RESOLUTION 21-112

A RESOLUTION OF THE CITY OF PANAMA CITY BEACH, FLORIDA, APPROVING THE PURCHASE OF HARDWARE AND SOFTWARE-BASED MONITORING SYSTEM FOR FLEET VEHICLES AND THE INSTALLATION FROM T-MOBILE US, INC., IN THE AMOUNT OF $69,304.77.

BE IT RESOLVED by the City Council of the City of Panama City Beach, Florida that:

1. The appropriate officers of the City are authorized to execute and deliver on behalf of the City that certain Agreement between the City and T-Mobile US, Inc., relating to the purchase of hardware and software-based monitoring system for fleet vehicles in the total amount of Sixty Nine Thousand, Three Hundred Four Dollars and Seventy Seven Cents ($69,304.77), in substantially the form attached as Exhibit A and presented to the Council today, with such changes, insertions or omissions as may be approved by the City Manager and whose execution of such agreement shall be conclusive evidence of such approval.

2. The following budget amendment #36 is adopted for the City of Panama City Beach, Florida, for the fiscal year beginning October 1, 2020, and ending September 30, 2021, as shown in and in accordance with the attached and incorporated Exhibit B, to reflect the receipt and expenditure for the purposes stated therein.

THIS RESOLUTION shall be effective immediately upon passage.

PASSED in regular session this 11th day of March, 2021.

CITY OF PANAMA CITY BEACH

By: _____
Mark Sheldon, Mayor

ATTEST:

_____
Lynne Fasone, City Clerk

CITY OF PANAMA CITY BEACH
BUDGET TRANSFER FORM BF-10

No. BA #36

FUND	General	ACCOUNT DESCRIPTION	APPROVED BUDGET	BUDGET ADJUSTMENT	NEW BUDGET BALANCE
TO	001-2101-521.44-10	Rentals and Leases	25,000.00	3,200.00	28,200.00
TO	001-2201-522.44-10	Rentals and Leases	20,000.00	1,100.00	21,100.00
TO	001-2400-524.44-10	Rentals and Leases	7,500.00	300.00	7,800.00
TO	001-4100-541.44-10	Rentals and Leases	8,000.00	1,000.00	9,000.00
FROM	001-7201-572.44-10	Rentals and Leases	47,000.00	(200.00)	46,800.00
FROM	001-8100-999.96-00	Reserves Available for Expenditures	11,179,750.00	(5,400.00)	11,174,350.00
	UTILITY				
TO	401-3300-533.44-10	Rentals and Leases	33,000.00	500.00	33,500.00
FROM	401-3500-535.44-10	Rentals and Leases	27,000.00	(300.00)	26,700.00
FROM	401-8100-999.96-00	Reserves Available for Expenditures	37,389,668.00	(200.00)	37,389,468.00
		Check Adjustment Totals:	48,736,918.00	0.00	48,736,918.00

BRIEF JUSTIFICATION FOR BUDGET ADJUSTMENT:

To appropriate funds from unrestricted reserves for the new GPS agreement with T-Mobile beginning in April, 2021.

ROUTING FOR APPROVAL

_____DEPARTMENT HEAD _____DATE _____CITY MANAGER _____DATE

_____FINANCE DIRECTOR _____DATE

Response to
City of Panama City Beach
Request for Proposals

Fleet Vehicle Monitoring System

February 26, 2021

Provided by:	T-Mobile US, Inc.
Contact Person:	Michael Wood
Address:	12920 SE 38th Street Bellevue, WA 98006
Phone:	850-356-1755
Email:	michael.wood33@t-mobile.com

February 26, 2021

Jason Pickle, IT Manager
City of Panama City Beach
116 South Arnold Road
Panama City Beach, Florida 32413
Telephone: (850) 233-5100

Re: Request for Proposal (RFP) for a Fleet Vehicle Monitoring System

Dear Jason,

T-Mobile USA, Inc. (T-Mobile) would like to thank the City of Panama City Beach for the opportunity to participate in the RFP for its Fleet Vehicle Monitoring System. T-Mobile understands the City's need for innovative and customizable technologies to meet your requirements for dependable data access, seamless wireless connectivity, and a partner that can provide a complete solution.

The proposed T-Mobile/Geotab solution offers an intuitive, full-featured solutions help you better manage drivers and vehicles by extracting accurate and actionable intelligence from real-time and historical trips data to optimize your fleet operations utilizing our excellent wireless service that provide value above and beyond what is expected.

The Geotab tracking solution provides the functionality you need to help you master your fleet. Geotab provides advanced, real-time fleet management and monitoring for businesses of all sizes:

- **Increase productivity** - Data will include detailed employee trip and route monitoring.
- **Optimize maneuvers** - Decide if your fleet needs to switch gears or stay the course with easy-to-use dashboards and customizable reporting on routes, fuel usage, engine statuses, and more.
- **Protect your assets** - Get the data you need to protect all your assets, including the most important ones—your people. Get alerts on unsafe driving behaviors, like excessive acceleration, and help keep your team safe.
- **Manage compliance** - With just the push of a button, drivers can record their hours of service (HOS) on a secure cloud platform, automatically populating the data you need to manage the factors that make for a winning HOS BASIC score.
- **Get actionable insights** - Boost productivity and save money by monitoring fuel usage, delivery routes, and more. Plus, maintenance reminders based on engine insights help you keep your fleet running smoothly. Manage driver behavior with risk alerts and safety reports.
- **Fleet vehicle compatibility** - Compatible with most gas, diesel, and electric vehicles on the road today. The fleet device works with 16-pin, 9-pin or 6-pin ports which are typically located underneath the dashboard. For 6-pin and 9-pin ports on heavy-duty vehicles, an adapter will typically be required.

T-Mobile's dedicated team of representatives will support the City of Panama City Beach with an account team consisting of Solutions Engineers, Wireless Network Engineers, and a Government Account Executive.

Paramount to a successful long-term relationship is harmonizing quality and service levels to ensure the City's satisfaction. T-Mobile will collaborate with the City in all stages of the relationship. With the dedication of our employees, the performance of our network, and value of our plans; T-Mobile empowers the City to get the solution and coverage it needs, at the price it wants, with award-winning Customer Service.

We look forward to implementing viable solutions so your needs can be met for the best value possible.

Sincerely,

David Bezzant
Vice President
T-Mobile for Government

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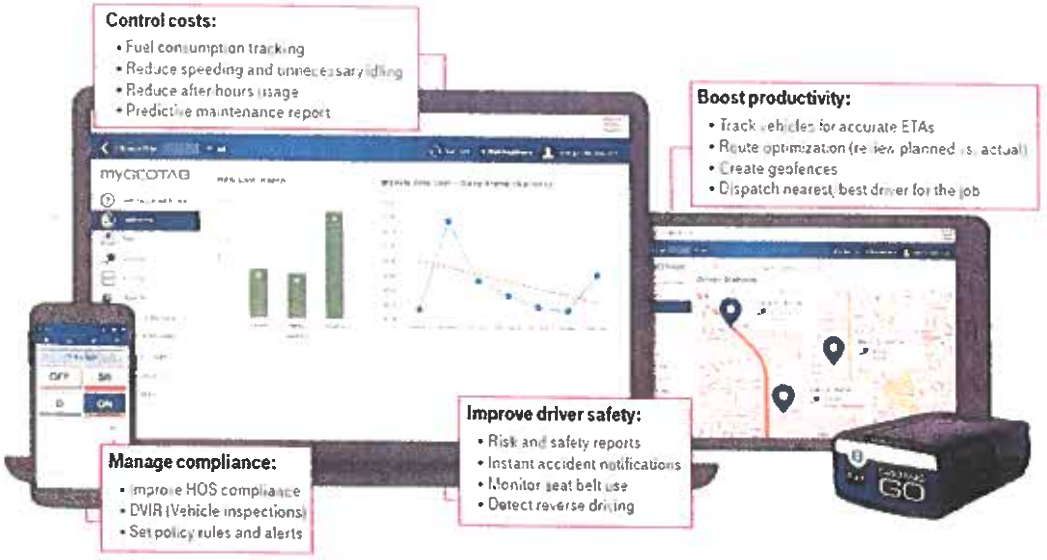
Executive Summary

