Comply. RSI can use virtually any carrier and will not have roaming fees.**

4.4.4 Upgrades or downgrades to service plans by FMO as needed, with no limits.

**Comply.**

4.4.5 Cancellation of service at the end of the regular billing cycle without early termination fees.

**Comply. Cancellation of service will not incur early termination fees. RSI service is based on the agreed upon contract.**

4.5 Vendor(s) shall activate service on new devices when shipped.

**Comply.**

4.6 Vendor(s) must provide one or more of the following items. Cost must be identified on the Cost Proposal Bid Sheet.

4.6.1 Asset tracking device without panic feature

**Not Bidding.**

4.6.2 Asset tracking device with panic feature

**Not Bidding.**

4.6.3 Employee tracking device (key fob) with panic feature

**Not Bidding.**

4.6.4 Data logger with engine diagnostics

**Comply.**

4.6.5 Data logger without engine diagnostics

**Comply.**

4.6.6 Data logger with visual/audible driver alerts and engine diagnostics

**Comply.**

4.6.7 Data logger with visual/audible driver alerts and without engine diagnostics

**Comply.**

4.6.8 Data logger with video capture and engine diagnostics

**Not Bidding**

4.6.9 Data logger with video capture and without engine diagnostics

**Not Bidding.**

4.6.10 Ancillary equipment (GPS device with visual/audible turn-by-turn capability; driver behavior monitoring device; RFID vehicle inspection device; all with unlimited data transmission service plans which may be separate from or included with AVL device data transmission service plans).

**Comply. For an in-vehicle solution, RSI offers an optional Custom Garmin Unit that provides turn by turn directions to the desired destination.**

**Integration with vehicle inspection systems and hardware is possible although it may require additional cost and customization from both vendors.**

4.6.11 Statewide AVL device data transmission service plans will be based on device "ping" rate.

**Comply. The RSI AVL system can update at virtually any rate. Update rates can adjust dynamically depending on factors such as vehicle status or the triggering of an on-board sensor. RSI will propose a 5 minute update rate as a default as specified in this RFQ.**

4.6.12 Browser client-server application that can be used to pinpoint the location of an AVL device, provide real time reporting, modify organizational hierarchy/device/employee, use dynamic application filtering, and ad-hoc reporting interface including breadcrumb, geofence, landmark, odd-hours, inspection compliance (RFID equipped vehicle) etc.

**Comply. RSI AVL is a Web browser based AVL system hosted by RSI. The RSI AVL system is accessed via Internet Explorer using unique login and password. The RSI AVL system is highly customizable and allows different levels of security settings such as maximum number of failed logon attempts, application lock, inactivity timeout, and certificate delivery.**

**The RSI AVL system monitors, displays, and logs real time vehicle location and status data. Reports may be produced for selected vehicles (or groups of vehicles) according to location.**

**The RSI AVL system can support unlimited simultaneous users. The RSI AVL System provides for multiple access levels for users. The RSI system can be configured so that specific users only have access to specific functionality or vehicle information.**

**The RSI AVL system allows you to watch a historical "replay" of any portion of a vehicle's activity history at various speeds. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles' movement and behavior including location, device activities, alerts, status changes, events, etc.**

**The RSI AVL system allows the user to set geo-fences on the map display. This geofence will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Geofences can be created as polygons or a configurable radius from a specific point, as well as created from existing boundaries, landmarks or zones within your GIS.**

4.7 The successful vendor(s) shall be available to communication with the Fleet Management Office on regular basis (monthly or quarterly, at FMO's discretion) to discuss the utilization of this contract and any relevant issues.

**Comply.**

4.8 Application Security:

The Vendor(s)' browser client-server application must provide the ability to provide user authentication, strong passwords, action selection for a maximum number of failed logon attempts, application lock, an inactivity timeout, and certificate delivery.

