I. EXECUTIVE SUMMARY

The Office of the MTA Inspector General (OIG) has long had an interest in how well the Metropolitan Transportation Authority’s (MTA) operating agencies manage employees’ vehicle use while on the job. In some cases, OIG has found that employees have neglected their duties while idling in agency vehicles during work hours. Thus, in addition to idling’s environmental and financial costs, it can raise concerns about productivity and accountability. Further, unsafe driving – as evidenced by speeding, harsh acceleration, and harsh braking – 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, OIG issued a report examining how Long Island Rail Road (LIRR) and Metro-North Railroad were managing unnecessary idling within their respective highway fleets, e.g., cars and sport utility vehicles. The OIG report identified weaknesses in both agencies’ identification of and response to instances of excessive idling resulting in harmful emissions and thousands of dollars of wasted fuel per month. In 2018, in a follow-up report on LIRR’s vehicle oversight program, OIG found that while the agency had taken some steps since 2012 to improve its monitoring of vehicle usage, deficiencies persisted. In 2023, OIG initiated another follow-up review, finding that both idling and safety-related behaviors are still a concern.

A. Summary of Findings and Recommendations

- **Idling and safety-related behaviors continue to occur at concerning levels.** Data on LIRR employees’ vehicle usage is captured in an Automatic Vehicle Location and Monitoring (AVLM) system called FleetTrack. OIG analyzed FleetTrack data for the month of March 2023. To focus on extended periods of idling, which were 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 (“excessive idling”). The analysis revealed that the vehicles in the departments with more than 10 highway vehicles idled for an average of 19% of the time their engines were running (their “engine hours”).

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).
The Communications department’s vehicles had the highest proportion of excessive idling in March, at 33% of their engine hours. In addition, OIG’s analysis of two safety-related indicators, harsh braking and harsh acceleration, showed differences among operating departments that might indicate variations in the types of traffic conditions their drivers encountered. However, management would benefit from identifying employees who repeatedly show above-average levels of these behaviors and taking action to reduce any safety risks.

- **LIRR did not fully implement two recommendations from 2018.** In response to OIG’s 2012 report, the agency updated its internal policies and procedures and also clarified the roles of those responsible for vehicle oversight. In response to the OIG’s 2017-18 follow-up review, LIRR agreed to implement OIG’s six recommendations. However, the current review determined that two recommendations had not been fully addressed. First, the agency’s revised policies still did not sufficiently define the duties required of executives, the Vehicle Fleet Office (VFO), and the operating departments’ Vehicle Coordinators (Coordinators) in monitoring idling. Second, LIRR had not developed goals and metrics to allow the agency to track its progress in reducing unnecessary idling.

- **LIRR personnel did not fully utilize FleetTrack’s capabilities** to monitor and report on driving behaviors. For example, some Coordinators were not aware of instances when employees did not tap their identification card on the vehicle’s card reader to sign in, even though the employees are required to do so. In addition, Coordinators did not regularly use FleetTrack to flag potentially unsafe behaviors. To help reduce unnecessary risks, the agency should perform periodic analyses and design reports to identify risky behavior. LIRR should also develop a mechanism for managers to give feedback to employees whose driving patterns are of concern.

- **Two data-related issues diminish FleetTrack’s reliability and deserve managerial attention.** OIG found two areas in which the AVLM system did not provide either complete or 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, typically when a vehicle undergoes service or inspection. When this occurs, the vehicle cannot transmit any location information or operating data such as speed, engine hours, idling, etc. OIG found that LIRR did not have an efficient, reliable way to identify these disconnections and arrange to fix them; the agency has since improved this process. The second issue concerned the measurement of speeding events, which were tallied in one-minute intervals rather than by a more useful metric. The agency should work with the contractor to develop solutions that will make FleetTrack more useful and reliable.
When OIG discussed its findings with the agency, an LIRR official explained that a new policy was developed in February 2019, when LIRR was using the previous AVLM software. Before creating the new procedures to monitor idling, the agency underwent the long process of contracting with their new vendor. Then, before the FleetTrack system could be fully implemented, the Covid-19 pandemic added a new source of disruption. All these factors prevented the agency from addressing the reduction in unnecessary idling and resulted in the incomplete implementation of the agreed-upon recommendations.