T-Mobile has a successful history of meeting fleet requirements for organizations across the U.S. We offer fleet management solutions to help you elevate productivity, improve customer satisfaction. For this opportunity with the City of Panama City Beach, we have partnered with Geotab. This solution will enable the City of Panama City Beach to:

City of Panama City RFP Desired Outcomes	T-Mobile Solution
Increase Savings *Reduce fuel and have insight regarding excessive idle time, speeding, harsh braking, acceleration, and turning, unauthorized travel*	Data Collection • Rich, accurate data on location, vehicle health, driving behavior, fuel consumption • Improve driving habits with in-vehicle feedback • Set up rules to reduce speeding, excessive idling, or not wearing a seat belt. • Measure precise vehicle movements such as harsh braking and acceleration
Improve Safety *Protect drivers, vehicles, the City, and reconstruct accidents*	Monitor • Collision alerts provide a detailed summary of events • Detection of a suspected accident will prompt the automatic upload of detailed data from the device to allow forensic reconstruction of the event
Ensure routine vehicle maintenance	Alert • Collect valuable information on vehicle health and status • Maintain and record vehicle identification numbers (VINs), odometer, and engine faults
Enhance service *Gauge arrival times, vehicle information regarding complaints, and vehicle location*	Track • Pinpoint locations via the GNSS (Global Navigation Satellite System) module that offers global positioning system (GPS) and Global Navigation Satellite System (GLONASS) • Receive alerts when vehicles move in and out of designated zones



Reporting is easy:

- Access web-based user interface
- Alerts for breached boundaries
- Idle time/stop reports
- Driver safety alerts/reports
- Engine diagnostics/alerts
- Regulatory compliance reporting
- Obtain add-on features and sensors to meet your unique business

Joining T-Mobile is Stress-Free

T-Mobile Accessibility has a dedicated and experienced implementation team ready to begin service transition. The City will benefit from T-Mobile's award-winning customer support from the outset of our partnership. When you switch to T-Mobile, your dedicated project team, led by an Implementation Manager, will create and guide you through a comprehensive implementation roadmap that ensures your transition to T-Mobile is seamless and easy.

Our commitment is to deliver a best-in-class migration experience. In doing so, we will collaborate to build a comprehensive migration plan that meets your organization's needs. Moreover, we will deliver the right solutions for your business, on-time, and in a manner that allows the City to stay focused on productivity, efficiency, and being connected. T-Mobile's approach to implementation is grounded in a consistent and predictable migration process. An Implementation Manager will follow a detailed roadmap.

The T-Mobile approach to implementation:

PLANNING	LAUNCH	DEPLOYMENT	TRAINING	TRANSITION
A detailed implementation roadmap is developed to drive the migration in a timely and organized manner	Review and approve implementation details and rollout schedule. Verify selected plans, features, and account details.	Distribute end user materials, selected equipment, and schedule training with on-site assistance, if needed.	Satisfaction surveys are distributed to ensure that implementation requirements are met, and best-in-class service was delivered.	Introduce your organization to your dedicated account support team.

Enthusiastic about the Future

Partnering with the City of Panama City Beach is important to T-Mobile. We look forward to utilizing our tenured industry experience with comparable engagements to offer the City of Panama Beach City outstanding service.

While T-Mobile's service is a hallmark of quality, T-Mobile is committed to providing our service at an advantageous value to the City of Panama City Beach. This proposal offers a fair price that includes an experienced and knowledgeable staff, backed by strong, successful processes and feature-rich, dependable platforms. It is our desire to partner with the City of Panama City Beach for many years.

About Us - Company Profile

Wireless solutions built for your business

T-Mobile delivers Government solutions to customers in Florida, in the southeast, and nationally. Geotab also has experience with local, regional, and national solutions. T-Mobile and Geotab have provided solutions to all sizes of government accounts.

Highest in Business Wireless Customer Satisfaction

A big part of the reason we're the fastest growing wireless company in America is that everything we do puts our customers first. We listen to them, address their pain points, and then challenge the rest of the industry to follow suit. But advocating for our customers is more than the right thing to do–it's good business. So above all else, we work for you. Our mission is to make it abundantly clear that we're the most customer-centric wireless carrier around. Whether you're a family or an enterprise, we're all about reducing your pain points.

J.D Power has awarded us the ***Highest in Business Wireless Customer Satisfaction*** award for the fourth year in a row across Very Small, Small/Medium, and Large Enterprise lines of business.

#1 in Performance and Reliability

#1 in Customer Service

#1 in Sales Representatives and Account Executives

#1 in Offerings and Promotion

#1 in Cost of Service

#1 in Billing

T-Mobile received the highest score among very small, small/medium, and large enterprise business wireless providers in the J.D. Power 2017-2020 U.S. Business Wireless Customer Satisfaction Studies of customers' satisfaction with their current wireless provider. Visit https://www.jdpower.com/awards.

History

T-Mobile USA, Inc. (T-Mobile USA), a Delaware corporation, was formed in 1994 as VoiceStream Wireless PCS (VoiceStream), a subsidiary of Western Wireless Corporation (Western Wireless). VoiceStream was spun off from Western Wireless in 1999, acquired by Deutsche Telekom AG (DT) in 2001 and renamed T-Mobile USA, Inc. in 2002. In 2013, T-Mobile US, Inc., a Delaware corporation, was formed through the business combination of T-Mobile USA and MetroPCS Communications, Inc. (MetroPCS). The business combination was accounted for as a reverse acquisition with T-Mobile USA as the accounting acquirer. In September 2018, we announced the rebranding of our prepaid brand, MetroPCS, as Metro™ by T-Mobile. On April 1, 2020, Sprint Corporation became a subsidiary of T-Mobile US, Inc. via a share exchange.

Location of Support Personnel

The City's account team will consist of staff located across the region. The director of T-Mobile's government team for the south, is in Miami, with the panhandle team member located in Pensacola. T-Mobile is proud of the Account Team that will support the City. Their mission is to serve the City and address all your telecommunications needs. When additional opportunities arise, the City's account team can utilize the full T-Mobile employee base to bring the expertise, knowledge, and know-how to solve issues and recommend advantageous solutions. T-Mobile will provide the City with access to our experienced network professionals to broaden your pool of technical expertise - allowing you to focus on other important matters.

Government Experience

T-Mobile's government team has supported agencies across the country since 2012 and is working hard to bring our award-winning customer service to you.

We're proud of what we've done to help government agencies across America transform the way they serve their citizens. As the primary wireless provider for the U.S. Department of Veterans Affairs, T-Mobile is deploying 70,000 lines of wireless service to the nation's largest integrated health care system, making health care providers accessible from virtually anywhere.

