This contract gives California state and local agencies access to an open telematics platform that can be used to help:

+ Improve efficiency
+ Intelligently electrify fleets
+ Reduce GHG emissions
+ Optimize winter operations
+ Streamline regulatory reporting and compliance

The State of California, focused on promoting a reliable, environmentally responsible and cost-effective fleet, has awarded Geotab a single-source Blanket Purchase Agreement (BPA) to supply the company’s award-winning fleet management technology to all interested state, municipal and county fleets.

To learn more or request a quote visit help.geotab.com/california or by emailing california@geotab.com
Electrification and EV Data

The MyGeotab platform is now optimized for fleets which are 0-100% electric, providing effective performance monitoring of both Evs and traditional vehicles in one platform for the first time.

+ Compare fuel consumed vs energy consumed in the fleet in one portal
+ A complete charging history of all your electric vehicles in the fleet similar to fuel fill ups
+ Real-time charging status and battery charge %

Go Electric: EV Suitability Assessment (EVSA)

Geotab can help simplify your fleet’s transition to electric vehicles with an EV Suitability Assessment. Get the answers you need to make the switch with a free EVSA from Geotab.

The EVSA helps you:
+ Select the right vehicles for starting your EV transition
+ Identify vehicles covering distances that are EV range capable
+ Select vehicles that make the most financial sense

Plan for EV adoption with data and go electric with confidence.
Learn more at geotab.com/ev

Regulatory Reporting

California signed Executive Order B-55-18 in September 2018 with the goal to achieve statewide carbon neutrality by 2045.

Geotab is currently working towards a partnership with the California Bureau of Automotive Repair (BAR) who have developed the Continuous Testing Program (CTP) Pilot to provide government agencies that have fleet vehicles an easier, more efficient and environmentally-friendly way to track emissions.

Government fleet vehicles that are approved for the CTP Pilot can substitute their biennial Smog Check inspections if they participate in the CTP Pilot, and the vehicles continue to meet the criteria; saving those government agencies time and money while ensuring their vehicles are running as cleanly as possible.

Engine Diagnostics with FMIS Integrations

The FMIS is typically the crucial data reservoir for vehicle mileage, fuel use, maintenance, costs, license plates, and other vehicle attributes. Geotab helps government agencies report on mileage, engine hours, locational data, and fuel consumption.

As federal fleets transition away from aggregate-level reporting to vehicle-asset-level data, a direct in-vehicle data feed becomes critical. This places an emphasis on integrating vehicle data into a Fleet Management Information System (FMIS). Utilizing this data is necessary to help agencies reduce fuel costs, identify and discard underutilized assets, and track towards federally mandated emissions reductions.
Safety

Seat Belt Detection

Geotab can detect when drivers are not wearing their seat belt. The information is sent to MyGeotab and can be referenced at any time regardless of there being an active seat belt exception rule. At the very least, Geotab strongly recommends turning on the default seat belt exception rule to enable exceptions reporting, which offers a facilitated look into which drivers are not buckling up.

Accelerometer Data

While driving, g-force is exerted on different parts of the vehicle, the GO device logs these events and uses conditional thresholds to determine the presence of aggressive driving. As vehicles experience jolting from hard acceleration, exertion from harsh braking, and side-to-side movement from harsh cornering, the GO device transmits these data points to a MyGeotab database where fleets can leverage accelerometer data-based exception rules and turn them into actionable coaching opportunities.

Collision Reconstruction

+ The GO device will detect an “collision level event” when a vehicle collision occurs and the accelerometer threshold exceeds 2.5g (front or back, or side to side)
+ During this “event” the GO device will record second-by-second data of the collision at 100 Hz frequency
+ This data is automatically transmitted to MyGeotab for interpretation

Direct and Indirect Costs of Vehicle Collisions for Fleets

<table>
<thead>
<tr>
<th>Direct Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Cost of Property Damage: $16,500</td>
<td></td>
</tr>
<tr>
<td>Average Cost of Non-Fatal Injury: $74,000</td>
<td></td>
</tr>
<tr>
<td>Average Cost of Fatality: $500,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor and Fleet Manager Time</td>
<td></td>
</tr>
<tr>
<td>Vehicle Repair Downtime</td>
<td></td>
</tr>
<tr>
<td>Reassignment of personnel to cover for missing employee(s)</td>
<td></td>
</tr>
<tr>
<td>Overtime pay to cover work of missing employee(s)</td>
<td></td>
</tr>
<tr>
<td>Re-entry and retraining of injured employee(s)</td>
<td></td>
</tr>
<tr>
<td>Administration cost (documentation of injuries, treatment, and absences)</td>
<td></td>
</tr>
<tr>
<td>Accident Investigation Cost</td>
<td></td>
</tr>
</tbody>
</table>

Statistics reported by OSHA
Fleet Utilization

With MyGeotab, government agencies can gather critical data on vehicle utilization such as:

- Real odometer mileage
- Engine hours
- On-duty versus off-duty use

Geotab’s IOX integrations make it possible to break down utilization even further.

