NYC TRANSIT SHOULD PLAN TO IMPROVE ITS OVERSIGHT OF HIGHWAY VEHICLE USAGE – FINAL

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I. EXECUTIVE SUMMARY

Metropolitan Transportation Authority (MTA) employees regularly use MTA cars or other passenger vehicles in the course of their work: for example, to inspect and maintain equipment and facilities in areas not easily accessed by public transportation.

The Office of the MTA Inspector General (OIG) has long had an interest in how the agencies monitor the usage of their “highway fleets,” e.g., cars and sport utility vehicles, with special attention to how well the agencies identify and respond to instances of idling that might have no operational purpose or benefit. In some cases, OIG has found that employees in idling vehicles are neglecting their duties; thus, excessive idling can raise concerns about productivity and accountability. Idling also wastes fuel and creates harmful emissions. Another OIG concern, unsafe driving – as evidenced by harsh braking, harsh acceleration, and speeding – can increase the risk of injury to employees and others, as well as damage to MTA property. For these reasons, the capable oversight of vehicle usage is a prudent form of risk management.

In 2012 and 2018, OIG released reports about excessive vehicle idling at Metro-North Railroad (MNR) and Long Island Rail Road (LIRR); New York City Transit (NYC Transit) did not have an idling-oversight program in place at the time. However, in April 2021 the MTA entered into an all-agency contract with a new provider of an Automatic Vehicle Location and Monitoring (AVLM) system called FleetTrack, and since then, NYC Transit has been implementing the system across its highway fleet. This rollout presented an opportunity for OIG to examine whether NYC Transit was prepared to use FleetTrack to effectively monitor and manage highway vehicle idling, risky driving-related behaviors, and overall driver accountability.

1 See MTA/OIG reports # 2012-06 Excessive Idling of Highway Vehicles at Long Island Rail Road and Metro-North Railroad (September 2012); # 2018-05 Vehicle Idling at Long Island Rail Road (June 2018); and # 2018-15 Vehicle Idling at Metro-North Railroad (July 2018).
A. Summary of Findings

- **Idling and risky driving-related behaviors occur at significant levels.** OIG analyzed FleetTrack data for two weeks, one each in February and April 2023. To focus on extended periods of idling, which are less likely to be caused by stops at traffic lights or other short, intermittent events, OIG reviewed only those instances lasting longer than five minutes (referred to in this report as “excessive idling”). The analysis revealed that out of 417 vehicles assigned to either the NYC Transit Department of Subways (Subways) or the Department of Buses (Buses), 269 idled excessively and for a combined total of over 5,000 hours during the two-week period, an average of over 18 hours per vehicle. OIG’s analysis of two risky driving-related indicators, harsh braking and harsh acceleration, showed differences between Subways and Buses that might simply indicate variations in the types of traffic conditions that drivers encountered. However, management would benefit from identifying employees who repeatedly show above-average levels of these behaviors and taking action to reduce any risky driving habits.

- **No one in NYC Transit is monitoring driver behavior.** OIG found that while the NYC Transit Fleet Services group oversaw the assignment, maintenance, and repair of the highway fleet, they expected that the operating departments were responsible for monitoring drivers’ behavior, including excessive idling and risky driving-related events. In turn, OIG found that the operating departments also were not monitoring drivers’ behavior. OIG found that the delegation of responsibility – in the absence of guidance from central management – resulted in a lack of monitoring protocols or other controls over employees’ vehicle usage at the department level.

- **NYC Transit should make better use of FleetTrack’s reporting features.** Because the agency was still equipping its fleet with the AVLM system and had not yet assigned clearly defined oversight responsibilities to the departments, OIG identified ample opportunity for NYC Transit personnel to use FleetTrack to monitor and report on driving behaviors.

- **NYC Transit employees have not been trained on how to review FleetTrack for risky driving behavior.** OIG found that although the AVLM vendor offered training during the initial FleetTrack rollout, as required by its contract, including a brief overview of the system’s ability to report on excessive idling or risky driving-related behaviors, some employees did not attend the training. For these reasons, key personnel were not prepared to analyze FleetTrack data on idling or risky driving nor instructed on how to create appropriate management reports.
• **Two data-related issues diminish FleetTrack’s reliability and deserve managerial attention.** The system did not provide either complete or, in some cases, useful data. In the first, OIG learned that the transponders installed in vehicles – which send data to the vendor’s servers – at times become disconnected. When this occurs, the vehicle cannot transmit any location information or operating data such as speed, engine hours, idling, etc. This typically is the result of transponders not being reconnected after servicing or inspection. OIG found that NYC Transit did not have an efficient, reliable way to identify the outages and arrange to fix them. The second issue concerned the measurement of speeding events, which were tallied in one-minute intervals rather than by a more useful metric, e.g., by an event’s total duration.