But that's just the beginning. Here are more examples of what we can do for government agencies like the City:

- We've helped Georgia's third-largest county save an estimated $50,000 in taxpayer money through smarter fleet management.
- In partnership with the Philadelphia Housing Authority, we've equipped 4,500 low-income families with tools to help bridge the digital gap, providing them with new ways to learn and advance their education and careers.
- We've enabled thousands of students and families in the Bronx to stay connected with local directories, city services, and resources.

References

Cobb County Georgia

1940 County Services Pkwy SW
Marietta, GA 30008
Al Curtis | Director Fleet Management
404-664-5149
al.curtis@cobbcounty.org

Headquarters:	Industry:	Employees:	Revenue:
Marietta, GA	Government	4,700+	$1.1B

The Opportunity

Coordinating a fleet of 2,600 vehicles to serve a county population of more than 755,000 is a tall order. To adequately serve the community, Cobb County Fleet Management needed to move beyond their telematic system to increase flexibility and make fast, effective decisions.

The Results

- $50,000 per year in conservatively estimated cost savings
- Decreased idling and fuel consumption
- Easy device installment, activation, scaling, and transference
- Improved routing, resource deployment, data visibility, and other efficiencies

> "I would strongly recommend T-Mobile's fleet management solution to pretty much every municipality that's out there that would like to not only track drivers, vehicles, assets, and behavior, but also to have significant cost savings added to their budget."

Ahsan Rafay, Chief Financial Officer, Cobb County Fleet Management

Check out a video about our partnership: https://tmobile.egnyte.com/dl/cBR1t6p8ps

City of Wichita

455 N. Main
Wichita, KS 67202
Troy Tillotson | Fleet & Facilities Division
316-268-4533
twtillotson@wichita.gov

Headquarters:	Industry:	Employees:	Revenue:
Wichita, KS	Government	1,000+	$563M

The Challenge

The City of Wichita aims to provide a great wireless experience to deploy technologies that enhance lifestyles, provide better services, and save money all at the same time.

The Solution

The City of Wichita partners with T-Mobile for Business to intelligently pursue their ambitious plans to modernize civil services.

The Results

Hotspot loan programs, fleet management, and public transit were great places to start.

- T-Mobile 4G LTE hotspots are available to be loaned out to 26% of Wichita homes that lack internet access.
- Vehicle diagnostics helped save an estimated $80,000 to $160,000 annually on fuel and contract costs—resulting in better service at lower costs.
- 60 city buses were equipped with free T-Mobile Wi-Fi.
- 170 city police cruisers connect to the internet via T-Mobile services.

> **T-Mobile for Business has been a good partner. They have given us the latitude to do some things that, frankly, other vendors would not entertain. And to me, that's a distinction between being a vendor and being a partner.**
>
> Mike Mayta, CIO, City of Wichita

Metropolitan Atlanta Rapid Transit Authority

2424 Piedmont Road NE
Atlanta, GA 30324
Kirk Talbot | Chief Information Officer
404-848-5273
kdobson@itsmarta.com

Metropolitan Atlanta Rapid Transit Authority (MARTA) is a government institution that operates a network of bus routes linked to a rapid transit system consisting of 48 miles of rail track with 38 train stations. T-Mobile provides the following to MARTA: 60 GPS devices, 150 cell phones, 1500 Wi-Fi units in buses and trains, and a mobile command center.

Provo City Fleet Management

568 E 1325 S
Provo UT 84606
Warren Merritt | Fleet Maintenance Supervisor
801-852-7724
wmerritt@provo.org

According to the Provo website (Public Works | City of Provo, UT), the Provo City Public Works Department is responsible for maintaining over 610 miles of streets, curb gutter and sidewalk, snow removal and over 90 traffic signals. Provo City Public Works' mission is to utilize its experience, expertise, and commitment to protect the community's health and welfare by providing a high quality of services at the lowest cost possible that the residents of Provo can rely on and come to expect. T-Mobile deployed a fleet solution for 550 vehicles.

State of Utah

4120 S State St.
Salt Lake City, UT 84107
Eric Gardner | Motor Pool Manager
801-538-3014
egardner@utah.gov

The Challenge

The division directly manages approximately 4,500 vehicles, although a telematics rollout could potentially benefit closer to 8,000 state vehicles and 40,000-plus drivers (including departments with delegated authority to manage their own fleets). Fleet Operations utilizes a range of vehicles,

from sedans to one-ton trucks, to accommodate the widely varied functions of employees in departments such as Human Services, Corrections, Public Safety, Agriculture and more.

The vast geography of the State poses a unique challenge for implementation, as does the agency's commitment to procuring an assortment of makes and models—based on the lowest lifecycle costs and environmental impact—rather than making a uniform investment.

Objectives

The key objective of the State of Utah Division of Fleet Operations (DFO) in conducting the large telematics pilot was to validate the effectiveness of fleet tracking systems in reducing overall operating costs and lowering overall cost per vehicle mile. The State hoped to:

1. **Reduce costs**
   Fuel: According to the U.S. Department of Energy, rapid acceleration and heavy braking can reduce fuel economy by up to 33% for highway driving and 5% on city roads. Other sources show effective use of telematics can reduce fuel costs by as much as 14%.
   Maintenance: Unscheduled repairs result in vehicle downtime and lost productivity. Telematics has been shown to reduce maintenance and repair costs by as much as 14% through preventive maintenance, real-time alerts to address damaging driving behavior, automated engine diagnostics and streamlined authorization of repairs.
   Accidents: Better driving behaviors/accountability results in fewer accidents and claims, which can lead to a reduction in comprehensive insurance costs.
2. **Improve fleet utilization** - Vehicle utilization has typically been measured by mileage, which is an incomplete metric. Telematics can account not only for miles driven, but what hours and days vehicles are driven over the course of the month and whether assets could better be used in a different location or manner. Savings can be achieved by removing or reallocating vehicles.
3. **Increase productivity** - Market research suggests that telematics can increase workforce productivity and reduce labor costs by up to 12%.3

The Solution

The State of Utah Division of Fleet Operations completed the first year of a telematics pilot program using Geotab's fleet tracking solutions. The initial solution consisted of 1600 devices using Geotab Pro Plus across multiple departments.

The Results

With Geotab telematics and strategic initiatives, the State of Utah realized several quantitative and qualitative benefits in the focus areas of fuel, maintenance, accidents, and utilization.

Fuel savings were achieved primarily through a reduction in idling and speeding. Eric Gardner, the division's Motor Pool Manager, says, "Our governor limits idling, but we couldn't know if people were doing it." He appreciates that telematics is helping the division achieve success in its policies. The Governor's Office of Management and Budget's Jeff Mottishaw agrees, "I was really surprised at how much idling our drivers were doing and how easy it was to affect change."