Driver ID with NFC Technology (IOX-NFCREADER)

Geotab’s Driver ID solution (IOX-NFCREADER) can be used to track which individuals are using each department vehicle. The auxiliary solution requires that a badge or ID is scanned when entering the vehicle.

Monitor lights and siren usage (IOX-AUXM)

Geotab’s Input-Output Expander technology can be used to track use of first responder-specific equipment such as the emergency vehicle lights on, siren on, driver’s door open and firearm locker open. IOX-AUXM easily connects to the 12-volt output of the first responder vehicle and supports up to four digital inputs. Data is captured and transferred to the MyGeotab fleet management software for reporting and rule-setting.

Public Works

Optimizing winter maintenance operations maximizes mobility of the traveling public while minimizing accidents due to winter traveling conditions. With real-time reporting on salt usage and winter maintenance activity, roads can be plowed and de-iced as soon as possible.

- **Automate time consuming workflows:** Ensure high level of service by measuring the activity of every vehicle in a fleet with simplified real-time reporting
- **Optimize performance:** Know the location and route of a fleet, monitor how much salt is being put down, measure the performance of a truck and the effectiveness of the fleet at large
- **Manage operating costs:** Gather data for real-time visibility on the performance of drivers and current state of snow removal and deicing to monitor overall operating costs

Big Data Analytics

Geotab turns commercial and public sector vehicles into mobile smart sensors, and when combined into fleets, creates a mobile smart city sensor network of over 2M sensors. This network collects and processes more than 45 billion uncompressed data elements per day, representing one of the largest organically grown IoT datasets in the world. Leveraging big data analytics and machine learning, this data is transformed into actionable smart city insights and urban analytics.

These insights can be used to:

- Infer road conditions
- Identify hazardous roadways and intersections
- Predict traffic patterns and future collisions
- Help municipalities reach their sustainability goals
- Manage and measure the impact of Vision Zero strategies

All Geotab Smart City solutions are created with the intention of helping municipalities better understand their local transportation environment.
SANDAG Big 5

• Next OS (operating system)
• The Next Operating System (OS) is the “brain” of the entire transportation system.
• One of the Features listed of the Next OS is:
  o Transportation Operators & Service Providers: Next OS supports transportation operators such as public transit agencies, and dynamically manages their services and equipment through dashboards and tools that use advanced analytics and real-time data.
• Two of the Anticipated Benefits are:
  o Visibility - Enhanced data management and analytics allow for more informed and responsive planning and decision making about public infrastructure investments.
  o Collaboration - Streamlined collaboration and operations across agencies and mobility service providers (public and private) make operations more efficient and provide a smooth transportation experience for people and goods.

• The State of California has recently awarded a 10 Year Blanket Purchase Agreement to install the most advanced and data rich devices (Geotab) into every single state vehicle. Why?
  o Smart Cities (vehicles are the foundation)
  o Improve Vehicle Utilization
  o Fleet Electrification
  o Reduction in GHG Emissions
  o Regulatory Reporting (BAR CTP)
  o Reduce Operating Costs
  o Open APIs for grand integration
  o Increased Driver Safety
• Contract ID:1-19-58-69, Hardware and Installation is $0, monthly service is only $19.75/vehicle

• From equipped vehicles, Geotab’s Smart Cities Insights Include: the processing of over 2 Billion data points each day, Road Conditions, Traffic Flow, Dangerous Roadways/Intersections, EV Infrastructure Planning, Traffic Arteries, Parking, Emissions

• Geotab and Smart Columbus - https://www.geotab.com/blog/smart-columbus-operating-system/
• Geotab and NYC’s Vision Zero - https://www.geotab.com/blog/nyc-vision-zero/

• RMJ Tech, located in San Marcos, is a selected subcontractor for Geotab in California for this specific project and has been providing like solutions, including Geotab, for over 12 years. RMJ clients have included the Metropolitan Water District of Southern California, San Diego County Water Authority, Eastern Municipal Water District, Los Angeles Department of Water & Power, SDGE, etc.
• Jerome Toliver, jtoliver@rmjtech.com 760-566-3182