• **NYC Transit lacks a way to efficiently document drivers’ identity.** OIG found that unlike MNR and LIRR, NYC Transit does not require drivers to swipe or tap an identification card before driving an agency vehicle; the agency’s highway fleet is not equipped with card readers. Instead, agency personnel must refer to paper mileage logs if they need to discover who had been driving a vehicle on a given date, e.g., if the agency received a notice that a driving violation had occurred. OIG learned that agency leaders made the decision not to require swiping-in because employees’ ID cards were not compatible with the vendor’s contactless technology at the time – but in several years, a new generation of ID cards would be.

This report includes recommended actions to address these areas. NYC Transit has an opportunity to ensure a successful implementation of the FleetTrack AVLM system. Proper oversight of employees’ use of highway vehicles can enhance the agency’s productivity and accountability, reduce risky driving, and increase the cost-effectiveness of the agency’s highway fleet.

In October 2023, OIG shared its Draft Report with NYC Transit for comment. In the agency’s January 2024 response, the President agreed with OIG’s recommendations and included expected implementation dates. NYC Transit’s specific responses are summarized in the Recommendations section at the end of this Report.
II. BACKGROUND

A. NYC Transit Highway Fleet

NYC Transit owns, leases, or rents approximately 1,054 non-revenue cars, vans, sport utility vehicles, and small pickup trucks that weigh less than 8,500 pounds. At the time of OIG’s review, 16 departments in Subways were responsible for about 60% of them, and 19 departments in Buses were assigned approximately 40%. Of this highway fleet, 417 had been equipped with AVLM technology by early 2023. As of August 2023, NYC Transit had equipped an additional two vehicles for a total of 419 vehicles, and the rest of the highway fleet will be equipped with AVLM technology by December 2024.

NYC Transit’s Fleet Services unit assigns vehicles to the operating departments and executives based on the business needs of the agency. Fleet Services personnel review the vehicles’ usage to ensure they receive scheduled maintenance and any necessary repairs; in addition, as needed, they reassign or retire underused vehicles.

Most of the NYC Transit vehicles are pool vehicles, not assigned to individual employees. The driver for each trip is responsible for the use of the vehicle and must enter details of the trip into a mileage log.

B. AVLM Transponders and the FleetTrack Information System

In 2021, MTA contracted with LB Technology Inc. (LB), to implement an all-agency AVLM system for MTA non-revenue vehicles. The contract value was $4.03 million for a five-year period beginning April 1, 2021, with two one-year options.

The contract requires LB to provide (1) in-vehicle transponders and (2) the FleetTrack information system to capture, store, and report on the data for managerial purposes. The transponders are installed under the vehicle’s dashboard and plugged directly into the vehicle’s internal electronic system. The transponder collects information about the vehicle’s location, mileage, and various driving-related behaviors in real time and uses the cell tower network to

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2 MTA’s 2021 All-Agency Policy 11-037, Assignment and Use of Official Vehicles (the MTA Policy), restricts the use of agency vehicles to official business, such as responding to emergencies and other events that could impact service delivery, delivering personnel and equipment to job sites, and patrolling agency property for security purposes.

3 OIG participates in MTA’s contract with LB to manage its own vehicles.
transmit the data back to LB servers for recording in the FleetTrack database. The information is stored within the FleetTrack database and used to generate reports on various indicators for access by the various agencies.

According to the terms of its contract with MTA, LB is responsible for training employees on how to use the FleetTrack system and also for creating FleetTrack reports specifically tailored to NYC Transit’s needs.

Of the FleetTrack system’s many available metrics, OIG’s review focused on these:

- Unnecessary or excessive idling, calculated beginning when the engine is turned on and the vehicle does not move for five minutes or more. OIG’s analysis only focused on the portion of the idling in excess of the first five minutes. This allowed OIG to exclude such short, intermittent events as stopping at traffic lights.
- Speeding.
- Harsh acceleration and harsh braking: an increase or decrease in speed greater than seven miles per hour per second.

