



AT&T Response to Metropolitan Area Planning Council's RFP for Automatic Vehicle Location Systems (AVL) with GPS



RFP MAPC 2016 AVL
11/3/2016
Technical Proposal





1500 S. Willow St.
Manchester, NH 03103

Office: 888-308-5270
Cell: 508-308-9996
todd.theel@att.com
www.att.com

November 3, 2016

Ms. Heidi Anderson
Manager, Municipal Procurement Services
Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Re: Request for Proposals to Supply and Deliver Hardware and Software for Automatic Vehicle Location Systems (AVL) with GPS, RFP #MAPC 2016 AVL (the "RFP").

Dear Ms. Anderson:

On behalf of AT&T Corp. ("AT&T"), I would like to thank the Metropolitan Area Planning Council ("MAPC") for the opportunity to submit this response to the RFP (the "Response"). As a leading provider of wireless telecommunications and related services to government institutions, AT&T is uniquely positioned to meet MAPC's service and product needs.

In that regard, please understand that AT&T is taking exception to the contractual terms and conditions set forth in the RFP including, without limitation, (1) the sample contract for goods and services included in the RFP; and (2) the sample municipal subscription form included in the RFP (collectively, the "MAPC Contract"). That said, in the event AT&T is fortunate enough to be selected as a vendor, AT&T will commit to utilizing the sample contract for goods and services as a negotiation starting point towards a final, mutually acceptable written agreement between AT&T and the MAPC. AT&T has certain, additional product-specific terms and conditions that it will require in any such contract, and certain of them have been included with the Response for reference. There may be additional terms and conditions necessary.

Notwithstanding anything to the contrary in the RFP, neither AT&T nor MAPC is under any obligation with respect to the RFP until both parties have agreed upon a mutually acceptable

final contract. AT&T respectfully requests that information in the Response be held confidential by MAPC to the extent allowed under applicable law.

AT&T looks forward to working with you and negotiating a final agreement in the event AT&T is selected as your vendor of choice. Please do not hesitate to call me for assistance at any time.

Sincerely,

Todd A. Theel
Client Solutions Executive 2



Connecting Your World

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Todd A. Theel
Client Solutions Executive 2
AT&T
1500 S. Willow St.
Manchester, NH 03103
Phone: 888-308-5270
Cell: 508-308-9996
todd.theel@att.com



Response Validity Period—The information and pricing contained in this response (the "Response" or the "Proposal") is valid for a period of 90 days from the date written on the Response cover page, unless rescinded or extended in writing by AT&T. **Terms and Conditions**—Unless otherwise stated herein, this Proposal is conditioned upon negotiation of mutually acceptable terms and conditions. **Proposal Pricing**—Pricing proposed herein is based upon the specific product/service mix and locations outlined in the Response, and is subject to the contracting vehicle offered by AT&T unless otherwise stated herein. Any changes or variations in the standard terms and conditions, the products/services, length of term, locations, and/or design described herein may result in different pricing. **Providers of Service**—Subsidiaries and affiliates of AT&T Inc. provide products and services under the AT&T brand. AT&T Mobility National Accounts LLC, an AT&T company, is the proposer for itself and on behalf of its service-providing affiliates. **Software**—Any software used with the products and services provided in connection with this Response will be governed by the written terms and conditions applicable to such software. Title to software remains with AT&T or its supplier. Customer must comply with all such terms and conditions, and they will take precedence over any agreement between the parties as relates to such software. **Copyright Notice and Statement of Confidentiality**—© 2016 AT&T Intellectual Property. All rights reserved. AT&T, AT&T logo, and all other marks contained herein are trademarks of AT&T Intellectual Property and/or AT&T affiliated companies. All other marks contained herein are the property of their respective owners. The contents of this document are unpublished, proprietary, and confidential and may not be copied, disclosed, or used, in whole or in part, without the express written permission of AT&T Intellectual Property or affiliated companies, except to the extent required by law and insofar as is reasonably necessary in order to review and evaluate the information contained herein.

Table of Contents

General Response	1
Tab 1 - Introduction	26
Cover Letter.....	26
Proposal Signature Page	28
Certificate of Non-Collusion.....	29
Certificate of Tax Compliance	30
Conflict of Interest Certification.....	31
Certificate of Compliance with M.G.L. c. 151B	32
Certificate of Non-Debarment	33
Additional Certifications	34
Certificate of Authority – Corporate (if applicable).....	35
IRS Form W9.....	36
List of subcontractors with full contact information (if applicable).....	37
Tab 2 - Minimum Quality Requirements	38
Tab 3 - Qualifications & Experience.....	39
Executive Summary.....	39
AT&T Fleet Manager Overview.....	47
AT&T Fleet Manager	71
Custom Map Specification	71
Route Completion Report /Live Map.....	77
Data Connector	81
Customer Support and Service SLA.....	111
Tab 4 - References	120
Tab 5 - Products	124
Section 12 - Product Requirements Matrix	124
AVL/GPS Implementation Methodology	140



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General Response

AT&T'S GENERAL RESPONSE TO THE RFP ("AT&T's General Response")

AT&T Mobility National Accounts LLC ("AT&T") is submitting its Response to this RFP (the "Response") pursuant to the responses, answers, clarifications and supplemental terms and conditions set forth in and/or incorporated into this Response. The Metropolitan Area Planning Council may be referred to as "MAPC" or "Customer" within this Response.

Accordingly, AT&T takes a general exception to all the contractual terms and conditions contained in the RFP including, without limitation (1) the sample contract for goods and services included in the RFP; and (2) the sample municipal subscription form included in the RFP (collectively, the "MAPC Contract").

AT&T takes such a general exception primarily because the MAPC Contract does not contain the product-related contractual terms and conditions necessary for AT&T to properly deliver the wireless solution described in the Response. In addition, AT&T may have also taken specific exceptions to certain RFP provisions, but has not made a final, complete comment on every such provision. Note that AT&T's General Response applies in all instance, including those where specific comments/exceptions have been made and those where such comments/exceptions have not been made. The absence of any individual response to a specific section of the RFP cannot be considered a waiver of any objection, or an agreement to that section's provisions. Similarly, the inclusion of any specific comment/exception does not remove the application of AT&T's General Response.

That said, please note that in the event AT&T is fortunate enough to be selected as the MAPC's vendor, AT&T will commit to utilizing the sample contract for goods and services as a starting point for negotiations towards a final, mutually acceptable written agreement between AT&T and the MAPC. AT&T has certain, additional product-specific terms and conditions that it will require in any such contract, and certain of them have been included with the Response for reference. There may also be additional terms and conditions necessary. AT&T remains willing to negotiate in good faith towards such a mutually acceptable contract vehicle.

Note that included within AT&T's General Response, in an efficiency effort, are several statements that apply to several, similar provisions throughout the RFP and should be read as applicable to any and all such related provisions. In that regard, note that:

- AT&T clarifies that only the physical response materials become Customer property. Any other pre-existing or newly-developed intellectual property of



AT&T, its suppliers or its third parties, provided in this Response or which is used or developed during the project remains the intellectual property of AT&T or its suppliers. AT&T would be willing to negotiate with Customer regarding rights to use that intellectual property.

- AT&T respectfully requests that information in this document be held confidential by Customer to the extent allowed under applicable law.
- AT&T will hold the prices quoted for a period of 90 days and will endeavor to extend this period to the length of time as requested by the RFP.
- The Response is a direct reflection of the entire scope of work as presented here, as of the date of submission. Acceptance of only part of the quote may require mutual agreement/adjustment to the final configuration, subsequent pricing and implementation schedule.
- Regarding any proposed waiver of informalities and irregularities, AT&T agrees, except to the extent the waiver of technicalities or informalities portions of this provision as used here and throughout this RFP implies AT&T waives rights to protest the award decision. To that end, AT&T reserves all protest rights afforded bidders/respondents participating in the contracting process.
- Any purchase orders issued for services as provided under the RFP must clearly provide that the purchase is made via the mutually agreed contract and not subject to the preprinted terms of that purchase order form.
- Any third-party software used with the services will be governed by the written terms and conditions of the third-party software supplier's software license documentation applicable to such software. Title to software remains with AT&T or its supplier. Customer, as the licensee, will be bound to all such terms and conditions, and they will take precedence over any agreement between the parties as relating to such software.
- To the extent any portion of this project may be funded in whole or in part with grants, loans or payments made pursuant to the American Recovery and Reinvestment Act of 2009 ("ARRA"), AT&T and Customer will need to reach mutual agreement on AT&T's participation.
- The information and pricing submitted with this Response is subject to change on account of any error or omission in the information provided by Customer or upon further investigation(s) as to the exact requirements of any order. For the price(s) quoted herein, AT&T will provide the items of equipment and services specifically listed in its proposal. Work which is not shown or described in a proposal will require mutual agreement/adjustment to the final configuration, subsequent pricing and Implementation schedule.



Notwithstanding anything to the contrary set forth in the RFP, neither AT&T nor MAPC is under any obligation with respect to the RFP until both parties have agreed upon and executed a mutually acceptable final contract.

It is AT&T's goal to provide the best communications services at the best value for all of our customers using the highest ethical and legal standards. Given the long and successful history of AT&T, we are confident this will be a successful contracting process, leading to a successful project performance.

RFP Sections Exceptions and Clarifications

2.6 Contract Extensions

Each contract will be eligible for two (2) additional one-year extensions, ending Jun 30, 2018 and Jun 30, 2019. In the event new contracts have not been procured and awarded by Jun 30, 2019, MAPC may elect to extend current contracts for an additional period of time until new contracts have been procured and awarded. However, in no instance shall any contract term, including extensions, exceed three years in total.

Contract extensions are not automatic. The decision to exercise an option to extend will be based on a determination that it is more advantageous for MAPC and the participating municipalities to exercise the option rather than undertake a new procurement as well as consideration of vendor performance. MAPC reserves sole discretion to extend contracts in consultation with the participating municipalities.

Except as provided elsewhere in this RFP, there will be no change in the terms and conditions, proposal prices, or products offered during the contract periods. A The initial term of any contract(s) resulting from this RFP will be from date of execution through Jun 30, 2017 with the option to renew for two additional one-year terms at the sole discretion of MAPC.

AT&T Response:

With respect to §2.6, AT&T respectfully requires any renewal of the resulting agreement to be mutually agreeable to both AT&T and the MAPC.

4.5 Contract

AT&T Response:

See AT&T's General Response with respect to this §4.5 and the final, mutually acceptable contract vehicle.



5.4 Price Proposal Preparation

Tab 2 – Pricing

- Proposers may update contract catalogs no more frequently than once during the term of any contract or contract extension and no sooner than the first day of the next extended contract period.

AT&T Response:

See AT&T's General Response with respect to the contract catalog issue referenced in the bullet directly above and for related, final, mutually acceptable contract vehicle concepts.

8 Terms and Conditions

AT&T Response:

See AT&T's General Response with respect to the terms and conditions set forth in this §8 and for related, final, mutually acceptable contract vehicle concepts.

8.1 Pricing

Vendors may not offer Buyers pricing that differs from authorized contract pricing without prior written approval from MAPC.

AT&T Response:

See AT&T's General Response. In addition, AT&T reserves the right to negotiate individual deals with Buyers that may differ in quality and nature from the standard offers set forth in the final, mutually acceptable main contract; however, such Buyers will remain subject to the basic, fundamental legal terms and conditions set forth in such contract.

Any changes to product availability and pricing are subject to MAPC written approval.

AT&T Response:

AT&T takes exception to the above requirement of obtaining MAPC's written approval for product availability and pricing.

8.2 Pricing Adjustments



AT&T Response:

See AT&T's General Response with respect to this §8.2 and for related, final, mutually acceptable contract vehicle concepts.

8.9 Returns

AT&T Response:

See AT&T's General Response with respect to the product return provisions set forth in this §8.9, as well as for related, final, mutually acceptable contract vehicle concepts.

8.10 Invoicing

All eligible parties are tax-exempt. Invoices should not show taxes or finance charges.

AT&T Response:

AT&T will honor tax exemption for all entities purchasing under any resulting contract that provide AT&T with a corresponding tax exemption certificate.

8.11 Payment by Eligible Parties

MAPC is not an eligible party under this RFP or any resulting contract(s). Neither is it a party to any resulting transactions, nor can it be held liable for false representations or non-payment by eligible parties.

Eligible parties are not obligated to make payment to Vendors other than in a manner consistent with their normal payment schedules and as bound by normal commerce. Payments shall be made in U.S. dollars. Vendors may not require cash payment nor accept cash for any transaction associated with this RFP.

AT&T Response:

See AT&T's General Response with respect to the payment issues referenced directly above.

Buyers shall have the right to withhold not more than 10% of the total amount of an invoice pending satisfactory fulfillment of an order including outstanding items. Payment of withheld amounts shall be made within 60 days of Buyer acceptance or satisfactory remedial action required of the Vendor.



AT&T Response:

See AT&T's General Response with respect to the withholding issues referenced directly above.

8.14 Contract Administration and Auditing

AT&T Response:

See AT&T's General Response with respect to the contract administration and auditing provisions set forth in this §8.14, as well as for related, final, mutually acceptable contract vehicle concepts.

8.15 Indemnification

AT&T Response:

See AT&T's General Response with respect to the indemnification provisions set forth in this §8.15, as well as for related, final, mutually acceptable contract vehicle concepts.

10 Sample Contract

AT&T Response:

See AT&T's General Response with respect to the sample contract, as well as for related, final, mutually acceptable contract vehicle concepts.

EXHIBIT C

Special Terms & Conditions

AT&T Response:

See AT&T's General Response with respect to the Special Terms & Conditions set forth in this Exhibit C.

11 Sample Municipal Subscription Form

AT&T Response:

See AT&T's General Response with respect to the sample Municipal Subscription Form, as well as for related, final, mutually acceptable contract vehicle concepts.



AT&T'S SUPPLEMENTAL TERMS AND CONDITIONS: See AT&T's General Response with respect to including certain additional terms and conditions in the Response. Appendix A, below, sets forth the fundamental terms and conditions for AT&T to provide the wireless service that will power its AVL Solution. Tabs 1-5 and Pricing Proposal are the Sales Information for AT&T's proposed AVL Solution, both of which would be incorporated into the final, mutually acceptable contract.

APPENDIX A – AT&T Supplemental General Terms and Conditions

General Terms and Conditions Version 4.12

1. Service.

1.1 AT&T Markets. Service is available for purchase only in AT&T Markets, as may be modified by AT&T from time to time.

1.2 Availability/Interruption. Service will be available only within the operating range of each Carrier's wireless system in AT&T Markets and where roaming is available through other carriers (each, a "Service Area"). AT&T may from time to time add or delete Service Areas, and AT&T may terminate Service to Customer's CRU(s) in any such deleted Service Area and/or terminate the Agreement if the Service Area deletion affects all of Customer's CRUs. Gaps in Service occur within the Service Areas shown on coverage maps, which, by their nature, are only approximations of actual coverage; therefore, AT&T does not guarantee Customer uninterrupted Service. Unless prohibited by law, Service may be interrupted, delayed or otherwise limited for a variety of reasons, including environmental conditions, unavailability of radio frequency channels, system capacity, priority access by National Security and Emergency Preparedness personnel in the event of a disaster or emergency, coordination with other systems, equipment modifications and repairs, and problems with the facilities of interconnecting carriers. AT&T may block access to certain categories of numbers (e.g., 976, 900 and international destinations) at its sole discretion. In addition, AT&T may interrupt or terminate Service without notice: (a) for any conduct that AT&T believes violates this Agreement or any terms and conditions of Customer's Plan; (b) if Customer's representative or CRU behaves in an abusive, derogatory, or similarly unreasonable manner with any of AT&T's representatives; (c) for Customer's nonpayment of charges, provision of inaccurate credit information, and/or refusal to pay any requested advance payment or deposit when AT&T believes that Customer's credit has deteriorated; or (d) if AT&T has reasonable cause to believe that Customer's Equipment is being used for an unlawful purpose or in a way that (i) is harmful to, interferes with, or may adversely affect the Service, AT&T's owned network or the network of any other provider, (ii) interferes with the use or enjoyment of Services received by other customers, (iii) infringes intellectual property rights, (iv) results in the publication of threatening or



offensive material, or (v) constitutes spam or other abusive messaging or calling, a security risk or a violation of privacy.

2. Plans; Sales Information. Customer may choose from Voice Service and Wireless Data Service Plans found at the “Plans” page of the Program Website, as may be modified by AT&T from time to time. The pricing, terms and conditions of the Service depend upon the Plan, feature, promotion or other offer selected when Service is activated or changed. End Users must qualify for the chosen Service. If End Users lose their eligibility for a particular Plan, AT&T may change their Plan to one for which they qualify. Customer is subject to the terms and conditions set forth in the Enterprise Customers: Additional Service and Equipment Related Terms found at att.com/abs-addtl-terms, as well as applicable product-specific pricing and/or additional product-specific terms and conditions set forth in (i) separate product briefs and rate brochures, (ii) at att.com/abs-addtl-terms or wireless.att.com/businesscenter (or such other site that AT&T may designate), and/or (iii) in other AT&T marketing materials. Such Enterprise Customers: Additional Service and Equipment Related Terms and other online and printed product materials are referred to collectively in the Agreement as “Sales Information” and incorporated herein by reference. Customer can contact its AT&T representative for copies of the Sales Information. Service (including without limitation, eligibility requirements, Plans, pricing, features, promotions, offers, and/or Service Areas) is subject to change without notice. Any provisions in the terms and conditions governing the Plan, feature, promotion or other offer which, by their terms, are to exist for a specified period of time, will survive any termination or expiration of this Agreement.

3. Equipment.

3.1 Availability. With respect to Numbers provisioned from AT&T Markets, Customer may purchase available Equipment found at the “Equipment” page of the Program Website, the list of which may be modified by AT&T from time to time. Specific models of Equipment are subject to availability limitations.

3.2 General. Customer is responsible for all phones and other Equipment assigned to Customer and/or its CRUs under Customer’s account. Equipment must be compatible with, and not interfere with, the Service and must comply with all applicable laws, rules, and regulations. Customer is responsible for the purchase and maintenance of any additional hardware, software and/or Internet access from PCs required to use the Service. Equipment not purchased from AT&T or its authorized distributors (a) may not provide some or all of the features included in the Service; and (b) may not allow use of features and functions when off of AT&T’s wireless network, including those that work while on AT&T’s wireless network, and CALLS TO 911 MAY NOT GO THROUGH ON ANY NETWORK. AT&T may periodically program Customer’s Equipment remotely with



system settings for roaming service, to direct Customer's Equipment to use network services most appropriate for Customer's CRUs' typical usage, and other features that cannot be changed manually. Customer agrees that Customer and/or its CRUs won't make any modifications to the Equipment or its programming to enable the Equipment to operate on any other system. AT&T may, at its sole and absolute discretion, modify the programming to enable the operation of the Equipment on other systems. Customer is solely responsible for complying with U.S. Export Control laws and regulations and the import laws and regulations of foreign countries when CRUs are traveling internationally with Customer's Equipment. Call timers included in the Equipment are not an accurate representation of actual billed usage.

3.3 Shipping, Title and Risk of Loss. Subject to availability, and AT&T's receipt of complete order information, AT&T will ship Equipment ordered by Customer and/or its End Users to the address specified in the order within two (2) to five (5) business days of AT&T's receipt of the order. Title and risk of loss will pass to Customer upon delivery of the Equipment to the address specified in the order.

4. Activation and Other Processes.

4.1 Service and Equipment. Customer will follow the policies and processes established by AT&T to purchase, activate, migrate, terminate, or otherwise modify a Service, including without limitation AT&T Mobile Services and Equipment, as may be modified from time to time. Customer authorizes AT&T to provide information about and to make changes to Customer's account, including adding new Service, upon the direction of any individual representative of Customer able to provide information AT&T deems sufficient to identify Customer. Any order for Service that Customer's representative submits to AT&T will be binding upon Customer pursuant to the terms and conditions of this Agreement. AT&T may reasonably rely on the authority of any person who executes an order on Customer's behalf. Customer consents to the use by AT&T or its authorized agents of regular mail, predictive or autodialing equipment, email, text messaging, facsimile or other reasonable means to contact Customer and/or its CRUs to advise Customer and/or its CRUs about AT&T's Services or other matters AT&T believes may be of interest to Customer and its CRUs. In any event, AT&T reserves the right to contact Customer and/or its CRUs by any means regarding customer service-related notifications, or other such information.

4.2 Additional Products, Services, Equipment, and Programs. AT&T may make additional products, services, Equipment and/or programs available to Customer through Attachments posted under the "Additional Products, Services, Equipment and Programs" section of the Program Website (collectively, "Optional Programs"). To the extent Customer orders, pays for, or otherwise receives the benefit of any Optional Program, Customer will be bound by the rates, terms and conditions set forth in the



corresponding Attachment, as well as in any Sales Information referenced therein, as such rates, terms and conditions may be modified by AT&T from time to time, all of which are incorporated herein by reference.

4.3 Identification and Password. Before Customer may use certain AT&T online activation, enrollment, configuration and/or support services, an authorized representative of Customer must register with AT&T and create a login identification ("ID") and password. Use of this login ID and password will enable Customer and/or its employees and agents to make certain changes to Customer's and/or CRUs' account(s). Customer is solely responsible for maintaining adequate security and control of any and all IDs, passwords, or any other codes that are created by Customer, or issued to Customer by AT&T, for purposes of giving Customer access to activation, enrollment, configuration and support services. AT&T is entitled to rely on information it receives from Customer or its agents and may assume that all such information was submitted by or on behalf of Customer.

4.4 Supplemental Services. AT&T may also make available to Customer certain services, features or software applications provided by third parties ("Supplemental Services"), which the third parties have authorized AT&T to resell to Customer and distribute to Customer, or provide Customer with instructions to obtain, the third party's end user license agreement ("EULA") and associated warranties and/or maintenance service terms, if any. Available Supplemental Services are listed at att.com/abs-addtl-terms, as modified by AT&T from time to time, and may include, without limitation, products that enable fleet tracking, mobile productivity, or workforce automation and/or messaging, email, email forwarding or other server software-based services. Customer acknowledges that (a) Customer is subject to the rates, terms and conditions set forth in the applicable Sales Information for the Supplemental Services selected by Customer and/or its CRUs, as such rates, terms and conditions may be modified by AT&T from time to time, all of which are incorporated herein by reference, and (b) Customer is also subject to the third party's EULA and other terms and conditions for any Supplemental Service selected by Customer and/or its CRU. Supplemental Services are subject to change without notice.

5. Payment and Charges.

5.1 Payment. Customer must pay all charges, including, without limitation, airtime, roaming, recurring monthly service, activation, optional feature charges, license fees, toll, collect call and directory assistance charges, Equipment, Supplemental Services, and any other charges or calls billed to a CRU's phone number. Customer may be billed for multiple types of usage simultaneously. Customer must also pay applicable taxes and governmental fees (regardless of whether they are imposed on Customer, a CRU, AT&T or a Carrier), administrative and late payment fees, restoral and reactivation charges,



and any Other Monthly Charges (as defined below). For any termination (including when a Number is switched to another carrier), Customer will be responsible for payment of all fees and charges through the end of the billing cycle in which termination occurs. Payment is due upon receipt of the invoice.

5.1.1 Other Monthly Charges. In addition to the monthly cost of the Plan and any selected features, AT&T imposes the following charges: (a) a Regulatory Cost Recovery Charge of up to \$1.25 to help defray its cost incurred in complying with obligations and charges imposed by state and federal telecom regulations, (b) a gross receipts surcharge, (c) state and federal universal service charges, and (d) other governmental assessments on AT&T, including, without limitation, a Property Tax Allotment surcharge applied with respect to each Corporate Responsibility User's assigned Number. These are not taxes or government-required charges. Customer understands and agrees that state and federal universal service fees and other governmentally imposed fees, whether or not assessed directly upon Customer, may be increased based upon the government's or AT&T's calculations. Customer and its CRUs should visit att.com/additionalcharges to view estimates of such discretionary charges for a CRU's area.

5.2 Charges.

5.2.1 Generally. If Equipment is shipped to Customer or a CRU, Services may be activated before delivery of the Equipment so that it can be used promptly upon receipt. Thus, Customer may be charged for Services while the Equipment is still in transit. Except as provided below, monthly service and certain other charges are billed one month in advance, and there is no proration of such charges if Service is terminated on other than the last day of the applicable billing cycle. Monthly service and certain other charges are billed in arrears if Customer is a former customer of AT&T Wireless and maintain uninterrupted service on select Plans; however, if Customer elects to receive invoices for Service combined with Customer's wireline phone bill (where available), Customer will be billed in advance as provided above. Unless otherwise provided in the corresponding Sales Information, if a selected Plan includes a predetermined allotment of services (e.g., a predetermined amount of airtime, data, megabytes or text messages), any unused allotment of such services from one billing cycle will not carry over to any other billing cycle. AT&T may bill Customer in a format as AT&T determines from time to time. Invoices will be available electronically in AT&T's Premier platform (i.e., the eBill application). Additional charges may apply for paper summary invoices, additional copies of invoices, or for detailed information about Customer's usage of Services. All data and messaging allowances must be used in the billing period in which the allowance is provided. Billing of usage for calls, messages, data or other services (such as usage when roaming on other carriers' networks, including internationally) may occasionally be delayed. Such usage charges may appear in a later billing cycle, will be



deducted from Anytime monthly minutes or other Service allotments for the month when the usage is actually billed, and may result in additional charges for that month. Those minutes will be applied against Customer's Anytime monthly minutes in the month in which the calls appear on Customer's bill. Customer also remains responsible for paying the monthly service fee if Service is suspended for nonpayment. AT&T may require payment by money order, cashier's check, or a similarly secure form of payment at AT&T's discretion. Billing cycle end dates may change from time to time. When a billing cycle covers less than or more than a full month, AT&T may make reasonable adjustments and prorations. Service charges may differ by Service Area. Particular Services may incur charges in a different manner than set forth herein, and AT&T will advise Customer of any such differences in the corresponding Attachment and/or Sales Information. Certain Services (e.g., select non-stocked Equipment) may be billed to Customer's or its CRUs' invoices, as applicable, by AT&T on behalf of the third party provider pursuant to the terms and conditions of AT&T's Alliance Billing Service Attachment found at the Program Website. AT&T will advise Customer when the Alliance Billing Service applies.

5.2.2 Voice Service Charges. AIRTIME AND OTHER MEASURED USAGE ("CHARGEABLE TIME") IS BILLED IN FULL-MINUTE INCREMENTS, AND ACTUAL AIRTIME AND USAGE ARE ROUNDED UP TO THE NEXT FULL-MINUTE INCREMENT AT THE END OF EACH CALL FOR BILLING PURPOSES. AT&T CHARGES A FULL MINUTE OF AIRTIME USAGE FOR EVERY FRACTION OF THE LAST MINUTE OF AIRTIME USED ON EACH WIRELESS CALL. UNLESS OTHERWISE PROVIDED IN THE SALES INFORMATION FOR A PARTICULAR PLAN OR FEATURE, MINUTES WILL BE DEPLETED ACCORDING TO USAGE IN THE FOLLOWING ORDER: NIGHT AND WEEKEND MINUTES, MOBILE TO MOBILE MINUTES, ANYTIME MINUTES AND ROLLOVER, EXCEPT THAT MINUTES THAT ARE PART OF BOTH A LIMITED PACKAGE AND AN UNLIMITED

PACKAGE WILL NOT BE DEPLETED FROM THE LIMITED PACKAGE. Chargeable Time begins for outgoing calls when pressing SEND (or similar key) and for incoming calls when a signal connection from the caller is established with AT&T's facilities. Chargeable Time ends after pressing END (or similar key), but not until the Equipment's signal of call disconnect is received by AT&T's facilities and the call disconnect signal has been confirmed. All outgoing calls on AT&T's wireless network for which AT&T's systems receive answer supervision or which have at least thirty (30) seconds of airtime or other measured usage shall incur a minimum of one (1) minute airtime charge. Answer supervision is generally received when a call is answered; however, answer supervision may also be generated by voice mail systems, private branch exchanges, and interexchange switching equipment. Chargeable Time may (a) include time for AT&T to recognize that only one party has disconnected from the call, time to clear the channels in use, and ring time, and (b) occur from other uses of AT&T's facilities, including by way



of example, voice mail deposits and retrievals, and call transfers. Calls that begin in one rate period and end in another rate period may be billed in their entirety at the rates for the period in which the call began.

5.2.3 Wireless Data Service Charges. DATA TRANSPORT OR USAGE IS CALCULATED IN FULL-KILOBYTE INCREMENTS, AND ACTUAL TRANSPORT OR USAGE IS ROUNDED UP TO THE NEXT FULL-KILOBYTE INCREMENT AT THE END OF EACH DATA SESSION FOR BILLING PURPOSES. AT&T CALCULATES A FULL KILOBYTE OF DATA TRANSPORT/USAGE FOR EVERY FRACTION OF THE LAST KILOBYTE OF DATA TRANSPORT/USAGE USED ON EACH DATA SESSION. TRANSPORT OR USAGE IS BILLED EITHER BY THE KILOBYTE ("KB") OR MEGABYTE ("MB"). IF BILLED BY MB, THE FULL KBs CALCULATED FOR EACH DATA SESSION DURING THE BILLING PERIOD ARE TOTALED AND ROUNDED UP TO NEXT FULL MB INCREMENT TO DETERMINE BILLING. IF BILLED BY KB, THE FULL KBs CALCULATED FOR EACH DATA SESSION DURING THE BILLING PERIOD ARE TOTALED TO DETERMINE BILLING. NETWORK OVERHEAD, SOFTWARE UPDATE REQUESTS, EMAIL NOTIFICATIONS AND RESEND REQUESTS CAUSED BY NETWORK ERRORS CAN INCREASE MEASURED KILOBYTES. DATA TRANSPORT/USAGE OCCURS WHENEVER CUSTOMER'S DEVICE IS CONNECTED TO AT&T'S WIRELESS NETWORK AND IS ENGAGED IN ANY DATA TRANSMISSION, AS DISCUSSED IN MORE DETAIL IN SECTION 4.4 OF THE ENTERPRISE CUSTOMERS: ADDITIONAL SERVICE AND EQUIPMENT RELATED TERMS FOUND AT ATT.COM/ABS-ADDTL-TERMS. Utilizing compression solutions may or may not impact the amount of kilobytes calculated for data transport. For Wireless Data Service that permits Voice Service usage at pay per use rates, airtime and other measured usage will be billed in full minute increments and rounded up to the next full minute increment at the end of each call. Customer is responsible for all Wireless Data Service usage sent through AT&T's wireless network and associated with Equipment regardless of whether the Equipment actually receives the information.

