CITY OF LONG BEACH

Memorandum

Date: November 3, 2023

To: Mayor and Members of the City Council

From: Thomas B. Modica, City Manager

Subject: **New Administrative Regulation 4-7: Use of Telematics to Ensure Safe and Efficient Operation of City Vehicles**

The purpose of Administrative Regulation (AR) 4-7 (attached) is to set forth City policy on the usage of telematics to enhance the safety, sustainability, and efficiency of our City's fleet operations. This AR outlines guidelines and procedures for telematics usage and applies to all City departments and offices reporting directly to the City Manager while requesting elected offices and non-City Manager departments to comply in the interest of administrative uniformity. Per Administrative Regulation 1-1: Issuance and Revision Instruction for Administrative Regulations, the City Attorney and City Auditor reviewed the AR.

Purpose and Scope

The primary goal of this AR is to establish a framework for utilizing vehicle telematics within our City's fleet to promote safer and more efficient operations. By leveraging telematics technology, the City anticipates significant annual cost savings, improved safety measures, and reduced operational expenses.

Implementation and Policy

All City vehicles and specific non-motorized equipment will be equipped with telematics systems monitored by Fleet Services. The Police Department may request exemptions for response and undercover vehicles through a formal process, addressing any validated security concerns.

Roles and Responsibilities

The AR details the roles and responsibilities of Fleet Services, User Departments, and Staff using City vehicles, ensuring a collaborative approach towards achieving the AR's objectives. Fleet Services will manage the telematics systems, providing necessary training and support to departments, while User Departments will monitor reports to improve driving habits and ensure efficient operations of their assigned City vehicles and equipment.

Benefits and Reporting

The AR anticipates substantial operational savings, improved fleet utilization, and enhanced safety measures. Data collected through telematics will facilitate improved

vehicle dispatching, fuel economy, location management, and maintenance savings. It will also provide valuable insights into accident investigations, driver behavior monitoring, and compliance with existing City policies.

Training and System Access

The AR outlines procedures to provide comprehensive staff training and strict control over system access, ensuring data security and appropriate usage of the telematics system.

Next Steps

Electronic notice of the new AR will be sent to all City departments, and the AR will be posted on the Citywide intranet and the City's website.

If you have any questions, please contact me or Dan Berlenbach, Fleet Services Bureau Manager, at (562) 570-5401 or dan.berlenbach@longbeach.gov.

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Administrative Regulations

Number AR 4-7
Issue 1

Subject: Use of Telematics to Ensure Safe and Efficient Operation of City Vehicles

I. Purpose

This administrative regulation is intended to establish City of Long Beach (City) guidelines and procedures for the use of vehicle telematics in the City fleet to enhance safe, sustainable and efficient operations. Telematics is a method of monitoring cars, trucks, equipment and other assets by using GPS technology and on-board diagnostics (OBD) to plot the asset's movements on a computerized map. The safe and efficient operation of fleet vehicles and equipment is a key interest of the City and telematics proactively assist in that objective while increasing safety and reducing operational costs.

II. Scope

This regulation is applicable to all City departments and offices reporting directly to the City Manager. It is also requested that elected offices and non-City Manager departments comply with these procedures in the interest of administrative uniformity unless they have established written policies for the use of telematics for their fleet operations.

III. Introduction

City vehicles and equipment are integral to department missions and are required to be driven safely, efficiently, and sustainably. Staff using City vehicles and equipment have a responsibility to drive them in accordance with applicable laws and regulations to ensure the safety of residents and staff and to drive and operate them efficiently to minimize overall expense and harmful gas emissions. An efficiently driven fleet benefits the community and the environment, while improving safety and reducing unnecessary expense. The use of telematics in the City fleet is projected to save hundreds of thousands of dollars annually.

IV. Roles and Responsibilities

Fleet Services: Manage the telematics systems for the City fleet, engaging with departments to provide access, analysis, training, and support. Provide relevant information to departments, including but not limited to updated telematics reports and utilization data. Install and maintain vehicle telematics systems.

User Departments: Monitor reports, coach employees as necessary to improve driving habits. Report inoperative telematics systems and system problems to Fleet Services. Notify Fleet Services when an employee is no longer employed with the City or no longer needs access.