C. Relevant Laws, Policies, and Procedures

The 2009 New York City Anti-Idling Law prohibits motor vehicles from idling for longer than three minutes.\(^4\) The law provides a few exceptions for idling past the three-minute threshold, such as when outside temperatures are below 40 degrees, and when the driver is operating an emergency vehicle; furthermore, heavy-duty vehicles weighing more than 8,500 pounds may idle for up to five minutes at a time. New York State law does not address the idling of highway vehicles under 8,500 pounds; however, idling for longer than five minutes is prohibited for heavy-duty vehicles at or above that weight.\(^5\)

The MTA Policy on the use of agency-owned vehicles states that vehicle operators “must eliminate unnecessary idling and comply with applicable state idling laws.” The Policy does not specify which vehicles it applies to, nor does it specifically define “unnecessary” idling. NYC Transit does not have an official policy addressing idling; however, its Maintenance of Way Bulletin 22-08 (June 2022) states, “No vehicle operator is permitted to allow the engine of a motor vehicle to idle for longer than three (3) minutes while parked, except under the following

\(^4\) NYC Administrative Code, Title 24 § 24-163. The limit drops to one minute in areas adjacent to a school.  
\(^5\) New York State Code of Rules and Regulations, Title 6 § 217-3.2.
conditions: The engine is powering an auxiliary function, such as loading or unloading cargo, or mixing concrete, when running the engine is required for maintenance, or when the vehicle is performing emergency services.”

III. FINDINGS

A. Idling and Risky Driving-Related Behaviors Occur at Concerning Levels

To determine whether NYC Transit highway fleet drivers are performing excessive idling or demonstrating concerning risky driving-related behaviors, OIG analyzed FleetTrack idling and risky driving data for two weeks in 2023: February 18 to 25 and April 1 to 7. OIG’s review revealed idling and risky driving-related behaviors that are concerning.

1. Excessive Idling

In its past work, OIG considered any instance of idling lasting longer than five minutes worth further evaluation to determine whether the idling was necessary or beneficial to agency operations. To focus on the portion of idling of greatest interest, OIG used the same standard for its current analysis and omitted the first five minutes from each instance in the dataset. OIG also performed an analysis of weather conditions for the two weeks to see how variations in temperature might impact idling. OIG did not identify any significant relationship between idling and temperature.

As shown in Table 1 below, OIG estimated that the excessive idling lasted 5,192 hours for the two major operating departments over the two weeks.

<table>
<thead>
<tr>
<th>Department</th>
<th># Vehicles</th>
<th>Idling Hours</th>
<th>Avg. Idling Hours per Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Buses</td>
<td>190</td>
<td>2,295</td>
<td>12.1</td>
</tr>
<tr>
<td>Dept. of Subways</td>
<td>227</td>
<td>2,897</td>
<td>12.8</td>
</tr>
<tr>
<td>Total</td>
<td>417</td>
<td>5,192</td>
<td>12.5</td>
</tr>
</tbody>
</table>

The analysis also revealed variations in excessive idling among the Buses and Subways departments with 10 or more vehicles. For example, OIG found that according to the FleetTrack
data, with an average of 16.5 hours for the two weeks in 2023, Road Operations\(^6\) had by far the highest average excessive idling hours per vehicle for any department in Buses. Road Operations manages 67\% (128 out of 190) of Buses’ FleetTrack-equipped vehicle fleet but accounts for 92\% of Buses’ excessive idling hours (2,109 out of 2,295 hours). OIG’s review of FleetTrack data for the two weeks revealed that out of the 10 vehicles with the most excessive idling hours, all 10 were assigned to Road Operations. The top 10 vehicles had excessive idling hours ranging from 75 to 103.4 hours for the two weeks OIG reviewed, well above Buses’ average of 12.1 excessive idling hours per vehicle.\(^7\)

Similarly, OIG’s review of Subways found that the Electronic Maintenance Division (EMD) department\(^8\) managed 40\% of Subways’ highway vehicles (91 out of 227) but accounted for almost two-thirds of Subways’ excessive idling hours (1,927 out of 2,897) for the two weeks that OIG examined. The EMD highway vehicles idled excessively for an average of 20.1 hours during the two weeks: this means that in addition to idling in periods lasting five minutes or less, on average, the EMD vehicles idled for more than an entire eight-hour workday each week.