Network overhead, software update requests, and resend requests caused by network errors can increase measured kilobytes. If Customer or a CRU chooses to connect Equipment to a PC for use as a wireless modem, standard Wireless Data Service charges will apply in accordance with the corresponding Plan. Wireless Data Service usage is compiled as often as once per hour or only once every 24 hours. AT&T's system will then create a billing record representing (a) the Wireless Data Service usage for each data gateway or service accessed (e.g. WAP, RIM) while on AT&T's wireless network; (b) the usage for each Carrier's domestic network; and (c) the Wireless Data Service usage for each international network. In some situations billing for Wireless Data Service usage may be delayed; any delayed usage will create additional billing records for the actual day of the usage. Usage on networks not owned by AT&T is limited as provided in Customer's Wireless Data Service Plan. Unless designated for international or Canada



use, Plan prices and included use apply to access and use on AT&T's wireless network and the wireless networks of other companies with which AT&T has a contractual relationship within the United States and its territories (Puerto Rico and the U.S. Virgin Islands), excluding areas within the Gulf of Mexico.

5.3 Software. Any software licensed separately by AT&T to Customer and/or its CRUs for use with the Service will be governed by the written terms and conditions applicable to such software. Title to software remains with AT&T or its supplier. Customer must comply with all such terms and conditions and they take precedence over this Agreement as to such software. For the avoidance of doubt, software referred to herein does not include Software (as defined in the Enterprise Customers: Additional Service and Equipment Related Terms found at att.com/abs-addtl-terms) or any Supplemental Service.

5.4 Disputed Charges. Except as otherwise provided by law with respect to unauthorized charges, disputed charges must be disputed to AT&T in writing within six (6) months after the date of the affected invoice, or the right to dispute is waived. In the event of a disputed invoice, Customer will pay the entire undisputed amount of the invoice. AT&T, Customer and Carriers will use their good faith efforts to reconcile the dispute within sixty (60) days of submission of the dispute to AT&T.

5.5 Late Payment Fee. Late payment charges are based on the state to which the area code of the first Number assigned to Customer's billing account is assigned by the North American Numbering Plan Administration (for area code assignments, see nationalnanpa.com/area_code_maps). If Customer has a single consolidated invoice across multiple billing accounts, the late payment fee will be calculated based on the Customer address associated with the Customer's foundation account profile.

Customer will pay AT&T a late payment fee equal to the lesser of up to 1.5% per month (prorated daily) of any amount not paid by the due date, or the highest amount allowed by applicable state law or tariff; provided, however, that, with respect to amounts not paid by Customer in accordance with §5.4 above, AT&T and Customer agree that the late payment fee will accrue on the unpaid disputed amount as set forth above during the dispute resolution process but that Customer will only be liable for the late payment fee to the extent the dispute is resolved in favor of AT&T. In the event Customer fails to pay billed charges when due and it becomes necessary for AT&T to refer Customer's account(s) to a third party for collection, AT&T will charge a collection fee at the maximum percentage permitted by applicable law, but not to exceed 18% to cover the internal collection-related costs AT&T has incurred on such account(s) through and including the date on which AT&T refers the account(s) to such third party.



5.6 Advance Payments and/or Deposits. AT&T may require Customer to make deposits or advance payments for Service, which AT&T may offset against any unpaid balance on Customer's account. Interest won't be paid on advance payments or deposits unless required by law. AT&T may require additional advance payments or deposits if AT&T determines that the initial payment was inadequate. Based on Customer's creditworthiness as AT&T determines it, AT&T may establish a credit limit and restrict Service. If Customer's account balance goes beyond the limit AT&T set for Customer, AT&T may immediately interrupt or suspend Service until Customer's balance is brought below the limit. Any charges incurred by Customer's CRUs' in excess of Customer's limit become immediately due. If Customer has more than one account with AT&T, Customer must keep all accounts in good standing to maintain Service. If one account is past due or over its limit, all accounts in Customer's name are subject to interruption or termination and all other available collection remedies. AT&T will charge Customer up to \$30 (depending on applicable law) for any check or other instrument (including credit card charge backs) returned unpaid for any reason.

6. Default, Termination, Cure and Remedies.

6.1 Default and Termination. If either party fails to perform or observe any material term or condition of this Agreement, then such party will be in default of the Agreement, and the non-defaulting party may terminate the Agreement in accordance with the terms and conditions of §6.2 below.

6.2 Notice and Opportunity to Cure. The party seeking to terminate the Agreement under

§6.1 above must notify the defaulting party in writing at least thirty (30) days prior to the proposed termination date. This written notice must specify the default(s) giving rise to the right to terminate the Agreement, and must specify a proposed termination date. The defaulting party will have thirty (30) days in which to cure the default(s), unless such cure period is extended by agreement of the parties. If the default is not cured within this thirty (30) day cure period or any extension thereof, then the Agreement will automatically terminate at the close of business on the termination date specified in the written notice or any agreed extension.

6.3 Termination for Deletion of Service Area. If the deletion of any Service Area materially reduces the Service provided to Customer hereunder, then Customer, within thirty (30) days of the effective date of the Service Area deletion, must notify AT&T in writing of its intent to terminate. Such written notice must specify the material Service Area deletion and must specify a proposed termination date no earlier than thirty (30) days from the date of the notice.



6.4 Remedies. Upon termination for any reason, the parties may seek any remedies available at law or in equity, and Customer will pay to AT&T all amounts incurred hereunder as of the termination date, including any Cancellation Fee(s). If the Agreement includes a Termination Charge in lieu of Cancellation Fees, then (a) upon termination resulting from Customer's default under §6.1 above, Customer must pay AT&T the Termination Charge; and (b) upon termination resulting from AT&T's default under §6.1 above or upon termination under §6.3 above, Customer will not be required to pay the Termination Charge. In addition, Customer will pay to AT&T all collection costs and expenses, including reasonable attorneys' fees and costs, incurred by AT&T in exercising any of its rights and remedies when enforcing any provisions of this Agreement.

7. DISCLAIMERS AND LIMITATIONS OF LIABILITY.

7.1 Disclaimer of Warranties. AT&T MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON- INFRINGEMENT OR ANY WARRANTY ARISING BY USAGE OF TRADE OR COURSE OF DEALING. FURTHER, AT&T MAKES NO REPRESENTATION OR WARRANTY THAT WIRELESS CALLS OR OTHER TRANSMISSIONS WILL BE ROUTED OR COMPLETED WITHOUT ERROR OR INTERRUPTION (INCLUDING CALLS TO 911 OR ANY SIMILAR EMERGENCY RESPONSE NUMBER), OR GUARANTEE REGARDING NETWORK SECURITY, THE ENCRYPTION EMPLOYED BY ANY SERVICE, THE INTEGRITY OF ANY DATA THAT IS SENT, BACKED UP, STORED OR SUBJECT TO LOAD BALANCING, OR THAT AT&T'S SECURITY PROCEDURES WILL PREVENT THE LOSS OR ALTERATION OF, OR IMPROPER ACCESS TO, CUSTOMER'S DATA AND INFORMATION. AT&T DOES NOT AUTHORIZE ANYONE TO MAKE A WARRANTY OF ANY KIND ON ITS BEHALF, AND CUSTOMER SHOULD NOT RELY ON ANYONE MAKING SUCH STATEMENTS. AT&T IS NOT THE MANUFACTURER OF EQUIPMENT PURCHASED BY OR PROVIDED TO CUSTOMER IN CONNECTION WITH USE OF THE SERVICE.

7.2 Limitation of Liability.

(a) AT&T'S ENTIRE LIABILITY, AND CUSTOMER'S EXCLUSIVE REMEDY, FOR DAMAGES ARISING OUT OF MISTAKES, OMISSIONS, INTERRUPTIONS, DELAYS, ERROR OR DEFECTS IN THE SERVICE THAT LAST MORE THAN TWENTY-FOUR (24) HOURS, AND NOT CAUSED BY CUSTOMER'S NEGLIGENCE, WILL IN NO EVENT EXCEED THE RECURRING SERVICE CHARGES FOR THE PERIOD DURING WHICH SUCH MISTAKE, OMISSION, INTERRUPTION, DELAY, ERROR OR DEFECT OCCURS AND CONTINUES. IN NO EVENT SHALL AT&T BE LIABLE TO CUSTOMER FOR ANY DAMAGES ARISING OUT OF MISTAKES, OMISSIONS, INTERRUPTIONS, DELAYS, ERROR OR DEFECTS THAT LAST LESS THAN TWENTY FOUR (24) HOURS.



(b) §7.2(a) WILL NOT APPLY TO:

(i) BODILY INJURY, DEATH, OR DAMAGE TO REAL OR TANGIBLE PROPERTY DIRECTLY CAUSED BY AT&T'S NEGLIGENCE;

(ii) BREACH OF §12 (Publicity and Advertising) OR §13.6 (Confidential Information);
OR

(iii) DAMAGES ARISING FROM AT&T'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

(c) NEITHER AT&T NOR CUSTOMER WILL BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, RELIANCE, OR SPECIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, ADVANTAGE, SAVINGS OR REVENUES, OR INCREASED COST OF OPERATIONS.

7.3 Disclaimer of Liability. AT&T WILL NOT BE LIABLE FOR ANY DAMAGES, EXCEPT TO THE EXTENT CAUSED BY AT&T'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, ARISING OUT OF OR RELATING TO: INTEROPERABILITY, ACCESS OR INTERCONNECTION OF THE SERVICE WITH APPLICATIONS, EQUIPMENT, SERVICES, CONTENT OR NETWORKS PROVIDED BY CUSTOMER OR THIRD PARTIES; SERVICE DEFECTS, SERVICE LEVELS, DELAYS OR INTERRUPTIONS (EXCEPT FOR LIABILITY FOR SUCH EXPLICITLY SET FORTH IN THIS AGREEMENT); ANY INTERRUPTION OR ERROR IN ROUTING OR COMPLETING CALLS OR OTHER TRANSMISSIONS (INCLUDING 911 CALLS OR ANY SIMILAR EMERGENCY RESPONSE NUMBER); LOST OR ALTERED MESSAGES OR TRANSMISSIONS; OR UNAUTHORIZED ACCESS TO OR THEFT, ALTERATION, LOSS, OR DESTRUCTION OF CUSTOMER'S, ITS AFFILIATE'S, END USERS', OR THIRD PARTIES' APPLICATIONS, CONTENT, DATA, PROGRAMS, INFORMATION, NETWORK, OR SYSTEMS.

7.4 Application and Survival. The disclaimer of warranties and limitations of liability set forth in this Agreement will apply regardless of the form of action, whether in contract, equity, tort, strict liability or otherwise and whether damages were foreseeable, and will apply so as to limit the liability of AT&T, Customer and their respective Affiliates, employees, directors, subcontractors, and suppliers. The limitations of liability and disclaimers set out in this §7 will survive failure of any exclusive remedies provided in this Agreement.

8. Force Majeure. Except for payment of amounts due, neither party will be liable for any delay, failure in performance, loss or damage due to fire, explosion, cable cuts, power blackout, earthquake, flood, strike, embargo, labor disputes, acts of civil or military authority, war, terrorism, acts of God, acts of a public enemy, acts or omissions



of carriers or suppliers, acts of regulatory or governmental agencies, or other causes beyond such party's reasonable control.

9. Arbitration. The parties agree to exercise their best efforts to settle any dispute arising out of or related to this Agreement through good faith negotiation. Any dispute arising out of or related to this Agreement that cannot be resolved by negotiation shall be resolved by binding arbitration administered by the American Arbitration Association ("AAA") under its Commercial Arbitration Rules in effect at the time that a dispute is submitted for resolution (the "Rules"), as modified by this Agreement. Judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. Such arbitration shall be held in New York, New York. The parties shall, within (twenty) 20 days of the issuance of a written notice of intent to arbitrate, as provided by the Rules, jointly select one (1) independent arbitrator licensed to practice law and familiar with the wireless telecommunications industry. If the parties cannot agree on an arbitrator within the specified 20-day period, then the selection shall promptly be made by the AAA in accordance with the Rules and the criteria set forth above. This Agreement evidences a transaction in interstate commerce, and thus the Federal Arbitration Act, 9 U.S.C. § 1, et seq, governs the interpretation and enforcement of this provision. In the event of a conflict between the FAA and the Rules, the FAA shall govern. In no event shall the arbitrator have the authority to make any award that is in excess of or contrary to what the Agreement provides. THE PARTIES AGREE THAT EACH MAY BRING CLAIMS AGAINST THE OTHER ONLY IN ITS INDIVIDUAL CAPACITY AND NOT AS A PLAINTIFF OR CLASS MEMBER IN ANY PURPORTED CLASS OR REPRESENTATIVE PROCEEDING. Furthermore, unless both parties agree otherwise, the arbitrator may not consolidate more than one person's claims, and may not otherwise preside over any form of a representative or class proceeding. If this specific proviso is found to be unenforceable, then the entirety of this arbitration provision shall be null and void.

If Customer is a Puerto Rico customer and AT&T cannot resolve the issue, Customer may notify the Telecommunications Regulatory Board of Puerto Rico of the grievance. Mail: 500 Ave Roberto H. Todd, (Parada 18), San Juan, Puerto Rico 00907-3941-; Phone: 1-787-756-0804 or 1-866-578-5500; Online: jrtrp.gobierno.pr, in addition to having available arbitration, as provided above.

10. No Class Actions. All claims between AT&T and Customer related to this Agreement will be litigated individually, and Customer will not consolidate or seek class treatment for any claim unless previously agreed to in writing by AT&T.

11. Use of Service.

11.1 Changes to Numbers. Except as otherwise provided by law, Customer has no property rights to any Number and AT&T may change any such Number.



11.2 Fraud Prohibited. Customer and its respective CRUs and IRUs (if applicable) will not use or assist others to use the Service or Equipment for any unlawful, unauthorized, abusive or fraudulent purpose. If Customer's Equipment is lost or stolen, Customer and/or its CRUs can report the Equipment as lost or stolen and suspend Service without a charge by contacting AT&T at the phone number listed on the monthly invoice or at wireless.att.com. Customer is responsible for all charges incurred until Customer or its CRU reports the theft or loss to AT&T except as otherwise provided by law, and Customer remains responsible for complying with all other obligations under this Agreement including, but not limited to, paying the Monthly Service Charge while the Equipment is suspended. Any Carrier may cancel Service to any Number if AT&T or that Carrier believes the Number is being used in an unlawful abusive or fraudulent manner. Before a Carrier cancels any Service under this paragraph, the Carrier will attempt to give Customer notice of its intent to cancel. In the event Customer instructs the Carrier to retain Service, Customer will be responsible for paying all charges, authorized, unauthorized or fraudulent, associated with such Number, including but not limited to charges incurred by any clone or duplication of that Number; provided, however, that Customer will not be liable for IRUs' charges under any such circumstance. Additionally, Customer agrees to adopt, at no additional charge to Customer, any reasonable fraud prevention or fraud reduction processes or products recommended by AT&T or, if not adopted by Customer, to be responsible for any unauthorized charges on Numbers which do not adopt such processes or products.

11.3 Acceptable Use; Restrictions Regarding Service. All use of AT&T's wireless network and Service is governed by AT&T's Acceptable Use Policy, which can be found at att.com/AcceptableUsePolicy, as determined solely by AT&T. AT&T can revise its Acceptable Use Policy at any time without notice. Use of Service is also subject to any restrictions and/or prohibited uses described in the applicable Sales Information.

11.4 Ownership. AT&T owns or leases the exclusive rights to the frequencies related to the Service, Numbers and transmission facilities used by AT&T in the provision of Service to AT&T customers. FCC regulations strictly forbid any party that is not a wireless communications licensee from altering, enhancing or maintaining cellular radio signals. FCC regulations require AT&T to maintain control over any transmitting device that operates within AT&T's assigned frequencies. Neither Customer nor any of its Affiliates may install any amplifier, enhancer, repeater or other device or system on AT&T's wireless network or frequencies without AT&T's prior written approval.

11.5 Content. Customer is solely responsible for all content that it permits to be posted or transmitted onto or through the Service or any of AT&T's systems, including materials, code, data, text (whether or not perceptible by End Users), multimedia information (including but not limited to sound, data, audio, video, graphics, photographs, or artwork), e-mail, chat room content, bulletin board postings, or any



other items or materials accessible through the Service or any of AT&T's systems ("Content"). Customer has sole responsibility for any losses resulting from Customer's or CRUs' downloading, access to, or use of any third-party Content, or from Customer's or CRUs' access to or use of the Service or the Internet, in any manner and for any purpose whatsoever. In providing Service, AT&T may permit End Users to transmit, receive and host content over its network and the Internet and may act as a "services provider" as defined in the Digital Millennium Copyright Act.

11.6 Customer's Notices to End Users. Customer will advise all its End Users that they must read all collateral materials concerning Service and use of the Equipment, including, without limitation, the Welcome Guide, Plan brochures, coverage maps, and materials related to Equipment and accessories. AT&T will make copies of such materials available to Customer upon request. Customer will also provide to End Users, and advise End Users to read, any additional printed materials and consumer information reasonably requested by AT&T from time to time to be so provided. Similarly, for purposes of determining which jurisdiction's taxes and other assessments to collect, federal law requires AT&T to obtain End Users' Place of Primary Use ("PPU"), which must be their residential or business street address and which must be within a Carrier's licensed Service Area. Customer agrees to provide its respective CRUs' PPU when ordering Service on behalf of such person(s), and to inform its End Users that they must provide their proper PPU when ordering Service in connection with this Agreement. If a CRU doesn't provide AT&T with a PPU, or if it falls outside AT&T's licensed Service Area, AT&T may reasonably designate a PPU within the licensed Service Area for such CRU. Each CRU must live and have a mailing address within AT&T's owned network coverage area.

11.7 Location-Based Services. AT&T collects information about the approximate location of Equipment in relation to AT&T's cell towers and the Global Positioning System ("GPS"). AT&T uses that information, as well as other usage and performance information also obtained from AT&T's network and the Equipment, to provide Voice Services and Wireless Data Services and to maintain and improve AT&T's network and the quality of customers' wireless experience. AT&T may also use location information to create aggregate data from which End Users' personally identifiable information has been removed or obscured. Such aggregate data may be used for a variety of purposes such as scientific and marketing research and services such as vehicle traffic volume monitoring. It is Customer's responsibility to notify all CRUs on Customer's account that AT&T may collect and use location information from their Equipment. The Equipment is also capable of purchasing and using optional goods, content and services (at Customer's request or the request of a CRU on Customer's account) offered by AT&T or third parties that make use of the Equipment's location information ("Location-Based Services"). Customer should review, and will advise all of its CRUs to read, the Sales



Information and the associated privacy policy for each Location-Based Service to learn how the location information will be used and protected. Customer and its CRUs may refer to AT&T's privacy policy at att.com/privacy for additional details

11.8 AT&T 411 Info. AT&T's directory assistance service (411) may use the location of Equipment to deliver relevant customized 411 information based upon an End User's request for a listing or other 411 service. Customer understands, and will advise all of its CRUs, that by using this directory assistance service, the CRU is consenting to AT&T's use of the CRU's location information for such purpose. This location information may be disclosed to a third party to perform the directory assistance service and for no other purpose. Such location information will be retained only as long as is necessary to provide the relevant customized 411 information and will be discarded after such use. Customer and its CRUs may refer to AT&T's privacy policy at att.com/privacy for additional details.

11.9 American Recovery and Reinvestment Act. Under certain circumstances, funds provided under the American Recovery and Reinvestment Act of 2009 ("ARRA") may be subject to certain restrictions, requirements and reporting obligations. AT&T may be subject to some of these restrictions, requirements and reporting obligations when Service, Equipment and/or Supplemental Services are purchased with ARRA funds. In order to comply with the restrictions, requirements and reporting obligations associated with the use of ARRA funds (if any), AT&T must be apprised of them before provisioning the Service, Equipment and/or Supplemental Services. Accordingly, the Service, Equipment and/or Supplemental Services provided under this Agreement shall not be used to support the performance of any portion of a project or program which has been funded in whole or in part with grants, loans or payments made pursuant to the ARRA, without the prior written agreement of AT&T and Customer regarding any specifically applicable terms, conditions and requirements. Customer shall provide AT&T with prior written notice before placing any order that may be funded in whole or in part with ARRA funds. If Customer fails to provide such prior written notice of ARRA funding; or if the parties cannot agree on the terms and conditions (if any) applicable to an ARRA funded order; or if any terms, conditions or requirements (other than those to which AT&T specifically agrees in such separate writing) are found to be applicable, then AT&T may, in its sole discretion, reject such order or immediately terminate the provision of any affected Service, Equipment and/or Supplemental Service without further liability or obligation.

12. Publicity and Advertising. Neither party will publish or use any advertising, sales promotion, press release or other publicity that uses the other party's name, logo, trademarks or service marks without the prior written approval of the other party.

13. Miscellaneous.



13.1 Defined Terms. Unless specifically excepted, all defined terms, regardless of where defined, will have the same meaning in all documents comprising this Agreement including, without limitation, the Cover Page (if applicable), the Program Description, the General Terms and Conditions, and all attachments. In addition to the terms defined elsewhere, these terms will have the following meanings in the Agreement:

13.1.1 "Affiliate" (a) when referring to an affiliate of AT&T, means and includes legal entities controlling or controlled by or under common control with AT&T; and (b) when referring to an affiliate of Customer, means and includes an entity controlling or controlled by or under common control with Customer, where control is defined as (i) the ownership of at least thirty five percent (35%) of the equity or beneficial interest of such entity; or (ii) the right to vote for or appoint a majority of the board of directors or other governing body of such entity.

13.1.2 "AT&T Mobile Services" means commercial mobile radio services, including without limitation, Voice Service, Wireless Data Service and Messaging Services.

13.1.3 "Carrier" or "Carriers" means a licensed Affiliate of AT&T that operates commercial mobile radio telecommunications systems in the geographic areas covered by the Agreement and, with respect to §8 of these General Terms and Conditions, includes the Carriers' respective employees, officers, agents and subcontractors.

13.1.4 "AT&T" or "party" when it refers to AT&T includes AT&T, its Affiliates, and their respective employees, officers, agents and subcontractors.

13.1.5 "AT&T Markets" means a geographic area served by Affiliates under common control with AT&T.

13.1.6 "Equipment" means the wireless receiving and transmitting equipment or SIM (Subscriber Identity Module) Card that AT&T has authorized to be programmed with a Number or Identifier, and any accessories.

13.1.7 "Messaging Services" means optional text/instant messaging and picture/video messaging features available with qualified Plans for use with Messaging Service-capable Equipment.

13.1.8 "Number" or "Identifier" means any number, IP address, e-mail address or other identifier provisioned by Carriers, their agents or the Equipment manufacturer to be used with Service.

13.1.9 "Plan" means an AT&T Mobile Services calling or other rate plan.



13.1.10 “Service” means the AT&T Mobile Services, Equipment, Optional Programs and Supplemental Services provided by AT&T under this Agreement.

13.1.11 “Voice Service” means wireless voice telecommunications services.

13.1.12 “Wireless Data Service” means wireless data telecommunications services.

13.2 Assignment. This Agreement may not be assigned by either party without the prior written consent of the other and such consent will not be unreasonably withheld. However, either party may, without the other party's consent, assign this Agreement to an Affiliate or to any entity that acquires substantially all of the party's business or stock and AT&T may assign its right to receive payments hereunder. Subject to the foregoing, this Agreement will be binding upon the assignees of the respective parties.

13.3 Compliance with Laws. AT&T and Customer agree to comply with all applicable federal, state and local laws and regulations in the performance of their respective obligations under this Agreement.

13.4 Entire Agreement. Unless specifically set forth herein, this Agreement is the entire agreement between the parties with respect to the subject matter herein and supersedes all prior agreements, proposals, representations, statements, or understandings, whether written or oral. Any change, modification or waiver of any of the terms and conditions of the Agreement will not be binding unless made in a writing manually signed by both parties. If the terms contained in this Agreement conflict or are inconsistent with the terms of any purchase order or other document provided by Customer, the terms of this Agreement will control.

13.5 Governing Law. This Agreement is subject to applicable federal laws, federal or state tariffs, if any, and the laws of the State of Georgia. Where Service terms and conditions are regulated by a state agency or the FCC, the applicable regulations are available for inspection. If there is any inconsistency between the Agreement and those regulations, this Agreement will be deemed amended as necessary to conform to such regulations.

13.6 Confidentiality. The terms and conditions of this Agreement are confidential and will not be disclosed by a party to any third party without the other party's prior written consent (except that each party may disclose the terms and conditions of this Agreement to its employees and, in the case of AT&T, its agents and subcontractors, who have a direct need to know the terms and conditions of the Agreement.) Nothing herein will prevent AT&T or Customer from supplying such information or making such statements or disclosures relating to this Agreement before any competent



governmental authority, court or agency, or as such party may consider necessary in order to satisfy its obligations under applicable laws, regulations or generally accepted accounting principles (including, without limitation, statements or disclosures to such party's lawyers or accountants). Such party will furnish notice thereof to the other party prior to such disclosure unless such disclosure is in response to a lawful requirement or request from a court or governmental agency regarding a criminal inquiry or matter, in which case no prior notice will be required.

13.7 Notices. All notices and communications required or permitted under the Agreement may be sent by first class mail (to Customer at the address indicated on the Cover Page (or, in the case of online versions of the Agreement, to Customer at the address confirmed during the online contracting process) and to AT&T at the address indicated below), electronic messaging (to Customer at the email address indicated on the Cover Page (or, in the case of online versions of the Agreement, to Customer at the legal notice email address confirmed during the online contracting process), bill inserts or other reasonable means. Notwithstanding the foregoing, any such notice or communication with respect to non-renewal, disputes, breach and/or termination under the Agreement must be in writing and will be deemed to have been duly made and received when personally served or delivered by facsimile with a confirmation report, or when mailed by overnight delivery service or certified mail, postage prepaid, return receipt requested, to Customer at the address indicated on the Cover Page (or, in the case of online versions of the Agreement, to Customer at the address provided during the online contracting process) and to AT&T at the address(es) indicated below. A party may change its address upon thirty (30) days' prior written notice to the other party.

(If via regular or certified mail)

AT&T Mobility National Accounts, LLC

P.O. Box 97061

Redmond, WA 98073

Attn: Offer, Development & Negotiation Facsimile Number: 425-580-9886

(If via overnight delivery)

AT&T Mobility National Accounts, LLC 16331 NE 72nd Way, RTC 1

Redmond, WA 98052

Attn: Offer, Development & Negotiation



With a copy to AT&T Legal Facsimile Number: 908-532-1263

13.8 Severability. If any portion of this Agreement is found to be unenforceable, the remaining portions will remain in effect and the parties will begin negotiations for a replacement of the invalid or unenforceable portion.

13.9 Survival. The terms and provisions of this Agreement which by their nature require performance by either party after the termination or expiration of this Agreement, including, but not limited to, limitations of liability, exclusions of damages, and indemnities, will be and remain enforceable notwithstanding such termination or expiration of this Agreement for any reason whatsoever.

13.10 Third Party Beneficiaries. Other than as expressly set forth herein, this Agreement will not be deemed to provide third parties with any remedy, claim, right of action, or other right.

13.11 No Waiver. Neither the acceptance by AT&T of any payment, partial payment or any other performance by Customer, nor any act or failure of AT&T to act or to exercise any rights, remedies or options in any one or more instances will be deemed a waiver of any such right, remedy or option or of any breach or default by Customer then existing or thereafter arising. No claimed waiver by AT&T of any rights, remedies or options will be binding unless the same is in a writing signed by AT&T.

13.12 TTY Users. Although some digital wireless phones and TTYs are compatible, the FCC recommends TTY users consider other options when calling 911, including using a wireline phone or Telecommunications Relay Services.

13.13 Remedies Nonexclusive. Except where otherwise expressly provided, no remedy conferred upon either party in the Agreement is intended, nor shall it be construed, to be exclusive of any other remedy provided in the Agreement or as allowed by law or in equity; rather, all such remedies shall be cumulative.



Tab 1 - Introduction

Cover Letter

Using this template, provide an originally signed letter on company letterhead reciting and asserting as follows:

Heidi Anderson
Metropolitan Area Planning Council 60 Temple Place, 6th Floor
Boston, MA 02111
Phone: 617.933.0766
Email: handerson@mapc.org

Re: RFP#: MAPC 2016 AVL

Dear Ms. Anderson,

In response to your Request for Proposals (“RFP”), we AT&T Mobility National Accounts LLC (“AT&T”) [insert name of Proposer] (“the Proposer”) hereby submit our Proposal to provide AVL Systems to the MAPC region municipalities and their municipal subdivisions including the following participating municipalities: Boston, Brookline, Cambridge, Lexington, Natick, Newton, Somerville, Wakefield, and Westwood.

We offer the following commitments and representations to Metropolitan Area Planning Council (“MAPC”) and the listed entities:

1. The undersigned is authorized to submit this Proposal on behalf of the Proposer and to bind the Proposer to its terms. We have fully reviewed the RFP and any and all addenda thereto, and we fully understand the scope and nature of the RFP and contractual arrangements for which Responses are being requested.
2. Our Proposal has been prepared and is being submitted without collusion, fraud, or any other action taken in restraint of free and open competition for the response to this RFP.
3. Neither the Proposer nor any of its employees or representatives is currently suspended or debarred from doing business with any governmental entity.
4. Neither the Proposer, nor any of its employees or representatives is currently the subject of or party to a Massachusetts public employee conflict of interest action or investigation.