Check out a video about our partnership: Rolling out telematics in government fleet | Geotab

Exhibit A – Section III Description of Work and Services Required

	T-Mobile's Response
Equipment Requirements:	
• Capability to track multiple vehicles (real-time and logged tracking)	T-Mobile complies. Pro Plus offers active tracking, all other plans offer near-real time.
• Transmit, for recording and storage in the proposed software solution, the location of each vehicle at intervals of five (5) seconds or less.	T-Mobile complies. Geotab has intellectual property to optimize data transfer rates over the cellular network. Rather than collecting data on a scheduled basis (ping rates), the Geotab GO9 device uses intelligent and patented logging algorithms to identify when to record speed, position, and other engine diagnostics. This is critical to ensuring that all data elements are collected. The device is constantly monitoring various inputs, including: second-by-second GPS data, intra-second accelerometer readings, and engine diagnostic inputs/outputs. The device monitors the data and determines the appropriate values to transfer and store. This patented curved based algorithm is applied to all Geotab data and distinguishes the solution from every other vendor solution on the market, resulting in the industry's most granular and actionable datasets.`
• Simultaneous real-time mapping of multiple vehicles	T-Mobile complies. Pro Plus offers active tracking, all other plans offer near-real time.
• Ability to track each vehicle after scheduled hours.	T-Mobile complies.
• Ability to track each vehicle's speed and number of starts and stops.	T-Mobile complies.
• Ability to detect if any vehicle's engine is running.	T-Mobile complies.
• Web access for tracking, reporting and viewing in maps with vehicle locations.	T-Mobile complies.
• Ability to view account information on-line.	T-Mobile complies.
• Printable built-in reports and individual vehicle reports.	T-Mobile complies.
• Schedulable electronic reporting and delivery.	T-Mobile complies.
• Easy hardware installation that does not require extensive modification of vehicles.	T-Mobile complies.
• Durable, low-maintenance equipment.	T-Mobile complies.
• Cellular and GPS antennas shall be internal to the unit with an option for an external antenna.	T-Mobile complies. External antennas are not required with the GO9 device.
• Vendor shall offer a full product line of mobile device options for various input and functional	T-Mobile complies.

	T-Mobile's Response
needs (4G/LTE minimum)	
• Vendor shall offer optional alternative mobile devices that support 4G/LTE and WiFi hotspot capabilities.	T-Mobile complies.
• Vendor must offer devices and data plans with no data overage charges that has no black out areas for the whole of Bay County.	T-Mobile complies.
• Harness Kit for heavy duty vehicles requiring 9-pin adapter should not require splicing cables of the vehicle on-board PTO devices	T-Mobile complies.

	T-Mobile's Response
Software Requirements:	
○ Accessible in an industry standard Web browser such as Microsoft Internet Explorer.	T-Mobile complies.
○ Must support unlimited simultaneous users.	T-Mobile complies.
• Able to show vehicle location information including ID, location, heading, address, latitude/longitude, time of fix, status, speed, etc. All parameters shall be customizable to the client's preference.	T-Mobile complies.
• Filtering capabilities to limit viewing vehicles to specific groups or subgroups.	T-Mobile complies.
• Vehicle table or list that shows a preview of vehicle information.	T-Mobile complies.
• The vehicle list shall allow easy pan/zoom to a selected vehicle.	T-Mobile complies.
• Capable of creating "geofences" using a radius and polygon selection, as well as distance from a configurable line (routes).	T-Mobile complies.
• The ability to submit speed limit changes for roadways that are new or under construction.	T-Mobile complies. The City can update the posted road speed of any road by left clicking on a road from the live map and selecting "Update posted road speed" from the popup window.

	T-Mobile's Response
Reporting Requirements:	
• Detailed Summary: This report provides an overview of all events that happened for the vehicle(s) during a given date/ time range.	T-Mobile complies.
• Duration Detailed: This report should compute the elapsed time between two statuses such as time spent at site or on the road.	T-Mobile complies.
• Event Summary: This report should list all violations of established Exception Condition	T-Mobile complies.

	T-Mobile's Response
parameters and its details.	
• Exception Conditions: This report must list all Exception Conditions that have been recorded.	T-Mobile complies.
• Landmarks: This report should show the locations that have been recorded.	T-Mobile complies.
• Location Event: This report should show the locations for the selected vehicle(s) for a given date and time.	T-Mobile complies.
• Off/Out of Service Summary: This report should list the times and duration a vehicle is off/out of the service area.	T-Mobile complies.
• Routing Detail: This report should provide the route statistics such as total stops, total drive time and total break/lunch time for the entire route.	T-Mobile complies.
• Stationary Summary: This report should list all of the vehicle(s) that went past a pre-set stationary vehicle time parameter and the location where the vehicle was stationary.	T-Mobile complies.
• Vehicle List: This report should provide any vehicle information entered in the database.	T-Mobile complies.
• Reports shall be exportable to Microsoft Word, Excel, PDF and other formats.	T-Mobile complies. Additionally, the City can take advantage of one year of cloud storage with tools for local file export.

	T-Mobile's Response
Equipment Manufacturer Requirements:	
• All of the equipment specified herein shall be furnished by a single MANUFACTURER who regularly engages in the production of this type of equipment who is fully experienced, reputable and qualified in the manufacture of the equipment to be furnished. Each component and auxiliary equipment item furnished under this specification shall be new and unused, of the type, size, design, and efficiency installed on previous projects and the product of a MANUFACTURER having a successful record of operation, manufacturing and servicing the equipment for a minimum of five (5) years prior to bid date. MANUFACTURER shall have at least one hundred (100) units installed, supply OWNER with previous installation details.	T-Mobile complies.
• The equipment MANUFACTURER who does not have the experience, shall provide unconditional extended warranty on the equipment. The MANUFACTURER's warranty	T-Mobile complies. "Warranty Period" means either: (a) the one year period commencing on the activation date; or (b) the lifetime of the device, provided that the

	T-Mobile's Response
period shall be for three (3) years after the final acceptance of the equipment by the OWNER. The equipment MANUFACTURER shall guarantee that the equipment furnished is suitable for the purpose intended and free from defects of design, material and workmanship. In the event the equipment fails to perform as specified, the equipment MANUFACTURER shall promptly repair or replace the defective equipment without any cost to the OWNER (including handling and shipment costs).	device is activated on certain rate plans (currently the Pro Plus rate plan and any other rate plan as announced by us from time to time ("Limited Lifetime Warranty")).

	T-Mobile's Response
Warranty	
• All equipment supplied under this section shall be warranted for a period of three (3) years from the date of acceptance by OWNER.	T-Mobile complies for the Pro Plus. "Warranty Period" means either: (a) the one year period commencing on the activation date; or (b) the lifetime of the device, provided that the device is activated on certain rate plans (currently the Pro Plus rate plan and any other rate plan as announced by us from time to time ("Limited Lifetime Warranty")).

	T-Mobile's Response
Patents and Licenses	
• The MANUFACTURER shall be responsible for all patents or licenses that exist on the equipment that may be provided.	T-Mobile complies.
• The MANUFACTURER a shall assume all costs of patent fees or licenses for the equipment or process; and shall safeguard and save harmless the OWNER/OWNER from all damages, judgments, claims and expenses arising from license fees, or claimed infringement of any letters, patent or patent rights, or fees for the use of any equipment or process structural feature or arrangement of any of the component parts of the installation; and the price bid shall be deemed to include payment of all such patent fees, licenses or other costs pertaining thereto.	T-Mobile complies.

	T-Mobile's Response
Installation	
• Installation of the monitoring equipment shall be in strict accordance with the MANUFACTURER'S instructions and recommendations.	T-Mobile complies.

	T-Mobile's Response
Training Opportunities	
• End-user and train-the-trainer courses • Web-based training • Conferences and workshops • Free open enrollment web-based training through client support center	T-Mobile complies.