The 10 Subways vehicles with the most excessive idling hours for the two weeks were split across two departments: seven were assigned to EMD and three to the Elevators and Escalators department. The excessive idling for these vehicles ranged from 63.6 to 115.1 hours for the two weeks OIG reviewed, well above Subways’ average of 12.8 excessive idling hours per vehicle.

2. Risky Driving-Related Behaviors

To determine how many harsh acceleration and braking events there were among NYC Transit highway vehicle drivers, OIG reviewed the two weeks of FleetTrack data.

a. Harsh Acceleration

OIG also looked at harsh acceleration per vehicle. Harsh acceleration is measured as an increase in speed greater than seven miles per hour per second. As shown in Table 2 below, the analysis revealed that Subways’ drivers had a much higher rate of harsh acceleration events per

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\(^6\) The Road Operations group is responsible for responding to emergencies, accidents, bus breakdowns and any other incidents that disrupt service.

\(^7\) At times, the vehicles were used during multiple work shifts on a given day.

\(^8\) The EMD department is responsible for the repair and maintenance of electronic equipment used in fare collection, communication, and security systems, and ensuring the operating readiness, reliability, and safety of these assets.
vehicle than Buses’ drivers: the rate for Subways was four times higher than Buses’ rate (3.36 events vs. 0.83).

Table 2. Average Harsh Acceleration Events by Vehicle

<table>
<thead>
<tr>
<th>Department</th>
<th># Vehicles</th>
<th>Harsh Accel. Count</th>
<th>Avg. Harsh Accel. Count per Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Buses</td>
<td>190</td>
<td>158</td>
<td>0.83</td>
</tr>
<tr>
<td>Dept. of Subways</td>
<td>227</td>
<td>763</td>
<td>3.36</td>
</tr>
<tr>
<td>Total</td>
<td>417</td>
<td>921</td>
<td>2.21</td>
</tr>
</tbody>
</table>

OIG found that of the 10 vehicles with the greatest number of harsh acceleration events for the two weeks, nine belonged to EMD. One car had 167 harsh acceleration counts – 21.9% of the Subways total. Notably, the top three cars were associated with over half of Subways’ harsh acceleration events (434 events, or 56.9%).

b. Harsh Braking

Harsh braking is measured as a decrease in speed greater than seven miles per hour per second. As seen in Table 3 below, the analysis revealed that Subways drivers had a much higher rate of harsh braking events per vehicle than Buses drivers: the rate for Subways over the two weeks was more than five times higher than that of Buses (1.45 events vs. 0.27).

Table 3. Average Harsh Braking Events by Vehicle

<table>
<thead>
<tr>
<th>Department</th>
<th># Vehicles</th>
<th>Harsh Braking Count</th>
<th>Avg. Harsh Braking Count per Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Buses</td>
<td>190</td>
<td>51</td>
<td>0.27</td>
</tr>
<tr>
<td>Dept. of Subways</td>
<td>227</td>
<td>330</td>
<td>1.45</td>
</tr>
<tr>
<td>Total</td>
<td>417</td>
<td>381</td>
<td>0.91</td>
</tr>
</tbody>
</table>

OIG’s analysis of harsh braking events by department revealed that of the 10 vehicles with the most harsh braking events, nine were again from EMD. Further, nine of the 10 vehicles were also on the list of top 10 vehicles for harsh acceleration events.

Like excessive idling, risky driving-related behaviors like harsh acceleration and harsh braking carry significant risks for the agency, such as the safety of employees and the public. Risky driving-related behaviors can lead to unexpected financial costs, not only for vehicle
repairs and replacements but also potentially expensive bills from injuries to employees and the public.

**B. No One in NYC Transit is Monitoring Idling or Risky Driving-Related Behaviors**

To learn about NYC Transit’s processes for monitoring usage of highway vehicles, OIG spoke with the Fleet Manager and 12 Non-Revenue Liaisons (Liaisons) from six departments. Together, the Liaisons managed 71% of the agency’s highway vehicles equipped with FleetTrack. The Fleet Manager is responsible for ensuring that highway vehicles undergo routine maintenance and repairs, procuring and replacing vehicles, ensuring the data integrity of FleetTrack, and providing FleetTrack access to employees upon request. The Liaisons’ major responsibilities vary somewhat between departments, but most of them track vehicle mileage for maintenance purposes, investigate accidents and complete related paperwork, and ensure that employees pay for driving violations.