5. The Proposer is not a party to any pending or current litigation that might adversely affect its performance on this project.
6. The Proposer has not filed for bankruptcy protection in the last seven years. If the Proposer has filed for bankruptcy protection in the last seven years, the Proposer must describe the circumstances that led to the filing, the ultimate disposition of the matter, the current situation and substantial, detailed evidence of the Proposer's financial ability to complete this project if selected.
7. The Proposer has no business dealings with countries or organizations that fund or support terrorist activities anywhere in the world.
8. We certify that all of the information provided in our Proposal is true and accurate and that MAPC may rely on such information in the evaluation of our Proposal. We have read and understand the evaluation criteria in the RFP. We accept that MAPC reserves the right to waive informalities and to reject in whole or in part any or all Proposals. We accept that the MAPC Evaluation Committee reserves the right to select the Proposals that they view as the most advantageous on the basis of the evaluation criteria listed in the RFP.
9. We agree to take full responsibility for all costs of preparing this Proposal. We waive any and all claims against MAPC, their employees, representatives, agents, and members related to the cost of preparing, submitting and having MAPC review and evaluate this Proposal.
10. We have read and understand the product requirements and standards specified in this RFP, and certify that any and all equipment offered in response to this RFP meet or exceed those requirements and standards.

Sincerely,

AT&T Mobility National Accounts LLC [Insert name of Proposer]

By: _____ [Insert signature of authorized representative]

Todd A. Theel, Client Solutions Executive 2 [Print or Type Name of authorized representative]

1500 S. Willow St. [Street Address]

Manchester, NH 03103 [City, State, Zip]

888-308-5270, todd.theel@att.com [Telephone] [Email]

November 3, 2016 [Date]



Proposal Signature Page

The accompanying Forms & Documentation are hereby submitted as a Proposal in response to the subject RFP. All information and statements are true, accurate and binding representations of its intentions and commitments in responding to this RFP.

AT&T Mobility National Accounts LLC
Company Name

Todd A. Theel
Contact Person

1500 S. Willow St
Street

888-308-5270
Phone

Manchester, NH 03103
City, State, Zip

Fax

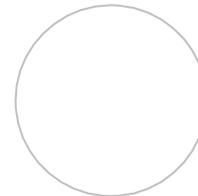
todd.theel@att.com
Email

Proposer acknowledges receipt of the Request for Proposals (RFP) and Addendum

No(s). 1-7, dated 10/3, 5, 17, 18, 24, 28/2016, and submits the attached proposal for this Request for Proposals to the Metropolitan Area Planning Council (MAPC), on the authority of the undersigned and as dated below who by signing confirms and pledges to abide by and be held to the requirements of this RFP and its resulting contract, to perform any tasks and deliver any documents required, and to execute a Contract with the MAPC.

Authorized Agent of the Proposer:

Signature (blue ink please)



Todd A. Theel
Printed Name

(If a corporation, attach certificate of vote or apply corporate seal here)

Client Solutions Executive 2
Title

November 3, 2016
Date



Certificate of Non-Collusion

As required under Chapters 233 and 701 of the Massachusetts Acts and Resolves of 1983 and as required under M.G.L. c. 30B certification must be made to the following by signing in the space indicated below. Failure to offer such signature will result in rejection of the proposal.

“The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word person shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group or individuals.”

Authorized Agent of the Proposer:

_____	<u>AT&T Mobility National Accounts LLC</u>
Signature (blue ink please)	Name (as used for tax filing)
<u>Todd A. Theel</u>	<u>84-1659970</u>
Printed Name	SS# or Federal ID#
<u>Client Solutions Executive 2</u>	<u>November 3, 2016</u>
Title	Date



Certificate of Tax Compliance

“Pursuant to M.G.L. c. 62C § 49A, I certify under the penalties of perjury that to my best knowledge and belief the undersigned has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.”

Authorized Agent of the Proposer:

_____ Signature (blue ink please)	<u>AT&T Mobility National Accounts LLC</u> Name (as used for tax filing)
<u>Todd A. Theel</u> Printed Name	<u>84-1659970</u> SS# or Federal ID#
<u>Client Solutions Executive 2</u> Title	<u>November 3, 2016</u> Date



Conflict of Interest Certification

The Proposer hereby certifies that:

1. The Proposer has not given, offered, or agreed to give any gift, contribution, or offer of employment as an inducement for, or in connection with, the award of a Contract pursuant to this RFP.
2. No consultant to, or subcontractor for, the Proposer has given, offered, or agreed to give any gift, contribution, or offer of employment to the Proposer, or to any other person, corporation, or entity as an inducement for, or in connection with, the award to the consultant or subcontractor of a Contract by the Proposer.
3. No person, corporation, or other entity, other than a bona fide full time employee of the Proposer has been retained or hired to solicit for or in any way assist the Proposer in obtaining a Contract pursuant to this RFP upon an agreement or understanding that such person, corporation or entity be paid a fee or other compensation contingent upon the award of a Contract to the Proposer.
4. Proposer understands that the Massachusetts Conflict of Interest Law, M.G.L. c.268A, applies to the Proposer and its officers, employees, agents, subcontractors, and affiliated entities with respect to the transaction outlined in the Request for Proposals.
5. Proposer understands that the Proposer and its officers, employees, agents, subcontractors, and affiliated entities, shall not participate in any activity which constitutes a violation of the Massachusetts Conflict of Interest Law or which creates an appearance of a violation of the Massachusetts Conflict of Interest Law.

Authorized Agent of the Proposer:

Signature (blue ink please)

Todd A. Theel
Printed Name

Client Solutions Executive 2
Title

November 3, 2016
Date

AT&T Mobility National Accounts LLC
Name (as used for tax filing)

84-1659970
SS# or Federal ID#



Certificate of Compliance with M.G.L. c. 151B

The Proposer hereby certifies that it is in compliance with and shall remain in compliance with M.G.L.

c. 151B and shall not discriminate on any prohibited basis outlined therein. The Proposer also hereby certifies that it shall comply with any and all applicable Commonwealth of Massachusetts Supplier Diversity Office (SDO) thresholds that have been established in conjunction with this Request for Proposals.

Authorized Agent of the Proposer:

_____ Signature (blue ink please)	<u>AT&T Mobility National Accounts LLC</u> Name (as used for tax filing)
<u>Todd A. Theel</u> Printed Name	<u>84-1659970</u> SS# or Federal ID#
<u>Client Solutions Executive 2</u> Title	
<u>November 3, 2016</u> Date	



Certificate of Non-Debarment

The Proposer hereby certifies that it is presently not debarred, suspended, or otherwise prohibited from practice by any federal, state, or local agency, and that, should any proceeding arise in which it is debarred, suspended, or otherwise prohibited from practice by any federal, state, or local agency, the Proposer shall inform the MAPC and involved municipalities within one (1) business day of such debarment, suspension, or prohibition from practice.

Authorized Agent of the Proposer:

Signature (blue ink please) AT&T Mobility National Accounts LLC
Name (as used for tax filing)

Todd A. Theel 84-1659970
Printed Name SS# or Federal ID#

Client Solutions Executive 2
Title

November 3, 2016
Date



Additional Certifications

I certify that all information, statements, and pricing made in my Proposal are true, accurate, and binding representations of the Proposer's intentions and commitment in responding to this RFP. Any such representations that exceed the minimum requirements of the RFP constitute legal obligations on the part of the Proposer to perform as stated and that failure to so perform may be used by MAPC as grounds to terminate the my contract.

I certify that pursuant to 28 CFR Part 42.204 (d) my employment practices comply with Equal Opportunity Requirements and comply with 28 CFR Part 42.202 and that my organization complies with the Americans with Disabilities Act.

Authorized Agent of the Proposer:

Signature (blue ink please)

AT&T Mobility National Accounts LLC
Name (as used for tax filing)

Todd A. Theel
Printed Name

84-1659970
SS# or Federal ID#

Client Solutions Executive 2
Title

November 3, 2016
Date



Certificate of Authority – Corporate (if applicable)



AT&T MOBILITY NATIONAL ACCOUNTS LLC

ASSISTANT SECRETARY'S CERTIFICATE

I, Jackie Begue, do hereby certify that I am a duly elected and qualified Assistant Secretary of AT&T Mobility Corporation the Manager of AT&T Mobility National Accounts LLC, a Delaware limited liability company (the "Company"), and as such I am authorized to execute this certificate. In such capacity, I further certify that:

1. Section 5.6 of the Company's Limited Liability Company Operating Agreement states as follows:

"The Manager shall have, except as otherwise provided by this Agreement and the requirements of applicable law, the sole, exclusive, full and complete authority, power and discretion to manage and control the business, affairs and properties of the Company, to make all decisions regarding those matters and to perform any and all other acts or activities customary or incident to the management of the Company's business, including, without limitation, the right and power to appoint individuals to serve as officers of the Company and to delegate authority to such officers."

AT&T Mobility Corporation as the Manager of the Company has the authority under Section 5.6 of the Company's Limited Liability Company Operating Agreement to manage all of the business affairs of the Company.

2. Section 5.15 of the Company's Limited Liability Company Operating Agreement states as follows:

"Any person or entity dealing with the Company may rely on a certificate signed by the Manager or officer on any document purporting to bind the Company shall constitute exclusive evidence to third parties of the authority of such person to execute such document on behalf of the Company and so bind the Company."

4. Todd A. Theel, Client Solutions Executive 2, is authorized and empowered by the Manager of the Company to execute and deliver in the name of and on behalf of the Company any and all documents that may be required by the Metropolitan Area Planning Council for that certain Request for Proposal to Supply and Deliver Hardware and Software for Automatic Vehicle Location Systems with GPS: RFP# MAPC2016AVL.

IN WITNESS WHEREOF, the undersigned has affixed her signature this 31st day of October, 2016.


Jackie Begue, Assistant Secretary



IRS Form W9

Form W-9 (Rev. December 2014) Department of the Treasury Internal Revenue Service	Request for Taxpayer Identification Number and Certification	Give Form to the requester. Do not send to the IRS.
---	--	--

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
AT&T Mobility II LLC

2 Business name/disregarded entity name, if different from above
AT&T Mobility National Accounts LLC

3 Check appropriate box for federal tax classification; check only **one** of the following seven boxes:
 Individual/sole proprietor or single-member LLC
 C Corporation
 S Corporation
 Partnership
 Trust/estate
 Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) **P**
 Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
 Exempt payee code (if any) _____
 Exemption from FATCA reporting code (if any) _____
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)
PO Box 6463

6 City, state, and ZIP code
Carol Stream, IL 60197-6463

7 List account number(s) here (optional)

*****NOTE*** Always use "Remit To" address when making payments.**

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number
 [] [] [] - [] [] [] - [] [] []

or

Employer identification number
 [8] [4] - [1] [6] [5] [9] [9] [7] [0]

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here Signature of U.S. person ▶ *Veronica Gray* Date ▶ *11/30/16*

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.



List of subcontractors with full contact information (if applicable)

AT&T Response:

N/A



Tab 2 - Minimum Quality Requirements

Minimum Quality Requirements – Revised (10/28/16)

In order for a Proposal to receive further consideration, Proposer must unconditionally check “Yes” to each Quality Requirement below. A Proposal will be rejected in its entirety if a Proposer fails to check “Yes”, or who modifies, qualifies, or limits its affirmative response in any way.

Circle “Yes” or “No” for each of the following requirements:

- a. Proposer is actively engaged in the manufacturing, sale, or sale and service of the goods solicited by this RFP.

Yes No

- b. The Proposer must have been in business for at least one (1) year.

Yes No

- c. Proposer has a Point of Contact who can be reached 24 hours a day, 7 days a week for customer-related issues and troubleshooting.

Yes No

Authorized Agent of the Proposer:

Signature (blue ink please)

AT&T Mobility National Accounts LLC
Name (as used for tax filing)

Todd A. Theel
Printed Name

84-1659970
SS# or Federal ID#

Client Solutions Executive 2
Title

November 3, 2016
Date



Tab 3 - Qualifications & Experience

Proposers must present clear and concise evidence indicating ability to comply with the RFP requirements and to provide and deliver the specified products and services to the Buyers.

In Tab 3, Qualifications & Experience, the Proposer must provide the following:

- A description of the experience of the Proposer in providing the specified products.
- A description of the Proposer’s history of working with municipal governments or other similar governmental or institutional clients, including the scope and duration of such engagements.
- A description of the Proposer’s service and support organizations and plans.
- A description of the Proposer’s product warranties and satisfaction guarantee policy.
- A list of any other specific qualifications the Proposer has in supplying the goods and services listed in this proposal.

The “Qualifications & Experience” measures listed above, which Proposers are asked to describe, will inform the criteria by which the Technical Proposals will be evaluated. Section 6 “Evaluation Criteria” further describes the criteria by which Technical Proposals will be evaluated.

AT&T Response:

Executive Summary

AT&T understands that the Metropolitan Area Planning Council (MAPC) is looking for vendors to “Supply and Deliver Hardware and Software for Automatic Vehicle Location Systems with GPS” to the 101 MAPC region municipalities and their municipal subdivisions. The vendor selected is expected to provide an end to end solution, including hardware, installations, software, hosting of data, and ongoing support. The goal is to provide the MAPC Municipalities with an AVL/GPS system that allows users to access fleet wide vehicle data such as, material application data, road and air temperature, vehicle diagnostic information, and, in both real-time and historically.

Due to the variety of vehicles and assets intended for GPS/AVL, such as dump trucks, vans, trailers, sanders, sweepers, vactors etc., the reporting requirements can range from just Basic Features (location and geo-fencing) to Advanced Features (vehicle diagnostic connection, Road and Air temperature data, and Spreader Control System



data). This goal can be achieved by implementing AT&T Fleet Manager, the solution can be tailored so that each department within your agency can have the ability capture the information they require, making it a one stop shop for all of your Fleet's reporting requirements.

AT&T Partnership with Webtech Wireless

Company History

AT&T Fleet Manager is provided by Webtech Wireless. Webtech Wireless Inc. (www.webtechwireless.com) is a publicly-held company headquartered in Vancouver, British Columbia, in one of Canada's most vibrant high-tech centers, delivering fleet intelligence solutions and location-based services to commercial and government fleets across North America and around the world.

With more than 900 customers tracking over 75,600 vehicles, Webtech processes over 270 million data transactions a day. Webtech Wireless' innovative solutions are relied upon every day by some of the world's largest and most experienced fleet managers, as well as local entrepreneurs, having grown to become one of the top 10 telematics vendors in North America, top 20 globally.

Since first launching in 1999, Webtech solutions were developed on industry-leading best practices, offering unparalleled breadth of functionality to support the needs of fleet and vehicle management. They are a profitable, financially secure, and growing company, employing over 150 individuals across 4 offices in North America.

Year after year, Webtech is recognized in the Deloitte Technology Fast 50 as one of the fastest growing technology companies in Canada. Webtech also partners with other industry leading companies, including Microsoft (Gold Certified Partner), ESRI, IBM, Motorola, Rogers, Bell, Telus, Sasktel, MTS, AT&T Wireless, Prolog, and ARI Financial Services.

Webtech's Experience Providing Similar Services

An industry original, Webtech launched commercially in 1999. Since then, Webtech has implemented GPS/AVL systems in over 350 government customers, capturing a dominant share of the market in North America. The company's client-driven application development has ensured Webtech's functionality focuses on the practical concerns facing fleets operations, developing a number of targeted applications that go far beyond simple web-based tracking. In fact, Webtech has responded to government fleet and operations requirements with a strong customer driven development roadmap.



Webtech was the first GPS/AVL provider to mitigate the burden off of state and provincial fleet drivers from logging paper work on vehicle activities. We found that most drivers didn't want a desk job anyway, thus Webtech collects all this information automatically so drivers can just close the door at the end of a shift and go home. Salt Management Reporting is a good example of this. The automatic collection of salt management data has helped reduce the burden of staff who typically work gruelling shifts during major snow events.

By and large, the range of sensors that Webtech has integrated with is specialized to the needs of local and state road maintenance operations. This includes salt spreading operations, sweeping operations, vacuum truck operations, plowing operations, highway helper operations, line painting/road marking operations, and road signals operations.

Webtech can work with fleet management requirements across the public sector spectrum. The vast menu of reports and integrations demonstrate our understanding of the needs of government fleet managers. Furthermore, providing an end-to-end system ensures it can be adapted functionally either at the hardware, middleware, or software level for customers, whether it's for current or future requirements.

Clients of Similar Scope and Size

AT&T has projects with over 350 government clients. Over 80% of government clients are city or county-wide implementations consisting of vehicle tracking for various departments.

AT&T's experience implementing GPS/AVL systems covers all verticals of the government market: City fleets (City of Chicago, City of Buffalo, Washington DC), County Fleets (Anne Arundel County MD, Arlington County VA), DOT Fleets (State of Pennsylvania DOT, Vermont AOT), Rail and Transit (Metrolinx/GO Transit, Long Island Railroad). Average fleet size is 100 to 200 units, with some accounts growing over 3,000 vehicles.

Below is a list of existing Webtech clients of similar scope and/or size as the agencies under MAPC:

- Alberta Transportation and Infrastructure
- Anne Arundel County, MD
- Arlington County, VA
- City of Bangor
- City of Buffalo



- City of Chicago
- City of Edmond
- City of Ottawa
- City of Toronto
- City of West Des Moines
- City of Key West
- Commonwealth of Kentucky
- Maryland State Highway Administration
- Maryland Transportation Authority
- Pennsylvania Department of Transportation
- Pennsylvania Turnpike Commission
- Rhode Island Department of Transportation
- Town of Hempstead
- Vermont Agency of Transportation
- Ville de Quebec
- Wayne County

Business Practices for Timely Delivery

To ensure a successful and timely implementation, all AT&T GPS/AVL projects are assigned a Project Manager. The Project Manager takes ownership of all technical components of a project and leads the assigned Project Team, consisting of members from Webtech, partners, sub-contractors, and the end customer. Below are some of the key items the Project Manager brings to an implementation to ensure timely delivery:

- Clearly defined scope ensures there are no misunderstandings within the Project Team
- A defined Project Team ensures resources are efficiently allocated and managed
- Dedicated project resources within Webtech ensure the project schedule is unaffected
- Ongoing and constant communication ensures reworks are avoided
- A detailed installation and training plan maximizes resources and time



- Defining a process for issue management provides quick response times to unforeseen issues
- A structured Change Request process guarantees changes to scope are evaluated against impact to project timeline

The project team for the MAPC implementations will provide expertise, knowledge, experience, and dependability. All team members are familiar and experienced with public agency standards and procedures, allowing them to respond to both anticipated as well as unexpected project elements, and thus ensuring a time delivery for the MAPC Municipalities.

Technical Approach

Proposed AVL/GPS Solution

AT&T will provide the MAPC with an end-to-end AVL solution, including hardware, installations, software, installations, professional services, and ongoing support.

Hardware + Installations

Hardware options have been included as part of this submission to accommodate the range of vehicles the MAPC intends to equip.

- **Plug and Play Units (WT4530):** AVL devices that are meant to plug in to the OBDII diagnostic port of the Vehicles. The trackers can monitor vehicle location with updates every 2 minutes and can monitor Engine information (If available).
- **Portable Units (WT2250):** AVL devices that can plug into a cigarette lighter for vehicles with simple tracking requirements, such as locations, stops, and geo-fencing, with the ability to report every 10 seconds.
- **Advanced Units (WT10X):** AVL devices for vehicles with complex integration requirements, such as salt spreader controller integrations, road and air temperature sensors, plow up/down, etc. The devices will also be securely mounted and hard wired in the vehicle.

All locators can be installed by AT&T or the Client. AT&T understands the importance of quality installations to ensure reliable and accurate GPS/AVL data. All devices are mounted out of sight, with the only portions visible being serial connection cables. All connection points can have tamper sealant applied as well. Furthermore, each vehicle installation includes a thorough installation check to ensure all telemetry and serial data is being collected.



Advanced Features

AT&T can provide all of the serial integrations required for the Advanced Features set. This includes integrations to the MAPC's Cirus, CompuSpread, & Force America controllers and Road Watch sensors. The data captured includes:

- Spreader Status
- Gate Setting
- Blast Status
- Error Status
- Pause Status
- Spinner Mode
- Bed Status
- PTO Status
- Material Selected
- Material Application Rate
- Road and Air Temperature

Project Management

At AT&T we have a formal Project Management Office (PMO) comprised of Project Managers and Project Coordinators. The AT&T PMO utilizes the best practices of the PMI methodology. Details on the services and documentation provided are included with this submission.

The Project Manager will be the lead in the MAPC implementations and ensure on-going communication, thorough documentation, and clearly defined success criteria and project schedule.

Data Hosting, Software, and Reports

Once the AT&T locators are installed, all data is automatically available on the AT&T Fleet Manager portal. All data is hosted by AT&T and archived indefinitely, with online availability surpassing the 24 month mark.

The AT&T Project Manager and Regional Business Manager will work with the MAPC Municipalities to ensure all required website logins are setup, all vehicles are identified



correctly on the portal, all tools are available, and all the required reports (whether optional or standard) are setup on the required logins.

A key report will be the Winter Operations Report, which will allow the MAPC to review all data collected from their Spreader Controllers.

From: 15/03/2014 12:00:00 AM To: 31/03/2014 12:00:00 AM
 Vehicles: 35-1179 CS440, 35-1181 CS440 Unit: Metric

1 of 1 Find | Next

Day Based Winter Operation

OttawaPWAdminBeta
 From 15/03/2014 12:00 AM to 31/03/2014 12:00 AM, Eastern Standard Time

Summary Detail

Vehicle/Date	Material Totals					Time			Distance		
	Salt (KG)	Sand (KG)	Mix (KG)	Prewet (L)	Anti Ice (L)	Spread (HH:MM)	Plow (HH:MM)	Total (HH:MM)	Spread (KM)	Plow (KM)	Total (KM)
35-1181 CS440	17,312	19,262	0	407	0	10:19	00:00	39:17	236.5	0.0	713.7
35-1185 CS440	23,049	26,238	0	421	0	11:36	00:00	76:46	255.6	0.0	864.5
35-1186 CS440	25,090	25,090	0	0	0	09:50	00:00	68:20	241.2	0.0	871.1
Total	65,451	70,590	0	828	0	31:45	00:00	184:23	733.3	0.0	2,449.3

Sample Winter Operations Report

Training

The MAPC Municipalities will receive web or on-site training to ensure end users understand how to use the system. All Webtech training follows a structured Explanation, Demonstration, and Confirmation (EDC) format. The instructor explains a series of tasks, demonstrates how to perform the tasks, and challenges the students to confirm that they can repeat the same tasks.

After training, customers receive one month of exclusive post-training instructor support. Instead of reaching out to the Support Desk, Customers can reach out to instructors during normal business hours for any training related questions, or if a re-demonstration or explanation of any topics covered during the session is required.

Customer Support

AT&T has a 24 x 7 Technical Support Help Desk which also manages 24 hour e-mail support. The system is managed by a Service & Support Application which allows all issues to be identified and promptly responded to, ensuring minimal service interruption.

Furthermore, the MAPC Municipalities will be assigned a Regional Business Manager to support the agency in all stages of the project as well as act as its primary contact during the life of the contract.



Warranty

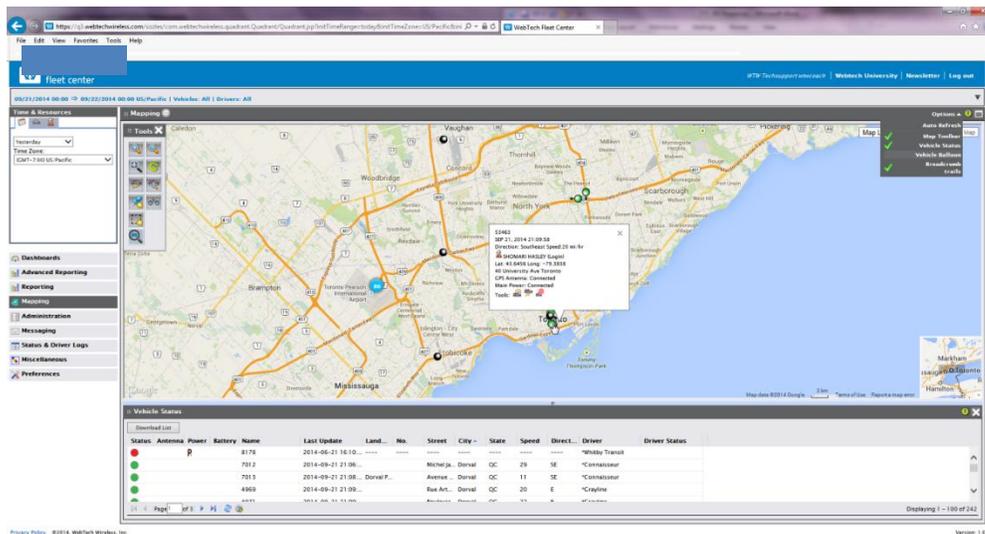
AT&T will provide a 3 year Warranty on locators with a new contract. The coverage excludes any peripheral equipment attached to the Products, such as: antennas, proximity sensors, diagnostic (ECM) gateways or any other peripheral not listed. This does not extend to theft, nonconformities, defects or errors due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to the Company's instructions, or failure to follow prescribed operating maintenance procedures, or damage caused by force of nature or act of any third party.



AT&T Fleet Manager Overview

Real-Time Tracking (Included)

Fleet Manager is AT&T’s web-based real-time GPS/AVL system, accessible on any mobile device or internet browser. It allows users to track an unlimited number of assets on the same user interface, providing location updates down to 10 second intervals. Users can configure device reporting configurations to suit the various equipment types, i.e. 3 second reporting for high security vehicles, 10 second reporting for standard vehicles, daily reporting for non-mobile assets. All vehicle information is collected and transmitted, including vehicle identification, time and date of report, latitude and longitude coordinates, direction in degrees, speed, and any other telemetry and serial data being captured.



AT&T Fleet Manager User Interface

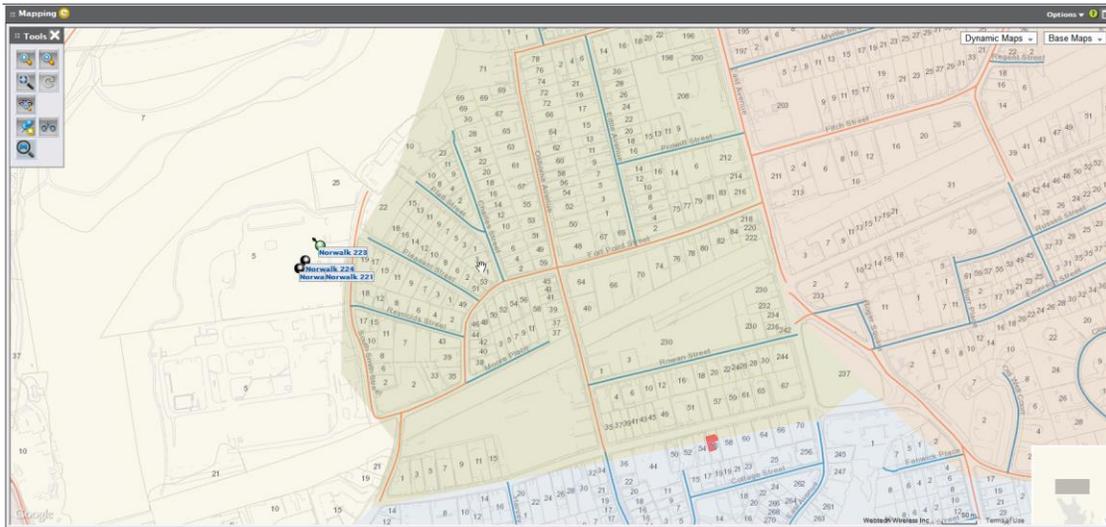
Google/Esri Hybrid Mapping Interface (Included)

Fleet Manager allows users to select between Google Maps (Street, Hybrid, and Satellite) as well as customer map data (which allows users to benefit from displaying map layers as either a base map or dynamic maps).

When using their own map data, customers have the option of hosting the data on their own ArcGIS server or ArcGIS online account, AT&T would simply require certain information such as credentials to access the URL (if needed). This option provides immediate visibility of any GIS data changes within the AVL system, and provides customers with control over the look and feel of map layers.



If a de-militarized zone with open connection to ArcGIS server is not available, AT&T can also host customer map data. AT&T would simply require all GIS data and AT&T would take care of all tiling and processing related to map presentation. Both options are included with AT&T’s monthly service fee.



Customer ESRI Base Map and Route Layers on AT&T Fleet Manager

Hardware Specifications

AT&T has numerous GPS/AVL devices. Hardware failure rates are below the industry standard (2%).

All devices are 3G and can be activated on any cellular network carrier. All devices are equipped with GPS/GLONASS receipts, providing accuracy under 2.5 meters CEP. 2.5 meter CEP accuracy translates to accuracy within 2.5 meters 50% of the time, within 5.0 meters 93% of the time, and within 7.5 meters 99% of the time. All devices provide Store and Forward functionality, ensuring data is stored on board when out of cellular network connectivity.

Environmental specifications vary depending on the AT&T locator model. For Operating Temperatures, WT 10x/WT 4500 locators operate between -20 to +60 C. The WT 2110 asset trackers and the WT 2250 operate between -40 to + 60 C and have an IP 68 rating. WT 10x, WT 4500, and WT 7000 locators are designed for in-cab installations and are housed in high strength Polycarbonate/ABS material which has impact, dust, and moisture resistance.