**Comply. RSI AVL is a Web browser based AVL system hosted by RSI. The RSI AVL system is accessed via Internet Explorer using unique login and password. The RSI AVL system is highly customizable and allows different levels of security settings such as maximum number of failed logon attempts, application lock, inactivity timeout, and certificate delivery.**

## 5.0 REQUIREMENTS: ORDERING, SERVICE, SUPPORT, REPORTING AND BILLING

5.1 Ordering:

5.1.1 The Vendor(s) shall provide activation of new service at no additional charge.

**Comply.**

5.1.2 Devices must be signed for at delivery by FMO

**Comply.**

5.2 **Service:**

5.2.1 The FMO plans to enter into device purchase agreements for an indefinite quantity of automatic vehicle location devices in the various device categories outlined in this RFQ.

**Comply.**

5.2.2 The FMO will furnish written orders for devices to be purchased, specifying make, model, and installation requirements including any required modification or upfitting (manufacturer or third party).

**Comply.**

5.2.3 The State of West Virginia is not subject to sales tax, usage tax, or personal property tax.

**Comply.**

5.2.4 The FMO shall not cause any lien to be attached to any device without the prior written consent of the Vendor. Authority to sign device purchase agreements on behalf of the FMO rests with the Executive Director, FMO, and DOA Fleet Manager.

**Comply.**

5.2.5 The FMO shall notify the Vendor, in writing, of any change in name, address, ownership or control of the FMO. Such notification to be supplied to the Vendor within fifteen (15) days of such change.

**Comply.**

5.3 Support:

5.3.1 Vendor(s) shall provide a toll-free support number coverage, staffed by technical personnel, to answer technical questions.

**Comply. During the warranty period, RSI will provide unlimited phone support via our toll-free number [(866) 869-7700]. After hours support is available 24/7 through the 911 option on our telephone system.**

5.4 Reporting:

5.4.1 Vendor(s) will provide a free quarterly optimization calculation, as applicable and requested by the FMO. There shall not be an additional charge or commitment for moving a device onto a more appropriate data transmission service plan (greater or lesser ping rate per hour). Optimization recommendations must be communicated through a quarterly report. The FMO will use this information for evaluation AVL and ancillary equipment usage, as provided by the Vendor(s).

**Comply. RSI project manager will work with the State to determine if the system is being used in an optimal manner and offer suggestions.**

5.4.2 Vendor(s) shall provide to the FMO an additional monthly report that shows total bytes of usage by AVL device or ancillary equipment serial number, in addition to billing the vehicle using agencies.

**Comply. Reports will be available upon request.**

5.5 Billing

5.5 Billing

5.5.1 FMO shall have the ability to change data service plans on a particular AVL device at the end of the regular billing cycle without any fee or charge.

**Comply.**

5.5.2 It will be the responsibility of the successful Vendor(s) to bill the individual spending units based on individual AVL and ancillary equipment requirements. Options may include:

5.5.2.1 A separate bill per device requested

5.5.2.2 Aggregate billing by agency geographic location

5.5.2.3 Aggregate billing for the spending unit

**Comply.**

5.5.3 This billing shall be provided in a pre-approved format, as agreed upon by both the Vendor(s) and the FMO. These bills will be delivered to the spending unit on a pre-arranged delivery date, mutually agreed upon by the FMO and the Vendor(s). Billing at a minimum should detail, for each AVL device or ancillary equipment on that bill, the following:

5.5.3.1 Vehicle number (last six-digits of VIN or complete Vin (seventeen alpha/numeric characters)
5.5.3.2 Device Number
5.5.3.3 Office (landline) Number
5.5.3.4 Supervisor's Name
5.5.3.5 Supervisor's Office (landline) Number
5.5.3.6 Department
5.5.3.7 Agency Name
5.5.3.8 Unit Name
5.5.3.9 Organization Number
5.5.3.10 Bill to address
5.5.3.11 Data transmission service plan level
5.5.3.12 Cost of data transmission

5.5.3.13 Overage charges, if applicable
5.5.3.14 Fees

**Comply.**

5.5.4 Vendor(s) shall work directly with spending units to resolve billing issues.

**Comply.**

5.5.5 The State will not pay activation fees, disconnection fees, early termination fees, or roaming fees (within the designated "home area"), as part of this contract.