In its efforts to monitor vehicle usage, LIRR centralized some oversight authority while delegating key duties to the VFO and departmental Coordinators. With clarification of expectations and guidance from central management, the departments could better manage excessive vehicle idling, and curb risky driving behavior.

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

II. BACKGROUND

A. LIRR Non-Revenue Highway Fleet

OIG’s review focused on 233 vehicles that weigh less than 8,500 pounds and which are used for purposes such as inspecting and maintaining far-flung equipment and facilities efficiently, or responding to the site of an accident. These vehicles, LIRR’s “highway fleet,” are passenger cars, sport utility vehicles, vans, and trucks.2

The LIRR VFO assigns vehicles to the departments and executives based on the agency’s operational needs. VFO personnel review the vehicles’ usage to ensure they receive scheduled maintenance and any necessary repairs; in addition, as needed, VFO reassigns or retires underused vehicles.

LIRR vehicles fall into two general categories: personally assigned vehicles (PAVs) and pool vehicles. PAVs are assigned to individual employees whose positions require 24/7 emergency response and/or who frequently travel to work sites; these drivers are usually divisional heads and other managers. Pool vehicles are not assigned to a specific person;

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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.
whoever is assigned to be the driver on a given day, or for a defined period, is responsible for the use of the vehicle and must tap in their employee ID card before operating the vehicle.

B. AVLM Transponders and the FleetTrack Information System

In 2021, MTA contracted with LB Technology Inc. (LB) to implement an all-agency AVLM system providing secure access to many concurrent users. The contract value was $4.03 million for a five-year period with two one-year options.

During the implementation at LIRR, LB provided in-vehicle transponders and card readers, as well as 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 its internal electronic system. The transponder collects information about the vehicle’s location, mileage, speed, and other operational data and uses the cell tower network to transmit it back to LB servers for recording in the FleetTrack database.

LIRR completed the implementation in early November 2021, and the agency’s entire highway fleet is now equipped with card readers and transponders.

C. FleetTrack Reports

FleetTrack records driving patterns and manages real-time data from the transponders. It allows LIRR to locate its vehicles and monitor their usage and condition. According to the terms of its contract with MTA, LB is responsible for training employees on how to use the system and for creating FleetTrack reports specifically tailored to LIRR’s needs. For example, VFO regularly runs reports to identify vehicles that will soon need scheduled maintenance, or vehicles that have not been driven recently (and thus may be due for reassignment or removal from the fleet).

OIG learned that FleetTrack also allows users to track idling, safety-related behaviors, and other metrics in real time. Of the system’s many available metrics, OIG’s review focused on these:

- Unnecessary or excessive idling, calculated from when the engine is turned on and the vehicle does not move for five minutes or more. OIG’s analysis focused on the portion of the idling in excess of the first five minutes. This allowed us to exclude short, intermittent events such as stopping at traffic lights.

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3 OIG participates in MTA's contract with LB to manage its own vehicles.
4 Several of the recommendations in OIG’s 2018 report concerned the prior vendor, BSM, and its information system, Sentinel.
• Speeding.
• Harsh acceleration and harsh braking: an increase or decrease in speed greater than seven miles per hour per second.

D. Relevant Laws, Policies, and Procedures

The 2009 New York City Anti-Idling Law prohibits motor vehicles from idling for more than three minutes. 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 idling for vehicles under 8,500 pounds; however, idling for longer than five minutes is prohibited for heavy-duty vehicles at or above that weight.

The MTA Policy states that drivers of agency-owned vehicles “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. LIRR’s 2019 policies – ENG-005, Passenger and Work Vehicle Assignment and Use (ENG-005), and ENG-008, Vehicle Operations Policy (ENG-008) – pertain to the monitoring of idling and safety-related behaviors, among other topics. In accordance with the policies, the Chief Engineer sends out a yearly bulletin directing LIRR drivers to comply with City and State idling laws and the agency’s requirement to “swipe in” before operating a vehicle.