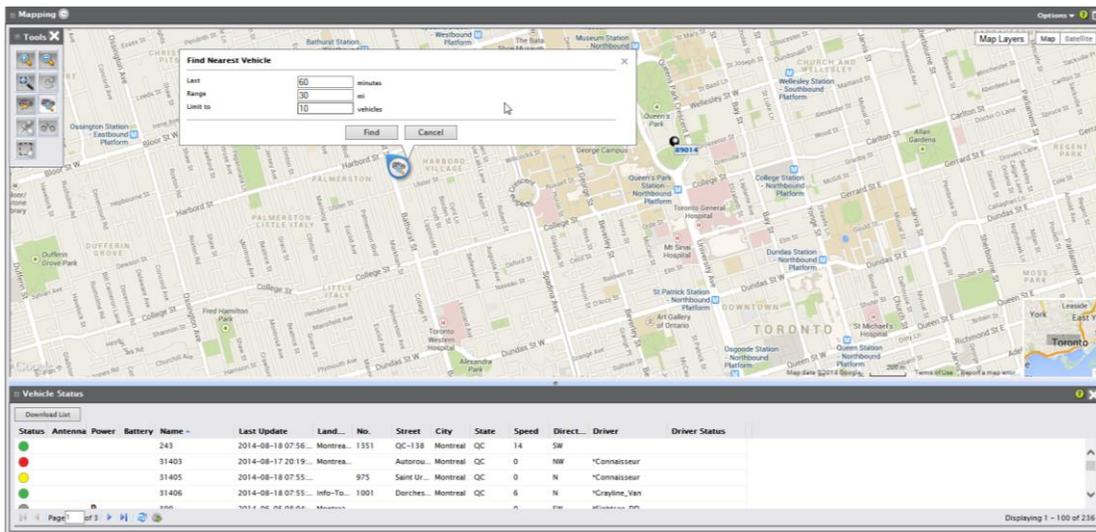
Model	Image	Dimensions/Weight	Description
WT2200		Size 2.25 x 2.25 x 10.5" Weight 907 g.	Battery powered Asset Watchers to protect non-mobile assets and equipment from theft. Reports vehicle locations every 6 hours, 12 hours, or 24 hours, as well as upon movement. Devices are IP67 rated and environment proof. All antennas are internal.
WT2250		Size 4.3 x 3.2 x 1.6" Weight 272 g.	Portable device powered by cigarette lighter adapter for plug and play portable tracking, i.e. contractors, personal vehicles, etc. Devices are IP 66 and environment proof. All antennas are internal.
WT4500		Size 1.7 x 2.5 x 1" Weight 51 g.	OBDII Dongle for light duty vehicles. Allows customers to simply plug in the device into the vehicle ECM port for standard reporting as well as diagnostic data. All antennas are internal.
WT10x		Size 4.7 x 3.4 x 1.3" Weight 200 g.	Standard AT&T AVL device. Provides integration to light duty and heavy duty vehicle ECM for diagnostic data and can provide up to 5 telemetry inputs. External GPS and cellular antenna. The WT10x also supports the following enhanced features: <ul style="list-style-type: none"> • AT&T Driver Center functionality, which includes Hours of Service Reporting, Two Way Messaging, In-Cab Navigation, and Electronic Driver Inspection Records. Requires in-cab Mobile Data Terminal or Android Tablet. • Satellite Iridium Reporting for continued location reporting when out of cellular network coverage. • Driver ID Reporting via RFID Fobs or HID Cards. • Spreader Controller Integrations • Road and Air Temperature Sensor Integrations

WT 10x devices can be equipped with internal batteries for antenna disconnect and power disconnect notifications for improved vehicle management and reduce downtime.



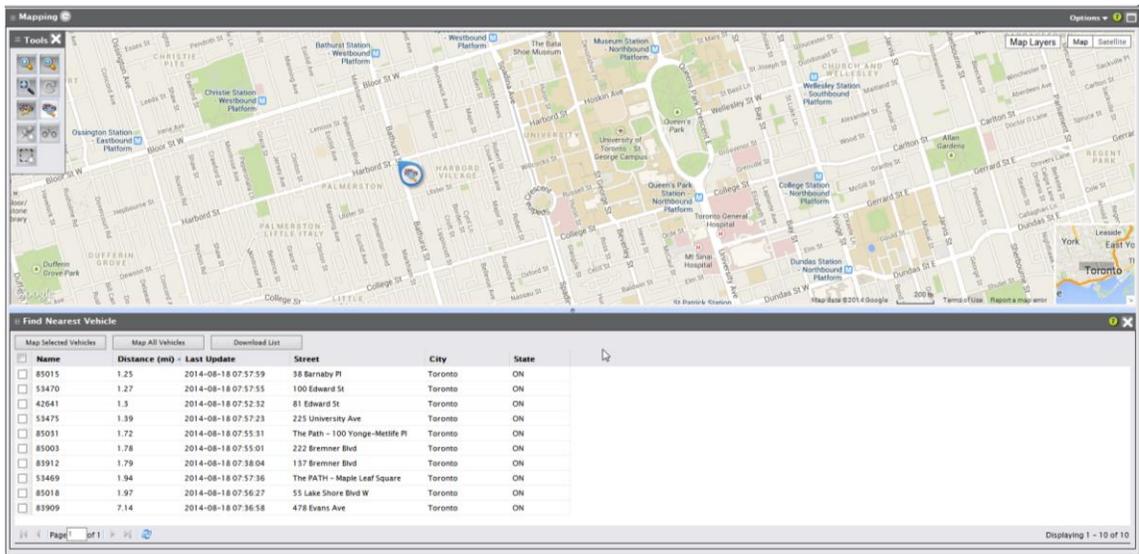
Finding Vehicles or Assets (Included)

Fleet Manager is a real-time web based AVL solution, allowing users to locate any vehicle at any point in time. The map refreshes every 10 seconds, with all vehicles reporting their locations every 10 seconds (standard AT&T reporting configuration) in addition to every right or left turn. If a user must locate the closest vehicle to any location, the Find Nearest Vehicle Tool allows users to simply click on the map and find the closest user defined amount of vehicles to that location, within a user defined time frame, within a user defined radius.



Find Nearest Vehicle Tool





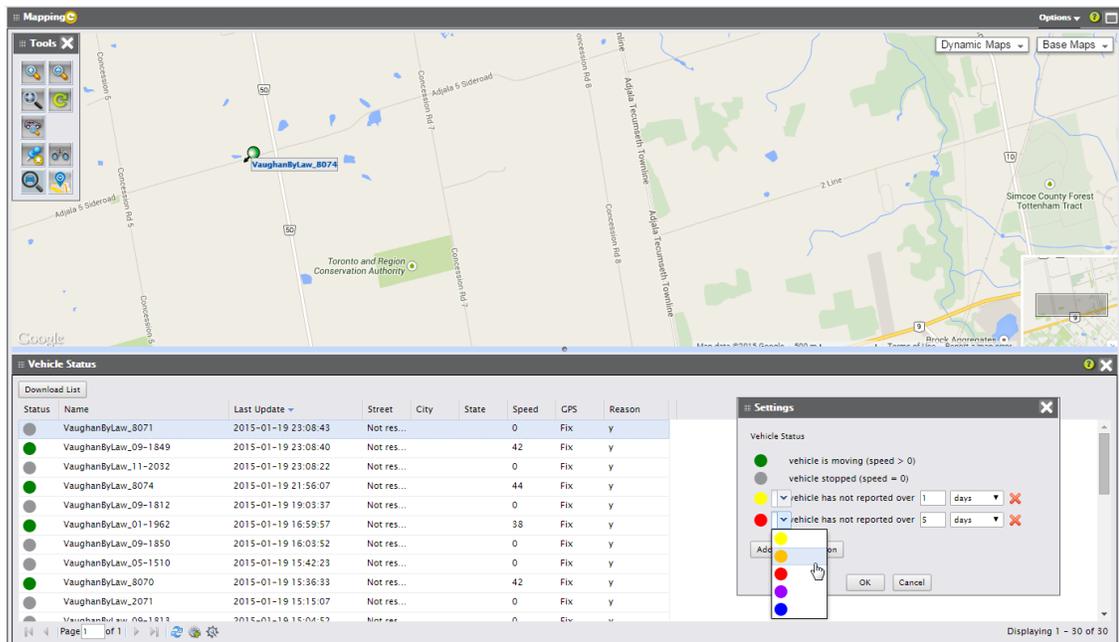
Find Nearest Vehicle Tool Results

Visual Vehicle Status Indicators (Included)

Users are able to configure the visual status indicators on the vehicle pane to reflect the nature of their own operations. For example, green can reflect moving vehicles, yellow can reflect vehicles with no moment in the last 3 hours, orange in 6 hours, red in 12 hours, and gray in 24 hours.

With respect to vehicle icons on the map, these will always reflect green for moving, red for speeding, gray for stopped, and yellow when telemetry data changes are being detected, i.e. lights or sirens are on, plow is down, sweeper broom is down, etc.



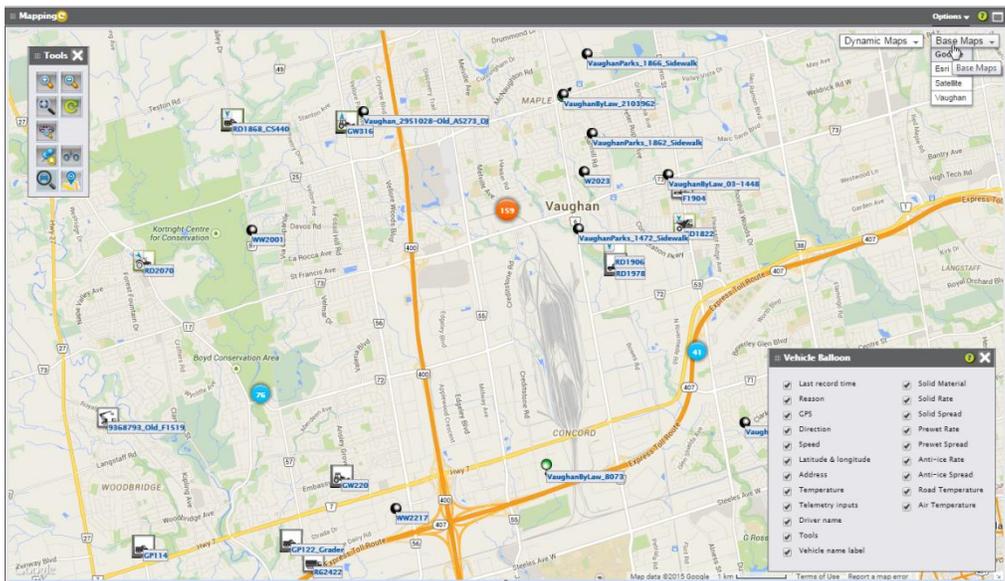


Setting up Visual Status Indicators

Vehicle Balloons (Included)

Upon having your cursor over a vehicle icon, a vehicle balloon will pop up, providing full Vehicle Name, time and date of last fix, speed, direction, status of telemetry inputs or serial data, as well as any other information users would like to see such as latitude and longitude coordinates. Users are also able to select through the Vehicle Balloon tool what fields are displayed.

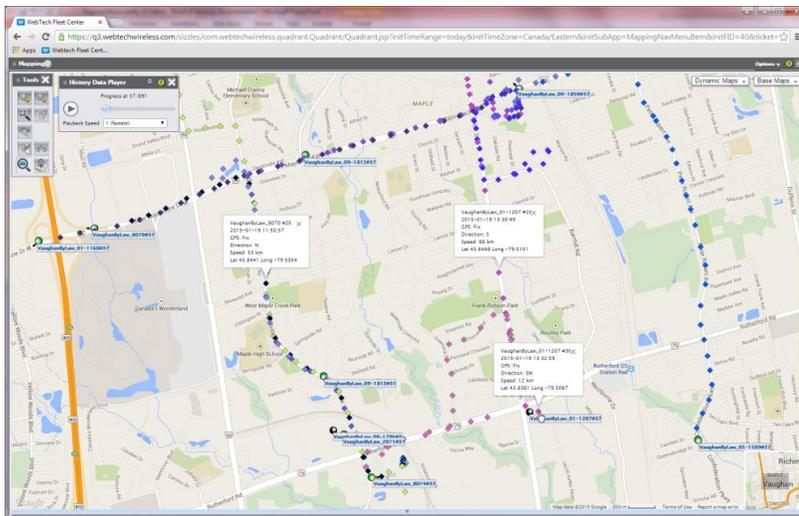




Vehicle Balloons with Configuration Window

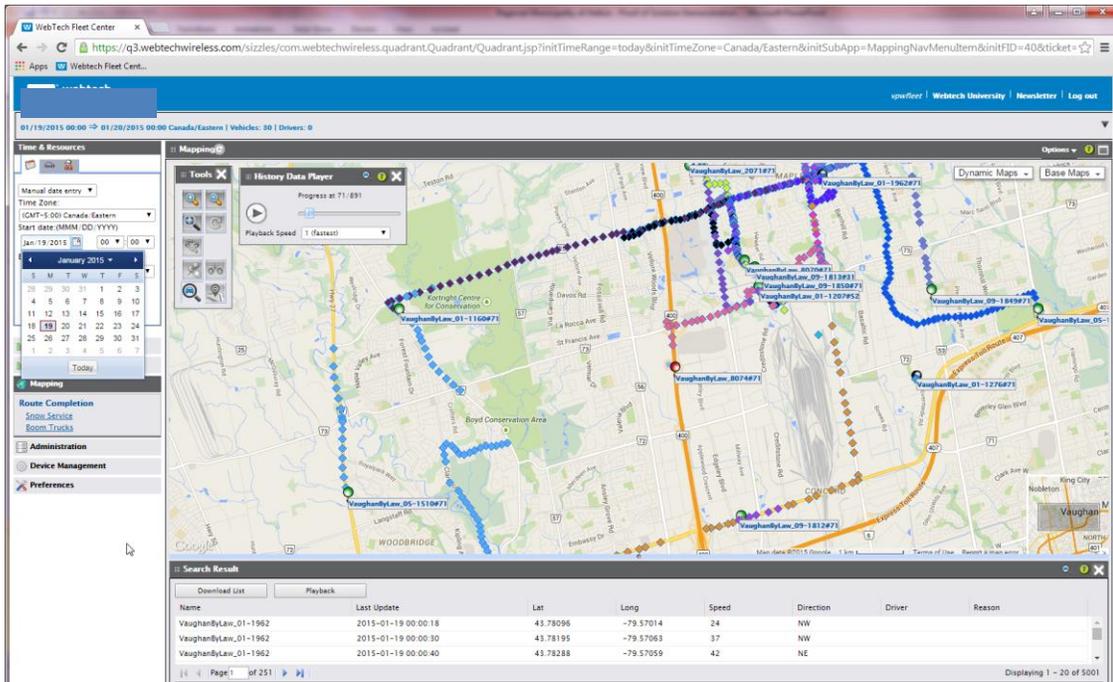
Historical Data Playback (Included)

Users have two methods of accessing historical data, through standard reports as well as playbacks on the mapping user interface. To playback historical data, users simply select the vehicle(s), date(s), and time(s) in question, and select the Vehicle Playback button. This will provide data for each and every packet in the vehicle pane for users to download (providing them the data in raw format) as well as popup a History Data Player window which allows users to play data on the map with breadcrumbs.



Vehicle Playback with Breadcrumbs at Full Screen



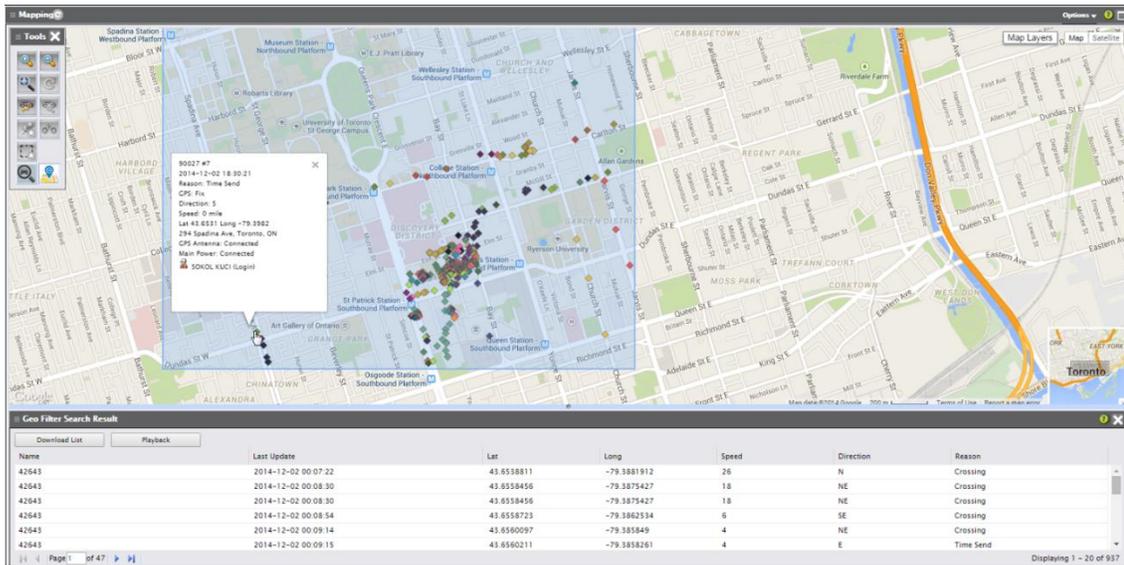


Vehicle Playback with Breadcrumbs

Geo Filter Query (Included)

Instead of selecting Vehicle Playback after choosing date(s), time(s), and vehicle(s) for historical queries, users can also select the Geo Filter tool which provides an additional level of filtering. Upon selecting the tool, users can draw a square area on the map, and filter the data to only display activity within this delineated zone.

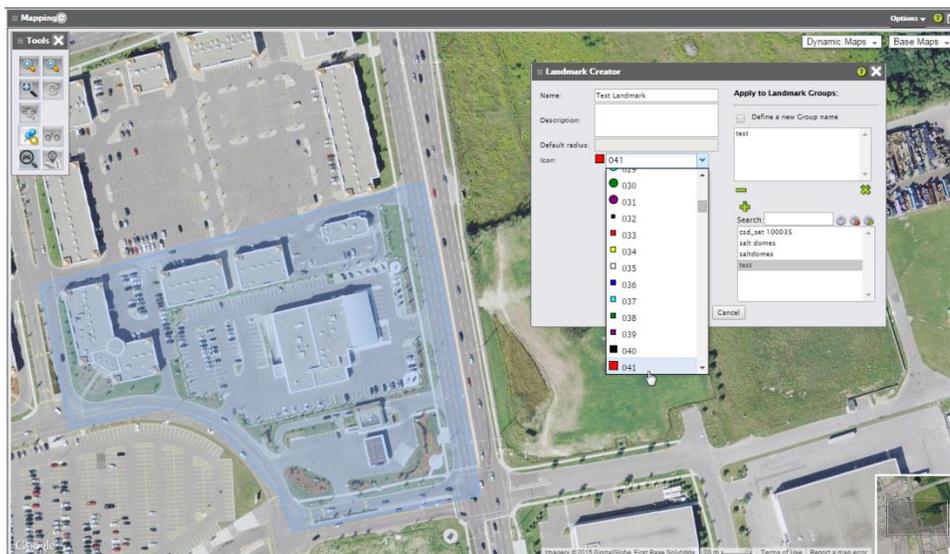




Geo Filter Query Results

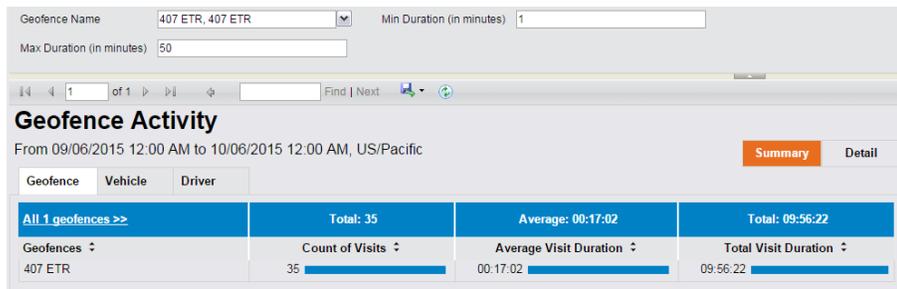
Geofencing and Landmarks (Included)

Users are able to create their own geofences and landmarks. Geofences will allow an agency to receive automatic alerts when vehicles enter or leave the chosen geofence, i.e. vehicles leaving the operating area or vehicles entering restricted zones. Landmarks will allow an agency to identify common points of interest on their reports, i.e. stops at yards. All geofences and landmarks can be drawn on the mapping interface by the user and saved.

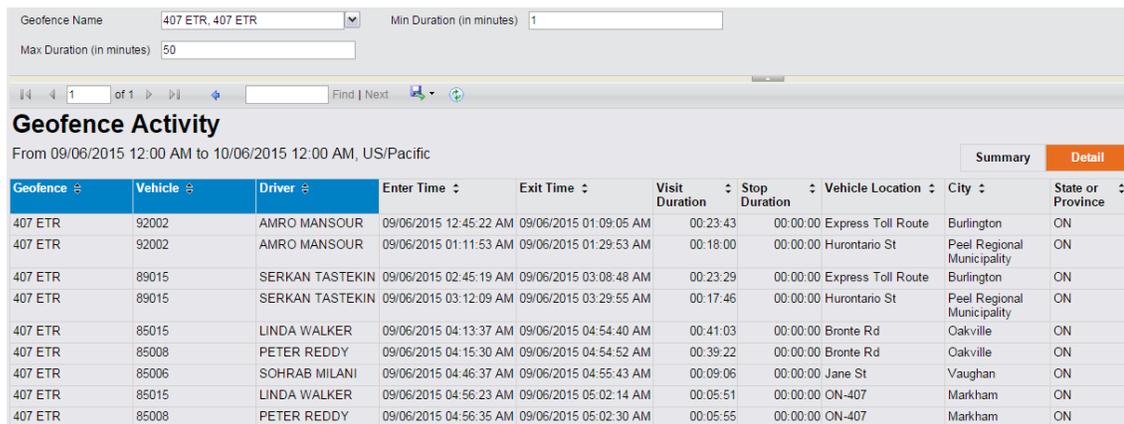


Creating a Landmark





Geofence Activity – Summary View



Geofence Name: 407 ETR, 407 ETR | Min Duration (in minutes): 1 | Max Duration (in minutes): 50

Geofence Activity
From 09/06/2015 12:00 AM to 10/06/2015 12:00 AM, US/Pacific

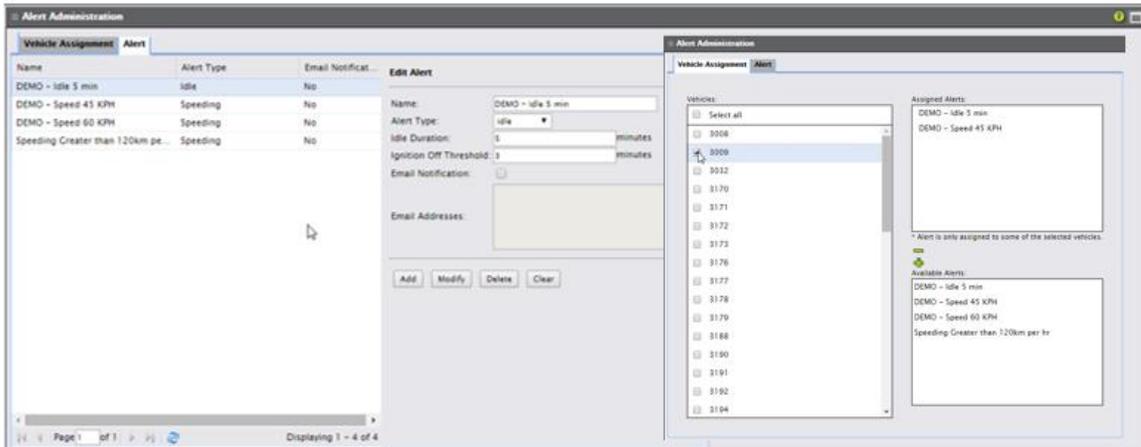
Geofence	Vehicle	Driver	Enter Time	Exit Time	Visit Duration	Stop Duration	Vehicle Location	City	State or Province
407 ETR	92002	AMRO MANSOUR	09/06/2015 12:45:22 AM	09/06/2015 01:09:05 AM	00:23:43	00:00:00	Express Toll Route	Burlington	ON
407 ETR	92002	AMRO MANSOUR	09/06/2015 01:11:53 AM	09/06/2015 01:29:53 AM	00:18:00	00:00:00	Hurontario St	Peel Regional Municipality	ON
407 ETR	89015	SERKAN TASTEKIN	09/06/2015 02:45:19 AM	09/06/2015 03:08:48 AM	00:23:29	00:00:00	Express Toll Route	Burlington	ON
407 ETR	89015	SERKAN TASTEKIN	09/06/2015 03:12:09 AM	09/06/2015 03:29:55 AM	00:17:46	00:00:00	Hurontario St	Peel Regional Municipality	ON
407 ETR	85015	LINDA WALKER	09/06/2015 04:13:37 AM	09/06/2015 04:54:40 AM	00:41:03	00:00:00	Bronte Rd	Oakville	ON
407 ETR	85008	PETER REDDY	09/06/2015 04:15:30 AM	09/06/2015 04:54:52 AM	00:39:22	00:00:00	Bronte Rd	Oakville	ON
407 ETR	85006	SOHRAB MILANI	09/06/2015 04:46:37 AM	09/06/2015 04:55:43 AM	00:09:06	00:00:00	Jane St	Vaughan	ON
407 ETR	85015	LINDA WALKER	09/06/2015 04:56:23 AM	09/06/2015 05:02:14 AM	00:05:51	00:00:00	ON-407	Markham	ON
407 ETR	85008	PETER REDDY	09/06/2015 04:56:35 AM	09/06/2015 05:02:30 AM	00:05:55	00:00:00	ON-407	Markham	ON

Geofence Activity – Detail View

Alerts for Violations (Included)

Through the Alerts Administration section, users can setup automatic alerts for speeding, idling, and stop violations. Users can configure different thresholds by vehicle (i.e. higher thresholds for pickup trucks when compared to plow trucks or sweepers) as well as different e-mail distribution lists by vehicle.





Speed, Idle, and Stop Alert Configuration

Speeding Reports (Included)

In addition to alerts when vehicles go over a certain speed threshold, users can run reports on historical vehicle speeding. Speed Report options include: speeding against profile limits, speeding against target limits, speeding duration, and speeding against posted limits (latter is optional).

Speeding Against Speed Target Limits

From 03/11/2016 12:00 AM to 03/12/2016 12:00 AM, PST

										Summary	Detail
Date	Vehicle	Driver	Speed Target, MPH	Actual Speed, MPH	Actual Over Limit, MPH	Speeding Location	City	State or Province			
11/03/2016 07:26:14 AM	001	001 DON NIX	50	61	11	19592 Ave 56	Terra Bella	CA			
11/03/2016 07:26:37 AM	001	001 DON NIX	50	61	11	19592 Ave 56	Terra Bella	CA			
11/03/2016 07:31:37 AM	001	001 DON NIX	50	61	11	15000 Ave 56	Earlimart	CA			
11/03/2016 07:41:37 AM	001	001 DON NIX	50	61	11	1698 Rd 128	Earlimart	CA			
11/03/2016 07:20:14 AM	003	003 NORTON KOEHLER	50	62	12	25946 S Demaree St	Tulare	CA			
11/03/2016 07:30:14 AM	003	003 NORTON KOEHLER	50	70	20	CA-99	Tulare	CA			
11/03/2016 07:33:54 AM	003	003 NORTON KOEHLER	50	69	19	16590 CA-99	Tipton	CA			
11/03/2016 07:35:14 AM	003	003 NORTON KOEHLER	50	66	16	1472 CA-99	Tipton	CA			
11/03/2016 07:45:14 AM	003	003 NORTON KOEHLER	50	62	12	6744 Elk Bayou Rd	Tipton	CA			
11/03/2016 07:04:38 AM	004	004 JOANNA SUMMERTON	50	68	18	CA-99	Merced County	CA			
11/03/2016 07:19:38 AM	004	004 JOANNA SUMMERTON	50	66	16	CA-99	Merced	CA			
11/03/2016 07:24:38 AM	004	004 JOANNA SUMMERTON	50	68	18	3134 CA-99	Merced	CA			
11/03/2016 07:29:38 AM	004	004 JOANNA SUMMERTON	50	70	20	CA-99	Le Grand	CA			
11/03/2016 07:34:38 AM	004	004 JOANNA SUMMERTON	50	69	19	CA-99	Chowchilla	CA			
11/03/2016 07:39:38 AM	004	004 JOANNA SUMMERTON	50	61	11	19412 Avenue 24	Chowchilla	CA			

Speeding Against Target Limits Report



Activity and Stop Reports (Included)

Users can query standard activity data for any and all vehicles through the Fleet Activity Summary Report. This provides total distance travelled, travel time, number of stops, stops in landmarks, total idle time, net idle time percentage, and last location. If users require more in depth information on stops during this time period, they can select the Stop Report button on the mapping interface, which provides a tabular view of all stops, including stop and idle time at each address, as well as a mapped view of all stops.