	T-Mobile's Response
Hosting Components (if applicable)	Please see the following for more information: Geotab's security policy
• 99.9 percent uptime outside of scheduled maintenance, guaranteed by Service Level Agreement	Performance Benchmarks • Application response times (separate by module if appropriate) • Speed of individual transactions • Speed of bulk transactions • Speed of bulk imports and exports • Data storage limits • Any other benchmark of significance Regarding system and supporting infrastructure performance, Geotab provides a 99.5% uptime guarantee for all its services, excluding any planned maintenance required. Performance of all My Servers are monitored regularly and new My Servers are provisioned (and existing My Servers resized) based on the average performance metrics on a weekly basis. The My Servers are where the MyGeotab databases are hosted. Geotab also monitors the availability of the application on a continuous basis. Statistics on uptime are made available through the portal. Regarding transaction speeds and response times they are generally contingent on and constrained/determined/influenced by the performance of systems and the network involved in the platform deployment. Geotab can assist in establishing benchmarks with the customer based on their unique arrangement and components of the solution deployed. Regarding data storage, application data streaming has a capability that allows for 1.7 MB dedicated log buffer storage for poor cell coverage. MyGeotab provides suitable tools to allow users to export their data should there be a need for

	T-Mobile's Response
	increased storage limits or longer storage periods.
• Data Center – Tier II. Minimum requirements: reliable data center, managed network infrastructure, on-site power backup and generators, multiple telecom/network providers, redundant network, secure facility, 24/7/365 system monitoring.	Geotab uses Google Compute Engine to provide computing resources for application and data hosting. The services fall under Google's very strict and world-leading global security policies, helping Geotab keep the City's data safe and secure.
• Hosting. Minimum requirements: automated software updates, server management and monitoring, multi-tiered software architecture, software updates and security patches, database updates and security patches, antivirus management and updates, server-class hardware, redundant firewall solutions, high performance SAN with N+2 reliability	Geotab uses Google Compute Engine to provide computing resources for application and data hosting. These services fall under Google's very strict and world-leading global security policies, helping Geotab keep our customer data safe and secure.
• Bandwidth. Minimum requirements: multiple network providers, burst bandwidth of at least 22Gb/s	T-Mobile complies.
• Disaster Recovery. Minimum requirements: 24/7 emergency support, on-line status monitor, event notification emails, recovery time objective for at least 24 hours, pre-emptive monitoring for disasters, multi-geographic region redundant back up data center	Members of Geotab senior management oversee business continuity planning to ensure that critical services can be continually delivered to clients. • Geotab conducts a regular business impact analysis to understand the relevant threat/risk landscape and prioritize planning. This includes cyber-attack, sabotage, utility/power outage, terrorism, and random failure of mission-critical systems. • Geotab implements suitable plans, measures, and arrangements to ensure business continuity, including: • Multi-location data center services • Fully redundant power with generator backups (data centers) • Multiple-source network providers (data centers) • Redundant networking equipment and server hardware • Availability of offsite backup storage options for customers (upon request) • Use of cloud technology for Geotab business (available anywhere) • In-house, redundant monitoring system (monitors all production servers, security alerts and other critical issues)

	T-Mobile's Response
	• 24/7/365 engineering stand-by support for all critical services (engineers and developers) • Disaster recovery plans for server failure - enables switching to redundant hardware
• DDoS Mitigation. Minimum requirements: defined DDoS attack process including the ability to identify the attack source and type of attack, the ability to monitor the attack for a threshold and a plan once threshold is reached	• Geotab conducts a regular business impact analysis to understand the relevant threat/risk landscape and prioritize planning. This includes cyber-attack, sabotage, utility/power outage, terrorism, and random failure of mission-critical systems. • In the event of a security breach, Geotab engineering may cut off some or all access to Geotab services to mitigate any possible intrusion damage. Once the threat has been contained or neutralized, a thorough and immediate investigation by high-level Geotab staff will be conducted, specifically to determine names and/or location of attacker(s), method(s) of breach, what kind of data was exposed (if any), and customers who may be affected. • If Geotab determines that customer data has been accessed by unauthorized persons, Geotab will inform affected customers immediately (within 24 hours), as required by applicable law, and work with them to ensure that the data is secured, moved, removed or changed. • Geotab's Incident Response Program (GRIP) was developed in accordance with NIST Special Publication 800-61 Revision 2: Computer Security Incident Handling Guide and is designed to align with industry best practices. Geotab is committed to continually improving and updating our Incident Response capabilities by incorporating lessons learned from previous responses that occur both internally and in the greater security community.
• Upgradeable security packages	This is not applicable. Geotab uses Google Compute Engine to provide computing resources for application and data hosting. These services fall under Google's very strict and world-leading global security policies,

	T-Mobile's Response
	helping Geotab keep our customer data safe and secure.

	T-Mobile's Response
Support and Maintenance	
• Dedicated account management	T-Mobile complies.
• Ongoing training opportunities and availability of robust, self-service documentation and technical support (videos and training manuals, etc.)	T-Mobile complies.
• 24/7 Phone Support services – emergency and non-emergency situations	T-Mobile complies.
• Hot-fixes and new feature releases on a regular basis.	T-Mobile complies.

Proposed compensation – Pro Plus Plan with Active Tracking and Lifetime Warranty

Per the requirements in this RFP, the Pro Plus offers Active Tracking and a Limited Lifetime Warranty. However, there might be scenarios where certain users do not require all the features provided by Pro Plus. We have included a second pricing table reflecting the Base Plan. Customer can also mix and match rate plans as all the rate plans offered use the same hardware. For example: a customer could have 20 vehicles on Base Plan and the rest on Pro Plus.

EXHIBIT F - BID SCHEDULE OF VALUES						
A. INITIAL COSTS						
Item	Qty	GPS Device Cost (PER DEVICE)	Device Install (if required)	Activation Fees (PER DEVICE)	Harness, connectors, required peripherals	Total initial cost for equipment
a. Heavy Equipment (9-pin)	5	$84.00	N/A	$0	$17.49	$507.45
b. Light Vehicle (OBDII)	190	$84.00	N/A	$0	$(10.49 not required)	$15,960.00
d. Off-Road Vehicles (3 wire)	18	$84.00	N/A	$0	$4.89	$1,600.02
Subtotal	213	$17,892	N/A	$	$175.47	$18,067.47
B. SERVICE COSTS						
Item	Qty	Monthly Monitoring (PER DEVICE)	First Year Costs	Total Annual Costs	12 Month Extension past initial contract	Total cost for 2, 3, and 4 years of service
a. Heavy Equipment (9-pin) Base Plan	5	$17.61	12 months	$1,057	$1,057	$1057, $1057 , $1057
b. Light Vehicle (OBDII) Base Plan	190	$17.61	12 months	$40,151	$40,151	$40151, $40151 , $40151
d. Off-Road Vehicles (3 wire) Base Plan	18	$17.61	12 months	$3,804	$3,804	$ 3804, $3804 , $3804
Subtotal	213	$3,750.93		$45,011	$45,011	$45011, $45011 , $45011
TOTAL BASE BID (sum of Total Initial & Total Annual Service Costs for first 2 years of Contract)					$108,089.79	

Proposed Compensation – Base Plan with Near Real-Time Tracking and 1 Year Warranty