III. FINDINGS

A. Idling and Safety-Related Behaviors Occur at Concerning Levels

To determine LIRR vehicles’ levels of excessive idling, as well as speeding, harsh acceleration, and harsh braking, OIG analyzed FleetTrack data for March 2023 for the 233 vehicles that weighed up to 8,500 pounds and were not providing power to another piece of equipment. The analysis revealed that LIRR drivers displayed considerable excessive idling and safety-related behaviors that are concerning.

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5 NYC Administrative Code, Title 24 § 24-163. The limit drops to one minute in areas adjacent to a school.
6 New York State Code of Rules and Regulations, Title 6 § 217-3.2.
7 A vehicle must idle while serving in this auxiliary role, known as “Power Take-Off” or PTO.
1. **Excessive Idling**

Ten LIRR departments were assigned more than 10 highway vehicles in March 2023, for a combined total of 183 vehicles – 78.5% of LIRR’s highway fleet. OIG’s analysis focused on these departments and vehicles.

As Table 1 shows, the vehicles for these 10 departments idled for an average of 19% of their engine hours during March. This proportion was highest, at 33%, in the Communications department, which uses 24 vehicles. The Track department and Safety department had ratios of 24% and 21% respectively for the month.

<table>
<thead>
<tr>
<th>Department with &gt;10 Vehicles</th>
<th>No. of Vehicles</th>
<th>Engine Hours</th>
<th>Excessive Idling in Hours</th>
<th>Excessive Idle Time as Percent of Engine Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>24</td>
<td>526.43</td>
<td>172.93</td>
<td>33%</td>
</tr>
<tr>
<td>Track</td>
<td>29</td>
<td>1,431.95</td>
<td>348.19</td>
<td>24%</td>
</tr>
<tr>
<td>Safety</td>
<td>11</td>
<td>297.21</td>
<td>62.54</td>
<td>21%</td>
</tr>
<tr>
<td>Transportation</td>
<td>20</td>
<td>511.99</td>
<td>97.60</td>
<td>19%</td>
</tr>
<tr>
<td>Stations</td>
<td>30</td>
<td>1,753.65</td>
<td>328.78</td>
<td>19%</td>
</tr>
<tr>
<td>Structures</td>
<td>18</td>
<td>723.67</td>
<td>99.50</td>
<td>14%</td>
</tr>
<tr>
<td>Power</td>
<td>17</td>
<td>385.98</td>
<td>43.67</td>
<td>11%</td>
</tr>
<tr>
<td>Construction &amp; Development Business Unit</td>
<td>11</td>
<td>125.74</td>
<td>7.46</td>
<td>6%</td>
</tr>
<tr>
<td>Maintenance of Equipment (MofE)</td>
<td>11</td>
<td>132.37</td>
<td>7.48</td>
<td>6%</td>
</tr>
<tr>
<td>Pool</td>
<td>12</td>
<td>228.44</td>
<td>12.85</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>183</strong></td>
<td><strong>6,117.43</strong></td>
<td><strong>1,181.00</strong></td>
<td><strong>19%</strong></td>
</tr>
</tbody>
</table>

It is likely that the operating departments use their vehicles differently, in different environments, to meet LIRR’s business needs. However, because excessive idling raises potential concerns about employees’ productivity and accountability, variations among departments might indicate behaviors that could warrant follow-up.

2. **Harsh Acceleration & Braking**

For the same 10 departments, OIG analyzed FleetTrack data on harsh acceleration and harsh braking; these behaviors can waste fuel and might indicate unsafe driving habits. The analysis revealed that in March 2023, Track, Structures, and the Construction & Development
Business Unit 8 had the highest per-vehicle rates of harsh acceleration. As an example, an acceleration event – when a vehicle’s speed increases more than seven miles per hour per second – might occur when a driver merges safely onto a highway; however, the data showed significant variations among the departments. Most notably, the 29 Track vehicles had a combined 603 harsh acceleration events, while the 30 Stations vehicles had only 283 events – less than half. This discrepancy might be caused by the behaviors of just a few drivers or might reflect a more systemic difference between the two groups’ driving habits or environments. If it is the former, precautions could be taken to reduce risky behavior.