From 09/21/2014 12:00 AM to 09/22/2014 12:00 AM, US/Pacific

Vehicle	Distance Traveled, miles	Travel Time	Count of Stops	Count of Landmarks Visited	Stop Duration	Idle Time	Net Idle Time	Last Record Address	City	State or Province
243	0.00	04:45:29	23	18	16:21:55	02:07:04	30.8 %	5550 Monk Blvd	Montreal	QC
31403	0.00	00:00:00	0	0	1 day(s), 00:04	00:00:00	0.0 %	2295 52e Avenue	Montreal	QC
31405	18.02	00:35:26	2	5	21:43:25	00:04:31	11.3 %	Autoroute Décarie	Montreal	QC
31406	116.96	05:48:54	28	14	18:25:07	01:29:18	20.4 %	Autoroute Décarie	Montreal	QC
399	17.64	01:40:40	11	15	19:22:55	00:39:52	28.4 %	Autoroute Décarie	Montreal	QC
42631	727.80	12:32:58	17	14	08:19:59	03:44:22	23.0 %	6150 Conin Dr	Mississauga	ON
42632	728.33	12:55:32	19	14	08:47:18	02:20:05	15.3 %	6171 Conin Dr	Mississauga	ON
42633	547.38	10:06:13	15	13	10:52:17	03:05:06	23.4 %	700 Mansfield Street	Montreal	QC
42634	666.75	12:05:34	19	18	11:46:20	03:54:47	24.4 %	Macdonald-Cartier Fwy	South Lancaster	ON
42635	359.88	07:00:33	13	11	13:37:00	05:11:49	42.6 %	6050 Indian Line	Mississauga	ON
42636	580.04	10:35:14	19	22	10:24:19	04:14:12	28.6 %	83 Edward St	Toronto	ON
42637	0.26	00:02:04	2	2	14:09:16	00:30:13	93.6 %	6150 Conin Dr	Mississauga	ON
42638	660.10	11:28:21	16	14	10:13:54	02:21:16	17.0 %	Hwy of Heroes	Newcastle	ON
42639	539.19	08:58:00	14	13	12:02:02	01:50:03	17.0 %	Macdonald-Cartier Fwy	Kingston	ON
42640	720.57	12:44:30	17	12	11:19:03	02:50:20	18.2 %	RÉSO Montreal sous terrain	Montreal	QC
42641	366.34	08:42:33	27	16	14:19:22	02:59:58	25.6 %	7302 Kalar Rd	Niagara Falls	ON
42642	723.05	12:28:03	19	20	11:03:05	02:14:43	15.3 %		Toronto	ON
42643	374.05	06:49:18	11	12	22:00:29	03:35:31	34.5 %	Autoroute Décarie	Montreal	QC
42644	723.11	12:30:40	15	9	11:55:41	03:17:38	20.8 %	5523 Chemin de la Côte Saint Paul	Montreal	QC
42645	0.00	00:00:00	0	1	1 day(s), 00:07	00:00:00	0.0 %	6020 Indian Line	Mississauga	ON
42720	709.98	12:17:01	20	19	11:20:53	02:23:14	16.3 %	Armoury St	Toronto	ON

Fleet Activity Summary Report

Stop #	Vehicle	Landmark	Stop Begins	Stop Ends	Stop Duration	Trip Time	Travel Time	Idle Time	Total Distance ...	Vehicle Location	City	State or Province
1	VaughanByLaw_8074		2015-01-19 12:06:15	2015-01-19 12:13:58	0:07:43	0:00:00	0:00:00	0:07:43	0.2	2501 York Regional Rd 73	Vaughan	ON
2	VaughanByLaw_8074		2015-01-19 12:20:16	2015-01-19 12:22:23	0:02:07	0:16:08	0:06:18	0:00:00	2.2	9505 York Regional Rd 6	Vaughan	ON
3	VaughanByLaw_8074		2015-01-19 12:30:23	2015-01-19 12:46:56	0:16:33	0:24:13	0:08:00	0:00:00	2.3	86 Tigi Ct	Vaughan	ON
4	VaughanByLaw_8074		2015-01-19 12:30:38	2015-01-19 12:54:27	0:23:49	0:08:11	0:04:00	0:00:00	0.9	Springside Rd	Vaughan	ON
5	VaughanByLaw_8074		2015-01-19 13:18:23	2015-01-19 13:55:52	0:37:29	1:00:45	0:23:56	0:00:00	29.8	8223 Drive Rd	Mississauga	ON
6	VaughanByLaw_8074		2015-01-19 14:20:49	2015-01-19 14:24:04	0:03:15	0:28:32	0:23:17	0:03:15	28.9	3120 Rutherford Rd	Vaughan	ON
7	VaughanByLaw_8074		2015-01-19 14:28:54	2015-01-19 16:26:52	1:57:58	2:02:48	0:04:50	0:02:00	1.5	86 Tigi Ct	Vaughan	ON
8	VaughanByLaw_8074		2015-01-19 16:26:52	2015-01-19 16:29:06	0:02:14	0:02:14	0:00:00	0:02:14	0.1	2501 Rutherford Rd	Vaughan	ON
9	VaughanByLaw_8074		2015-01-19 18:40:00	2015-01-19 18:56:04	0:07:04	2:26:58	2:19:54	0:07:04	46	17420 York Regional Rd 27	Schomberg	ON
10	VaughanByLaw_8074		2015-01-19 20:48:10	2015-01-19 20:50:15	0:02:05	1:54:51	1:52:46	0:00:00	63.3	42 Dolores Crescent	Vaughan	ON
11	VaughanByLaw_8074		2015-01-19 20:50:15	2015-01-19 20:54:15	0:04:00	0:04:00	0:00:00	0:04:00	0.1	11 Dolores Crescent	Vaughan	ON
12	VaughanByLaw_8074		2015-01-19 21:10:21	2015-01-19 21:22:20	0:11:59	0:28:05	0:16:06	0:00:00	15.4	80 Tigi Ct	Vaughan	ON
12 stops		0 landmarks			3:35:58	9:18:45	5:40:47	0:28:16	188.7			

Stop Report with Mapped Stops

Vehicle Maintenance (Optional Pricing – Engine Diagnostics)

To assist agencies in scheduling preventative maintenance services, AT&T devices can provide mileage and engine hours. Please note that for mileage and Engine Hours, AT&T recommends customers obtain this information using GPS calculations as opposed to ECM integrations. With the variety of make/model/year vehicles within a single fleet, it is likely that not all vehicles will provide mileage as a field of data. Using GPS calculations with AT&T’s high frequency reporting ensures accurate mileage values, and allows users to receive proactive alerts when vehicles are due.

Vehicle : 004 Current odometer : 220354 mile Current Engine Time : 2070 hours [Estimated] Manager : miguel.solorio@co.kings.ca.us							
Total tasks : 1							
Task	Last date	Last odometer	Last Engine Time	Due date	Due odometer (mile)	Due Engine Time	Status
Engine Oil Change	26/Apr/2015	218000	0	25/Oct/2015	224000	N/A	Safe period A service... 217,748 B service... done on C service... done on D service... done on 12/19/13 at 196,006 E service... done on 10/19/12 at 177,416 F service... done on NOTE Make sure you leave a note when entering this vehicle.

Vehicle : 005 Current odometer : 214381 mile Current Engine Time : 1876 hours [Estimated] Manager : miguel.solorio@co.kings.ca.us							
Total tasks : 1							
Task	Last date	Last odometer	Last Engine Time	Due date	Due odometer (mile)	Due Engine Time	Status
Engine Oil Change	06/May/2015	208000	0	02/Nov/2015	212000	N/A	Overdue A service... 206,434 B service... done on C service... done on 02/26/15 at 194,871 D service... done on 03/31/15 at 200,312 E service... done on 08/05/14 at 148,462 F service... done on 09/18/14 at 178,683

Vehicle Maintenance Subsystem				Vehicle Maintenance Management			
Cal View							
Jun/29/2015							
	Safe period	Service period	Grace period	Overdue			
001	Engine Oil Change						
002	Engine Oil Change						
003	Engine Oil Change						
004	Engine Oil Change						
005				Engine Oil Change			
006	Engine Oil Change						
007	Engine Oil Change						
008	OUT OF SERVICE						
009		Engine Oil Change					

Maintenance Module

Vehicle Diagnostics (Optional Pricing – Engine Diagnostics)

AT&T devices can connect to vehicle ECMs for diagnostic information. CAN, J1708, J1939, J1979, and OBDII standards are supported. Fields available per vehicle are dependent on make/model/year.

Diagnostic information allows for Vehicle Performance reporting, which provides information such as sharp turns, accelerations, decelerations, time over RPM, fuel economy, CO2 emissions, etc. If available, Diagnostic Trouble Code alerts can also be provided, allowing fleets to proactively receive reports indicating that the malfunction indicator light has gone off in a vehicle, and providing the code number.



Performance

From 08/17/2014 12:00 AM to 08/18/2014 12:00 AM, US/Pacific

Vehicle	Driver	Score	Distance, miles	Travel Time	Engine Time	Idle Time	Idle Time Over Engine Time	Brake Count	Sharp Acceleration Count	Time Over RPM	Speeding Count	Speeding Duration	Fuel Efficiency, MPG	CO2 Emissions, lbs
31405		99 %	89.43	03:14:00	07:09:06	03:55:06	54.79 %	4	6	00:00:00	0	00:00:00	4.45	449.48
31406		99 %	61.96	02:23:43	03:56:34	01:32:51	39.25 %	0	0	00:00:00	0	00:00:00	5.15	269.23
5515		0 %	0.00	00:00:00	00:00:29	00:00:29	100.00 %	0	0	00:00:00	0	00:00:00	0.00	0.00
7015		99 %	189.10	13:29:25	21:24:00	07:54:35	36.96 %	0	0	00:00:01	0	00:00:00	4.37	967.54
7022		98 %	295.40	18:24:27	1:09:03:00	14:38:33	44.30 %	210	0	00:01:16	0	00:00:00	0.00	0.00
83823		98 %	0.40	00:03:00	00:42:00	00:39:00	92.86 %	0	0	00:00:00	0	00:00:00	0.29	30.73
83888		99 %	0.30	00:03:00	00:15:00	00:12:00	80.00 %	0	0	00:00:00	0	00:00:00	0.48	13.96
8515		99 %	93.36	03:58:09	06:40:41	02:42:32	40.56 %	0	0	00:00:05	0	00:00:00	0.00	0.00
8536		99 %	127.23	05:50:27	08:46:03	02:55:36	33.38 %	0	0	00:00:00	0	00:00:00	0.00	0.00
8537		99 %	148.47	05:38:39	09:34:07	03:55:28	41.01 %	0	0	00:00:04	0	00:00:00	0.00	0.00
8538		99 %	80.23	03:39:50	05:34:25	01:54:35	34.26 %	0	0	00:00:00	0	00:00:00	0.00	0.00

Vehicle Performance Report

Company: KART Calvans

From: Jan. 01 2015 00:00:00 **To:** Feb. 01 2015 00:00:00

Time zone: PST

Group: All_Vanpools

Report Description: This report displays OBDII Diagnostic Trouble Codes (DTCs) and the date, time and location of the occurrences

Vehicle 003

Date	Address	DTC	Description
2015/01/02 07:07:49	4004 W Cameron Ave, Visalia, CA	P0171	System too Lean (Bank 1)
2015/01/02 07:07:49	4004 W Cameron Ave, Visalia, CA	P0174	System too Lean (Bank 2)
2015/01/02 07:29:31	1663 Hillman St, Tulare, CA	P0171	System too Lean (Bank 1)
2015/01/02 07:29:31	1663 Hillman St, Tulare, CA	P0174	System too Lean (Bank 2)
2015/01/02 15:55:34	500 Quebec Ave, Corcoran, CA	P0171	System too Lean (Bank 1)
2015/01/02 15:55:34	500 Quebec Ave, Corcoran, CA	P0174	System too Lean (Bank 2)
2015/01/04 17:43:27	W Cameron Ave, Visalia, CA	P0171	System too Lean (Bank 1)

OBDII Diagnostic Trouble Code Report

Dashboard (Optional Pricing – Engine Diagnostics)

The Fleet Manager Dashboard is intended to display key information at a high level, allowing users to quickly see the performance of their fleet. The Dashboard Manager allows Administrators to configure vehicle groups for display on the dashboard as well



as the targets, color legend definitions, and selecting between weekly or daily dashboards.

Dashboard for Last 7 days

From 08/11/2014 12:00 AM to 08/18/2014 12:00 AM, US/Pacific

Vehicle		Speeding		Idle		Fuel Efficiency		Utilization	
		Against Profile Limits		Idle Time by GPS				Total Ignition Time	
		Over Speeding Tolerance	Vehicles Over Speeding Tolerance	Idle Time over Engine Time % Tolerance	Vehicles Over Idle Time Tolerance	Fuel Efficiency Target	Vehicles Under Fuel Efficiency Target	Utilization Target	Vehicles Under Utilization Target
Fleet	Vehicles								
All fleet (default)	167	10 MPH	1	50 %	24	15 MPG	9	15 %	36
TWCoach	85	5 MPH	2	50 %	9	6 MPG	1	20 %	29
DriverPerformance	90	10 MPH	1	50 %	11	10 MPG	1	15 %	17

Dashboard

Telemetry Reporting (Optional Pricing – Sensors)

AT&T equipment can integrate to a wealth of external discrete sensors. Discrete sensors are those that provide an up/down or on/off status. It simply needs a 12v signal to determine the status of a sensor or, if a 12v signal cannot be found, Hydraulic Pressure or Proximity Sensors. Information that can be captured to can include but is not limited to plow, spreader, blade, sweeper, wing, vactor, brooms, etc.

AT&T ensures that if sensors are required, these are adequately sourced to ensure longevity as well as accurate readings. For example, to capture plow status, AT&T would use proximity sensors. AT&T recommends installing proximity sensors over other plow status methods. Proximity sensors are unaffected by hydraulic pressure issues (autofloat, maintenance, etc.) and can be easily checked visually to ensure calibration is maintained. Other methods to capture plow status include hydraulic sensors (these are susceptible to pressure variations as the vehicle ages, when the system is in need of or has been repaired, or if operators float their plows during operations), as well as mercury/ball switches (these are mounted in a fashion where calibration is complex, recalibration is not possible, and false triggering is common due to vehicle bouncing and movement).

Once telemetry data is being captured, users can run data on the Telemetry Report. There are two Telemetry Report options:



Telemetry Events Report

From 01/06/2015 12:00 AM to 01/07/2015 12:00 AM, Canada/Mountain

Date & Time	Vehicle	Landmark	Vehicle Location	City	State or Province	Events
02/06/2015 07:50:52 AM	25		1701 AB-1A	Canmore	AB	Broom On
02/06/2015 07:50:55 AM	25		1701 AB-1A	Canmore	AB	Broom On
02/06/2015 09:13:35 AM	25		1729 C Bow Valley Trail	Canmore	AB	Broom On
02/06/2015 09:13:38 AM	25		1729 C Bow Valley Trail	Canmore	AB	Broom On
02/06/2015 11:08:04 AM	25		1818 Mountain Ave	Canmore	AB	Broom On
02/06/2015 11:11:40 AM	25		1701 Bow Valley Trail	Canmore	AB	Broom On
02/06/2015 01:02:09 PM	25		5 10 St	Canmore	AB	Broom On
02/06/2015 01:02:14 PM	25		5 10 St	Canmore	AB	Broom On
02/06/2015 01:40:02 PM	25		AB-742	Canmore	AB	Broom On
02/06/2015 02:09:00 PM	25		AB-742	Canmore	AB	Broom On
02/06/2015 03:03:55 PM	25		AB-742	Canmore	AB	Broom On
02/06/2015 03:54:23 PM	25		Palliser Trail	Canmore	AB	Broom On
03/06/2015 08:06:40 AM	25		100 Spring Creek Dr	Canmore	AB	Broom On

Event Based Telemetry Report

Date	Vehicle	Start Time	End Time	Operational				Total				Operational over Total	
				Operational Duty Time	Operational Travel Time	Operational Idle Time	Operational Distance (KM)	Duty Time	Total Travel	Total Idle Time	Total Distance (KM)	Duty Time	Distance (KM)
02/02/2015	RD1298_CS230	2:19:05	19:35:52	1:23:50	0:22:37	0:42:51	4194.0	17:16:47	10:29:35	1:46:32	4375.0	8%	96%
03/02/2015	RD1298_CS230	7:16:50	15:03:28	0:20:29	0:09:49	0:08:21	2.5	7:46:38	4:48:55	0:47:58	81.8	4%	3%
02/02/2015	RD1677_CS440	1:22:11	17:34:28	10:36:56	7:24:21	1:36:50	145.8	16:12:17	11:10:58	2:09:58	222.0	66%	66%
03/02/2015	RD1677_CS440	7:13:04	14:19:55	12:16:32	1:28:48	1:00:36	28.8	7:06:51	3:23:36	1:09:10	86.4	173%	33%
02/02/2015	RD1868_CS440	0:32:36	19:58:40	0:28:10	0:16:26	0:03:56	6.6	19:26:04	14:50:02	1:46:35	258.1	2%	3%
02/02/2015	RD2291_CS440	2:18:21	20:10:44	10:28:26	7:50:25	1:08:01	108.3	17:52:23	13:27:11	2:53:11	196.7	59%	55%
03/02/2015	RD2291_CS440	7:19:43	15:19:13	10:54:25	0:40:23	1:36:12	10.9	7:59:30	4:19:21	2:20:01	81.3	136%	13%

Day Based Telemetry Report

Winter Operations Integrations and Reporting (Included)

AT&T equipment has proven integrations with a variety of Spreader Controllers and requires no development. Controllers we have interfaced to include:

Force America (5100/6100)

Dickey John (Control Point/Flex4)

Parker IQAN

Epoke

Accucast

Schmidt-Stratos

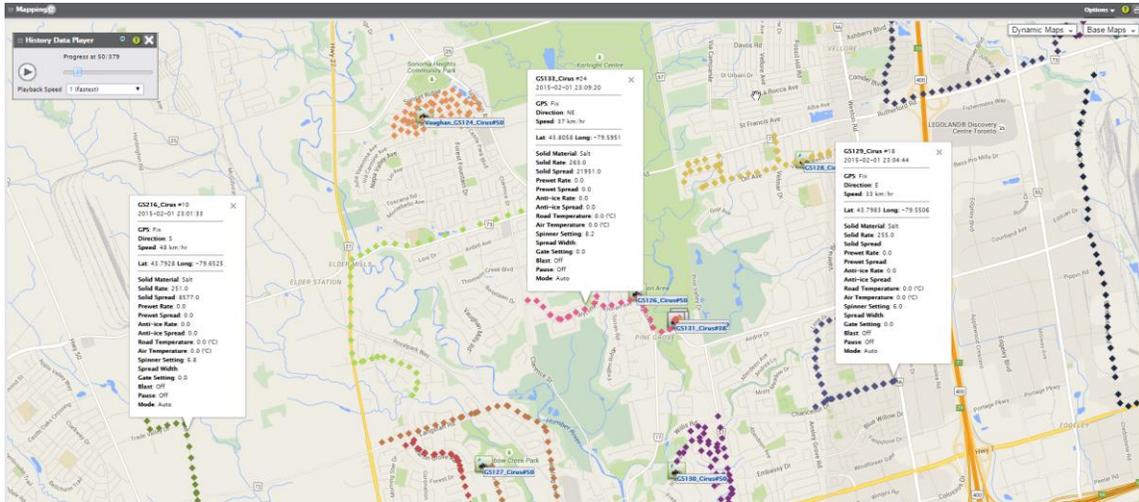
Cirus

Bosch/ Compuspread (230/440/550)

Data from ground speed controllers is obtained through a serial integration to the control head, rather than reading pulses from the controller. AT&T works with all major spreader controller manufacturers such as Force America and Parker to ensure we provide true serial integrations to ground speed controllers. This also provides customers with a wealth of information from the controller, such as Solid Application Rate, Liquid Application Rate, Total Accumulated Solid, Total Accumulated Liquid, Solid Material Type, Liquid Material Type, Gate Height, Controller Paused or Not Paused, as well as Road and Air Temperature Data (when connected to the controller).



On vehicles where temperature sensors are not connected to a controller, such as patrol trucks, AT&T devices can also provide direct serial integrations for data capture. Makes and models include Road Watch and Vaisala Road and Air temperature sensors.



Vehicle Balloons with Spreader Data Fields

The interactive Winter Operations Report allows users to query Winter Operations data captured from their spreader controllers. The Summary View is intended to display key information at a high level. Details include total material used, total time, and total distance. Within the Summary View, the total time and total distance columns can be expanded for a breakdown of time and distance plowed and spreading. Furthermore, the report allows users expand each vehicle and drill down to a specific date within the time queried.

Trip Based Winter Operations

VaughanPW

From 02/02/2015 12:00 AM to 03/02/2015 12:00 AM, Canada/Eastern

Summary

Detail

Date/Vehicle	Material Totals					Time			Distance		
	Salt (KG)	Sand (KG)	Mix (KG)	Prewet (L)	Anti Ice (L)	Spread (HH:MM:SS)	Plow (HH:MM:SS)	Total (HH:MM:SS)	Spread (KM)	Plow (KM)	Total (KM)
02/02/2015	387,523	116,600	0	0	0	1:23:53:04	00:00:00	6:12:04:49	940.3	0.0	2,834.7
AS262_DJ	31,700	0	0	0	0	02:06:42	00:00:00	06:22:50	56.7	0.0	143.7
AS263_DJ	14,000	0	0	0	0	01:06:16	00:00:00	02:42:12	22.8	0.0	55.3
AS264_DJ	0	6,100	0	0	0	00:47:33	00:00:00	02:14:30	8.4	0.0	32.1
AS265_DJ	67,600	0	0	0	0	03:00:03	00:00:00	09:24:50	51.3	0.0	151.4
AS266_DJ	29,600	0	0	0	0	03:14:39	00:00:00	07:04:00	49.4	0.0	116.3
AS268_DJ	34,400	0	0	0	0	03:14:51	00:00:00	08:20:49	58.3	0.0	146.8
AS269_DJ	22,000	0	0	0	0	04:11:27	00:00:00	07:28:29	63.0	0.0	121.3
AS270_DJ	0	0	0	0	0	00:00:00	00:00:00	06:30:18	0.0	0.0	145.9
AS272_DJ	0	29,500	0	0	0	03:22:36	00:00:00	06:51:06	50.5	0.0	91.5
AS273_DJ	0	0	0	0	0	00:00:00	00:00:00	00:12:00	0.0	0.0	0.0
AS274_DJ	0	24,200	0	0	0	02:51:22	00:00:00	05:50:43	36.5	0.0	75.6
AS275_DJ	0	32,200	0	0	0	03:43:01	00:00:00	07:32:46	34.6	0.0	86.0
AS277_DJ	0	1,600	0	0	0	00:09:57	00:00:00	08:07:51	4.0	0.0	138.7
AS278_DJ	0	23,000	0	0	0	02:54:28	00:00:00	05:59:03	64.1	0.0	123.6
AS301_DJ	0	0	0	0	0	00:00:00	00:00:00	01:23:45	0.0	0.0	13.3

Trip Based Winter Operations Report – Summary View



By switching to the Detail View, average application rates will be displayed per day. These will be listed individually by material, e.g. solid application rate, pre-wet application rate, anti-ice application rate. Furthermore, the total time and total distance columns can also be expanded for a breakdown of time and distance plowed and spread.

Trip Based Winter Operations
 VaughanPW
 From 02/02/2015 12:00 AM to 03/02/2015 12:00 AM, Canada/Eastern

Summary **Detail**

Vehicle	Start Date/Time (DDMM/YYYY HH:MM:SS)	End Date/Time (DDMM/YYYY HH:MM:SS)	Material Totals					Total (HH:MM:SS)	Total (KM)	Spreader Details		
			Salt (KG)	Sand (KG)	Mix (KG)	Prewet (L)	Anti Ice (L)			Average Solid Rate	Average Prewet Rate	Average Anticice Rate
AS262_DJ	02/02/2015 12:13:31 AM	02/02/2015 12:18:24 AM	500	0	0	0	0	00:04:53	1.3	255	0	0
AS262_DJ	02/02/2015 12:18:44 AM	02/02/2015 12:19:24 AM	0	0	0	0	0	00:00:40	0.2	255	0	0
AS262_DJ	02/02/2015 12:25:32 AM	02/02/2015 12:29:13 AM	0	0	0	0	0	00:03:41	2.1	0	0	0
AS262_DJ	02/02/2015 05:22:37 PM	02/02/2015 05:24:37 PM	0	0	0	0	0	00:02:00	0.1	0	0	0
AS262_DJ	02/02/2015 05:26:35 PM	02/02/2015 05:38:46 PM	0	0	0	0	0	00:12:11	6.4	0	0	0
AS262_DJ	02/02/2015 05:39:16 PM	02/02/2015 06:24:36 PM	0	0	0	0	0	00:45:20	3.4	170	0	0
AS262_DJ	02/02/2015 06:25:44 PM	02/02/2015 06:37:11 PM	0	0	0	0	0	00:11:27	6.5	0	0	0
AS262_DJ	02/02/2015 06:41:55 PM	02/02/2015 06:46:37 PM	0	0	0	0	0	00:04:42	0.2	0	0	0
AS262_DJ	02/02/2015 06:47:30 PM	02/02/2015 07:00:11 PM	0	0	0	0	0	00:12:41	6.4	258	0	0
AS262_DJ	02/02/2015 07:00:42 PM	02/02/2015 08:08:41 PM	8,400	0	0	0	0	01:07:59	21.4	269	0	0
AS262_DJ	02/02/2015 08:16:26 PM	02/02/2015 09:09:59 PM	7,300	0	0	0	0	00:53:33	20.9	269	0	0
AS262_DJ	02/02/2015 09:16:03 PM	02/02/2015 10:08:19 PM	7,500	0	0	0	0	00:52:16	24.7	269	0	0
AS262_DJ	02/02/2015 10:14:54 PM	02/02/2015 11:55:27 PM	8,000	0	0	0	0	01:40:32	43.6	263	0	0

Trip Based Winter Operations Report – Detail View

Geospatial Winter Operations Report (Optional)

AT&T also provides an Optional Route or Road Based Winter Operations Report, whereby all fields are calculated down to the Road Segment level. These Road Segments can be grouped by Road Class and Road name, or by Route Group and Route Number, depending on the individual requirements of the agency.

The below example provides a summary of data by Road Class, with drill-down capabilities to date, vehicle, and specific road. A further drill-down to Road Segment is available. The primary purpose of this report is to capture the amount of material (Salt, Sand, or Prewet) dispensed on District vs. Township roads for inter-municipal billing purposes.



Date From: 1/1/2013 Date To: 1/10/2013
 Vehicle Type: Combo CS230, Combo CS440 Vehicle Name: Bracebridge 10-38 Sander Plow
 Road Type: DISTRICT, TOWNSHIP, Unknow Municipality: BCB_BCB, BCB_GRA, BCB_HUN
 Street Name: ALEXANDRA ST, ALICE ST, ANC

1 of 1 100% Find | Next

Town of Bracebridge Route Based Winter Operations Report



From 01/01/2013 to 01/10/2013

Report Filters	Material Totals			Time	Distance	Details
	Salt (KG)	Sand (KG)	Prewet (L)	Total (HH:MM:SS)	Total (KM)	Granular Rate
<input checked="" type="checkbox"/> DISTRICT	34420	88936	996	64:03:01	1854.14	90
<input type="checkbox"/> 1/1/2013 12:00:00 AM	0	0	0	00:05:59	0.00	0
<input type="checkbox"/> Bracebridge 78-35 Sander Plow CS440	0	0	0	00:05:59	0.00	0
<input type="checkbox"/> ECCLESTONE DR	0	0	0	00:05:59	0.00	0
<input checked="" type="checkbox"/> 1/2/2013 12:00:00 AM	6860	34456	743	20:53:07	564.76	90
<input checked="" type="checkbox"/> 1/3/2013 12:00:00 AM	20779	30227	144	20:34:09	632.30	111
<input checked="" type="checkbox"/> 1/4/2013 12:00:00 AM	3130	10366	109	19:00:56	536.56	55
<input checked="" type="checkbox"/> 1/5/2013 12:00:00 AM	3651	13887	0	03:28:50	120.53	169
<input checked="" type="checkbox"/> TOWNSHIP	31740	188437	1245	127:25:34	2098.24	177
<input checked="" type="checkbox"/> Unknown	3404	13395	42	165:12:02	956.84	131
Total	69564	290768	2283	356:40:37	4909.22	144

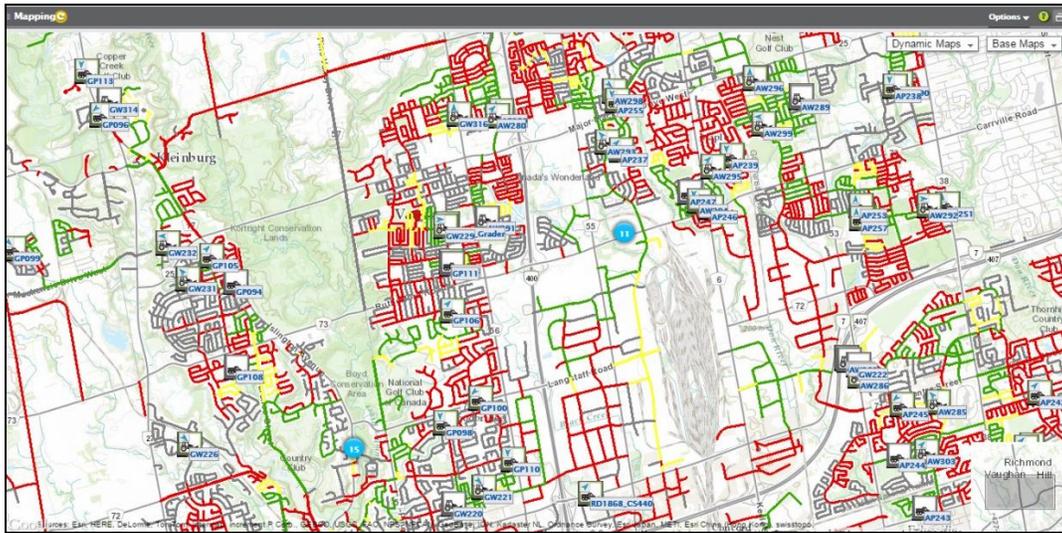
Route Based Winter Operations Report (Optional Report)

Service Level Compliance Package (Optional)

The Service Level Compliance Package includes the Route Completion Report as well as the Live Service Map. These will allow users to see the completion status of routes or roads in real time, as well as provide tools for post-event analysis.

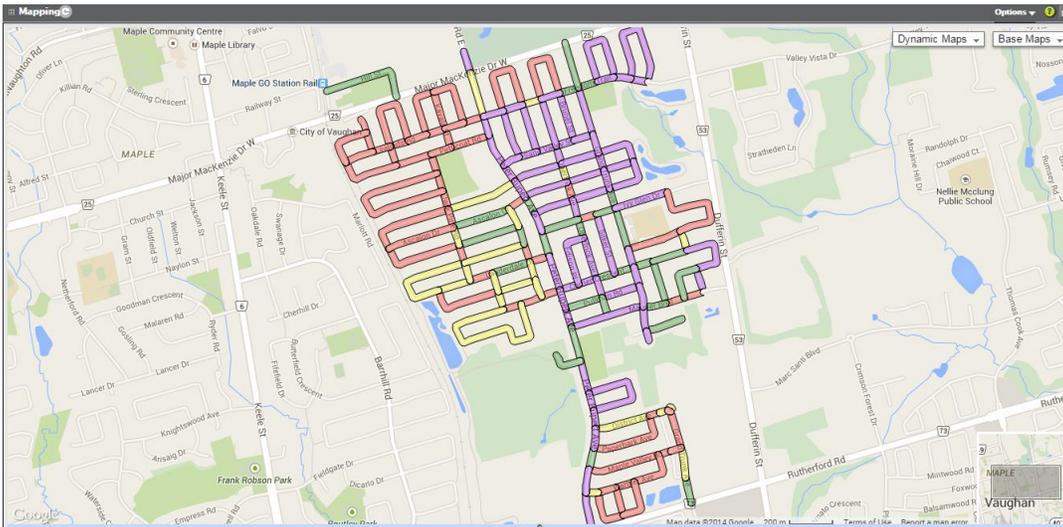
For the Live Service Map, agencies would simply have to provide their map data. AT&T would then configure a layer to be turned on the map, showing users, based on the map data provided, when a vehicle last passed a road segment. Red segments could mean no vehicle has passed in over 24 hours, whereas yellow could mean 5 hours and green 1 hour.