EXHIBIT F - BID SCHEDULE OF VALUES						
A. INITIAL COSTS						
Item	Qty	GPS Device Cost (PER DEVICE)	Device Install (if required)	Activation Fees (PER DEVICE)	Harness, connectors, required peripherals	Total initial cost for equipment
a. Heavy Equipment (9-pin)	5	$0.00	N/A	$0	$17.49	$87.45
b. Light Vehicle (OBDII)	190	$0.00	N/A	$0	$(10.49 not required)	$0.00
d. Off-Road Vehicles (3 wire)	18	$0.00	N/A	$0	$4.89	$88.02
Subtotal	213	$0	N/A	$	$175.47	$175.47
B. SERVICE COSTS						
Item	Qty	Monthly Monitoring (PER DEVICE)	First Year Costs	Total Annual Costs	12 Month Extension past initial contract	Total cost for 2, 3, and 4 years of service
a. Heavy Equipment (9-pin) Base Plan	5	$12.30	12 months	$738	$738	$738, $738 , $738
b. Light Vehicle (OBDII) Base Plan	190	$12.30	12 months	$28,044	$28,044	$28044, $28044 , $28044
d. Off-Road Vehicles (3 wire) Base Plan	18	$12.30	12 months	$2,657	$2,657	$ 2657, $2657 , $2657
Subtotal	213	$2,619.90		$31,439	$31,439	$31439, $31439 , $31439
TOTAL BASE BID (sum of Total Initial & Total Annual Service Costs for first 2 years of Contract)					$63,053.07	

Fleet management solutions feature comparison

	Base	Regulatory	Pro	ProPlus	ProPlus – (Full Price Equipment)
Active Tracking – Live Vehicle Location				✓	✓
Real-time audible alerts for verbal coaching				✓	✓
Map updated with live vehicle movement				✓	✓
Self-calibrating accelerometer – no vehicle setup required			✓	✓	✓
Detect impact and towing events (while ignition off)			✓	✓	✓
False positive filtering (i.e. does not record railroad tracks, speed bumps or potholes as aggressive driving)			✓	✓	✓
Accident data auto detection and upload of last 1.2 minutes on accident			✓	✓	✓
Estimated odometer and engine hours (not based on engine data)	✓	✓	✓	✓	✓
Actual engine hours, engine road speed & odometer from engine †For HOS purposes only.		✓†	✓	✓	✓
Engine Management			✓	✓	✓
Odometer, Engine Hours and Engine Road Speed †For HOS purposes only.		✓†	✓	✓	✓
Driver's seat belt and passenger			✓	✓	✓
Passenger seat occupied			✓	✓	✓
Total fuel used and idle fuel			✓	✓	✓
Fuel level input (to identify fuel-up events & for data integration with fuel card)			✓	✓	✓
Ignition detect			✓	✓	✓
Check Engine Light			✓	✓	✓
In-vehicle Audible Alerts / Driver Feedback	Limited	Limited	✓	✓	✓
Speeding	✓	✓	✓	✓	✓
Driving in reverse			✓	✓	✓
High RPM – target fuel savings			✓	✓	✓
Seatbelt usage detection over user-defined speed			✓	✓	✓
Aggressive driving (acceleration, braking, cornering)			✓	✓	✓
Unlimited customer zone importing, editing and creation (geofencing)	✓	✓	✓	✓	✓
Flexible group structure	✓	✓	✓	✓	✓
Combination exception rules	✓	✓	✓	✓	✓
Built-In Rules-Based Exceptions	Limited	Limited	✓	✓	✓
After-hours usage	✓	✓	✓	✓	✓
Backup when leaving			✓	✓	✓
Engine diagnostics and issues			✓	✓	✓
Dangerous driving (acceleration, braking, cornering)			✓	✓	✓
Accident			✓	✓	✓
Low battery warning			✓	✓	✓
Engine misuse (over-revving)			✓	✓	✓

	Base	Regulatory	Pro	ProPlus	ProPlus – (Full Price Equipment)
Reports			✓		
Over 30 built-in reports	✓	✓	✓	✓	✓
Report scheduling	✓	✓	✓	✓	✓
Private vs. Business mileage	Limited	Limited	✓	✓	✓
IFTA fuel tax reports	Limited	✓	✓	✓	✓
Driver scoring reports	Limited	Limited	✓	✓	✓
Risk management reports (insurance use case)	Limited	Limited	✓	✓	✓
Customer stops by zone report	✓	✓	✓	✓	✓
Driver congregation report	✓	✓	✓	✓	✓
Accident reconstruction report			✓	✓	✓
Customizable work hours, time off, and timecard reports	✓	✓	✓	✓	✓
Find nearest vehicle to location including distance	✓	✓	✓	✓	✓
Maintenance reminders scheduled by time or distance	✓	✓	✓	✓	✓

GEOTAB.

Legal Comments

In response to Customer's solicitation ("RFP"), T-Mobile is quoting wireless products and services pursuant to the following terms and conditions:

(i) For services identified on T-Mobile's quote/proposal as "GSA Schedule" T-Mobile is offering such services under its existing GSA Multiple Award Schedule, Wireless Mobility Solutions Special Item Number (SIN) 517312, Contract Number: GS-35F-0503M ("GSA Schedule Contract"), which can be viewed at https://www.gsaelibrary.gsa.gov/ElibMain/contractorInfo.do?contractNumber=GS-35F-0503M&contractorName=T-MOBILE+USA%2C+INC&executeQuery=YES.

(ii) For products and services identified on T-Mobile's quote/proposal as "Open Market" T-Mobile is offering such products and services pursuant to the terms of the GSA Schedule Contract, as well as the T-Mobile Terms and Conditions and the applicable product specific terms and conditions as posted at: https://www.t-mobile.com/responsibility/legal/terms-and-conditions.

Accordingly, T-Mobile respectfully takes a blanket exception to all terms and conditions of the RFP that are not required by law, including, without limitation, the exhibits entitled "General Terms and Conditions" and "Agreement." The terms and conditions in any Customer-generated order template will have no force or effect other than to denote quantity, the products or services purchased or leased, delivery destinations, requested delivery dates and any similar information mutually agreed to by the parties. Additionally, since T-Mobile is not a manufacturer of products, and certain products and services being offered are developed and owned by third parties, T-Mobile is required to pass through the third party terms and conditions from our vendors via URL or click-through third party terms at point of sale or upon login to the third party application.

Please note the following:

- Some service offerings that include a monthly recurring charge may not be eligible for discounts. Other charges, including, but not limited to, activation fees, international roaming and dialing, E911, and Federal Universal Service Fund charges or other surcharges may apply. Please refer to the GSA Schedule Contract for complete details.
- Device pricing is only valid for new activations and is offered as Open Market pricing. Device pricing will be in accordance with T-Mobile's business practices. To check if a specific device is available, please contact your T-Mobile Account Manager. Device models offered are sold solely for use with T-Mobile service. The ability to use some or all features depends on device capability and connection to our network. Device specifications are provided by the manufacturer. All devices are subject to availability.

T-Mobile will comply with the requirements and conditions in the RFP, subject to proposal information, exceptions, clarifications, and any supplemental terms provided by T-Mobile and subject to T-Mobile's response stating that the controlling terms and conditions are those in the GSA Schedule Contract.

Please see the following edits:

EXHIBIT E
CITY OF PANAMA CITY BEACH'S
INSURANCE REQUIREMENTS

INSURANCE - BASIC COVERAGES REQUIRED

A. The Contractor shall procure and maintain during the life of this Agreement insurance of the following types:

1) Worker's Compensation: For all of ~~his~~ *its* employees engaged in work on the project under this Agreement. In case any employee engaged in hazardous work on the project is not protected under the Worker's Compensation Statute, the Contractor shall provide Employer's Liability Insurance for the protection of such of his employees not otherwise protected under such provisions.

