CHARLOTTE.

Subject/Title	
Automatic Vehicle Locator Policy	
Date Effective	**Revision Date Effective**
June 1, 2020	
	Code Number
	GS 5
City Manager	**General Services**
	Responsible Department
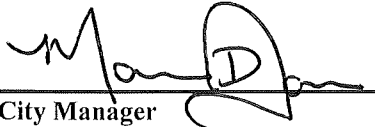
Objective

The City of Charlotte is committed to responsible operation of its vehicle fleet through efficient and effective practices. To ensure accountability and best practices, the City of Charlotte will utilize automatic vehicle locator (AVL) devices throughout the city's fleet of vehicles. The deployment of AVL devices will use telematics to help the city achieve critical fleet goals that include safety and risk mitigation; efficient, productive, and effective governance; and sustainability and resiliency within its fleet, as outlined below:

- *Safety and Risk Mitigation*: To encourage the safe operation of city vehicles by establishing minimum standards and guidelines for vehicle speed, seat belt usage, harsh cornering, hard braking, rapid acceleration, and other parameters; it is critical to focus driver training and coaching efforts in the areas where it is most needed.
- *Efficient, Productive, and Effective Governance*: To improve city operations by identifying vehicle time off route and off duty, identifying vehicle congregation patterns, remotely evaluating engine and diagnostic codes, improving accurate recording of vehicle mileage meter information, recording the accurate number of engine operation hours, and supporting incident response efforts by informing dispatchers of vehicle locations and status.
- *Sustainability and Resiliency*: To develop a fleet-wide dataset of utilization information for analyzing data across the fleet including:
  - Vehicle fleet right-sizing efforts,
  - Alternative fueling suitability, including electric vehicles and charging infrastructure requirements, and
  - Anti-idling campaigns and idle mitigation efforts.

Policy

All city vehicles and rolling stock assets will be up-fitted with a city-approved AVL device. The information collected will be used to support safety and risk mitigation; efficient, productive, and effective governance; and sustainability and resiliency. The information is to be used collectively to help inform fleet decisions and address patterns of driver behavior for one-time incidents or infractions.

For the purposes of this policy, city vehicles and rolling stock are defined as: on-road, self-propelled motorized assets that have been acquired by the city through purchase, donation, lease, or long-term rental (two weeks or more).

This policy does not apply to unmarked law enforcement vehicles used primarily for covert

operations. For the purposes of this policy, these vehicles are defined as vehicles that receive a confidential license plate and/or are used in such a way that their identification as city vehicles would incapacitate them from performing their normal duties.

1. **Driver Registration**

   A. In accordance with the Driving Authorization Policy, only city employees who have been granted driving authorization based on a review of the driver's Motor Vehicle Record (MVR) conducted by Risk Management are authorized to operate a vehicle to conduct city business.

   B. Usage of a city vehicle and rolling stock assets will be directly tied to a driver. Vehicles assigned to a single driver can be associated with that driver.

   C. Vehicles used by multiple drivers will be up-fitted with a "badge reader" device to identify the driver for each trip.

   D. Any vehicle that is re-assigned or changes from single-driver to multi-driver will be up-fitted with a "badge reader" device within thirty days of the reassignment.

   E. Driver information will be registered and stored in the telematics system.

2. **Driver Acknowledgement**

   A. City drivers will be fully informed of this policy and of all departmental exception handling rules and procedures prior to the driver's first trip in a vehicle with an AVL device.

   B. All city drivers will acknowledge awareness, digitally or in writing, of the telematics device operating within the city vehicle.

3. **Telematics System**

   A. All telematics devices deployed in city vehicles and rolling stock assets will be compatible and consistent throughout the fleet.

   B. All city telematics data will be stored in a single database to ensure the availability of city-wide reporting and data analysis.

   C. The telematics system will be configured such that departments have access only to departmental vehicle data. I&T, Strategy and Budget, Fleet Management, and Risk Management will have access to city-wide datasets in order to perform fleet and risk analysis across departments.

   D. Supervisors and managers will be able to create and chose from a variety of reports to review interdepartmental and citywide data.

4. Telematics Data Rule Alerts

A. The telematics system will generate driver behavior alerts based on system-wide rules. Examples of driver behavior alerts include excess speed; failure to wear a safety belt; excessive idling; and harsh braking, acceleration, or cornering. Rule alerts are outlined in section 4.B. below.