Live Service Map

For the Route Completion Report, agencies simply have to provide their route data, which would ensure all roads are classified. AT&T would then configure the completion of each road classification, i.e. 1 pass with plow down and spreader on for residential roads vs 2 passes with plow down and spreader on for arterials. When running the report, users would see how many passes were done on each segment, identifying under services as well as over serviced segments. The report will also indicate what vehicles covered what segments.



Route Completion Report Map



Segment	Route	Road Name	Completed	# of Passes	Required Passes	Alert
933	7B-E	Amberty Street	No	0	2	Red
941	7B-E	Apple Blossom Drive	No	0	2	Red
827	7B-E	Apple Blossom Drive	Yes	2 AP253 AP253	2	Green
828	7B-E	Apple Blossom Drive	No	0	2	Red
829	7B-E	Apple Blossom Drive	No	0	2	Red
832	7B-E	Apple Blossom Drive	No	1 AP253	2	Yellow
838	7B-E	Apple Blossom Drive	No	0	2	Red
849	7B-E	Apple Blossom Drive	Yes	2 AP253 AP253	2	Green
850	7B-E	Apple Blossom Drive	Yes	3	2	Purple
854	7B-E	Apple Blossom Drive	Yes	4 AP253 AP253 AP253	2	Purple
859	7B-E	Apple Blossom Drive	No	0	2	Red
860	7B-E	Apple Blossom Drive	No	0	2	Red
870	7B-E	Apple Blossom Drive	No	1	2	Yellow
877	7B-E	Apple Blossom Drive	Yes	1	2	Purple

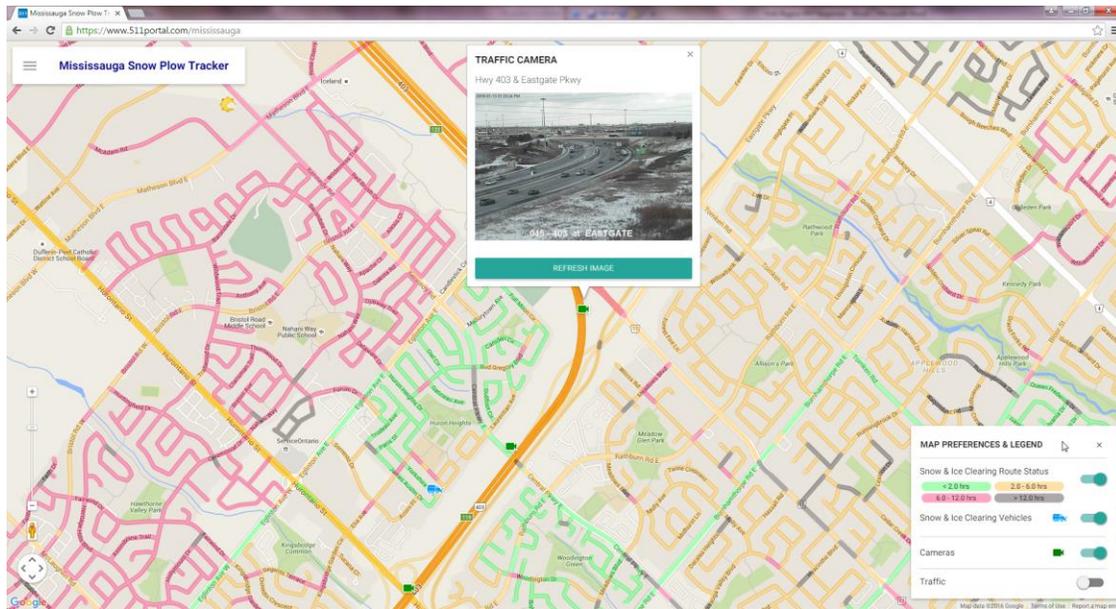
Route Completion Report Details

Public Information Solutions (Optional)

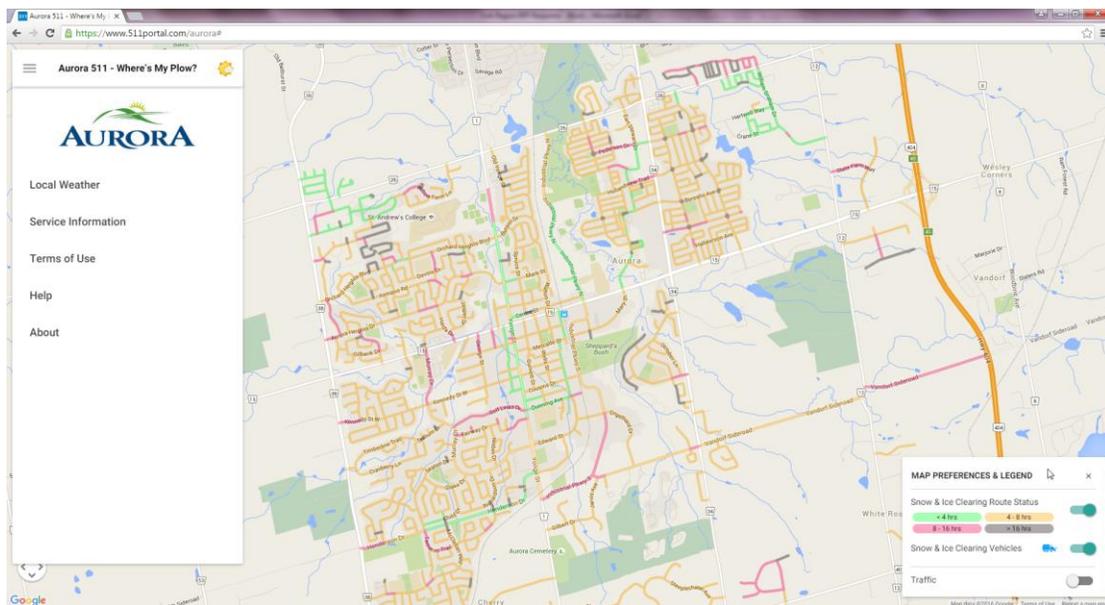
Our new generation Public Information System provides both mobile application and website access for citizens to receive updates on route coverage, whether streets are clear or not, traffic, links to traffic cameras, construction updates, etc. Agencies can choose what information is included, whether it's no vehicles and only route coverage, vehicles on a time delay, or both.

For route coverage, agencies must have the Service Level Compliance Package in place.





Public Web Site, City of Mississauga



Public Web Site, Town of Aurora

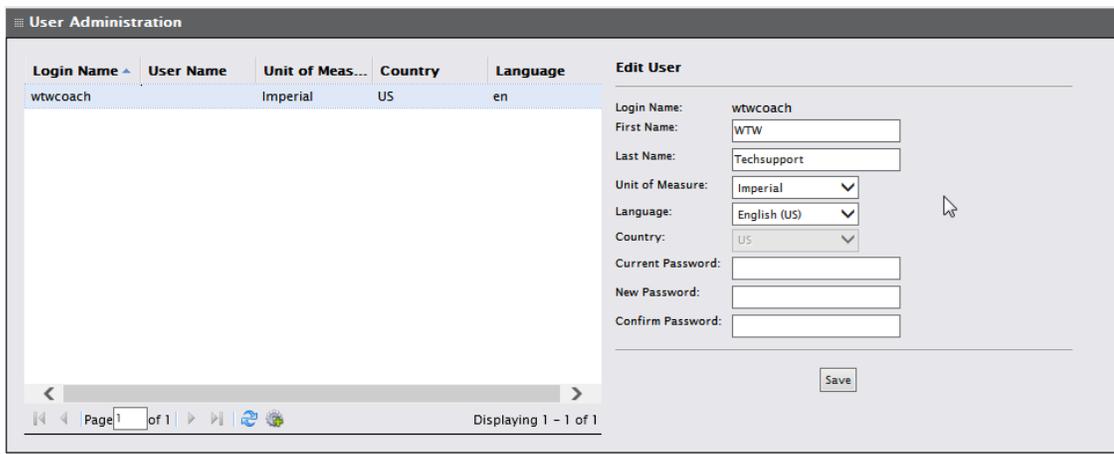
System Management and Administration (Included)

AT&T Fleet Manager provides administrators with the ability to manage all aspects of users, vehicles, groups, and login preferences. For User Administration, this includes updating usernames and passwords. For Vehicle Administration, this includes updating



vehicle name, vehicle icon, license number, VIN, year/make/model, notes, etc. For Group Administration, this includes creating vehicle groups for easier navigation on customer logins with many vehicles (i.e. multiple departments on the same login) as well as security groups (so only certain vehicles are visible for certain users). For Login Preferences, this includes choosing what vehicles or vehicle groups will be displayed on the screen upon login.

Other administration features include Vehicle Group administration (setting up vehicles into groups), Score Profile administration (setting up minimum acceptable scores for driver performance), and Dashboard Manager (setting up minimum acceptable thresholds for vehicle and driver KPIs).



User Administration Window



Vehicle Administration

Vehicle	Vehicle Icon	Time Zone	Diagnostics ...
243		Canada/Eastern	GPS
31403		Canada/Eastern	J1708
31405		Canada/Eastern	J1979
31406		Canada/Eastern	J1979
399		Canada/Eastern	OBDII
42631		Canada/Eastern	J1939
42632		Canada/Eastern	J1939
42633		Canada/Eastern	J1939
42634		Canada/Eastern	J1939
42635		Canada/Eastern	J1939
42636		Canada/Eastern	J1939

Standard Attributes

Edit Vehicle

Name: 31405

Resource Type: Vehicle

License Number: A70626

VIN: WDW8E7AC395425706

Year: 2009

Make: Dodge

Model: Sprinter

Fuel Type: Diesel

Locator Serial Number: 7034614

Locator Type: WT7000H

SIM Number: 7057618098

Diagnostics Type: J1979

Vehicle Time Zone: GMT-4:00 Canada/Eastern

Speeding Notification: 71 MPH

Notes: Sent to Montreal April/12 to be

Default Driver/Owner: Connaissanceur

Page 1 of 22 | Displaying 1 - 11 of 242 | Save

Vehicle Administration Window

Group Administration

- [Vehicle Groups]
 - all
 - blackbox
 - Buffalo_AP
 - BurlingtonTeenTourBand
 - Class_D_buses**
 - Connaissanceur
 - DriverPerformance
 - GreaterKingMinorHockey
 - Locators
 - MDTs
 - OHL
 - SafewayTours
 - ShuttleVans
 - Test_Units
 - Toronto_Kingston_Montreal
 - TWCoach
 - VehPerformance
 - Whitby_Transit
 - WiFi_NON_Safeway
 - WTW_DEAP

Vehicles (8 items):

- 5138
- 5205
- 5301
- 5310
- 5515
- 5601
- 5602
- 5603

Users:

- CCADMIN
- CCDISP01
- CCMAN1
- CCMECH

Search: [] [] [] []

243

- 31403
- 31405
- 31406
- 399
- 42631
- 42632
- 42633
- 42634
- 42635
- 42636
- 42637
- 42638
- ...

CCADMIN

- CCANADA1
- CCCENTURY
- CCCUST01G
- CCCUST02G
- CCCUST03G
- CCCUST04G
- CCCUST05G
- CCCUST06G
- CCCUST07G
- CCCUST08G
- CCCUST09G
- CCCUST10G
- ...

1 of 11 | 1 of 2

Group Administration Window



AT&T Fleet Manager

Custom Map Specification



AT&T Fleet Manager Custom Map Specification

Contents

Hosting Options	73
Common Map Layers	73
Data Types and Formats	74
Map Projection	75
Map Creation	76



AT&T Fleet Manager™ is a powerful GPS/AVL solution that will serve as an invaluable tool in efforts to improve fleet and business intelligence. AT&T Fleet Manager provides a flexible mapping solution which allows users to incorporate their own map data into the solution as well as choose Basemap from both Google and Esri.

Hosting Options

There are two custom map hosting options:

- Client Hosted
 - The Map Service(s) can be hosted on the clients ArcGIS Server, or ArcGIS Online account
 - The map needs to be tiled in the Google/Bing/ArcGIS Online Scale scheme
 - AT&T requires the REST URL, the minimum and maximum visible levels, and a start zoom level.
 - Please provide any credentials to access the REST URL if needed.
 - If Dynamic Map Service is required as a Basemap option, please provide the REST URL as well.
 - Benefits of client hosting:
 - Immediate visibility of any GIS data changes within the AVL system
 - Control over the look and feel of map layers to ensure consistency within the operation
- AT&T Hosted
 - AT&T can host custom map service(s) if the GIS data is provided
 - Benefits of AT&T hosting:
 - De-militarized zone with open connection to ArcGIS Server is not required
 - AT&T will take care of any tiling and other processing related to map presentation
 - Limitations
 - Map updates are restricted to once per year
 - Updates are subject to processing time and deployment scheduling
 - If the tile size or satellite images being hosted are very large extra charges may apply.

Common Map Layers

AT&T Fleet Manager can display the custom map layers in two ways: Basemap or Dynamic.



- A Basemap is a standalone map layer that can be used as a background for reference.

Dynamic maps have layers that are overlaid on top of the Basemap (Google, Esri, custom map etc.). These layers have the option of being toggled on and off.

Common examples of Basemap Layers (these layers will be combined and tiled)

- Street Centerline (with Street Names for labels)
- Railway
- Parks
- Water Body, River
- Municipal/County boundary
- Parcels data (with address for labels)
- POI's (Points of Interest) – includes fire stations, work yards etc.

Common examples of Dynamic Layers: (these layers will have the option of being to toggled on and off)

- Snow routes or Plow Route
- Mile Markers
- Fire hydrant locations
- Mailbox locations

Data Types and Formats

Client Hosted:

- For Basemap, cached Map Service is preferred, because the map is pre-tiled and has better performance ., however we can use Dynamic Map Service as well
- For Dynamic Layers, Dynamic Map Service is needed if layers need to be toggled , otherwise the Tiled Map Service is acceptable as well

URL format for both Basemap and Dynamic layer

- Example of the REST URL for Tiled MapService:
<http://<server name>/<instance name>/rest/services/<cached map name>/MapServer>



- Example of the REST URL for Dynamic MapService:

http://<server name>>/<instance name>/rest/services/<dynamic map name>/MapServer

AT&T Hosted:

The list below contains some of the most common GIS data types (not an exhaustive list).

Esri Format is recommended; however other various types of data & map data providers are also acceptable. Projection information is required from client for all data provided.

- Esri (preferred format)

Esri Map Files or Map Package which include the files underline with symbology, scales, labels etc. information

Or

Shapefile (*.shp, *.dbf, *.prj, *.shx – with optional *.sbn, *.sbx)

File Geodatabase (*.gdb folder)

Esri Interchange file (*.e00)

- MapInfo

TAB files (*.tab, *.map, *.id, *.dat)

MapInfo Interchange file (*.mif)

- Intergraph GeoMedia

Access Warehouse (*.mdb)

- Autodesk AutoCAD file

AutoCAD DWG/DXF (*.dwg/*.dxf)

Map Projection

All common GIS projections are supported. A projection file or text file containing projection information must be provided.



Map Creation

All the layers provided by the client will be grouped into one Basemap and/or one Dynamic Map and published to our ArcGIS server. Requests for additional Basemap/Dynamic Map requirements will be addressed on a case by case basis.

The style and visibility (color/size/symbol etc.) must be specified for each layer and in each zoom level.

- Example: Provide either the image for the final map (pdf or image) or describe how the final map looks like.

If this information is not provided, we will use best practices to produce the map.

If a layer requires a different style of each of the subgroups in it, then the column(s) that is used to categorize the subgroup must be identified.

- Example: breaking down the road class in road layer into small subgroups such as local, collector, highway etc.

Provide the fields that are used to label for each layer and provide the zoom level for label if possible.

- Example: label under 10miles/kms

If the client requires customized symbols for the map, they must provide us with the symbols (*.jpg or *.bmp) or clearly describe what the symbol will look like.



Route Completion Report /Live Map

Contents

Description	78
Data Request.....	78
Sample Report Screenshot.....	79



Description

The Route Completion Report allows users to see the historical activity of routes and areas. The Live Map feature allows users to see live activity of the roads. Both reports will need GIS data with route definitions and certain mandatory attributes. The Route Areas and Numbers are determined by the user based on their business needs such as winter operations, waste management etc.

Data Request

AT&T requires GIS line data for both of the reports, the requirements are:

- GIS line data that has segments as the lowest granularity – the line data can be Snow Plow Routes, Sweeping routes, Sidewalk or Street Centerline Data etc.
- Formats (ESRI formats or MapInfo formats)
- Map Projection
 - AT&T Fleet Manager (WFC) uses: Latitude/longitude NAD83
 - AT&T can re-project the common projections into Latitude/longitude NAD83, however we need to either have the projection file or the projection information in a text file.
- We require two nested levels of grouping for the GIS data as attributes. These can be single field or a combination of multiple fields. These groupings will be used to drill down to see the report content (see the screenshots)
 - The example of the two levels can be Maintenance Area/Route number, Route Type/Route Number etc.
- “Street name” field is mandatory and must not contain any blank values in the attribute table.
- Other Preferred Fields:
 - “Lane Number” or “Road class” attribute field
 - “Required Passes” attribute field – default is 2
 - Address range field , or segment name to differentiate each segment

Vehicle list

Vehicle lists with vehicle name and vehicle type are required for each Route Completion Report / Live Map.

- We can set up certain types of vehicles to run against certain type of GIS data

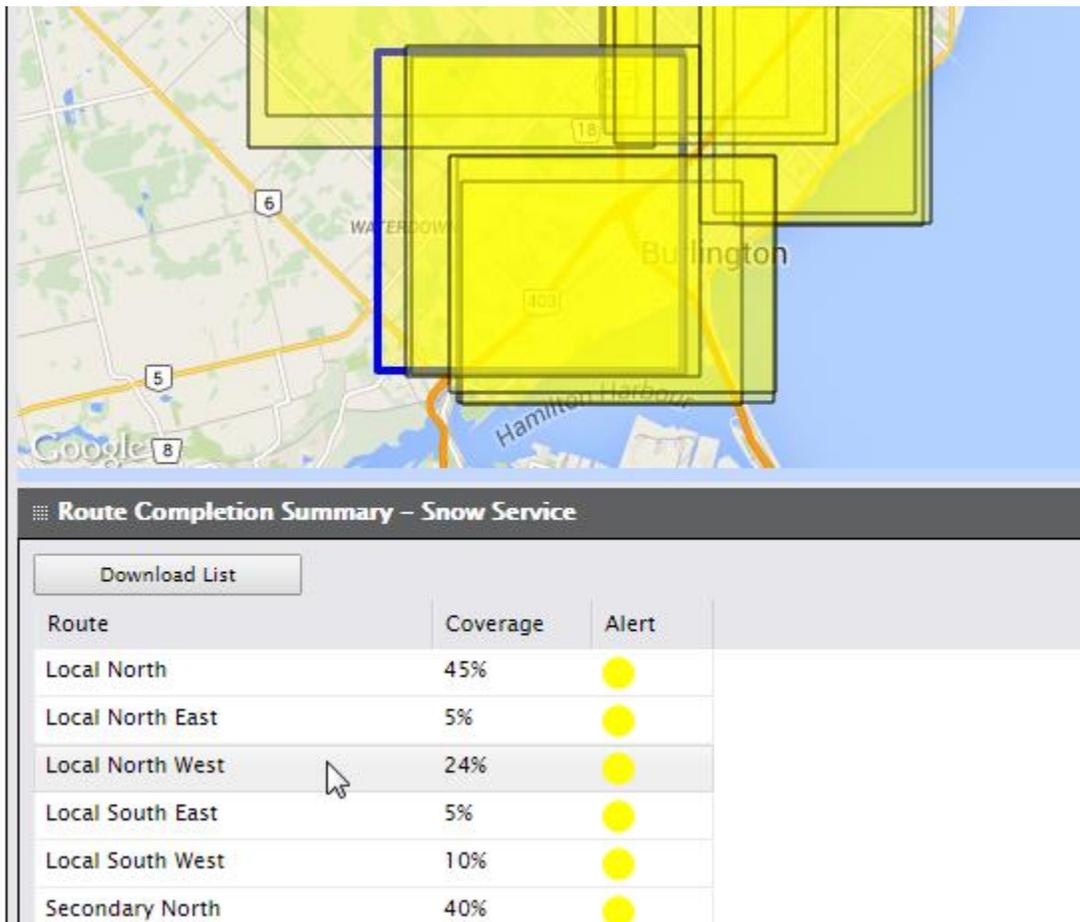


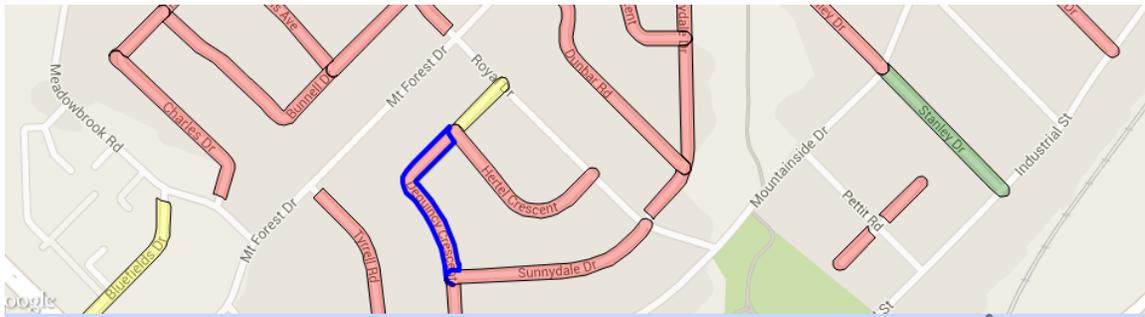
- Example: Only plow vehicles will be used for the Plow Route Completion Report

Sample Report Screenshot

An example of the interface is shown below:

Route Completion Report - for the example below, the first level of breakdown of the group is “Road Class” (local, primary etc.) and the second level of breakdown is “Maintenance Area” (north, north east etc.)



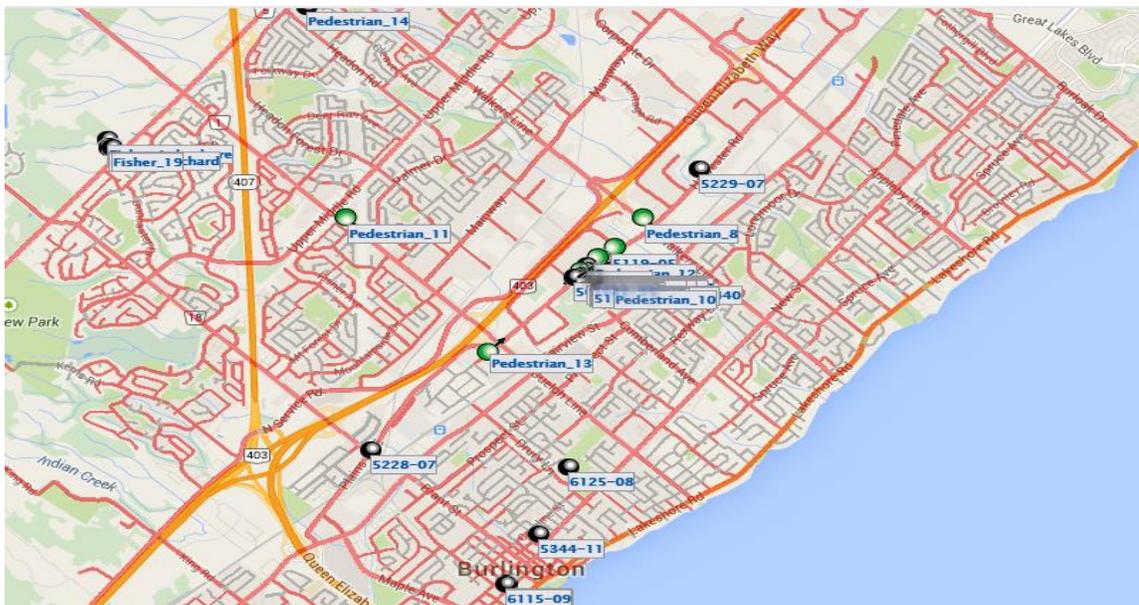


Route Completion Detail – Snow Service

Download List

Segment	Route	Road Name	Completed	# of Passes	Required Passes	Alert
33330	North West	DE QUINCY CRES.	No	0	2	Red
33242	North West	DE QUINCY CRES.	No	1	2	Yellow
33243	North West	DE QUINCY CRES.	No	0	2	Red
33244	North West	DE QUINCY CRES.	No	0	2	Red
33245	North West	DE QUINCY CRES.	No	0	2	Red

Live Map – The colors indicate when the last time the route segment was completed.



Data Connector

SDK v2 API Guide

January, 2016
Revision 1.5



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January, 2016



Contents

REVISION HISTORY	85
INTRODUCTION.....	86
The Connector SDK	86
Available APIs	86
Technical Expertise Requirements	86
ACCESSING APIS	87
Security Token and REST URL	87
Integration Testing	87
GET VEHICLE STATUS	88
Request Format	88
cURL	88
HAL Browser	88
URL Parameters	89
Response Details	90
Status Codes	90
Response Body	90
Sample Response	91
Response Fields (Location Data)	92
Response Fields (Winter Operations Data)	92
GET REAL TIME DATA FEED.....	94
Request Format	94
cURL	94
HAL Browser	94
URL Parameters	95
Response Details	96
Status Codes	96
Response Body	96



Sample Response 97

Response Fields (Location Data) 98

Response Fields (Winter Operations Data) 98

IMPORT POSITION INFORMATION..... 100

Sample Call 100

Source Data 100

Mandatory Fields 100

Sample Source 102

Status Codes 102

Successful Response Body 103

Non-provisioned vehicles..... 103

GET VEHICLE INFORMATION..... 104

Request Format 104

cURL 104

URL Parameters 104

Response Details 105

Status Codes 105

Sample Response 105

Response Fields 106

TESTING WITH THE API SANDBOX 107

APPENDIX 1 – WINTER OPERATIONS STATUS TABLE..... 108

APPENDIX 2 – GET VEHICLE INFORMATION (ENUMERATED FIELDS) 109



REVISION HISTORY

Revision	Date	Author	Description
0.1	Sept. 21, 2015	J. Gort	First draft for review
1.0	Sept. 22, 2015	J. Gort	Initial revision (Get Vehicle Status)
1.1	Sept. 24, 2015	J. Gort	Updated Response Fields (location data); lat, lon are reported in decimal degrees
1.2	Oct. 9, 2015	J. Gort	Modifications/additions for Import Position Information and Testing with the API Sandbox
1.3	Oct. 14, 2015	J. Gort	Updated Import Position Information source field: direction must be an integer, 0-360
1.4	Nov. 3, 2015	J. Gort	Added Get Vehicle Information call and related Appendix; modified existing call names and URL endpoints for API v2
1.5	Jan. 25, 2016	J. Gort	Added Get Real Time Data Feed call.



INTRODUCTION

The Connector SDK

The Connector SDK is built on a RESTful API with authentication via security token. The SDK is designed to retrieve and integrate AVL (Automatic Vehicle Location) data with the FM (Fleet Manager) system via standardized, self-contained calls.

Available APIs

Connector SDK v2 supports the following calls:

API Name	Type	Description
Get Vehicle Status (Page 86)	GET	Returns a snapshot of the last known vehicle location/status from FM, for all or individual vehicles, optionally including Winter Operations data.
Get Real Time Data Feed (Page 94)	GET	Returns a feed of vehicle status records transmitted to FM in the previous 7 days, for all or individual vehicles, optionally including Winter Operations data.
Import Position Information (Page 100)	POST	Uploads vehicle location data to AT&T Fleet Manager from third party devices.
Get Vehicle Information (Page 104)	GET	Retrieves vehicle and Locator information from FM for integration with other systems.

Technical Expertise Requirements

This document is intended for a technical audience familiar with RESTful APIs and Web Services.



ACCESSING APIs

Security Token and REST URL

A company-specific security token and a FM REST URL are required to access the production API. For more information, contact the Support team at 1-866-945-4568 or support@webtechwireless.com.

Integration Testing

Prior to accessing your company's production data, we recommend testing your calls with the API Sandbox. For more information, see Testing with the API Sandbox on page 107.



GET VEHICLE STATUS

This call returns the last known vehicle location from FM, optionally including winter operations information. The response contains one record per vehicle requested, in JSON format.

Request Format

cURL

A security token must be inserted into the Get Vehicle Status request header. You can use a popular command-line tool such as cURL (<http://curl.haxx.se/>) for this purpose. Given a security token=1234, to create a request using the default Get Vehicle Status (/vehiclestatus) call, the required cURL syntax is:

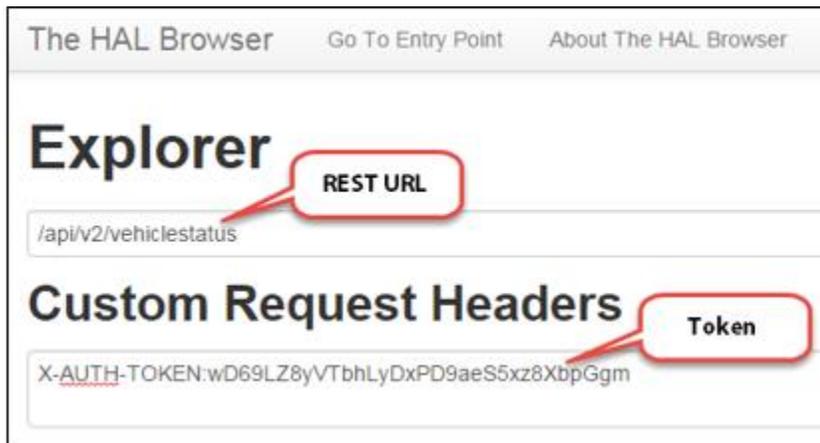
```
curl -H "X-AUTH-TOKEN:1234" <Your FM REST URL>/api/v2/vehiclestatus
```

HAL Browser

Optionally, the FM API leverages the HAL browser as a REST tool to support input of the security token to the Get Vehicle Status request header.

To create the default Get Vehicle Status (/vehiclestatus) call using the HAL browser:

1. Browse to <Your FM REST URL>/api/v2/hateoas



2. Paste <Your FM REST URL>/api/v2/vehiclestatus/ into the Explorer field.
3. Paste the string X-AUTH-TOKEN: into the Custom Request Headers field, concatenated with the company security token you received from the Technical Support team.
4. Click Go!