OIG learned that neither the Fleet Manager nor any of the 12 Liaisons believed it was their responsibility to monitor vehicle idling or risky driving-related behaviors. Although they have access to FleetTrack reports containing information on excessive idling and risky driving-related behaviors, including harsh acceleration and harsh braking, these officials did not use or review them. Further, they erroneously believed that another individual or group was responsible for monitoring these aspects of drivers’ behavior.

OIG found that Fleet Services management expected the departments to perform any monitoring of excessive idling and risky driving-related behaviors. However, with no instruction from Fleet Services on this topic, and no related NYC Transit policies or procedures to address it, the department liaisons were unaware that they could – or were in any way expected to – use FleetTrack to monitor these events.

When OIG discussed this finding with NYC Transit officials, OIG learned it was the first time some of them had reviewed high-level summary data about excessive idling and risky driving-related behaviors. NYC Transit officials further agreed that to better manage this risk, the agency should assign responsibility for this task and take other steps as well. For example, NYC Transit policy should include guidelines on excessive idling and risky driving-related behaviors, and the agency should establish an ongoing program to monitor vehicle usage. An effective oversight program would require the development of metrics and goals regarding these behaviors and the creation of a mechanism to give drivers feedback about their vehicle usage patterns.
With hundreds of active vehicles, it is impractical to identify and address all instances of excessive idling or risky driving-related behaviors. NYC Transit officials recognized the importance of using FleetTrack to identify instances of idling and risky driving-related behaviors at levels beyond what would be expected for normal operational needs or defensive driving. They confirmed that valid operational reasons might explain some of the behaviors captured; as an example of “acceptable” idling in winter, a Buses employee might need to run the engine to remain warm while supervising active field operations. And harsh braking and acceleration – at reasonable levels – might simply indicate defensive driving in difficult driving conditions. For these reasons, agency officials agreed that the focus of future data analyses should be on “outliers,” or drivers with ongoing behaviors outside the norm.

To reduce financial, health and risky driving, and environmental risks, the NYC Transit vehicle usage oversight program should focus on drivers showing the greatest levels of excessive idling or risky driving-related behaviors. It is these individuals who are most likely failing to comply with the agency’s expectations for productivity, accountability, and risky driving. By performing regular analyses, the agency can use FleetTrack to identify drivers exhibiting egregious idling or risky driving-related behaviors.

C. Employees Have Not Been Trained to Review Data on Driving Behaviors

According to the terms of its contract with the MTA, LB is required to provide NYC Transit employees with training on how to use FleetTrack. The LB FleetTrack training is open to all NYC Transit employees, whether for the first time or as a refresher, at no additional charge to the agency. As requested by NYC Transit management, LB will schedule training for all employees. An LB official told OIG that following the initial implementation of FleetTrack, the company provided in-person training sessions led by LB instructors at NYC Transit locations. After about one month of this in-person training, LB held online training sessions twice weekly for approximately six more months.

OIG found that although LB did provide regular training sessions to teach employees how to use FleetTrack to produce reports on excessive idling and risky driving-related behaviors, only two of the 12 Liaisons OIG spoke with had been scheduled to take the training. Further, OIG learned that NYC Transit did not document who attended FleetTrack training and when. While LB was able to provide OIG with a list of the employees who had been scheduled for in-person training, LB could not confirm whether the employees actually attended the session for which they were enrolled.
When OIG discussed this finding with NYC Transit officials, they told us they were working with LB Technology to develop additional FleetTrack training sessions. They also said that they would consider designing an agency-wide, standardized curriculum to train employees on how to use FleetTrack to identify excessive idling and risky driving-related behaviors.

D. NYC Transit Should Address Data Issues to Improve FleetTrack’s Reliability

During this review OIG found that FleetTrack has inherent functionality and reporting issues that NYC Transit must address if the agency is to adequately monitor and improve drivers’ behavior. The two significant data issues that OIG found – both previously unknown to NYC Transit – include disconnected transponder devices and FleetTrack’s method for calculating speeding events.

1. Disconnected Devices

When a vehicle’s transponder is physically disconnected from the vehicle’s internal electronic system, it cannot send data back to LB’s servers to be stored in FleetTrack. In this situation, FleetTrack cannot report on key indicators, including location, engine hours, idling, risky driving-related behaviors, and more.