**Comply. This will be a one year contract with optional extensions.**

5.5.6 Vendor(s) must include, per AVL device or ancillary equipment number and/or IP address, and all fees (USF, Administrative Fees, etc.). The state cannot pay any tax, fee, or surcharge that is not included as part of the base monthly rate. The State of West Virginia is exempt from all Federal and State of West Virginia taxes.

**Comply.**

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Asset Tracker #____ without Panic Feature** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | NO BID | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| GPRS Device Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Battery Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Antenna Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Car Charger Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Kits/Sets/Outfits Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Installation Cost | | | 50 | | | | | | $0 | | | | | | | | | | $0 |
| DSP Cost (5-minute ping) | | | 50 | | | | | | | | | $0 | | | | | | | $0 |
| Roaming Cost | | | 50 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 50 | | | | | | | | | | | | | | | $0 | $0 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Employee Tracker (key fob) #____ with Panic Feature** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | NO BID | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| GPRS Device Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Battery Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Antenna Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Car Charger Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Kits/Sets/Outfits Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Installation Cost | | | 50 | | | | | | $0 | | | | | | | | | | $0 |
| DSP Cost (5-minute ping) | | | 50 | | | | | | | | | $0 | | | | | | | $0 |
| Roaming Cost | | | 50 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 50 | | | | | | | | | | | | | | | $0 | $0 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger #____ with Engine Diagnostics** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | CalAmp | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | 500 | $375 | | $375 | | | | | | | | | | | | | $187,500 |
| CDMA Device Cost J1708/J1930 | | | 500 | $395 | | $395 | | | | | | | | | | | | | $197,500 |
| GPRS Device Cost OBD-II | | | 500 | $275 | | $275 | | | | | | | | | | | | | $137,500 |
| GPRS Device Cost J1708/J1930 | | | 500 | $295 | | $295 | | | | | | | | | | | | | $147,500 |
| Battery Cost | | | 500 | $20 | | $20 | | | | | | | | | | | | | $10,000 |
| Antenna Cost | | | 500 | $22 | | $22 | | | | | | | | | | | | | $11,000 |
| Car Charger Cost | | | 500 | $15 | | $15 | | | | | | | | | | | | | $7,500 |
| Kits/Sets/Outfits Cost | | | 500 | $12 | | $12 | | | | | | | | | | | | | $6,000 |
| Installation Cost | | | 500 | | | | $100 | | $100 | | | | | | | | | | $50,000 |
| DSP Cost (5-minute ping) | | | 500 | | | | | | | $0.00 Included | | #VALUE! | | | | | | | #VALUE! |
| Roaming Cost | | | 500 | | | | | | | | | | $0 | | $0 | | | | $0 |
| Browser client-server application | | | 500 | | | | | | | | | | | | | $18 | | $18 | $9,000 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger #____ without Engine Diagnostics** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | CalAmp | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost | | | 7000 | $275 | | $275 | | | | | | | | | | | | | $1,925,000 |
| GPRS Device Cost | | | 7000 | $139 | | $139 | | | | | | | | | | | | | $973,000 |
| Battery Cost | | | 7000 | $20 | | $20 | | | | | | | | | | | | | $140,000 |
| Antenna Cost | | | 7000 | $22 | | $22 | | | | | | | | | | | | | $154,000 |
| Car Charger Cost | | | 7000 | $15 | | $15 | | | | | | | | | | | | | $105,000 |
| Kits/Sets/Outfits Cost | | | 7000 | $12 | | $12 | | | | | | | | | | | | | $84,000 |
| Installation Cost | | | 7000 | | | | $100 | | $100 | | | | | | | | | | $700,000 |
| DSP Cost (5-minute ping) | | | 7000 | | | | | | | $0.00 Included | | #VALUE! | | | | | | | #VALUE! |
| Roaming Cost | | | 7000 | | | | | | | | | | $0 | | $0 | | | | $0 |
| Browser client-server application | | | 7000 | | | | | | | | | | | | | $18 | | $18 | $126,000 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger with Visual/Audible Driver Alerts and with Engine Diagnostics #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | CalAmp | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | 50 | $425 | | $425 | | | | | | | | | | | | | $21,250 |
| CDMA Device Cost J1708/J1930 | | | 50 | $445 | | $445 | | | | | | | | | | | | | $22,250 |
| GPRS Device Cost OBD-II | | | 50 | $325 | | $325 | | | | | | | | | | | | | $16,250 |
| GPRS Device Cost J1708/J1930 | | | 50 | $345 | | $345 | | | | | | | | | | | | | $17,250 |
| Battery Cost | | | 50 | $20 | | $20 | | | | | | | | | | | | | $1,000 |
| Antenna Cost | | | 50 | $22 | | $22 | | | | | | | | | | | | | $1,100 |
| Car Charger Cost | | | 50 | $15 | | $15 | | | | | | | | | | | | | $750 |
| Kits/Sets/Outfits Cost | | | 50 | $12 | | $12 | | | | | | | | | | | | | $600 |
| Installation Cost | | | 50 | | | | $100 | | $100 | | | | | | | | | | $5,000 |
| DSP Cost (5-minute ping) | | | 50 | | | | | | | $0.00 Included | | #VALUE! | | | | | | | #VALUE! |