URL Parameters

The following optional parameters return a single vehicle, with or without Winter Operations (WOR) data. For more information, see Response Fields (Location Data) on page 98 and Response Fields (Winter Operations Data) on page 98:

Parameter Name	Description	Type	Sample
name	FM vehicle name qualifier	String; max length=40, alphanumerics only (including :, -, and _)	name=vehicle1
wor	Triggers the inclusion of Winter Operations data	Boolean	wor=true

Note: You can also return data for a single vehicle by appending the FM vehicle id to the /vehiclestatus call in the request URL (for more information, see Sample URLs, below).

Sample URLs

The base URL is: <Your FM REST URL>/api/v2

URL	Response
/vehiclestatus	All vehicles, location data only
/vehiclestatus?wor=true	All vehicles, with WOR data
/vehiclestatus/902049549	Single Vehicle, by ID (ID=902049549), location data only
/vehiclestatus?name=Vehicle_43210	Single Vehicle, by name (name= Vehicle_43210), location data only
/vehiclestatus/902049549?wor=true	Single Vehicle, by ID (ID=902049549), with WOR data
/vehiclestatus?name=Vehicle_43210&wor=true	Single Vehicle, by name (name= Vehicle_43210), with WOR data



Response Details

Status Codes

The Response Header contains one of the following status entries:

Status	Description
200 OK	Successful response; body is valid JSON
403 Forbidden	Error: missing, incorrect, or expired security token
404 Not found	Error: bad URL (e.g. bad vehicle ID or vehicle name)
500 Internal Error	Error (e.g. database down or process failure)

Response Body

Information is returned in JSON format, and adheres to the following conventions:

- Date/time is in “yyyy-MM-dd HH:mm:ss” format
 - 24-hour clock, always UTC
- Any measure without an explicit unit is metric by default.
- The unit for speed is explicitly specified by speedUnit
- Units for the controller are explicitly specified by controllerUnit (either “imperial”, “metric” or “customized”)
- Units for temperature are explicitly specified by tempUnit (either “imperial”, “metric” or “customized”).
- Specific WOR data returned is dependent on the controller installed in the vehicle.
 - Unavailable WOR fields are omitted from the response. If there is no WOR for the vehicle, the whole WOR structure is not returned even if it was explicitly requested.

Telemetry input values are not returned by default: they are bundled with Winter Operations data and included when the wor=true parameter is specified. For more information, see URL Parameters on page 89.



Sample Response

Here is a successful response body for a single vehicle (includes Winter Operations data):

```
Code: 200
Content:
{
  "vehicleId": 47,
  "vehicleName": "vehicle1",
  "datestamp": " 2015-09-10 03:13:08 GMT",
  "lat": 49.2827,
  "lon": -123.1207,
  "direction": 126,
  "speed": 65,
  "speedUnit": "km/h",
  "inputFlags": [
    {"in0": 0},
    {"in1": 1},
    {"in2": 0},
    {"in3": 1},
    {"in4": 0},
    {"in5": 0},
    {"in6": 0},
    {"in7": 0},
    {"in8": 1},
    {"in9": 1},
    {"in10": 1},
    {"in11": 0},
    {"in12": 0},
    {"in13": 0},
    {"in14": 0},
    {"in15": 0}
  ],
  "wor": {
    "airTemp": 13,
    "antiIceRate": 54,
    "totalAntiIce": 16685511.3,
    "antiIceType": -1,
    "controllerType": "CS440",
    "controllerUnit": "Metric",
    "gateSetting": 11,
    "roadTemp": 12,
    "tempUnit": "metric",
    "woStatus": 688128
  }
}
```



Response Fields (Location Data)

Field Name	Description
vehicleId	FM Unique vehicle identifier
vehicleName	Vehicle name
datestamp	Time the vehicle location was reported ; 24-hour clock, always UTC
lat	Vehicle location - latitude (decimal degrees)
lon	Vehicle location - longitude (decimal degrees)
direction	Vehicle direction (degrees)
speed	Vehicle speed
speedUnit	Unit of speed measurement (km/h or mph)
inputFlags (in0 through in15)*	Telemetry input values

* Telemetry input values (inputFlags in0 through in15) are not returned by default: they are bundled with Winter Operations data and included when the wor=true parameter is specified. For more information, see URL Parameters on page 89.

Response Fields (Winter Operations Data)

Field Name	Description
controllerType	Indication of the Ground Speed Controller Make/Model in the vehicle
woStatus	For WO Status bits, see the Appendix WO Status Table.
solidType1	Integer value representing the current material selected on the controller
solidType2	Applicable only for controllers & trucks that support two solid materials on truck at same time
solidPct	Percentage of Solid Rate that contains solid material (only utilized for controllers that combine Solid and Pre-wet into one Application Rate)
solidRate	Solid Application Rate selected
actSolidRate	Controller feedback of Solid Rate (if available)
totalSolid	Accumulated total solid material dispensed from controller - counter could reset each trip or be a seasonal value
prewetType	Integer value representing the current material selected on the controller
prewetRate	Pre-wet Application Rate selected
actPrewetRate	Controller feedback of Pre-wet Rate (if available)



Field Name	Description
prewetPct	Percentage of Solid Rate that contains liquid material (only utilized for controllers that combine Solid and Pre-wet into one Application Rate)
totalPrewet	Accumulated total Pre-wet material dispensed from controller - counter could reset each trip or be a seasonal value
spinnerSetting	Spinner Setting selected
actSpinnerRpm	Controller feedback of Spinner Rate if available
spreadWidth1	Selected spread width
spreadWidth2	Liquid spread width or percentage of spread width (dual purpose field, depending on controller type)
gateSetting	Gate Height or Percentage
antilceType	Integer value that represents the current material selected on the controller
antilceRate	Anti-Ice Application Rate selected
totalAntilce	Accumulated Anti-Ice solid material dispensed from controller - counter could reset each trip or be a seasonal value
airTemp	Current air temperature
roadTemp	Current road temperature
error	Controller Error Code (if applicable)
controllerUnit	Populated if measurement unit is provided as part of controller data
tempUnit	Populated if measurement unit is provided as part of controller data



GET REAL TIME DATA FEED

For one or all vehicles, this call returns a stream of vehicle status records transmitted to FM in the previous 7 days, providing updated location and speed data. Winter operations information is optional.

Note: Records are fetched in batches, to a maximum of 4,000 per call. The oldest records from the previous 7 days (by transmission date/time stamp) are retrieved first. If a vehicle has more than 4,000 records on the server for the last week, each subsequent call picks up the next most recent batch of records, until all data from the past 7 days has been retrieved.

Request Format

cURL

A security token must be inserted into the Get Real Time Data Feed request header. You can use a popular command-line tool such as cURL (<http://curl.haxx.se/>) for this purpose. Given a security token=1234, to create a request using the default Get Real Time Data Feed (/feed) call, the required cURL syntax is:

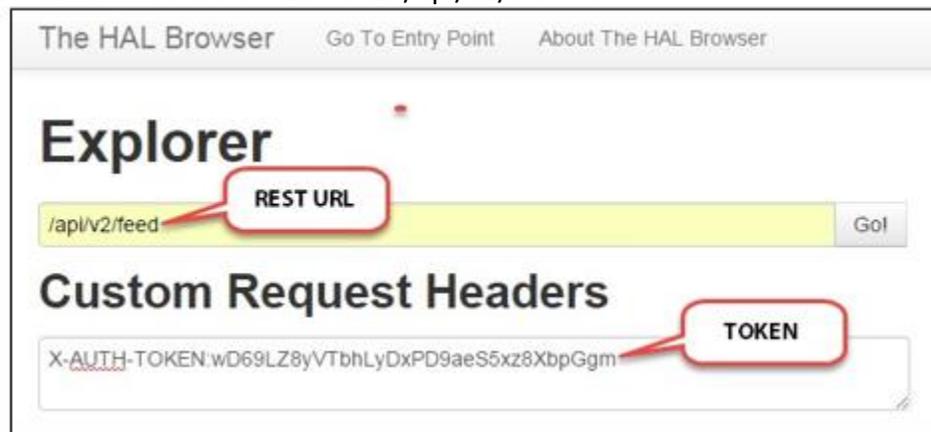
```
curl -H "X-AUTH-TOKEN:1234" <Your FM REST URL>/api/v2/feed
```

HAL Browser

Optionally, the FM API leverages the HAL browser as a REST tool to support input of the security token to the Get Real Time Data Feed request header.

To create the default Get Real Time Data Feed (/feed) call using the HAL browser:

1. Browse to <Your FM REST URL>/api/v2/hateoas



2. Paste <Your FM REST URL>/api/v2/feed/ into the Explorer field.



3. Paste the string X-AUTH-TOKEN: into the Custom Request Headers field, concatenated with the company security token you received from the Technical Support team.
4. Click Go!

URL Parameters

The following optional parameters return a single vehicle, with or without Winter Operations (WOR) data. For more information, see Response Fields (Location Data) on page 98 and Response Fields (Winter Operations Data) on page 98:

Parameter Name	Description	Type	Sample
name	FM vehicle name qualifier	String; max length=40, alphanumerics only (including ;, -, and _)	name=vehicle1
wor	Triggers the inclusion of Winter Operations data	Boolean	wor=true

Note: You can also return data for a single vehicle by appending the FM vehicle id to the /feed call in the request URL (for more information, see Sample URLs, below).

Sample URLs

The base URL is: <Your FM REST URL>/api/v2

URL	Response
/feed	All vehicles, location data only
/feed?wor=true	All vehicles, with WOR data
/feed/902049549	Single Vehicle, by ID (ID=902049549), location data only
/feed?name=Vehicle_43210	Single Vehicle, by name (name= Vehicle_43210), location data only
/feed/902049549?wor=true	Single Vehicle, by ID (ID=902049549), with WOR data
/feed?name=Vehicle_43210&wor=true	Single Vehicle, by name (name= Vehicle_43210), with WOR data



Response Details

Status Codes

The Response Header contains one of the following status entries:

Status	Description
200 OK	Successful response; body is valid JSON
403 Forbidden	Error: missing, incorrect, or expired security token
404 Not found	Error: bad URL (e.g. bad vehicle ID or vehicle name)
500 Internal Error	Error (e.g. database down or process failure)

Response Body

Information is returned in JSON format, and adheres to the following conventions:

- Date/time is in “yyyy-MM-dd HH:mm:ss” format
 - 24-hour clock, always UTC
- Any measure without an explicit unit is metric by default.
- The unit for speed is explicitly specified by speedUnit
- Units for the controller are explicitly specified by controllerUnit (either “imperial”, “metric” or “customized”)
- Units for temperature are explicitly specified by tempUnit (either “imperial”, “metric” or “customized”).
- Specific WOR data returned is dependent on the controller installed in the vehicle.
 - Unavailable WOR fields are omitted from the response. If there is no WOR for the vehicle, the whole WOR structure is not returned even if it was explicitly requested.

Telemetry input values are not returned by default: they are bundled with Winter Operations data and included when the wor=true parameter is specified. For more information, see URL Parameters on page 95.



Sample Response

Here is a successful response body, showing 4 records for a single vehicle (without winter operations data):

```
Code: 200
Content:
{
  {
    "vehicleId": 2056809,
    "vehicleName": "HemaR5-10000441",
    "datestamp": "2016-01-18 01:32:20",
    "lat": 49.255,
    "lon": -123.009,
    "direction": 0,
    "speed": 0,
    "speedUnit": "km/h"
  },
  {
    "vehicleId": 2056809,
    "vehicleName": "HemaR5-10000441",
    "datestamp": "2016-01-18 01:32:21",
    "lat": 49.254807,
    "lon": -123.00913,
    "direction": 0,
    "speed": 0,
    "speedUnit": "km/h"
  },
  {
    "vehicleId": 2056809,
    "vehicleName": "HemaR5-10000441",
    "datestamp": "2016-01-18 07:37:55",
    "lat": 49.255,
    "lon": -123.009,
    "direction": 0,
    "speed": 0,
    "speedUnit": "km/h"
  },
  {
    "vehicleId": 2056809,
    "vehicleName": "HemaR5-10000441",
    "datestamp": "2016-01-18 07:38:33",
    "lat": 49.255,
    "lon": -123.009,
    "direction": 0,
    "speed": 0,
    "speedUnit": "km/h"
  },
}
]
```



Response Fields (Location Data)

Field Name	Description
vehicleId	FM Unique vehicle identifier
vehicleName	Vehicle name
datestamp	Time the vehicle location was reported ; 24-hour clock, always UTC
lat	Vehicle location - latitude (decimal degrees)
lon	Vehicle location - longitude (decimal degrees)
direction	Vehicle direction (degrees)
speed	Vehicle speed
speedUnit	Unit of speed measurement (km/h or mph)
inputFlags (in0 through in15)*	Telemetry input values

* Telemetry input values (inputFlags in0 through in15) are not returned by default: they are bundled with Winter Operations data and included when the wor=true parameter is specified. For more information, see URL Parameters on page 95.

Response Fields (Winter Operations Data)

Field Name	Description
controllerType	Indication of the Ground Speed Controller Make/Model in the vehicle
woStatus	For WO Status bits, see the Appendix WO Status Table.
solidType1	Integer value representing the current material selected on the controller
solidType2	Applicable only for controllers & trucks that support two solid materials on truck at same time
solidPct	Percentage of Solid Rate that contains solid material (only utilized for controllers that combine Solid and Pre-wet into one Application Rate)
solidRate	Solid Application Rate selected
actSolidRate	Controller feedback of Solid Rate (if available)
totalSolid	Accumulated total solid material dispensed from controller - counter could reset each trip or be a seasonal value
prewetType	Integer value representing the current material selected on the controller
prewetRate	Pre-wet Application Rate selected
actPrewetRate	Controller feedback of Pre-wet Rate (if available)



Field Name	Description
prewetPct	Percentage of Solid Rate that contains liquid material (only utilized for controllers that combine Solid and Pre-wet into one Application Rate)
totalPrewet	Accumulated total Pre-wet material dispensed from controller - counter could reset each trip or be a seasonal value
spinnerSetting	Spinner Setting selected
actSpinnerRpm	Controller feedback of Spinner Rate if available
spreadWidth1	Selected spread width
spreadWidth2	Liquid spread width or percentage of spread width (dual purpose field, depending on controller type)
gateSetting	Gate Height or Percentage
antilceType	Integer value that represents the current material selected on the controller
antilceRate	Anti-Ice Application Rate selected
totalAntilce	Accumulated Anti-Ice solid material dispensed from controller - counter could reset each trip or be a seasonal value
airTemp	Current air temperature
roadTemp	Current road temperature
error	Controller Error Code (if applicable)
controllerUnit	Populated if measurement unit is provided as part of controller data
tempUnit	Populated if measurement unit is provided as part of controller data



IMPORT POSITION INFORMATION

This call uploads vehicle location data to AT&T Fleet Manager from third party devices.

Sample Call

A POST uploads data from a specified source file, which must contain required fields in JSON format (for more information, see Sample Source on page 102).

Given a security token=1234, and a source file named <source_file>.json, the cURL syntax for the Import Position Information call is:

```
curl -X POST -H "Content-Type: application/json" -d @"<source_file>.json" -H "X-AUTH-TOKEN: 1234" <Your FM REST URL>/api/v2/vehiclestatus
```

Note: the source file should exist in the directory you use to run the cURL command.

Source Data

Mandatory Fields

Each vehicle record in the JSON source must contain ALL the following fields:

Field Name	Description	Type	Sample Value
vehicleName	Vehicle name	[string]: max. 40 alphanumeric characters (colon :, hyphen - and underscore _ are permitted)	vehicle-01
datestamp	Time the vehicle location was reported	[timestamp]: "yyyy-MM-dd HH:mm:ss", UTC, 24hr clock	2015-09-11 03:13:08
lat	Vehicle location - latitude (decimal degrees)	[decimal] valid latitude (-90 ~ 90) in projection: WGS 1984 (EPSG:4326)	49.2827
lon	Vehicle location - longitude (decimal degrees)	[decimal] valid longitude (-180 ~ 180) in projection: WGS 1984 (EPSG:4326)	123.1207
direction	Vehicle direction (degrees)	[integer] valid direction (0-360)	36
speed	Vehicle speed	[decimal] non-negative (units are km/h)	80



Field Validation

If a call is successful (for more information, see Status Codes on page 102), any records failing validation are detailed in the response (for more information, see Successful Response Body on page 103):

- vehicleName must match an existing vehicle name provisioned in the FM system.

Note: You can run the default Get Vehicle Status (/vehiclestatus) call to return records including vehicle names for all the company's provisioned vehicles. For more information, see Get Vehicle Status on page 86).

- All fields are required and values must conform to the specifications shown in the Type column of the Mandatory Fields table, above.
- To avoid validation errors, if a third party device does not provide direction or speed data, fill these fields with dummy values (for example, 0).

Processing Requirements

Each call may upload data for a single vehicle, or multiple vehicles can be included.

Important Notes: A single POST cannot contain more than 5,000 vehicle records, and consecutive calls should be at least 10 seconds apart.

JSON source must be enclosed in square brackets (i.e. begin with a left square bracket and end with a right square bracket). This rule applies to both single and multiple vehicle calls.



Sample Source

Here are sample JSON vehicle location records:

```
[{
  "vehicleName": "vehicle1",
  "datestamp": " 2015-09-10 03:13:08",
  "lat": 49.2827,
  "lon": -123.1207,
  "direction": 126,
  "speed": 65
},
{
  "vehicleName": "vehicle2",
  "datestamp": " 2015-09-11 03:13:08",
  "lat": 49.2827,
  "lon": -123.1207,
  "direction": 126,
  "speed": 65
},
"
]
```

Status Codes

The Response Header contains one of the following status entries:

Status	Description
200 OK	Successful response; body is valid JSON
400 Bad Request	Invalid JSON or record limit exceeded
403 Forbidden	Error: missing, incorrect, or expired security token
404 Not found	Error: bad URL
500 Internal Error	Error (e.g. database down or process failure)



Successful Response Body

A successful POST (Status Code=200 OK) returns a processing summary indicating the number of received, valid, and invalid records, including the vehicle name and a validation error description for each rejected record:

```
Code: 200
Content:
{
  "received": 1000,
  "valid": 998,
  "invalid": 2,
  "errors": [{"vehicle-200": "Invalid date stamp."},
             {"vehicle-300": "Direction is not numeric."}]
}
```

Non-provisioned vehicles

If a record contains a vehicleName that does not match an existing vehicle provisioned in FM, the record is rejected and listed as an error in the processing summary. Note that if the record is properly formatted JSON, it is still counted as "valid", however no data for the non-provisioned vehicle is uploaded.



GET VEHICLE INFORMATION

This call retrieves vehicle and Locator information - generally for integration purposes: for example, matching vehicle names from the telematics system with those in dispatch software.

Request Format

cURL

A security token must be inserted into the Get Vehicle Information request header. You can use a popular command-line tool such as cURL (<http://curl.haxx.se/>) for this purpose. Given a security token=1234, to create a request using the default Get Vehicle Information (/vehicles) call, the required cURL syntax is:

```
curl -H "X-AUTH-TOKEN:1234" <Your FM REST URL>/api/v2/vehicles
```

URL Parameters

The following optional parameter returns data for a single vehicle. For more information, see Response Fields on page 106:

Parameter Name	Description	Type	Sample
name	FM vehicle name qualifier	String; max length=40, alphanumerics only (including :, -, and _)	name=vehicle1

Note: You can also return data for a single vehicle by appending the FM vehicle id to the /vehicles call in the request URL (for more information, see Sample URLs, below).

Sample URLs

The base URL is: <Your FM REST URL>/api/v2

URL	Response
/vehicles	All vehicles
/vehicles?name=Vehicle_43210	Single Vehicle, by name (name= Vehicle_43210)
/vehicles/902049549	Single Vehicle, by ID (ID=902049549)



Response Details

Status Codes

The Response Header contains one of the following status entries:

Status	Description
200 OK	Successful response; body is valid JSON
403 Forbidden	Error: missing, incorrect, or expired security token
404 Not found	Error: bad URL (e.g. bad vehicle ID or vehicle name)
500 Internal Error	Error (e.g. database down or process failure)

Sample Response

Here is a successful response body for a single vehicle:

```
Code: 200
Content:
{
  "vehicleName": "453",
  "vehicleId": 3000002,
  "licenseNo": "123456",
  "VIN": "WAUWGBFC6EN086568",
  "year": 2011,
  "make": "Toyota",
  "model": "Tundra",
  "locatorSN": "4532057076",
  "resourceType": { "value":
    0, "description":
    "VEHICLE"
  },
  "fuelType": {
    "value": "G",
    "description": "GASOLINE"
  },
  "locatorType": {
    "value": 13,
    "description": "WT7000H+"
  },
  "diagnosticType": {
    "value": 107,
    "description": "J1979"
  }
}]
```



Response Fields

Note: If a field value is unavailable from FM for a particular vehicle, that field is omitted from the response; therefore, the JSON structure may differ between vehicle records.

Field Name	Description
vehicleName	Vehicle name
vehicleId	FM unique vehicle identifier
resourceType	Vehicle category*
licenseNo	License plate number
VIN	Vehicle Identification Number
year	Model year
make	Manufacturer
model	Vehicle model
fuelType	Type of fuel*
locatorSN	Serial number of the installed Locator
locatorType	Locator hardware model*
simMobileNo	Number on the Locator SIM card
diagnosticType	Vehicle internal diagnostic protocol/bus*

* These fields are enumerated data types with a specific set of values/descriptions; for details, please see Appendix 2 – Get Vehicle Information (Enumerated Fields) on page 109.



TESTING WITH THE API SANDBOX

To test your calls prior to production implementation, follow the procedures described earlier in this Guide, with the following modifications:

- Replace <Your FM REST URL> with the sandbox URL:
<https://testapi.webtechwireless.com>
- Insert one of the following security token values for access to sandbox test data:
wD69LZ8yVTbhLyDxPD9aeS5xz8XbpGgm
BZVtwvF6CbX8e6Ey9gX4N4v4ktVdtpM4

Note: If you need provisioned vehicle names for testing, run the default Get Vehicle Status (/vehiclestatus) call on the test data to return records for existing vehicles.



APPENDIX 1 – WINTER OPERATIONS STATUS TABLE

Field Name	Bit Position	Description
Reserved	0 - 2	Reserved
SpreadOn	3	Spreading ON/OFF
Blast	4	Blast Status
SolidPause	5	Solid Material Pause
LiquidPause	6	Liquid Material Pause
Unload0	7	Unload Status
Unload1	8	Liquid Unload Status (only applicable for controllers providing independent liquid unload information)
Reverse	9	Reverse Status
ConvOn	10	Conveyor Status
LiquidOn	11	Liquid Status
PrewetOn	12	Pre-wet Status
AntilceOn	13	Anti-Ice Status
ConvMode	14 & 15	Conveyor Mode 0 - Auto 1 – Open Loop 2 – Manual 3 – Auto
PrewetMode	16 & 17	Pre-wet Mode 0 - Auto 1 – Open Loop 2 – Manual 3 – Auto
AntilceMode	18 & 19	Anti-Ice Mode 0 - Auto 1 – Open Loop 2 – Manual 3 – Auto
HasError	20	Error Status



APPENDIX 2 – GET VEHICLE INFORMATION (ENUMERATED FIELDS)

The following tables show the FM values and descriptions that potentially exist in response data from the Get Vehicle Information (/vehicles) call, for enumerated fields as shown:

Resource Type <resourceType>

Value	Description
0	Vehicle
11	Tractor
14	Trailer
16	Lead Vehicle

Diagnostic Type <diagnosticType >

Value	Description
100	None
101	J1708
102	J1939
106	OBDII
107	J1979
108	GPS

Locator Type <locatorType>

Value	Description
0	Unknown
1	WT5000
2	WT5110
3	WT6000
4	WT7000E
5	WT7000H
6	WT5130
7	WT4500
8	WT2250
9	WT2200
10	WT2100
11	WT2110
12	WT2110P



Value	Description
13	WT7000H+
14	WT9000
15	RABBIT
16	WT10X

Fuel Type <fuelType >

Value	Description
B	Biodiesel
C	Compressed Natural Gas
D	Diesel
E	Ethanol (Dry)
F	Ethanol (Wet)
G	Gasoline
H	Hybrid (G and Y)
L	Liquefied Natural Gas
N	Not Applicable
Y	Electricity



Customer Support and Service SLA

1. Service Description

1.1 Description of the service that AT&T and its solution vendor partner will provide to Customer

The in-vehicle device collects data from a vehicle on-board computer and systems, and location information from a global positioning system (GPS). The data is then transmitted through the AT&T cellular wireless network to the Network Operation Center, (NOC) a central hub that collects and processes location data to provide various activity reports.

The Fleet Manager system may also provide other telematics and communications services to Customer including but not limited to:

- Telemetry reporting from vehicles and trailers;
- Driver messaging and forms completion;
- Driver hours of service reporting;
- Location based reporting for route and schedule adherence;
- Processing messages in real-time and historical access;
- Notifying end-users of specific event occurrences through e-mail

Customer can access the Fleet Manager system 24/7 over the Internet to create reports and use mapping services. The system may also be interfaced to customer back-office applications through machine to machine interfaces, to provide comprehensive enterprise solutions.

2. Definitions

Unless defined herein, all capitalized terms shall have the meanings set forth in the Agreement.

Term	Definition
Availability	The percentage resulting from the following calculation: $[1 - (\text{Down Time} / (\text{Total Time}))] \times 100$.
Business Hours	Monday through Friday, 8:30 AM to 5:00 PM Pacific Time.
Fleet Manager Systems	Services developed to collect, manage and present information received from AVL units. The list of the Systems is outlined in Section 3.2.
Down Time	The number of minutes systems are not operational during a calendar month. Down Time excludes Scheduled Maintenance downtime.



Term	Definition
Emergency Maintenance	Maintenance required outside the agreed-upon Scheduled Maintenance or necessary within Scheduled Maintenance but not scheduled in advance pursuant to Section 6. Any downtime due to Emergency Maintenance will be counted against Availability.
Hours of Operation	24 hours a day, 7 days a week and 365 days a year.
Incident	Any problem Fleet Manager Systems for which Customer requests support in conformance with this SLA.
Incident Management Process	This facilitates incident management through the notification and escalation processes. This process alerts designated Customer departments to Fleet Manager Systems - affecting incidents and provides a method by which succeeding levels of technical expertise and related management are engaged in restoration activities.
Resolution	The permanent correction of the error, defect or condition giving rise to the Incident/outage.
Root Cause Analysis	The process of identifying the core events that resulted in failure to meet performance requirements.
Scheduled Down Time	The number of minutes of Down Time incurred during Scheduled Maintenance.
Scheduled Maintenance	The number of minutes of maintenance that is scheduled in advance. Scheduled Down Time shall occur within the Scheduled Maintenance window. Any downtime outside of the maintenance window will be counted against the availability calculations.
Technical Bridge	A teleconference that brings together appropriate technical people and their immediate supervisors and managers to focus on isolating and resolving an Incident.
Total Time	The total number of minutes in a given calendar month.

3. Performance Requirements

3.1 Monthly Availability Performance Requirement

AT&T and its solution vendor partner will ensure that Fleet Manager Systems maintains a monthly Availability of 99.5%.

3.2 System Services and Outage Weight

Component	Description	Outage Weight %	Reason
Web/Portal Service	Part of the Application server. It controls the Fleet Manager Portal.	100%	Key Component



Component	Description	Outage Weight %	Reason
Database	Stores location records received from Gateways	100%	Key component
Application Service	Primary workhorse receiving all incoming data and handling all APIs and dispatcher and administrator interfaces. Data to and from the other server machines (Geo Server, Reports, and DB) passes through the Application Server for distribution and processing.	100%	Key Component
Map Rendering Service	Provides the map image seen in the Fleet Manager Portal.	50%	Temporary workaround available (using reporting feature)
Geocoding Service	Responsible for reverse geocoding: determining the street address associated with a latitude and longitude.	0%	Address resolution is not essential to the proper running of the system.
Reporting Service	Responsible for querying the database in order to run reports.	0%	Reporting Server, if down, will queue reports for later delivery via email for viewing.
Data Push/Pull Component and Data Feeder	Provides Locator records meeting certain criteria to a third-party server	0%	Data Push Component will queue data for delivery later, when connectivity between the third party and the Fleet Manager system is restored.
Third Party Integrations & External APIs	Allows third-party applications to access or modify data	0%	AT&T has no control over the availability or reliability of third-party components.



Component	Description	Outage Weight %	Reason
Real Time Tracking	Ability to see data in real time.	0%	Acceptable delays are outlined in section 3.3 Service Latency.

3.3 Service Latency

User requests for Services shall be fulfilled in accordance with Table below for each calendar month. This includes delivery of all bytes of the response (content plus protocol overhead) that Fleet Manager controls.

Percentile 1	Latency Target 1	Percentile 2	Latency Target 2
95%	180 sec	99.9%	300 sec

These requirements are specific to the portion of end to end Latency incurred within Fleet Manager Span of Control and will be measured from the secure network nearest the border router. The latency introduced by the GPRS network, the WAP Gateway and other elements of the Cellular data network are excluded from the latency measurements described above.

3.4 Service Level Reporting

If required, AT&T can provide Customer with reporting for Availability on a monthly basis. These reports will include:

- Availability
- Scheduled Maintenance and any resulting Down Time
- Emergency Maintenance and any resulting Down Time
- Total Down-Time
- List of Incidents with date, start time, stop time, network element impacted and root cause

4. Non-Performance Service Remedy

4.1 Non-Performance

If Availability falls below 99.5% at any point in time, Customer may be entitled to service credits from AT&T until Availability is restored in accordance with section 3.0.



4.2 Non-Performance Compensation – Service Availability

Customer shall receive a credit to monthly Support and Maintenance invoice for shortfall in the Availability requirement per Table below.

Service Availability	Monthly Invoice Credit for Availability Shortfall
99.50% - 100%	0%
98.00% - 99.49%	10%
< 98.00%	20%

5. Incident Management

Customer and AT&T collaboration and communication is a key to mutual success. All entities responsible for Fleet Manager Systems Availability will follow this matrix for Incident communication and Incident Management.

5.1 Monitoring

AT&T and its solution vendor partner will monitor all functional components and all network connectivity points related to Fleet Manager Systems 24 hours per day, 7 days per week, and 365 days per year. AT&T will have 24x7x365 NOC with on-call personnel to handle emergency phone calls within 30 minutes.