Coverage A - Worker's Compensation - Statutory
Coverage B - Employer's Liability - $1,000,000.00

Liability: ~~Comprehensive~~ *Commercial* General Liability insurance including, but not limited to:

~~a) Independent Contractor's Liability;~~ *(T-Mobile does not provide primary insurance for our contractors but we do require them to provide their own insurance prior to performing any work.)*

b) Contractual Liability;

c) Personal Injury Liability.

The minimum primary limits shall be no less than $1,000,000 per occurrence / $2,000,000 annual aggregate Personal Injury Liability, and no less than $500,000 Property Damage Liability, or $2,000,000 Combined Single Limit Liability, or higher limits if required by any Excess Liability Insurer. City shall be ~~named~~ *included* as additional insured pursuant to an additional insured endorsement on ISO Form 20 10 ~~10-01 (or superseding form)~~ providing comprehensive general liability coverage for completed operations in addition to on-going operations.

2) Automobile Liability: Automobile Liability insurance including all owned, hired, and non-owned automobiles. The minimum primary limits shall be no less than $1,000,000 Bodily Injury Liability, and no less than $1,000,000 Property Damage Liability, or no less than $1,000,000 Combined Single Limit Liability, or higher limits if required by the Excess Liability Insurer. City shall be ~~named~~ *included* as additional insured.

3) Professional Liability: Professional Liability insurance covering professional services rendered in accordance with this Agreement in an amount not less than $1,000,000 per occurrence/$2,000,000 annual aggregate project specific coverage, or in an amount not less than $10,000,000 per claim $10,000,000 annual aggregate non-project specific, company-wide coverage.

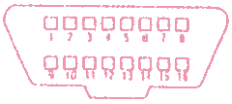
B. Certificates of Insurance: The Contractor shall furnish to the City ~~copies of all policies~~ *certificates of insurance* and *applicable* endorsements ~~and certificates of insurance~~ allowing thirty (30) days written notice of any ~~change in limits or scope of coverage,~~ cancellation, or non-renewal. ~~Such certificates shall contain the following wording:~~

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE AMENDED IN LIMITS OR SCOPE OF COVERAGE OR CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL THIRTY (30) DAYS NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN.

In the event (1) the ACORD form does not include the forgoing provision in the certificate, (2) the city has been provided a copy of a policy endorsement naming including the city as additional insured (on the general liability and automobile liability insurance policies) and (3) the policy endorsement in favor of the city (for the workers compensation, general liability and automobile liability insurance policies) expressly provides that the city be given thirty (30) days written notice before an amendment in limits or scope of coverage or cancellation, then the following wording may be substituted "SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE AMENDED IN LIMITS OR SCOPE OF COVERAGE OR CANCELED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS." If the insurance policies expire during the term of this Agreement, a renewal certificate shall be filed with the City thirty (30) days prior to the renewal date.

Vehicle Compatibility

Identify which port you have. The extension adapters allow the device to be installed out of the way and out of sight. The T-Harness allows the vehicle port to remain open and free for use, such as for a scan tool.



16-pin port

Fleet management devices plug in seamlessly. Adapter and harnesses are available but are not required.

HRN-GS16K2

Pin T-Harness

HRN-BS16S4

16-Pin Extension Adapter

HRN-CW03S3

3-Pin Straight Harness with exposed wires

9-pin port

Fleet management devices require an adapter.

HRN-GS09K2

9-Pin T-Harness

HRN-DS09S4

9-Pin Extension Adapter

6-pin port

Fleet management devices require an adapter.

HRN DS06T2

6-Pin heavy-duty T-Harness for installations where the Deutsch connector needs to remain available for other applications

Fleet management solutions support the majority of:

Light-duty vehicles:

- Weigh less than 8,500 pounds
- Manufactured after 1996

Heavy-duty vehicles:

- Weigh more than 8,500 pounds
- Manufactured after 1999

Manufactured by:

- International
- Mack
- Freightliner
- Volvo
- Peterbilt
- Isuzu
- Kenworth
- Mitsubishi (Fuso)
- Sterling

Input/ Output (IOX) Expanders

Input/Output (IOX) Expanders and hardware addons that plug directly into your fleet management device. They provide deeper insights into the status of your fleet. By leveraging the Controller Area Network (CAN) of your vehicles, IOX Expanders collect a variety of data–all available in your app.

Identify the IOX Expanders that will work best for your vehicles.

AUX Monitor - IOX-AUXM

Allows for monitoring of up to eight signals from your vehicle in real time. Track any sensor or input your company requires, including school bus warning lights, doors opening and closing, panic buttons for drivers, and more.

Text to Speech - IOX-GOTALK

Uses text-to-speech technology to provide real-time, verbal alerts to drivers based on predefined rules. You can customize the language used and words verbalized to create messages tailored to each driver.

NFC Reader - IOX-NFCREADER

Integrates Near Field Communication (NFC) with your fleet management device to help identify which drivers are operating vehicles in your fleet at any given time.

External Buzzer - IOX-BUZZ

Connects to your fleet management device to amplify in-vehicle feedback and reduce the number of missed alerts caused by things like loud engine noise.

USB Adapter - IOX-USB

Plug and play IOX USB power adapter for charging and powering USB devices.

Garmin Integration - IOX-GARMINNT

GARMIN IOX® connects to your fleet management device to allow for enhanced in-vehicle driver-dispatcher communication.

Device Specs

IOX-AUXM

Allows for monitoring of up to eight signals from your vehicle in real time.

Connectors:

- 8-pin Molex 43020-0800;
- Keyed 5-pin mini-USB type-B plug: daisy chain power and CAN in
- Keyed 5-pin mini-USB type-B socket: daisy chain power and CAN out

Length: 110 cm/43 inches

IOX-BUZZ

Reduces the number of unheard alerts due to engine noise.

Connectors:

- Keyed mini-USB type-B plug: daisy chain power and CAN in
- Keyed mini-USB type-B socket: daisy chain power and CAN out

Length: 140 cm/55 inches

IOX-GOTALK

Uses text-to-speech technology to provide real-time, verbal alerts.

Connectors:

- Keyed mini-USB type-B plug: daisy chain power and CAN in
- Keyed mini-USB type-B socket: daisy chain power and CAN out

Length: 240 cm/94 inches

IOX-USB

Power adapter for charging and powering USB devices.

Connectors:

- Keyed Male Mini-USB Type-B connector: daisy chain power and CAN in
- Keyed Female Mini-USB Type-B connector: daisy chain power and CAN out
- Female USB Type-A connector: USB charger

Length: 150 cm/59 inches

IOX-NFCREADER

Identifies which drivers are operating vehicles in your fleet at any given time.

Connectors:

- Keyed mini-USB type-B plug: daisy chain power and CAN in
- Keyed mini-USB type-B socket: daisy chain power and CAN out
- 2-pin grounding socket (Molex connector)

Length: 130 cm/51 inches

IOX-GARMINWT

Connect your fleet management solution to a GARMIN device.

Connectors:

- Keyed mini-USB type-B plug: daisy chain power & CAN in
- Keyed mini-USB type-B socket: daisy chain power & CAN out
- Mini-USB type-B plug: GARMIN

Length: 190 cm/75 inches

GEOTAB
management by measurement

Geotab® GO9TM — Expandable Telematics Device

For the most up-to-date version, please visit: goo.gl/f7huRc

GO9 Device

Geotab's GO9 telematics device is the most powerful yet. The GO9 offers a 32-bit processor, 4x more memory and 5x more RAM than the GO8. Similar to the GO8*, the GO9 offers state-of-the-art GPS technology, g-force monitoring, GEOTAB IOX* expandability, engine and battery health assessments, and communication on the LTE network*.