| Roaming Cost | | | 50 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 50 | | | | | | | | | | | | | $18 | | $18 | $900 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger with Visual/Audible Driver Alerts and without Engine Diagnostics #___** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | CalAmp | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost | | | 2000 | $319 | | $319 | | | | | | | | | | | | | $638,000 |
| GPRS Device Cost | | | 2000 | $189 | | $189 | | | | | | | | | | | | | $378,000 |
| Battery Cost | | | 2000 | $20 | | $20 | | | | | | | | | | | | | $40,000 |
| Antenna Cost | | | 2000 | $22 | | $22 | | | | | | | | | | | | | $44,000 |
| Car Charger Cost | | | 2000 | $15 | | $15 | | | | | | | | | | | | | $30,000 |
| Kits/Sets/Outfits Cost | | | 2000 | $12 | | $12 | | | | | | | | | | | | | $24,000 |
| Installation Cost | | | 2000 | | | | $100 | | $100 | | | | | | | | | | $200,000 |
| DSP Cost (5-minute ping) | | | 2000 | | | | | | | $0.00 Included | | #VALUE! | | | | | | | #VALUE! |
| Roaming Cost | | | 2000 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 2000 | | | | | | | | | | | | | $18 | | $18 | $36,000 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger with Video Capture and with Engine Diagnostics #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | NO BID | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| CDMA Device Cost J1708/J1930 | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| GPRS Device Cost OBD-II | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| GPRS Device Cost J1708/J1930 | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Battery Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Antenna Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Car Charger Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Kits/Sets/Outfits Cost | | | 50 | NO BID | | #VALUE! | | | | | | | | | | | | | #VALUE! |
| Installation Cost | | | 50 | | | | | | $0 | | | | | | | | | | $0 |
| DSP Cost (5-minute ping) | | | 50 | | | | | | | | | $0 | | | | | | | $0 |
| Roaming Cost | | | 50 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 50 | | | | | | | | | | | | | | | $0 | $0 |
| | | | | | | | | | | | | | | | | | | **Total** | #VALUE! |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Data Logger with Video Capture and without Engine Diagnostics #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | NO BID | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| CDMA Device Cost J1708/J1930 | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| GPRS Device Cost OBD-II | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| GPRS Device Cost J1708/J1930 | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| Battery Cost | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| Antenna Cost | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| Car Charger Cost | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| Kits/Sets/Outfits Cost | | | 200 | | | $0 | | | | | | | | | | | | | $0 |
| Installation Cost | | | 200 | | | | | | $0 | | | | | | | | | | $0 |
| DSP Cost (5-minute ping) | | | 200 | | | | | | | | | $0 | | | | | | | $0 |
| Roaming Cost | | | 200 | | | | | | | | | | | | $0 | | | | $0 |
| Browser client-server application | | | 200 | | | | | | | | | | | | | | | $0 | $0 |
| | | | | | | | | | | | | | | | | | | **Total** | $0 |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ancillary Equipment Battery #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | MISC | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| Battery Cost | | | | | | | | | | | | | | | | | | | |
| Antenna Cost | | | 50 | $22 | | $22 | | | | | | | | | | | | | $1,100 |
| Car Charger Cost | | | | | | | | | | | | | | | | | | | |
| Kits/Sets/Outfits Cost | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | |
| DSP Cost (5-minute ping) | | | | | | | | | | | | | | | | | | | |
| Roaming Cost | | | | | | | | | | | | | | | | | | | |
| Browser client-server application | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **Total** | $1,100 |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ancillary Equipment Battery #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | MISC | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| Battery Cost | | | 50 | $20 | | $20 | | | | | | | | | | | | | $1,000 |
| Antenna Cost | | | | | | | | | | | | | | | | | | | |
| Car Charger Cost | | | | | | | | | | | | | | | | | | | |
| Kits/Sets/Outfits Cost | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | |
| DSP Cost (5-minute ping) | | | | | | | | | | | | | | | | | | | |
| Roaming Cost | | | | | | | | | | | | | | | | | | | |
| Browser client-server application | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **Total** | $1,000 |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client-Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ancillary Equipment Battery #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | MISC | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| Battery Cost | | | | | | | | | | | | | | | | | | | |
| Antenna Cost | | | | | | | | | | | | | | | | | | | |
| Car Charger Cost | | | 50 | $15 | | $15 | | | | | | | | | | | | | $750 |
| Kits/Sets/Outfits Cost | | | | | | | | | | | | | | | | | | | |
| Installation Cost | | | | | | | | | | | | | | | | | | | |
| DSP Cost (5-minute ping) | | | | | | | | | | | | | | | | | | | |
| Roaming Cost | | | | | | | | | | | | | | | | | | | |
| Browser client-server application | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **Total** | $750 |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.