Furthermore, all functional components and all network connectivity points will be monitored 24/7, with internal escalation procedures. If automated monitoring finds an issue then an on-call person will be notified.

5.2 Trouble Tickets and Updates

AT&T and its solution vendor partner will coordinate Incident isolation, testing and repair work for all Fleet Manager Systems errors, defects or Fleet Manager Systems problems, and all third-party system errors, defects or problems that are within the span of control. Customer will be proactively informed when an issue or condition arises that may cause potential system anomalies and additional Trouble Tickets.

5.3 Customer Notification

Customer may communicate Incidents by email or telephone at any time. In each case, support will open a Trouble Ticket with information to assist in Incident Resolution and will assign a priority level to the Incident.

5.4 Notification to Customer



In the event that an incident is identified, AT&T and its solution vendor partner is responsible for notifying Customer within 30 minutes via phone call or email. Customer shall track Incidents via a common Incident or Trouble Ticket number. AT&T shall provide a first response and updates for each Incident according to time periods described in tables 5.6 and 5.7.

5.5 Incident Classifications

When issues are reported from the Customer to Technical Support, they are evaluated and classified as single or multiple customer issues. If it is a single customer issue, the issue is investigated by Technical Support. However, if it is a multiple customer issue, Network Operations is assigned to investigate the issue.

5.6 Single Customer Issues

Issues impacting single customers are investigated by Technical Support. Each issue will be assigned a priority level based on the table below. Initial acknowledgement will include ticket number for tracking purposes. Once the issue has been resolved, Technical Support will provide summary of the issue, and what was done to fix it.

Priority	Description	Response Time	Resolution
High	Problems that impact all or most of Customer devices: <ul style="list-style-type: none"> • Portal problems • Database problems • Messaging problems • Feeder problems 	1 business hour after the problem has been reported.*	90% of problems resolved or agreed work around provided in 8 hours. 100% resolved in 48 hours.
Medium	Problems that impact individual Customer devices: <ul style="list-style-type: none"> • GPS/GSM problems • Performance problems • Activation requests • RMA requests • Configuration changes 	1 business day after the problem has been reported.	75% of problems resolved or agreed work around provided in 2 business days. 100% resolved in 10 business days.
Low	Intermittent or isolated problems that are visible to Customer but do not significantly impact business operation	1 business day after the problem has been reported.	The goal is that no problem is open for more than 45 business days, but in some cases resolution is determined on an individual basis.

* Customer shall call and send email to Technical Support when reporting a High Priority problem.



5.7 Multiple Customer Issues

In the event of an incident affecting multiple customers, the issue is assigned to Network Operations. Each issue will be assigned a priority level based on the table below. Network Operations will provide updates on issue resolution via email or web portal.

Priority	Description	Response Time	Updates	Resolution
High	Critical Fleet Manager Systems issues that impact 25% or more of customers:	30 minutes of the time the issue is detected	Every 1 hour or as required	90% of issues resolved in 1 hour. 100% resolved in 8 hours.
Medium	System issues that impact less than 25% of customers	4 hours of the time the issue is detected during NetOps business hours	Every 1 day or as required	75% of issues resolved in 1 business day. 100% resolved in 5 business days.
Low	Intermittent system issues that do not significantly impact customer business operations.	1 business day of the time the issue is detected or request occurs during NetOps business hours	N/A	The goal is that no issues are open for more than 15 business days, but in some cases resolution can be determined on an individual basis.

5.8 Technical Bridge

A Technical Bridge may be established for any Incident. Customer may join the Technical Bridge upon notice. The Technical Bridge is used for NOC-to-NOC communication, troubleshooting, triage and escalation. Customers will be notified at least fifteen (15) minutes prior to the start of the bridge.

5.9 Root Cause Analysis

A written assessment will be provided of the root cause of all Incidents. The completed RCA will be provided within five (5) business days.

6. Change Management – Maintenance

6.1 Scheduled Maintenance/Scheduled Downtime

Customer will be notified by email no less than three (3) Business Days before a Scheduled Maintenance event. Customer will be notified via email immediately prior to and after the Scheduled Maintenance is performed, or if Scheduled Maintenance is



postponed or cancelled. Customer will be available to join Technical Bridges during Scheduled Maintenance as reasonably requested.

Scheduled Maintenance will not exceed 480 minutes of downtime per month for Fleet Manager Systems. Customer will be notified of Scheduled Down Time and it will occur during the Scheduled Maintenance window. Scheduled Down Time will not count against Availability until the 480-minute level has been exceeded.

6.2 Maintenance Window

Scheduled Maintenance and Scheduled Down Time will be performed on Sunday between the hours of 1:00 AM and 3:00 AM Pacific Time. Customer may at times request that a maintenance window be closed so that Customer can perform maintenance.

6.3 Emergency Maintenance

Should Fleet Manager require Emergency Maintenance, Customer Operations will be notified immediately. Any Down Time resulting from Emergency Maintenance shall be included as Down Time in the Availability calculation and reports.

6.4 Holiday Network Freeze

Except for critical activities, no maintenance activities will be conducted that could impact Customer’s services during Customer’s holiday operations freeze period, as defined by the Customer.

Additionally, except for critical activities, no maintenance activities will be conducted that could impact Customer's services during other holiday maintenance freeze periods. Customer will make best effort to notify AT&T at least 2 weeks prior to any additional maintenance freeze periods.

7. Contacts and Hours of Operation

The following Contacts information may be updated and republished anytime upon written notice.

Desk	Hours of Operation	Role	Phone/Email
Technical Support	Monday to Friday 7:30 am – 8:00 pm ET (4:30 am – 5:00 pm PT) Saturday	Single User Issues	1-866-945-4568 support@webtechwireless.com



Desk	Hours of Operation	Role	Phone/Email
	11:00 am – 7:30 pm ET (8:00 am – 4:30 pm PT)		
Network Operations	24 x 7 x 365	System Incident Management and Emergency Maintenance	604-765-7682 operations@webtechwireless.com



Tab 4 - References

References

Project Name _____

Owner _____

City/State _____

Period of Contract _____

Contract \$ Value _____

Period of Contract _____

Publicly Bid? YES or NO _____

Summary of Services Provided to Reference _____

Point of Contact (PoC) Name _____

PoC Title _____

PoC Email _____

PoC Phone _____

References will be asked to describe past performance in the following areas:

- Installation schedule performance;
- Operation of hardware and software within specification parameters;
- Quality (compliance with contract terms, conditions and specifications);
- Field product support; and
- Warranty performance (response to service calls).

AT&T Response:

Reference #1

Project Name: Automated Vehicle Location System (AVL)



Owner: Vermont Agency of Transportation

City/ State: Montpelier, VT

Period of Contract: 2012 to Present

Contract Value: \$300,000.00+

Publically Bid? Yes

Summary of Services: Vermont Agency of Transportation deployed the AT&T Fleet Manager products within their Snow Plow fleet to track and log the winter maintenance activity of their 220+ snow plow trucks in real-time. To accomplish the data collection, AT&T Fleet Manager successfully integrated to Cirus, Dickey John, Certified Power, and Schmidt Stratos salt/sand spreader controllers to report material rates and quantities as well as reporting operational actions such as the amount of time spent plowing, and areas covered.

Point of Contact Name: Ken Valentine

Point of Contact Title: Central Garage Superintendent

Point of Contact Email: Ken.Valentine@vermont.gov

Point of Contact Phone: (802) 828-0651

Reference #2

Project Name: Automated Vehicle Location System (AVL)

Owner: City of Buffalo, NY

City/ State: Buffalo, NY

Period of Contract: 2008 to Present

Contract Value: \$175,000.00+

Publically Bid? Yes

Summary of Services: The City of Buffalo uses AT&T Fleet Manager to monitor activity of 175 vehicles throughout all of their different departments. Their Snow Plow fleet was equipped to track and log the winter maintenance activity of the snowplow trucks in



real-time. To accomplish the data collection, AT&T successfully integrated to their Cirus Salt Spreader controllers to report material rates and quantities as well as reporting operational actions such as the amount of time spent plowing. Besides Snow Plows, the City monitors supervisor vehicles, passenger cars, street sweepers, and sanitation trucks.

Point of Contact Name: Henry Jackson

Point of Contact Title: Deputy Commissioner, Streets and Sanitation

Point of Contact Email: hjackson@ch.ci.buffalo.ny.us

Point of Contact Phone: (716) 238-6045

Reference #3

Project Name: Automated Vehicle Location System (AVL)

Owner: Anne Arundel County, Maryland

City/ State: Annapolis, MD

Period of Contract: 2014 to Present

Contract Value: \$280,000.00+

Publically Bid? No

Summary of Services: Anne Arundel County Maryland deployed the AT&T Fleet Manager products within their Snow Plow, Passenger Vehicle, Sanitation, and Contractor fleets for live vehicle location monitoring with 10 second updates. There are additional integrations to monitor Material usage through their Force America Salt Spreaders, Boom activity on their infrastructure fleet, and Custom Route based GIS reporting to monitor route completion utilizing the County's GIS layers.

Point of Contact Name: Alexander Baquie

Point of Contact Title: Assistant Chief

Point of Contact Email: alexbaquie@aacounty.org

Point of Contact Phone: (410) 222-7045



Reference #4

Project Name: Automated Vehicle Location System (AVL)

Owner: City of West Des Moines, Iowa

City/ State: West Des Moines, IA

Period of Contract: 2010 to Present

Contract Value: \$200,000.00+

Publically Bid? No

Summary of Services: West Des Moines installed AT&T AVL equipment in the city Public Works fleet to track and log winter maintenance activity of the snow plow trucks in real-time. To accomplish the data collection, AT&T successfully integrated to various salt/sand spreader controllers to report material rates and quantities as well as reporting operational actions such as the amount of time spent plowing. Spreader Controller integrations include Force America and Monroe, sensor integrations plow Up/Down, Other deployments include Painter, Sweeper, Mower, Grader, Loaders, and supervisor vehicles.

Point of Contact Name: Kevin Hensley

Point of Contact Title: Superintendent of Public Works

Point of Contact Email: Kevin.Hensley@wdm.iowa.gov

Point of Contact Phone: (515) 222-3480



Tab 5 - Products

In this section, the Proposer shall submit the following:

- A statement that all of Proposer’s products submitted for consideration meet the Standards described in Section 3 and Section 12 of this RFP.
- Fill out product specification spreadsheet included in Section 12 of the RFP. Respond where indicated with YES/NO unless otherwise noted. If the Proposer offers multiple products, separate columns, tabs, or spreadsheets can be used to respond to each specification separately for different products.
- If the proposed system does not meet a specific requirement included in the spreadsheet in Section 12 of the RFP, or if it is necessary to eliminate or modify any of the requirements, indicate within the spreadsheet how this omission or modification will be remedied or mitigated.
- Proven track record of the proposed hardware and software will be a consideration.
- Only ongoing products should be proposed. Proposer must state these products will NOT be discontinued for at least 18 months after delivery.

AT&T Response:

Section 12 - Product Requirements Matrix			
<u>ITEM</u>	<u>REQUI RED feature unless otherwi se noted</u>	<u>Y E S o r N O</u>	<u>Explanation if NO</u>
Minimum Product Requirements - Baseline Per Section 3 (City of Newton Specifications)			
<u>General</u>			
The Contractor shall supply the hardware and software necessary to provide an Automatic Vehicle Location (AVL) system (“system”) in accordance		Y E S	



with the requirements hereinafter specified.			
The AVL units must be capable of transmitting geographical coordinates of their current location along with date/time information to the host computer (“tracking server”) in real time.		Y E S	
The data must be stored in a manner that would allow multiple users to access the data simultaneously.		Y E S	
The system must have the ability to access the stored vehicle positional information and as a minimum, display the current location on a map that is run as a client application.		Y E S	
The system must be capable of interfacing with the City’s Snow Plow Tracking Solution. Rest services are the preferred solution, but other options will be considered.		Y E S	AT&T can import 3rd party hardware location data in into the AT&T Fleet Manager portal using the AT&T Data Connector API. Please reference the AT&T Data Connector document attached.
<u>GPS Receiver Subsystem</u>			
<i>The GPS Receiver subsystem:</i>			
• shall include a satellite receiver capable of determining geographic locations to within three meter accuracy		Y E S	
• shall transmit data on regular intervals at a minimum of ten seconds (five or one second intervals may be preferred		Y E S	
• shall include an antenna		Y E S	



<ul style="list-style-type: none"> • shall be powered directly from the vehicle's 12 volt power system 	Y E S	
<ul style="list-style-type: none"> • must include mobile devices for easy transfer from contract vehicles, as well as hardwired for city vehicles 	Y E S	For vehicles that only require a track and trace solution, AT&T will provide the WT2250 which can provide high frequency reporting (10 sec) and serve as a portable solution which can be plugged in and out of a contractor vehicles cigarette lighter.
<ul style="list-style-type: none"> • mobile devices should include the option to run on battery power 	Y E S	The portable device mentioned above, fully charged, can provide up to 300 records while running on battery power.
<ul style="list-style-type: none"> • should have the ability to disable data service when device is not in use 	Y E S	ATT (standby)
<ul style="list-style-type: none"> • must operate in field conditions experienced in the daily operation of a wide variety of equipment such as snowplows, sidewalk plows, material spreaders, sweepers, front-end loaders, trucks, cars 	Y E S	
<ul style="list-style-type: none"> • must be able to function in extreme winter weather conditions and shall be enclosed in a suitable water resistant, salt resistant, and shock and vibration resistant housing 	Y E S	
<ul style="list-style-type: none"> • should have device fault detection functionality 	Y E S	
<ul style="list-style-type: none"> • positional accuracy shall be 3 meters minimum 	Y E S	



<i>The GPS Receiver Subsystem shall be able to track vehicle status data which includes:</i>			
• vehicle number		Y E S	
• vehicle speed		Y E S	
• direction and location		Y E S	
• engine on and off status		Y E S	
• plow up/down		Y E S	
• salt spreader on/off		Y E S	
• street sweeper on/off		Y E S	
• shall include warranty and support		Y E S	Please see ATT Customer Support SLA included in Technical Proposal Tab 3.
<u>AVL Monitoring Software</u>			
<i>The AVL Monitoring Software:</i>			
• shall be a server-based application which can be used to track and report the location of at least 200 unique devices in real and near-real time		Y E S	Fleet Manager is AT&T's web-based real-time GPS/AVL system, accessible on any mobile device or internet browser. It allows users to track an unlimited



			number of assets on the same user interface, providing location updates down to 10 second intervals.
<ul style="list-style-type: none"> shall only be available to authorized users 		Y E S	
<ul style="list-style-type: none"> data shall be easily exported for use in other applications 		Y E S	
<ul style="list-style-type: none"> shall include minimum one year warranty and support. 		Y E S	3 Year Hardware Warranty included with ATT contract. Customer support included for contract term.
<i>The following features must be available from the AVL Monitoring Software:</i>			
<ul style="list-style-type: none"> map display of current locations of all vehicles a user is authorized to see, as well as for user defined length of history (sometimes referred to as “bread crumbs”) 		Y E S	
<ul style="list-style-type: none"> ability to zoom in and out 		Y E S	
<ul style="list-style-type: none"> latitude/longitude displays 		Y E S	
<ul style="list-style-type: none"> replay feature to show past vehicle behavior. Any activities shall be made available for replay of any vehicle or route. 		Y E S	
<ul style="list-style-type: none"> annotate mobile resources on screen with municipal defined information such as vehicle number or operator name. The dispatch operator should be capable of changing the annotation and monitor the location and status of mobile resources, 		Y E S	



receive alerts/reports when a defined status changes or a predefined event occurs (example: exceeding speed limit, idling for extended periods, hard starts/stops, etc.)			
<ul style="list-style-type: none"> shall have the ability to create multiple map areas with boundaries (“Geo-fences”). Events that occur within or outside these user defined geo-fences (example: entering, exiting, time in zone, etc.) shall generate alarms or alerts and can be shown in a report 		Y E S	
<ul style="list-style-type: none"> shall include a vehicle maintenance module for scheduled fleet maintenance 		Y E S	
<u>Reporting</u>			
<i>Reporting shall include:</i>			
<ul style="list-style-type: none"> activity summary reports; 		Y E S	
<ul style="list-style-type: none"> stop reports; 		Y E S	
<ul style="list-style-type: none"> status reports; 		Y E S	
<ul style="list-style-type: none"> drill down capability for more detailed information; 		Y E S	
<ul style="list-style-type: none"> start, finish and idle time; 		Y E S	



<ul style="list-style-type: none"> total hours of operation per calendar day or user defined period; 		Y E S	
<ul style="list-style-type: none"> exception reporting for speeds; 		Y E S	
<ul style="list-style-type: none"> geo-fence exceptions or compliance reports; 		Y E S	
<ul style="list-style-type: none"> sensor reports (e.g. plow up / down); 		Y E S	
<u>Training and Documentation</u>			
<p><i>The Contractor shall provide necessary training and reference material to municipal designated staff for each of the following categories:</i></p> <ul style="list-style-type: none"> install hardware and shall be at a municipal locations 			<p><u>Training Documentation</u></p> <p>AT&T offers a training certification program in which an AT&T Field Service Specialist will go to the municipal location and provide installation training and certify the designated municipal staff to perform their own installation services. Installation manuals and other various documentation can also be found on the AT&T online resource AT&T Fleet Manager University.</p>
		Y E S	



- train municipal staff on hardware installation and mobile device operation

All AT&T training follows a structured Explanation, Demonstration, and Confirmation (EDC) format. The instructor explains a series of tasks, demonstrates how to perform the tasks, and challenges the students to confirm that they can repeat the same tasks. For example, the instructor may explain and demonstrate all the steps for running a daily activity report, then challenge the students to run a different report on their own. Software training is a hands-on training program that ensures all students understand how to use the system, run the required reports, etc. On-site training is recommended to take place in customer training labs, where AT&T sends a team member from the Training department to the customer's site, and each student is following the class on their own computer. After training, customers receive one month of exclusive post-training instructor support. In addition to reaching out to Technical Support, Customers can reach out to instructors for any training related questions, or if a re-demonstration or explanation of any topics covered during the session is required. With respect to documents, all students will receive access to AT&T Fleet Manager University, the center

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			for manuals, guides, and videos for users to access at any point in time to answer questions on reports, tools, and other functionality. To accommodate groups that are geographically dispersed, every training course can also be delivered online via webinar in addition to on-site training.
<ul style="list-style-type: none"> demonstrate the functionality and operability of the GPS Receiver and AVL monitoring software 		Y E S	See comments above
<ul style="list-style-type: none"> operating manuals 		Y E S	See comments above
<ul style="list-style-type: none"> installation schematics 		Y E S	See comments above
ITEM	<u>DESIRED features municipality noted</u>	<u>YES or NO</u>	<u>Explanation if NO</u>
Additional Functionality Desired by Participating Municipalities			



Solutions for snow contractors (plug-n-play modem, tablet, mobile app, etc.)	Boston	Y E S	For vehicles that only require a track and trace solution, AT&T will provide the WT2250 which can provide high frequency reporting (10 sec) and serve as a portable solution which can be plugged in and out of a contractor vehicles cigarette lighter.
Location based searching and route playback	Boston	Y E S	Through AT&T Fleet Manager users have the ability to playback historical data by simply selecting the vehicle(s), date(s), and time(s) in question, and select the Vehicle Playback button. This will provide data for each and every packet in the vehicle pane for users to download (providing them the data in raw format) as well as popup a History Data Player window which allows users to play data on the map with breadcrumbs. Instead of selecting Vehicle Playback after choosing date(s), time(s), and vehicle(s) for historical queries, users can also select the Geo Filter tool which provides an additional level of filtering. Upon selecting the tool, users can draw a square area on the map, and filter the data to only display activity within this delineated zone. Additional information and screen shots available in Tab 3 – AT&T Fleet Manager Overview.
Ability for GPS modem to act as WiFi or 4G hot-spot	Boston	N O	The proposed AT&T locators operate on the 3G network. The



			locators offered do not have WiFi Hotspot capability at this time.
Supports plow up/down, spreader on /off, broom up/down, etc.	Boston /Brookline	Y E S	
Provide air and road temperature data	Boston	Y E S	On vehicles where temperature sensors are installed AT&T devices can provide serial integrations for data capture. Makes and models include Road Watch and Vaisala Road and Air temperature sensors.
Ability to interface with ESRI to allow integration with current municipal software like SnowCap	Boston	Y E S	AT&T recognizes the value in sharing information between the various systems that are implemented by our customers. Integration of GPS/AVL data into ESRI, and other GIS systems; CAD systems; Dispatch; and Public Information sites are some examples of systems that GPS/AVL data is incorporated into. For ESRI GIS integrations in particular clients typically would utilize one of the calls that are part of the Data Connector SDK to extract data from AT&T Fleet Manager. If the agency only requires the current vehicle location to be overlaid into the GIS System the Vehicle Location call will be sufficient however if all records are required within the ArcGIS database, utilizing a call that returns all records since the last time the service was called is utilized. This ensures that every record is populated



			<p>into the GIS database for further spatial analysis. Webtech Connector SDK is a set of REST Data Services with JSON formatted responses. AT&T Data Connector provides the following data elements:</p> <ul style="list-style-type: none"> - Vehicle Information - Name, Make, Model, Year, VIN - Location, Heading, Speed, Datestamp - Telemetry Input Statuses - Winter Operations fields (where applicable) – Application Rates, Material Types, Material Totals, etc. <p>Please refer to the AT&T Data Connector document attached.</p>
Ability to tie into Cirrus control systems to tally how much salt a truck is spreading	Boston	Y E S	
Idling and speeding exception alerts and reports	Boston	Y E S	
Ability to program snow routes into a tablet, mobile app, etc. for snow contractors	Boston	N O	Potential integration with ATT partner C2Logix further investigation required.
Ability to pause billing for dedicated snow equipment during spring/summer months when it is not in use.	Boston /Brookline	Y E S	ATT Standby is available
IOS and Andriod compatible app that drivers of contracted snow removal and street sweeping equipment can download to their cell phones that	Boston	N O	Under development further information required.



would allow the municipality to track them through the GPS providers software interface			
Ability to set-up pre-programmed snow plowing and street sweeping routes into an app or a separate "plug and play" GPS device for contractors and municipal drivers	Boston	N O	Potential integration with ATT partner C2Logix further investigation required.
Web-based tracking portal	Cambri dge	Y E S	
Find closest vehicle to a location function	Cambri dge	Y E S	
Mobile phone application for viewing vehicle location	Cambri dge	Y E S	AT&T Fleet Manager can be accessed from any modern web browser (Chrome, IE, and Safari) via a computer, smart phone, or tablet.
GPS polling rate of 30 seconds or better	Cambri dge	Y E S	
GPS tracking application that can show past location of all tracked vehicles simultaneously for at least a 24 hour period	Cambri dge	Y E S	The AT&T Vehicle History provides historical vehicle for the entire fleet however a single query is capped at 10000 records however there are many other reporting tools and ad-hoc queries that can be performed on AT&T Fleet Manager to assist users in capturing only metrics that are pertinent. IE. GeoFilter, Search Vehicle History. Please refer to the AT&T Fleet Manager Overview document located in the Technical Proposal Tab 3.



Vendor must be able to provide both hard-wired solutions and portable, rechargeable, battery-powered GPS tracking devices for vehicles	Cambri dge	Y E S	
Vendor must be able to provide real-time GPS tracking data to either the municipality or a third-party vendor through a web-service	Cambri dge	Y E S	Please refer to the AT&T Data Connector document located in the Technical Proposal Tab 3.
Unlimited number of users for portal or mobile phone application	Cambri dge	Y E S	
Vendor must be able to store GPS information for 30 days or longer	Cambri dge	Y E S	
Vendor's software must be able to simultaneously track up to 250 vehicles	Cambri dge	Y E S	
Data is transmitted at less than one minute intervals	Somerv ille	Y E S	
Data is available for longer than one month before wiped from system	Somerv ille	Y E S	
Ability to communicate via walkie-talkie type services between vehicles with GPS devices	Somerv ille	Y E S	Push to Talk via AT&T



<p>Must collect, and transmit data from spreader control system such as Cirus, Dickey John, Flex-4, Force-America, Schmidt, E-Poke, Compu-Spread 230, 440, and 550</p>	<p>Brookline</p>	<p>AT&T equipment has proven integrations with a variety of Spreader Controllers and requires no development. Controllers we have interfaced to include:</p> <ul style="list-style-type: none"> • Bosch/ Compuspread (230/440/550) • Dickey John (Control Point/Flex4) • Cirus (Spreadsmart, Dual Spread) • Force America (5100/6100) • Dickey John (Control Point/Flex4) • Epoke • Schmidt-Stratos • Accucast • Parker IQAN <p>Data from ground speed controllers is obtained through a serial integration to the control head, rather than reading pulses from the controller. AT&T works with all major spreader controller manufacturers including but not limited to Bosch/Rexroth, Dickey John, and Force America to ensure we provide true serial integrations to ground speed controllers. This also provides customers with a wealth of information from the controller, such as Solid Application Rate, Liquid Application Rate, Total Accumulated Solid, Total</p>
		<p>Y E S</p>



			Accumulated Liquid, Solid Material Type, Liquid Material Type, Gate Height, Controller Paused or Not Paused, as well as Road and Air Temperature Data (when connected to the controller).
Hardware must have a backup battery used for detection of loss of GPS or power. The AVL/GPS system must be able to send alerts via SMS and email to selected contacts when tampering is detected.	Brookline	YES	
The system must be capable of showing, in real time, the Automatic Salt Control (ASC) data, as well as generate suitable reports based on available spreaders. This data can include such things as set/actual rates, total material dispensed as well as trip and/or seasonal totals.	Brookline	YES	Please refer to the AT&T Fleet Manager Overview document located in the Technical Proposal Tab 3 which provides details and illustrations on all Winter Operations Reporting and Service Level Compliance reporting.
Information data stored by the system shall be accessible on-line for a period of up to two years and maintained in a data warehouse beyond two years. Data shall be accessible by request for a minimum of 7 years without additional cost	Brookline	YES	



End-user system access 24/7 (24 hours 7 days a week) via any web browser connected to the Internet	Brookline	YES
Shall provide the ability to replay vehicle data over a specified time period and/or location to aid in claim reviews.	Brookline	YES
The system will provide an unlimited number of user accounts and contacts (i.e. no "seat license").	Brookline	YES

- Describe options for pilot installation.
- Describe system roll-out process and timeline, from inquiry, to purchase order, to installation, to training, to ongoing operation. Address ability to roll out simultaneously in multiple communities.

AT&T Response:

AVL/GPS Implementation Methodology

Below is an outline of AT&T’s approach for AVL/GPS Pilot & Implementations. This process will be repeated with each agency looking to work with AT&T to make sure each implementation is a success. With a team of Project Managers on staff, AT&T has the ability simultaneously roll out solutions to multiple communities at the same time.

To ensure a successful implementation, the assigned Project Manager will assemble an internal Project Team and take ownership over various technical components. The project team will consist of a member from the following departments: Project Management, Solutions Engineering, Account Management, Training, and Field Services. The Initiation and Planning phases of the project are key to ensure all client requirements and expectations are understood by all members of the AT&T project team. The below technical components are part of the successful implementation:

Vehicle Analysis

The Solutions Specialist will review the vehicle lists provided for each phase of the project, and confirm the hardware and software configuration requirements for each vehicle.

Order Fulfillment



The manufacturing team configures all devices in the order as defined by the Solutions Specialist. Devices are provisioned into the client portal and tested to ensure functionality before shipment.

Installation

Units are installed into the correct vehicle based on the requirements and configurations provided. After each installation the Field Service Technician preforms an Installation Check with a member from Technical support to ensure proper functionality.

Report Configuration

The Solutions Specialist is will work with the Commission to acquire any specific details for reports and other system functions that require configuration. Some examples of this would be material type definition from the Spreader Controllers and GIS and Route details. This information will then be utilized during the report creation/setup process.

Data Verification

Post installation and report deployment, the Solutions Specialist is responsible for monitoring and reviewing the data that is being captured and presented within Webtech Fleet Center. If any anomalies are discovered they will be highlighted so that immediate corrective action can begin.

Training

An implementation is not complete without thorough training for the users of the system. Training of the system will occur after initial installations are complete so that the training can occur within the Commission's portal. The Training plan will be developed during the projects planning phase.

To ensure complete customer satisfaction, AT&T project team will provide Pilot Scorecards to each agency on a monthly basis to make sure all success criteria are met.

Example: Pilot Scorecard



Appendix B – Pilot Scorecard

Score	Description
5	Excellent: the demonstration exceeded our expectations
4	Above Average: the demonstration of the requirement was satisfactory and exceeded the basic requirements
3	Average: the demonstration of the requirement met the basic needs
2	Below Average: the demonstration met some of the basic requirements
1	Poor: Lacking or inadequate in demonstration of the requirement

Activity	Description	Date	Date	Date	Date	Final Score	Comments
Training	Training material was sufficient and easy to understand. Training delivery was well-organized and effective. Trainer was knowledgeable and professional.						
Project Methodology	The Project Team quickly responded to our requests. All our concerns were addressed in a timely manner.						
Customer Support	Technical Support quickly responded to our tickets. All identified issues were resolved to our satisfaction.						
Communication	Contact with the AT&T team was efficient. Roles and responsibilities were clearly defined, regular progress updates were provided, and escalations were addressed in a professional and timely manner.						
Success Criteria	Allow for real-time location of one or multiple vehicles on the mapping interface						
	Display Client's GIS information, including base maps and dynamic layers, on the mapping interface						
	Provide a Route Completion Report and Live Service Map, allowing users to track progress of service based on Client's route information						
	Provide access to data online for 24 months, and archive data indefinitely, ensuring access to information, when needed.						
	Provide a simple and modern graphical user interface available on multiple browsers and platforms, including mobile devices						
	Provide management an Activity Summary, Stops Report, and Landmark Reporting, as well as the ability to create activity alerts.						
	Allow users to playback or plot historical breadcrumbs on the map for one or multiple vehicles.						
Provide the Connector Software Development Kit for Client.							

- Describe alternative purchasing arrangements, including, but not limited to, lease-to- purchase.

AT&T Response:

Purchasing arrangements – Two (2) and three (3) year lease purchase option are available on an individual case basis pending credit approval. Individual case based purchasing arrangements are available through AT&T Capital Services, Inc. as an option to Hardware, Software, Supplies, Maintenance, Repair Materials, and Extended Warranties one time charges.