B. Departments must meet the minimum rule thresholds as detailed below:

- *Speeding*: Driving above the posted speed limit for thirty seconds or longer. The City of Charlotte expects all city-approved drivers to be aware of, abide, and obey all traffic laws and posted speed limits. Vehicles with activated emergency warning lights and sirens will not be reported as a violation under this rule.
- *Seat belt*: Seat belt usage is required at all times pursuant to NC G.S. 20-135.2A, and any seat belt events will be reported as a violation under this rule. The statute applies to vehicles operating on city streets or highways. Vehicles operating within city premises under twenty miles per hour will not be reported as a violation under this rule.
- *Idling*: Idling thresholds and rule alerts are set within the Fleet & Motorized Equipment Asset Management policy. Idling in excess of the thresholds set by the Fleet & Motorized Equipment Asset Management policy will be reported as a rule violation.
- *Harsh braking/harsh acceleration/hard cornering*: Vehicles that perform harsh maneuvers while operating, such as evasive actions, hard turns, acceleration at a high rate of speed, usually occurs as a driving pattern or behavior that can be tracked over time. These harsh actions wear on the vehicle and are harmful for the vehicle over the course of its useful life. This information will be tracked as a repeated behavior rather than reviewing one specific instance.

C. Departments will be able to review thresholds and rule violation reporting using the collected AVL data.

- It is recommended that departments review the reports consistently.
- Departments are expected to follow the minimum rule violation thresholds set in section 4.B. above.
- A department may appeal for a different threshold or give feedback about the exception thresholds stated above during AVL Governance Committee meetings. The meetings will include appropriate stakeholders, including departmental AVL liaisons, Fleet Management, and Risk Management.
- CMPD will be subject to internal professional standards and will follow internal operational guidelines as it relates to vehicle pursuits.

5. Device Tampering

A. Departments are responsible for investigating all device tampering alerts. Drivers of city vehicles shall not attempt to remove or alter the AVL device at any point in

time.

B. Vehicles with defective, non-functioning, tampered, or altered AVL devices will be presented to Fleet Management for diagnosis and service so the vehicle and the AVL can be placed back into the fleet.

6. **Driver Behavior**

A. Departments are responsible for monitoring rule violations reported by the AVL system. The department's fleet liaison and/or the employee's supervisor will be responsible for enforcing and communicating violations, as well as communicating disciplinary actions, as appropriate.

B. Departments are responsible for coaching, encouraging, and teaching good driving behavior. It is not the responsibility of Risk Management or Fleet Management to decide when unsafe driving behavior is found within a department.

C. Departments are responsible for monitoring employees and correcting patterns of unsafe driving behaviors such as excessive speed, harsh braking or acceleration, prolonged idling, or non-seat belt usage.

D. Any disciplinary action recommended by departments based on a pattern of unsafe driving behavior will be consistent with the citywide progressive discipline policy. Minimum steps include:
   - Driver coaching/counseling,
   - Referral to a defensive driving course (as applicable),
   - Referral for revocation of city driving permission, and
   - Referral to city human resources for additional disciplinary action as deemed necessary by the situation.

7. **AVL Governance Committee**

A. Fleet Management, in coordination with other city departments, will form an AVL Governance Committee that will be charged with oversight of the AVL program.

B. The main responsibilities of the Governance Committee will be to ensure consistency and standards across departments, AVL system management, and user access and security control.

C. The Committee will have representatives from each AVL user department, as well as representatives from Fleet Management, Risk Management, and I&T.

D. Fleet Management will be responsible for chartering the Committee and organizing the Committee meetings. The AVL Committee will be an interdepartmental team that will report to the City of Charlotte's General Services Director.

8. **References**

This policy aligns with and complements the following city policies and plans:
   - Driving Authorization Policy,

- Vehicle Accident Reporting Policy,
- Fleet and Motorized Equipment Asset Management Policy,
- Progressive Discipline Policy, and
- Strategic Energy Action Plan.

Updated versions of the referenced documents are available on CNET.

9. Definitions

- **Automated Vehicle Locator**: A device that uses a global positioning system to remotely track the location, speed, and other vehicle specific data.

- **Driving Authorization:** Authorization granted for an individual to be designated as an Authorized Driver based on a review of the driver's Motor Vehicle Record (MVR) conducted by Risk Management.

- **Telematics:** A broad term that refers to devices that merge GPS enabled devices (such as AVLs) into a system that can provide broad trends of information, allowing users to interpret trends of historical driver data. Telematics allow for tracking individual vehicles, collecting data, and reporting on vehicle location, history, speed, mechanical diagnostics, safety and other information. The recorded data is transmitted to a database using wireless cellular or satellite connections.