Vehicle Tracking

Using Geotab's patented tracking algorithm, the GO9 accurately recreates vehicle trips and analyzes incidents. The GO9 also offers in-vehicle alerts to instantly notify drivers of infractions and — with hardware Add-Ons — provides live coaching for driver's on-road performance. The GO9 does not require a dash-mounted antenna or any wire splicing.

Top Features

- Easy installation
- LTE Connectivity (select regions)*
- Small form factor device
- Intelligent in-vehicle driver coaching
- Breakthrough collision detection and notification
- External device expandability via IOX Technology
- Built-in auto-calibrating accelerometer and gyrometer
- Near-real-time vehicle data
- Fast GPS acquisition time using Almanac OTA support
- Support for GPS+GLONASS connectivity
- Additional native support for more vehicle protocols
- End-to-end cybersecurity

Security

Geotab platform security is designed for end-to-end protection of your data.

Key implementations include:

- GO device and network interfaces use authentication, encryption, and message integrity verification.
- GO devices are individualized. Each device uses a unique ID and non-static security key — making it difficult to fake a device's identity.
- Over-the-air updates use digitally-signed firmware to verify that updates come from a trusted source.
- Geotab uses independent third-party experts to validate the platform from end to end.
- FIPS 140-2 validated by NIST (certificate #3371)

Technical Specifications and Features

Interfaces	Engine Management
	Legacy Interfaces:
	Physical Interfaces: J1850 PWM, J1850 VPW, J1708, 9141-2 and ISO 14230 (KWP2000) @ Pins 2_10
	Speed: 10.4/41.6 kbaud for J1850, 9141-2 and ISO 14230 and 9600/62500 bps for J1708
	Data packet protocols: J1850 PWM, J1850 VPW, J1708, J1708 CAT, ISO Toyota, ISO Vario, ISO Ford, ISO Izuzu
	Diagnostic/application protocols: OBD2
	Standard CAN:
	Physical Interfaces: CAN @ Pins 6_14/3_11/2_10
	Speed: 125/250/500 kbps
	Data packet protocols: ISO 15765 CAN, GMLAN, VW TP 2.0, SAE J1939-21, SAE J1939-FMS
	Diagnostic/application protocols: Std OBD2, WWH-OBD, UDS (ISO 14229)
	Single Wire CAN:
	Physical Interfaces: Single Wire CAN @ Pin 1
	Speed: 33/50/83.3 kbps
	Data packet protocols: GMLAN, OEM Specific
	Medium/Low Speed CAN:
	Physical Interfaces: J1939-13 Type 2, TTL CAN @ Pins 3_11/2_10
	Speed: 50/125/250 kbps
	Data packet protocols: GMLAN, OEM Specific, ISO 15765 CAN, SAE J1939-21, SAE J1939-FMS
	Diagnostic/application protocols: Std OBD2, WWH-OBD, UDS (ISO 14229)
	* 2- or 3-wire install support (for older vehicles/asset tracking)
	Input/Output
	Buzzer
	LEDs – Ignition, GPS, Cellular
	IOX (more details below)
	Internal GPS/Cellular antennas
*Cellular	Availability varying on certification - full list of supported countries here
	GO9 LTE
	LTE (CAT-1): Bands 2/4/5/12, 3G: Bands 2/5
	GO9 LTE TMO
	Single Mode LTE (CAT-1): Bands 2/4/12
	GO9 LTE VZW
	Single Mode LTE (CAT-1): Bands 4/13
	GO9 3G/2G Global
	3G: 800/850/900/1900/2100 MHz
	2G: 850/900/1800/1900 MHz
	3GPP Compliant

GPS Receiver	72-channel engine (GPS/GLONASS/Beidou/Galileo/SBAS/WAAS/EGNOS/MSAS/GAGAN)
	Under 1 second Time-To-First Fix for hot and aided starts
	Cold start: 26s
	Concurrent GPS & GLONASS system
	A-GNSS
	Accuracy: ~2.0 m CEP
	OTA FW updates supported
I/O Expandability Support (IOX)	Currently supports a combination of up to 5 of the following:
	Driver ID
	Charging or data transfer over USB
	Garmin
	Iridium Satellite
	AUX – 4 per IOX (Digital or Analog)
	Serial Port and Additional CAN for third-party device integration
	Driver Feedback via external Buzzer and GOTALK
	Substance Spreader
	Relay control
	Alert
Environmental and EMC	Operating Temperature
	-40 to +85 °C
	SAE J1455
	Thermal Shock (Section 4.1.3.2)
	Humidity cycle (Section 4.1)
	Temperature Cycle (Section 4.2)
	Mechanical Vibration (Section 4.10)
	Operational Shock, Transit drop, Handling Drop (Section 4.11.x.x)
	Inductive Switching, Burst Transients, Starter Motor Engagement (Section 4.13.2.2.1)
	Coupled Transients (Section 4.13.2.2.2)
	Electrostatic Discharge Handling, operational and non-operational (Section 4.13.2.2.3)
	Radiated Immunity
	Radiated and Conducted Emissions
Accelerometer & Gyroscope	3D accelerometer and 3D gyroscope. Full-scale acceleration range of ±8g and an angular rate range of ±250 dps
	Acceleration and angular rate output data rate of 1.66 kHz
Mechanical	Weight: 70 g (0.15 lb)
	Dimensions: 75 mm L × 50 mm W × 23 mm H
	Housing: Flame retardant black ABS
Electrical	Voltage
	12 V and 24 V systems supported
	Current
	At 12 V
	Operating Mode: 60-300 mA
	Operating mode + IOX: Up to 2 A
	Sleep mode: 4.5 mA
	At 24 V

	Operating Mode: 35-180 mA
	Operating mode + IOX: Up to 2 A
	Sleep mode: 3.0 mA
	Resettable overcurrent protection to IOX
Compliance	Standards: FCC, IC, PTCRB, NOM, HERO, HERF, HERP, CE, Emark, RED, REACH, RoHS, WEEE, RCM
Over-the-Air (OTA) Support	Firmware Updates: For maintenance, new features, and custom applications
	Parameters: For turning additional features on/off
	Almanac/Ephemeris Data: For quicker GPS latch
In-cab Buzzer	Decibel Output: >85 dBA at 10 cm
	Driver Feedback: Harsh braking, harsh acceleration, harsh corners, over-revving, excessive idling and speeding, engine based seatbelt violations (when available), and custom
	Test Mode: Diagnostic beeps for validating GPS and wireless connection
Voltage Recording	Curve-based voltage logging to detect weak batteries, failing alternators, and failing starters.
64-Mb Non-volatile Flash Memory	Main Data Memory: Up to 80,000 logs in offline mode (out of coverage)
	Collision Data Memory: Buffer records over 100 minutes of second-by-second data
	(6,000 logs). Last 72 records (1.2 minutes) are sent instantly on accelerometer-triggered collision-level events.
Recording Parameters	Patented curve-based GPS/voltage/accelerometer/engine data logging algorithm for fewer, more accurate data points.
Intelligent Ignition	Non-engine-based ignition detect on voltage and movement, allowing for 3-wire installation. Ideal for older vehicles with no engine information and covert installation for asset recovery.

Vendor	Jason	Salcido	Travis	Total out of 300 possible points
Samsara Inc	74	74	66	214
Steinbauer Engineering	42	63	38	143
T-Mobile	98	99	95	292
Verizon	53	71	66	190