City Drivers: Use safe driving techniques when operating City vehicles and equipment. Avoid high-risk and sudden/harsh driving actions such as rapid acceleration, hard braking, and sudden changes in direction. Follow posted speed limits and minimize engine idling in accordance with City AR 4-6, *Engine Idling Policy*.

V. Policy

All City vehicles (and motorized equipment) will be equipped with telematics systems. Certain non-motorized equipment (such as trailers) will also be equipped with telematics, and monitored on a rotating basis. Police response and undercover vehicles may be exempted through a formal request to Fleet Services if there is a validated security concern that cannot be addressed through strict program access control. Fleet Services will manage installation of vehicle-borne systems and associated programs. Departments are responsible to manage safe use of vehicles and equipment assigned to them and the actions of their assigned staff when driving/operating City vehicles and equipment. Abuse of and unsafe operation of City vehicles and equipment may be addressed by Departments through disciplinary action as explained later in this regulation.

VI. Types of Telematic Systems

City vehicles and equipment are equipped with active or passive telematics systems, both provide similar information. Active telematics provide real-time or near real-time information. Passive telematics are installed on vehicles and equipment where real-time information is not required by user departments. Passive systems download data periodically and not in real-time.

VII. How Telematics Works

The systems installed on City vehicles and equipment collect data on vehicle location, operation, and condition. This information is transmitted to a central system managed by Fleet Services where it is stored, analyzed, and collated. It is accessible online by trained and authorized staff. Access to the system and training on its functionality is managed by Fleet Services.

Telematics systems include a Global Positioning System (GPS) capability as an integral part of their functionality along with other capabilities beneficial to safe, sustainable and efficient operation of the fleet. Telematics systems installed in City vehicles and equipment collect and transmit data on vehicle use that can be used to dispatch vehicles to service calls, reduce idling, enhance maintenance, and improve safety through monitoring of driver behavior. The next paragraph explains the data collected, its use, and benefits.

VIII. Use and Types of Telematics Information

Telematics systems installed on the City fleet provide valuable information on the use and condition of the fleet. Full implementation of telematics enables significant savings in operation of the City fleet through reduced fuel, maintenance, and accident repair costs. The most common uses of telematics data include:

i. **Routing and dispatching**. Active telematics provides the ability to ascertain the exact location of vehicles and equipment in real time and to dispatch the closest one to a work site. The systems track the location of vehicles and equipment (displayed on maps) and where they have traveled. It is useful for dispatching units to service calls, route optimization, as well as locating vehicles and equipment in real time.

ii. **Fuel Economy**. Telematics enables vehicles and equipment to be monitored for speeding, hard acceleration and braking, and excessive idling, all of which waste large quantities of fuel and increase harmful air emissions.

iii. **Location Management**. Telematics provides the ability to geofence particular areas and alert staff of out-of-service area travel. This is useful to ensure a good City image and to prevent vehicle misuse.

iv. **Maintenance Savings**. Use of telematics reduces maintenance costs in several ways:

   a. Telematics provides vital alerts to Fleet Services' Maintenance Division on a vehicle's operational condition and potential issues, enabling service before a failure occurs.

b. Telematics data includes accurate odometer readings which enable an efficient and timely inspection and preventive maintenance (PM) program, helping to ensure driver safety and reduce costly repairs.

c. The use of telematics is approved by the State of California to eliminate vehicle emission inspections reducing expense and downtime.

d. Conservative driving (starts, stops, and cornering) reduces brake and tire wear.

v. **Vehicle assignment**. Telematics can greatly assist in analysis to determine proper utilization of the fleet. This can provide data to determine where, how, many, and what type of vehicles and equipment are needed to support department missions in optimizing the fleet.

vi. **Accident investigation**. The location history function of telematics provides an accurate record of vehicle location over time that can be used to prove a City vehicle was or was not at a particular location. This can protect both the City and its drivers in investigations when complainants allege a City vehicle was in a certain location at a certain date and time. Speed data can likewise protect both the City and its drivers.

vii. **Safe operations and driver behavior**. Telematics can be used to monitor safe driving actions to improve driving habits, thus reducing risk, accidents, injuries, City liability, and repair costs. Harsh driving can be an indicator of unsafe driving and increase likelihood of an accident. The systems provide information on how a vehicle is driven; e.g., idling, speed, hard acceleration, cornering or braking, seat belt use, and other aspects.

viii. **Engine idling**. Monitoring of engine idling helps ensure compliance with AR 4-6, *Engine Idling Policy* to reduce excess fuel consumption and air pollution.

ix. **Vehicle Marking.** City vehicles will be marked with "How's My Driving" and/or "GPS Equipped" stickers to enhance safe driving.

