Introduction

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**What is Telematics?**

**Telematics**: using onboard computers and telecommunications technologies to transmit real time data from a vehicle to an organization. Installed or after-factory telematics devices collect and transmit data on vehicle use, diagnostics or emergencies.

Source: Gartner IT Glossary www.gartner.com/it-glossary/telematics
Why Telematics?

Support Governor’s goals to reduce carbon emissions (Executive Order 14-04) and improve employee/public safety.

Measureable Metrics:
- Improvements to employee safety
- Accident cost reductions
- Reduce miles traveled and increase MPGs
- Reduce fuel consumption
- Reduce Green House Gas Emissions (GHG)
- Reduction in idle time
- Reduction of time for mileage reporting and recall notifications
Agency Partners
Starting November 2015

- Agency partners, employees and labor help DES identify and refine business and technical requirements for telematics pilot.
- These refined requirements guided re-evaluation of a proposed solution.

The key refined requirements were....
Key Refined Requirements

DATA MINIMIZATION: Collect only data you need. Keep data only as long as you need it…

…to accomplish business purposes, e.g., improved driver safety, reduced emission, optimized routing

LOCATION PRIVACY: Control geocoordinate precision.

By default do not capture precise locations that reveal business activities exempt or potentially exempt from disclosure.
Refined Requirements and the RFI

Early 2016

• DES Fleet compares refined requirements to proposed solution.
• **Result:** proposed solution lacked key functionality required by fleet customers.

Mid 2016
“Can your solution meet customers’ needs?”

• Reboot telematics as competitive procurement and run RFI to assess current state of telematics.
• Received responses from 17 vendors.
• Several vendors claim their solution meets customers’ needs.
2017

DES publishes detailed RFP incorporating refined requirements.

The RFP includes three sections....

• Standard DES Contract
• Telematics RFP Requirements
• Telematics Questions
RFP Specification Overview

- Device Functionality
- Device Operation & Installation
- Integrations
- Mapping
- Notifications & Alerts
- Public Information
- Reports
- System & Device Configuration
- Experience

- Data Retention
- Data Transmission
- Disaster Recovery
- Security
- System Access
- Technical
- Training
- Upgrades and Maintenance
- Warranty, Maintenance, Support Services
Introduction: DES wishes to ensure vehicle location privacy by creating a virtual buffer to dynamically reduce accuracy of the geo-coordinates identifying the precise location of a DES fleet vehicle.

- Describe in detail how the solution;
  - Reduces positional accuracy – Data processing and data storage
  - Is configurable by system administrators
  - Meets or exceeds WA State OCIO security protocols
  - Uses Geo-Fence functionality
How does the RFI address location privacy?

Control precision of location recording

Create .25 to .5 buffer around actual vehicle location.

Allow greater precision if triggered by special conditions

- Air bag deployment
- Failure to return to agency home
Fleet Vehicle X traveled from location A to location B

Vehicle location accuracy is 1 kilometer (.62 mile)
### How GPS Coordinates Affect Location Accuracy

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How GPS Coordinates Affect Location Accuracy

The yellow dots show the route of a fleet vehicle (over time) traveling from Tenino to Rainier.
How GPS Coordinates Affect Location Accuracy

- When telematics records at a low level of precision, a fleet vehicle location is less precise.
- Here the vehicle is somewhere within each blue square.
- At this setting, vehicle location is accurate only to 1 kilometer.
- At this level of accuracy data provides fleet with information that meets our business needs.
From RFP to Pilot and Evaluation

- December 2016 - January 2017
  - Launch competitive telematics procurement

- February - May 2017:
  - Select service provider(s)

- June and August 2017:
  - Pilot
  - Begin data collection
  - Assess effectiveness of telematics.
RFP Evaluation to Pilot Timeline

January
• Post RFP

February
• Bidder responses due
• Begin evaluations

March
• Product evaluations
• Vendor interviews & demos

April
• Security design review

May
• Select successful bidder

June
• Anticipated contract execution

Fall 2017
• Pilot begins
Thank you

Questions?

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