OIG learned that NYC Transit did not keep complete records of device disconnections, and thus agency officials were unaware of how frequently information was lost in this manner. LB provided OIG with the relevant data, which revealed a widespread problem: of the 417 vehicles equipped with FleetTrack, 49 – or 11.8% – had a disconnected device for the entire four-month period from January 1 through April 30, 2023. Consequently, agency managers had no method for obtaining insight into how these vehicles were being used, or where they were, for that period. Similarly, OIG’s analysis could not include any information on these vehicles’ excessive idling, harsh braking, and harsh acceleration.

To confirm whether any of the 49 vehicles were driven while the transponder was disconnected, OIG reviewed Vehicle Use Logs for 33 (67%) of them and found that:

- 32 of the 33 vehicles were driven at least once during the weeks of February 19-25 and April 1-7, 2023, accruing a total of 11,764 miles – an average of 368 miles per vehicle.

9 MTA Policy requires employees to fill out a “Vehicle Use Log” each time they operate an agency vehicle. The logs are paper documents containing driver and passenger names, trip date and time, starting location and destination, purpose of the trip, odometer readings, and fuel purchases. Managers and supervisors in each operating department use the completed logs to track vehicles’ mileage for maintenance purposes.
An additional 159 vehicles (38.1% of the highway fleet equipped with FleetTrack) experienced a disconnected device at some point, though not for the entire period. Because of limitations with the FleetTrack data, the dates, times, and duration of the outages were unavailable for this group of vehicles.

Notably, these disconnections likely mean that OIG’s analysis described in Finding A undercounted the true extent of excessive idling and risky driving-related behaviors at NYC Transit. This also meant that NYC Transit was not able to locate and assign the vehicles to employees in a timely manner.

The Fleet Manager and most of the Liaisons were aware that the transponder devices sometimes became disconnected, but none knew how frequently the disconnections occurred or regularly monitored their vehicles for this issue. Instead, OIG learned that the officials identified disconnections only irregularly and usually on an ad hoc basis. Further, they expressed confusion about who within NYC Transit or LB Technology was responsible for identifying and reporting on disconnected devices.

MTA’s contract with LB does not specify who is required to monitor the system for disconnections. According to one LB official, NYC Transit is responsible for this oversight function; however, none of the officials OIG spoke had taken on this responsibility. The Fleet Manager told OIG that he lacked the staff resources to monitor the system for these events, and the individual departments were responsible for doing so. However, Liaisons from four departments told OIG they do not check FleetTrack for these events; in fact, two Liaisons believed the Fleet Manager would monitor the system for disconnections.

The Fleet Manager explained that he had identified – and reported to LB – 14 device outages since the rollout of LB technology began. Notably, he learned of these disconnections through a mileage tracking report generated not from FleetTrack, but from a separate information system intended for a different purpose. After receiving each outage report, LB dispatched a technician to diagnose and fix the problem. Further, the Fleet Manager investigated each event to identify its root cause. Of the 14 disconnections, he found that 12 occurred because a NYC Transit or third-party technician disconnected the transponder during routine maintenance or servicing and then failed to reconnect it correctly. In the two remaining instances, the Fleet Manager could not pinpoint why the device became disconnected. This example highlights the importance of ongoing vehicle usage monitoring, and also indicates that maintenance technicians require training and regular reminders about how to service vehicles with transponders properly. If the Fleet Manager had not alerted LB to the disconnections, these vehicles might have remained “invisible” to the departments and to Fleet Services.
OIG learned that NYC Transit (and the other operating agencies) could ask LB to create (1) a FleetTrack alert to signal when a vehicle’s device has stopped transmitting data, and (2) a report on all disconnected devices for a certain timeframe, e.g., the prior week or month. The alert would allow the agency to identify a vehicle with a disconnected transponder immediately, and the report would give management periodic summary information about these events. However, NYC Transit had not asked LB to implement these useful features.

2. **Speeding Events**

OIG found that FleetTrack’s method of capturing speeding events did not accurately capture occurrences of speeding in ways that would be useful for management purposes. This was unknown to NYC Transit personnel.

FleetTrack calculates speeding by comparing the time it takes a vehicle to travel between two points in one minute and the speed limit for that stretch of roadway. This method both undercounts and exaggerates speeding.