Regarding harsh braking – defined as a vehicle slowing by more than seven miles per hour per second – OIG found that the Track, Stations, and Structures departments had the highest per-vehicle rates during the month. Notably, the harsh braking rates were lower than for harsh acceleration; for example, Track vehicles showed an average of 21 acceleration events and only 11 braking events. While it might indicate that a driver is driving defensively and safely, it might also be a sign that the driver has been following another vehicle too closely. As with harsh acceleration, the figures for Track and Stations differed greatly: the 29 Track vehicles had a combined 312 harsh braking events, while the 30 Stations vehicles had only 213 events – one-third less.

FleetTrack data is available on the behavior of drivers who have complied with LIRR’s requirement to tap their ID card before starting the vehicle. OIG performed some preliminary analyses of individual drivers’ behavior and shared the results with LIRR managers, who agreed that the information could be useful. However, with hundreds of active vehicles, LIRR managers said they would want to focus on drivers showing the greatest levels of excessive idling or risky driving behaviors that cannot be readily explained by obvious factors such as weather, density of work area, or assignment. Reviewing reports on driver behavior on a regular basis would allow supervisors and managers to identify and counsel employees who might present an above-average safety risk to themselves and other road users.

3. **Unknown Drivers**

As noted above, LIRR policy requires that before beginning a trip, the driver must tap their agency ID badge against a card reader mounted on the dashboard of the vehicle. If the badge is authenticated, the light on the reader turns green. However, if a driver does not tap in before beginning the trip, the reader will make a buzzing sound, which will continue until the employee taps in. After 10 minutes, the sound will cease.

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8 This LIRR unit, formerly known as the Department of Program Management, manages the agency’s capital projects.
Despite the clear policy directive, OIG’s analysis revealed a number of cases in which drivers could not be identified in FleetTrack, either because a driver did not tap their ID card, or a card reader was out of order. The system assigns these instances to an “unknown driver” for reporting purposes. In March 2023, these unknown drivers accounted for over 156 hours of excessive idling time – 11.5% of the excessive idling for the agency as a whole. Unidentified drivers also accrued 6.7% of the harsh acceleration instances and 9.5% of the harsh braking events for the month.

Unknown drivers in the Communications department had the highest number of excess idling hours for the month; at 58 hours, this represented more than 10% of the group’s engine hours and one-third of the group’s excessive idling. Without knowing who was driving these vehicles, Communications managers could not determine whether corrective action was necessary to hold one or more drivers accountable.

Regarding safety-related behaviors, unknown drivers in the Mail department – which has only four vehicles – had the most instances of both harsh acceleration and harsh braking. The Track group, with 29 vehicles, had the second-highest number of both types of behavior, though at significantly lower levels. This wide disparity indicates that the agency should review the data for accuracy and possible action – either to give the departments feedback or to determine whether the card readers were operating as intended.

Most of the Vehicle Coordinators and supervisors whom OIG interviewed explained that they investigate “unknown driver” instances only when a driver has incurred a parking or speeding infraction, or when law enforcement has been involved in a vehicle-related incident. (In these cases, the relevant Coordinator must take several steps to identify the driver, who – in accordance with LIRR policy – is responsible for paying the fines.) However, in an example of more proactive oversight, the Engineering Coordinator highlights all the “unknown driver” occurrences when completing his monthly reports, to allow managers and supervisors to take action regarding individual drivers when needed.

In discussions with LIRR officials, OIG has identified several reasons why the incidences of risky behaviors were not being addressed.
B. Follow-Through Was Lacking on Past Recommendations and Changes to Policy

1. Assignment of Responsibility

Recommendation #1 from OIG’s 2018 report stated, “LIRR should assign ultimate responsibility for reducing unnecessary idling to an operational executive who will oversee and be accountable for idling management. The executive should be the point person for program guidance and should have sufficient authority to administer and enforce policies and procedures as needed to make the idling program continually effective and efficient.” In response, LIRR designated the Chief Engineer as the executive in charge. The Chief Engineer’s primary role regarding idling is to send an annual corporate memo to the department heads reminding department Coordinators to promote compliance with State and City vehicle idling laws and related LIRR policies and procedures.