IX. Training

i. Telematics and driver behavior data is useful in driver training as it highlights unsafe habits and practices that increase risk to City drivers, and others on the roadway.

ii. The City Safety office, with assistance from Fleet Services, provides driver training for staff assigned to use City vehicles and equipment to ensure safe and efficient operations.

iii. Fleet Services will provide comprehensive training to ensure appropriate business-related usage of the system and assistance any time thereafter as requested.

X. System Reporting

Data collected by City telematics systems is available online for review and reporting. Reports are available as online queries and can also be scheduled for regular delivery to specific addressees.

i. **Reports.** Users can request Fleet's assistance to develop reports and for scheduling as needed. Vehicle location, engine idling, and driver behavior can all be included.

ii. **Departmental level reporting.** Fleet Services will develop summary reports and regularly distribute them to department managers to enable monitoring of the safe and efficient operation of their assigned City vehicles and equipment. High-level and exception-based reports enable managers to view how their portion of the City fleet is being driven, reduce accidents, and improve efficiency.

iii. **Goals.** The Fleet Services Bureau may establish annual fleet operational goals in coordination with the City Risk Manager.

XI. Use of Telematics Information for Coaching and Discipline

i. Telematics data shall be used as a supplemental source for disciplinary purposes unless there appears to be unlawful activity. All uses of telematics data for disciplinary purposes must be approved by a department's Administrative Officer or the Department of Human Resources.

ii. The intent of the City's use of this data is to improve safety and efficiency—it is not expected that staff will be regularly monitored unless it can be well-justified. Departments will, however, review data provided by Fleet Services identifying risky, unsafe, and wasteful driving, using it for training and coaching to improve driver safety and behavior. Only in exceptional or illegal circumstances would use of this data rise above coaching and training.

iii. Telematics data from vehicles in active 911 emergency calls is understood to include hard acceleration, braking, speeding, etc. that is

part of routine duties, and thus should not be the basis for disciplinary action.

iv. Employees who purposely disable, tamper, or remove telematics equipment are subject to disciplinary action.

XII. System Use and Access

Data stored in the system is secured through end-to-end protection, digitally-signed firmware, authentication and encryption. System access is to be limited and strictly controlled to protect the data and its use.

i. **Department responsibilities.** Limit access to trained and authorized staff, review access annually, ensure new users receive system training.

ii. **User access**. Users are specifically authorized a level of access as required by their departmental role and are limited to viewing the vehicles and equipment in their workgroup or Department. Expectations regarding use of the telematics system vary by classification and/or role. Fleet Services enables system access upon training and department manager request.

iii. **Access removal**. Departments will notify Fleet Services Acquisitions Division when employees with access are no longer employed with the City or no longer require system access.

iv. **Access review**. Fleet Services will review the authorized access list annually for currency.

XIII. Definition of Terms

Harsh Driving:	A sudden change in direction or velocity of a vehicle often noted as sudden changes in g-forces (gravitational force equivalent) monitored by an accelerometer.
Global Positioning System (GPS):	A global navigation satellite system, that provides exact location, velocity, and time synchronization. GPS supports the same information for vehicles and equipment provided through telematics systems.
Preventive Maintenance (PM):	A system of inspection and service for the City's fleet to ensure safe and efficient operation. Dependent on accurate mileage or hours of usage data transmitted and recorded by telematics systems.

Emissions Smog Test:	State-mandated biennial emissions test for vehicles.
Telematics:	Telematics is a method of monitoring cars, trucks, equipment and other assets by using GPS technology and on-board diagnostics (OBD) to plot the asset's movements on a computerized map.
User Departments:	City Manager departments that operate motorized vehicles or equipment maintained by Fleet Services.
Utilization:	A measure of usage compared to capacity or threshold. The value is often expressed as a percentage, frequency, or amount of mileage.

CITY MANAGER

9/26/23
DATE