- **Undercounting**: A transponder sends data on the vehicle’s speed to LB’s servers once per minute. However, a driver must be exceeding the posted speed limit at the precise data-capture moment for FleetTrack to record a speeding event. Thus, FleetTrack may not record a speeding event if the driver speeds for 59 or fewer seconds.

- **Exaggeration**: FleetTrack documents speeding in individual increments based on the one-minute standard. Therefore, if a vehicle speeds for five consecutive minutes, FleetTrack will record five separate speeding events. In addition, the system records a separate event each time a speeding vehicle turns at a significant angle (25 degrees or greater) and continues to speed. This can also produce illogical results; for example, OIG found that because a driver made multiple harsh turns while speeding on a curvy road, FleetTrack documented the vehicle as speeding 21 times in less than 20 minutes, including five times in a single minute. While this driving behavior might well be troubling, the data documenting it could seem nonsensical to a person with oversight responsibilities.

These methods of documenting speeding events are neither intuitive nor useful for oversight purposes. However, OIG learned that LB could create a fairer and more accurate way for the agency to identify risky speeding behaviors. For example, an LB official told OIG that upon request, LB could design a report documenting the duration of each speeding event. Such a report could also include instances when a driver’s speeding is of concern to management, e.g., repeated and extended periods of speeding more than 10 mph above the posted limit, and LB could adjust FleetTrack to develop the appropriate alerts and reports. This would allow the
agency to focus on the behaviors presenting the greatest driving risk to agency employees and other roadway users.

When OIG discussed this finding with NYC Transit officials, they agreed that the agency should develop a formal process to identify vehicles with a disconnected transponder device and take appropriate action, and to remind technicians of the importance of reconnecting devices after servicing. The officials also agreed that the agency should work with the vendor to revise FleetTrack so that it measures and documents speeding in more useful ways.

E. NYC Transit Should Plan to Use FleetTrack to Document Drivers’ Identity

Many organizations with AVLM-equipped vehicles require every driver to swipe or tap a unique ID card before starting a vehicle; otherwise, an alarm will sound. (In more restrictive fleet-management systems, the vehicle will not start unless the driver has successfully swiped in.) Within the MTA, both MNR and LIRR drivers must swipe their employee ID cards when starting a vehicle; the card reader captures the driver’s information via a radio-frequency identification (RFID) chip embedded in the ID and the transponder transmits the information back to the LB servers for recording in FleetTrack.

OIG learned that unlike the commuter railroads’ employee ID cards, NYC Transit cards do not contain RFID chips but use near-field communication (NFC) technology instead. Unfortunately, LB’s card-reading technology is not compatible with NFC cards; therefore, NYC Transit drivers do not swipe in when using a vehicle.

The lack of electronic driver identification limits management’s ability to readily monitor employees’ productivity, accountability, and proper vehicle use. Without swiping technology, FleetTrack can report on excessive idling and risky driving-related behaviors only by vehicle, not by individual driver. Therefore, agency personnel cannot use the system to verify that individual drivers are where they say they are, to determine whether employees are using the vehicles for appropriate and efficient work, and to quickly identify the driver in case of an accident or citation. OIG learned that to identify drivers who have been involved in an accident, Liaisons must consult the paper Mileage Logs, which is a laborious task. If the agency decides to monitor idling or risky driving-related behaviors, the Liaisons will need to use the Mileage Logs to identify specific drivers exhibiting troubling behaviors – until the agency installs swiping technology.

When OIG discussed this finding with agency officials, the Fleet Manager said that given the current technological constraints, requiring drivers to swipe in is not feasible. He further explained that agency executives decided not to spend the money to equip the highway vehicles
with RFID card readers – and issue new ID cards to all potential drivers – because they understood that in several years all employees’ cards will be replaced by new One Metro New York (OMNY) ID cards, which use RFID technology. When that occurs, the officials expect to install OMNY-compatible card readers and require drivers to swipe into the system. NYC Transit officials agreed that they should start planning now, to enable the agency to quickly implement a driver-identification mechanism once all employees have an OMNY card.

**IV. RECOMMENDATIONS**

NYC Transit management should:

1. Assign ultimate responsibility for monitoring and reducing excessive idling and risky driving-related behaviors to an NYC Transit executive.