According to policy ENG-008, which was amended after the 2018 OIG report, VFO was assigned centralized authority as the facilitator in monitoring idling. Its important role included such duties as providing general oversight to the departments; establishing and maintaining a list of Vehicle Coordinators; ensuring that all Coordinators received FleetTrack training, had access to the system, and were aware of the reports available; and notifying the Chief or Coordinators about the departments’ compliance with policy.

At the departmental level, ENG-008 specifically states that Coordinators should: “On a monthly basis or more, run various available reports to monitor and review driver ID taps, idling, and other relevant information available in the AVLM system and provide to Department supervision. They should also work with departments to resolve any issues and ensure compliance with LIRR corporate policies and Idle Laws.”

OIG found deficiencies at each level of responsibility. Most significantly, nine of the 10 Coordinators OIG interviewed did not use FleetTrack to monitor idling; they primarily used it for locating vehicles, confirming accident reports, and investigating speeding tickets and other traffic violations. Only two of the 10 Coordinators received alerts or notifications from FleetTrack regarding idling. Even in those two cases, the Coordinators were not providing feedback to drivers regarding concerning behaviors, and there were no guidelines in place describing when corrective action or discipline might be warranted.

OIG also found that VFO was not fully performing all its assigned duties. The Coordinators told OIG that they did not discuss idling with VFO, and VFO did not follow up with managers or the Coordinators regarding excessive idling. Further, VFO did not work with
department heads to determine who should be assigned to the Coordinator role. OIG also
learned that VFO did not inform the departments when useful new idling reports became
available in FleetTrack.

A lack of clear guidance from VFO and Engineering resulted in the inconsistent ways in
which vehicle Coordinators understood and carried out their responsibilities. In short, LIRR had
not created either an effective process to identify questionable vehicle usage or an enforcement
mechanism.

- **Training**

  OIG also found that LIRR personnel did not fully utilize the FleetTrack training sessions
  that LB offered. The MTA all-agency contract states that training must be provided to each
  agency and describes a train-the-trainer approach. An LB representative told OIG that LB staff
  provided a training schedule to LIRR staff and conducted some in-person classes. For the first
  month following the system implementation, training was held in person, followed by regularly
  scheduled online sessions. OIG learned that four of the 10 Coordinators had not yet had online
  training, and three of the four had not received training at all.

  Section 4C.1 of policy ENG-008 states that Corporate Training should “[d]evelop and
  provide all training programs deemed necessary by the Policy, including but not limited to
  relating to laws, regulations and corporate policies related to Vehicle idling and proper Vehicle
  use and operation.” An LIRR training official told OIG that agency instructors discuss the New
  York State idling law during the defensive driving class required for employees who will drive
  agency vehicles. However, the training does not address LIRR’s requirement that drivers tap
  their ID cards before starting a trip.

  Moreover, OIG found that the assignment of many responsibilities was unclear in policies
  ENG-005 and ENG-008; in addition, the documents still referred to the prior AVLM system,
  Sentinel. When OIG discussed this finding with the agency, LIRR officials said they planned to
  update and clarify the policies to address these limitations.

2. **Development of Goals & Metrics**

  Recommendation # 6 from OIG’s 2018 report stated, “LIRR should develop metrics to
  quantify unnecessary idling and should establish idling reduction goals for LIRR’s highway
  vehicle fleet, in anticipation of implementing a new system capable of accurately and reliably
  capturing idling data.” In response, LIRR agreed and proposed specific metrics on: (1) the ratio
  of fuel consumption to miles traveled; (2) time spent idling as a percentage of the time a highway
  vehicle operates; (3) the average amount of time highway vehicles idle per day.
Despite the agency’s stated plan, OIG learned that LIRR did not establish these agency-wide metrics. In addition, VFO did not work with departments to develop goals and metrics for their own highway fleet operations. None of the 10 Coordinators OIG interviewed had performance standards for their respective departments.