| Product ↓ Service → | Manufacturer | Model | Estimated Device Requirement | Device Cost | Device Discount | Net Device Cost | Installation Cost | Installation Discount | Net Installation Cost | Data Transmission Service Plan Cost (5-minute ping rate) | Data Transmission Service Plan Discount (5-minute ping rate) | Net Data Transmission Service Plan Cost (5-minute ping rate) | DSP Roaming Cost | DSP Roaming Discount | Net DSP Roaming Cost | Browser Client-Server Application Cost | Browser Client Server Application Discount | Net Browser Client-Server Application Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ancillary Equipment Battery #____** | | | | | | | | | | | | | | | | | | | |
| Manufacturer | MISC | | | | | | | | | | | | | | | | | | |
| Model | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| CDMA Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost OBD-II | | | | | | | | | | | | | | | | | | | |
| GPRS Device Cost J1708/J1930 | | | | | | | | | | | | | | | | | | | |
| Battery Cost | | | | | | | | | | | | | | | | | | | |
| Antenna Cost | | | | | | | | | | | | | | | | | | | |
| Car Charger Cost | | | | | | | | | | | | | | | | | | | |
| Kits/Sets/Outfits Cost | | | 50 | $12 | | $12 | | | | | | | | | | | | | $600 |
| Installation Cost | | | | | | | | | | | | | | | | | | | |
| DSP Cost (5-minute ping) | | | | | | | | | | | | | | | | | | | |
| Roaming Cost | | | | | | | | | | | | | | | | | | | |
| Browser client-server application | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **Total** | $600 |

Basic Package – Device (asset tracker, employee tracker, data logger with engine diagnostics, data logger without engine diagnostics, data logger with visual/audible alerts and engine diagnostics, data logger with visual/audible alerts without engine diagnostics, data logger with video capture and engine diagnostics, data logger with video capture without engine diagnostics) and user manual.
DSP – 12 pings per hour or unlimited data transmission for ancillary equipment.
Roaming Cost – Cost of Roaming if out of state.