   *Agency Response: Agree. The agency’s response to the Draft Report states that the responsibility will be assigned to one or more leaders by Q1 2024.*

2. Consult with counterparts in MNR, LIRR, Bridges and Tunnels, and MTA Headquarters to establish reasonable consistency, where possible, among the agencies’ metrics, goals, and policies regarding highway fleet usage.

   *Agency Response: Agree. The agency expects to complete implementation by Q4 2024.*

3. Require each operating unit’s Liaison to monitor FleetTrack and provide reports to Fleet Management on potential unsafe drivers or excessive idling to management.

   *Agency Response: Agree. NYC Transit’s response further states, “Processes and procedures will need to be put in place prior to the full implementation of this recommendation planned for Q4 2024.***

4. Amend New York Transit Policy/Instruction 2.3.2, *Assignment and Use of Support Fleet Vehicles*, to define (1) excessive idling and risky driving-related behaviors, (2) the circumstances when excessive idling is permitted, and (3) the actions NYC Transit will take if excessive idling or risky driving-related behaviors are identified.

   *Agency Response: Agree. Further, NYC Transit “will work with MTA Headquarters to develop an All-Agency policy by Q4 2024.”*

5. Establish procedures to monitor excessive idling and risky driving-related driver behaviors and to support appropriate action when needed.

   *Agency Response: Agree. The agency “will determine and utilize the available
functionality of the LB software to monitor driving and idling.” In addition, NYC Transit “will develop procedures based on system functionality for monitoring excessive idling and identifying risky driver related behavior once related All-Agency Policies have been established by Q4 2024.”

6. Develop metrics to quantify excessive idling and establish annual idling reduction goals for each department within NYC Transit.

Agency Response: Agree. The agency will “work with MTA HQ to develop metrics by Q4 2024 for all applicable vehicles.”

7. Working with LB, develop a vehicle misuse profile that can be used to identify drivers who regularly exhibit poor habits like excessive speeding or consistent harsh acceleration or braking. Management should create a process for using the profiles to initiate deeper inquiry and corrective action as needed.

Agency Response: Agree. NYC Transit “will evaluate current LB reports by Q4 2024 for appropriate criteria in determining poor driver habits such as excessive speeding, harsh acceleration or braking. The NYC Transit Lead(ers) will develop a misuse profile and will assess available correction actions in compliance with the [MTA] HQ All Agency Policy.” No expected implementation date was provided.

8. Design reports in FleetTrack to help achieve the reduction goals mentioned in Recommendation 6.

Agency Response: Agree. “NYCT will review, modify, and work with LB Technology for reports consistent with the establishment of the All-Agency Policies in an effort to reduce excessive idling on applicable vehicles.” No expected implementation date was provided.

9. Develop a mechanism to give drivers feedback about excessive idling and risky driving-related behaviors.

Agency Response: Agree. However, the agency response states, “Development of this process is contingent on the full implementation of OMNY or another system to identify drivers. Additional funding may be needed for this project for vehicle modifications, hardware and software. NYC Transit will update the OIG on full implementation as soon as practicable.”
10. Work with LB Technology to provide FleetTrack training to Liaisons and other relevant NYC Transit staff.

   *Agency Response: Agree. The agency expects to complete implementation by Q2 2024.*

11. Establish a standardized training curriculum across the departments and offer annual refresher training.

   *Agency Response: Agree. The agency “will work with MTA Headquarters to establish training and offer annual refresher training. NYC Transit will update the OIG on full implementation as soon as practicable.”*

12. Develop a formal process to identify vehicles with a disconnected transponder device and take appropriate action.

   *Agency Response: Agree. The agency expects to complete implementation by Q1 2024.*

13. Remind all technicians to reconnect the transponder device after servicing or repair work.

   *Agency Response: Agree. The agency expects to complete implementation by Q1 2024.*

14. Work with LB Technology to create a FleetTrack speeding report that measures the duration of excessive speeding.

   *Agency Response: Agree. The agency expects to complete implementation by Q2 2024.*

15. Develop a plan to implement a driver-identification mechanism once all employees have an OMNY-equipped ID card.

   *Agency Response: Agree. “The feasibility of a driver-identification mechanism is dependent on OMNY’s full implementation and placed in service by all agencies where employees are issued an OMNY-equipped ID card. NYC Transit will update the OIG on a plan when OMNY is fully implemented.”*

   *The agency’s response also states that NYC Transit “will require significant internal resources and additional operating funding to properly implement these recommendations.”*