3. Development of Oversight Procedures

Policy ENG-008 states that Coordinators should have written Standard Operating Procedures (SOPs) to address such topics as reminding drivers about vehicle idling restrictions before operating a vehicle; generating various monthly reports; documenting employees’ acknowledgment of discussions with supervisors; and supervisors’ tracking of violations and corrective actions, discipline, or loss of driving privileges. The new SOPs should also include how to identify trends and patterns by driver and vehicle, which can be used in developing a strategy to address and mitigate idling.

However, OIG found that most of the departments did not create procedures for identifying patterns of excessive idling, or a method to report to VFO on those results. This deficiency prevented departments from determining whether idling had increased or decreased over time and from identifying drivers with repeated instances of excessive and unnecessary idling. In a notable exception, OIG learned that in another instance of the Engineering department’s more proactive stance in overseeing its employees’ vehicle usage, the Engineering Coordinator regularly analyzed idling for its departments, including Track, Power, and Signal. However, he told OIG that he did not receive any feedback from the department heads when he shared his monthly reports with them.

When OIG discussed this finding with the agency, an LIRR official explained that Policy ENG-008 was developed in February 2019, when LIRR was using Sentinel. Before creating the SOPs, the agency underwent the long process of contracting with the new vendor, LB. Then, before the FleetTrack system could be fully implemented, the Covid-19 pandemic added a new source of disruption. All these factors prevented the agency from prioritizing the reduction in unnecessary idling and resulted in the incomplete implementation of the agreed-upon recommendations.

C. LIRR Should Address Data Quality Issues in FleetTrack

OIG identified two areas where LIRR and LB Technology should collaborate to improve the accuracy and usefulness of FleetTrack data.
1. **Disconnected Devices**

   Of the 233 highway vehicles included in OIG’s analysis in March 2023, FleetTrack showed no engine hours for 43 vehicles, or 18%. Transportation and Communications had the highest number of these vehicles, with nine and seven respectively. Some of the vehicles may not have been driven at all during the month; for example, OIG learned that nine of them were unneeded rental vehicles that LIRR had returned to the rental companies – but they still appeared on the FleetTrack roster.

   In contrast, some or all of the other 34 vehicles may have been in use in March. OIG learned that, at times, the transponder installed in a vehicle stops transmitting information about location, engine hours, miles driven, idling events and duration, speeding, harsh acceleration, and harsh braking. These data interruptions are typically caused when mechanics disconnect the transponder during routine maintenance and then neglect to reconnect it correctly. Rarely, a transponder experiences a malfunction that causes a loss of power, and in a very slim minority of cases, there are indications of possible tampering with the device.

   An LIRR official told OIG that when a transponder loses power, it is important for management and/or VFO to take action as quickly as practicable to bring the vehicle back into view. However, OIG found that the corrective process was somewhat informal: LIRR managers and supervisors relied on the drivers to let them know of an issue with a vehicle or a transponder. However, in some cases the driver might see no indication of a disconnection. If a driver alerted management to a problem, a manager or Coordinator notified LB about any issues with the device. LB then worked with their subcontractors to send technicians to LIRR locations to repair and/or reconnect the devices. This multi-step communication process could take time. In a positive development, an LB official informed OIG that in early 2023 the company created an online case management portal for LIRR personnel to create and send electronic “trouble tickets” directly to LB, instead of having to call in for service repairs.

   OIG found that LIRR did not effectively monitor the disconnection of the transponders. No designated staff within VFO or Engineering were responsible for (1) analyzing the device-disconnection issues that LB reported, or (2) proactively reviewing FleetTrack vehicle utilization reports, which could identify vehicles that had stopped reporting data. This hindered LIRR’s ability to get complete and accurate reports on its highway fleet for the purpose of preventive maintenance as well as for the oversight of excessive idling and safety-related driving behaviors.

2. **Unreliable Data on Speeding Events**

   OIG found that FleetTrack’s speeding-related data did not describe speeding events in a way likely to be useful to management. This was unknown to LIRR.
FleetTrack calculates speeding by comparing the time it takes a vehicle to travel between two points in one minute to 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 vehicle 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) and continues to speed.

These methods of documenting speeding events are neither intuitive nor useful for oversight purposes. However, OIG learned that LB could create a 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 particular 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 safety risk to agency employees and other roadway users.

When OIG discussed its findings with LIRR officials, they explained that because some idling is acceptable – or even necessary – in emergency situations or to protect employees from adverse weather conditions, managers would need to focus on employees with above-average levels of idling. The same is true for speeding and safety-related behaviors, which may indicate appropriate defensive driving. Therefore, they said that if FleetTrack reports could highlight drivers with repeated unnecessary idling and poor safety-related behaviors, the personnel monitoring vehicle usage could spend their time addressing potentially significant risks.
IV. RECOMMENDATIONS

A. Follow-Through on MTA OIG 2018 Report

LIRR should:

1. Establish metrics and goals for idling and safety-related behaviors.

   Agency Response: Accept. The agency’s response to the Draft Report states that LIRR will consult with the vendor, establish “feasible and appropriate metrics and goals” and “work with our counterparts at our other MTA Agencies to establish a consistent approach where possible.” The agency expects to complete implementation in Q2 2024.

2. Consult with counterparts in Metro-North Railroad, New York City Transit, 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: Accept. The agency expects to complete implementation in Q2 2024.

3. Reinforce the Vehicle Fleet Office’s role as facilitator and communicator.

   Agency Response: Accept. “The LIRR is currently in the process of undergoing a reorganization of various key roles and responsibilities. Concurrently, vehicle-related Policies and Procedures are being reviewed. Respective key roles and responsibilities are being identified and evaluated to ensure they are appropriately assigned. Once complete, the VFO’s and other related party roles will be reinforced via the new reporting structure and updated Policies and Procedures.” Implementation expected in Q3 2024.


   Agency Response: Accept. The agency expects to complete implementation in Q3 2024.

5. Train vehicle coordinators on their responsibilities, including the regular use of key FleetTrack reports.

   Agency Response: Accept. The agency expects to complete implementation in Q3 2024.
6. Work with LB Technology to develop a driver safety profile to identify employees who regularly exhibit poor driving 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: Accept. The agency expects to complete implementation in Q3 2024.

7. Develop a mechanism to give drivers feedback about excessive idling and safety-related behaviors.

Agency Response: Accept. The agency expects to complete implementation in Q3 2024.

8. Establish guidelines to identify unknown drivers on a regular basis and to outline appropriate actions for vehicle coordinators and management to take.

Agency Response: Accept. “LIRR will work with the vendor to ensure compliance with the contract requirements as it relates to correct equipment installation on our fleet and that meaningful reporting tools are available in the system to identify and report unknown drivers so that departmental coordinator(s) can make informed decisions and take appropriate action.” Implementation expected in Q2 2024.

9. Determine the appropriate use of alerts and notifications from FleetTrack.

Agency Response: Accept. The agency expects to complete implementation in Q2 2024.

10. Update policies ENG-005 and ENG-008 as needed.

Agency Response: Accept. The agency expects to complete implementation in Q3 2024.

B. New Issues

To address new and developing issues, LIRR should:

11. Assign the responsibility for identifying device-disconnection incidents to the Vehicle Fleet Office or the vehicle coordinators and provide training as needed.

Agency Response: Accept. The agency’s response states, “This is currently the responsibility of the VFO. Upon implementation of above Recommendations, the VFO will ensure departmental coordinator(s) understand their responsibilities as it
relates to device-disconnection incidents.\)” The agency expects to complete implementation in Q3 2024.

12. Discuss with LB Technology how to identify device-disconnection incidents and take appropriate action. This includes training maintenance technicians on the importance of reconnecting transponders after disconnection for any reason and informing the Vehicle Fleet Office of incidents requiring managerial attention.

Agency Response: Accept. The agency expects to complete implementation in Q1 2024.

13. Discuss with LB Technology methods to improve the accuracy and reliability of data on speeding events.

Agency Response: Accept. The agency expects to complete implementation in Q2 2024.