

Audit Report

# Vehicle Purchase and Replacement

January 2020



We noted several issues with how Fleet Mobility Services (Fleet) replaces and buys vehicles. Fleet previously lacked data to effectively identify vehicles to be replaced and did not always replace vehicles when appropriate. Additionally, we did not find evidence that Fleet considered alternatives to buying vehicles when departments submitted requests for new vehicles. We also did not see evidence that Fleet considered if the vehicle requested by a department was the right vehicle. The department is adding new technology which they expect to improve these processes.

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Cover: Austin Transportation vehicle, @AustinTexasGov Twitter, June 2019.

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## Objective

Are Fleet's purchase and replacement decisions made in a way that balance departmental needs, usage, costs, and environmental sustainability goals?

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## Background

Many City employees need vehicles for their jobs. Fleet Mobility Services (Fleet) is responsible for making sure City employees have access to safe and reliable vehicles and that departments get vehicles in a timely, cost-effective, and environmentally responsible manner. Fleet manages the process of buying a new vehicle when a department needs to replace an old vehicle or add a vehicle to their fleet. The City's fleet consists of about 6,600 vehicles and other equipment, including 140 electric vehicles. Fleet plans on buying around 550 new vehicles in fiscal year 2020, most of which are intended to replace current City vehicles.

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## What We Found

### Summary

We noted several issues with how Fleet Mobility Services (Fleet) replaces and buys vehicles. Fleet previously lacked data to effectively identify vehicles to be replaced and did not always replace vehicles when appropriate. Additionally, we did not find evidence that Fleet considered alternatives to buying vehicles when departments submitted requests for new vehicles. We also did not see evidence that Fleet considered if the vehicle requested by a department was the right vehicle. The department is adding new technology which they expect to improve these processes.

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### Finding 1

Fleet previously lacked data to effectively identify when vehicles might need to be replaced and did not always replace vehicles when it was appropriate.

Fleet creates a list of vehicles each month that need to be inspected to see if they should be replaced. This list is currently based only on mileage and does not consider driver behavior and other factors that contribute to vehicle wear and tear. The department also does not have specific guidelines for when electric vehicles should go through this inspection. This resulted in an ineffective inspection process because some vehicles may have been inspected before it was necessary, while other vehicles that might have needed to be replaced were not inspected.

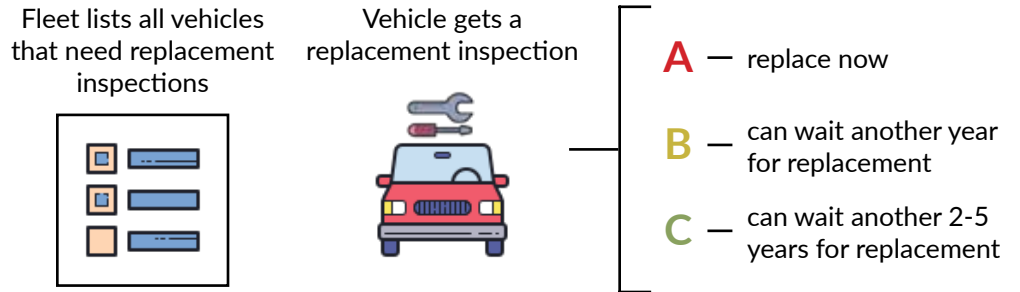
Fleet is getting new technology that will track information about each vehicle, such as mileage, excessive idling, driver performance, fuel usage, and electric vehicle specific information. This information will help Fleet better identify when vehicles should be inspected to see if they are ready

to be replaced. Fleet management said this will improve the replacement inspection process.

**Fleet is not always replacing vehicles that are ready to be replaced**

Inspected vehicles get an A, B, or C rating. “A” ratings mean the vehicle is ready to be replaced. “B” or “C” ratings mean the department can use the vehicle for a few more years. However, we found that “A” rated vehicles were not always replaced. Employees continued to use some of these vehicles and Fleet had to maintain them. This was a drain on Fleet’s resources and resulted in employees driving potentially unreliable vehicles.

**Exhibit 1: Fleet’s replacement inspection process**



SOURCE: OCA analysis of Fleet procedures, September 2019.

**Finding 2**

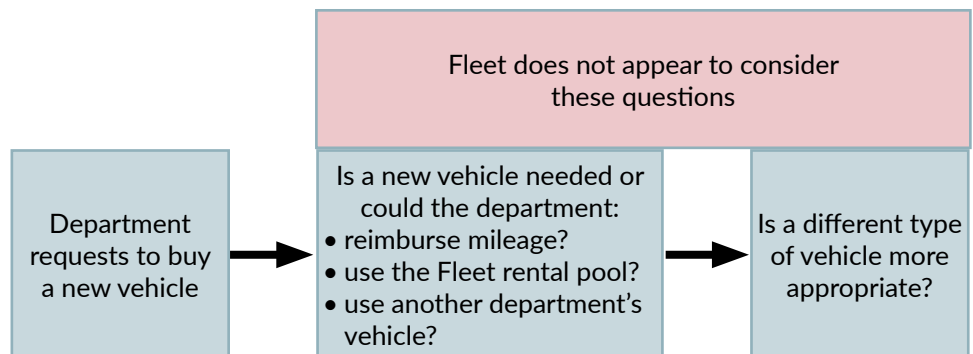
Fleet may not be exploring options other than buying a new vehicle and may not be considering if the vehicle requested by a department is the right vehicle. However, the department is adding new technology that could help the department when making vehicle purchase decisions.

Departments can request a new vehicle to replace a current vehicle or to add a vehicle to their fleet. We found issues with how Fleet decided a vehicle is needed and which type of vehicle to buy. This may have resulted in the City buying vehicles that it did not need.

**Fleet did not appear to look at options other than buying a new vehicle**

City policy says the City’s goal is to restrict the number of City-owned vehicles used by only one employee. Fleet is responsible for making sure the City meets this goal. However, we did not find evidence that Fleet always looked at options other than buying a new vehicle when departments requested to buy a vehicle. This may have resulted in unnecessary spending on vehicle purchases.

**Exhibit 2: Fleet does not appear to consider other options before deciding to buy a new vehicle**



SOURCE: OCA analysis of City policy and Fleet procedures, September 2019.

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City policy says that departments should use vehicles in the rental pool or mileage reimbursement if possible, rather than buying a vehicle for an employee to use at work.

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One alternative to buying a vehicle is to reimburse employees for miles driven. We found that while it may be cheaper in some cases to reimburse employees for mileage, this limits Fleet's ability to make sure employees drive alternative fuel or electric vehicles in line with environmental goals. Another alternative to buying a vehicle is to use vehicles from Fleet's rental pool. A third alternative is to find another City-owned vehicle that is not being used to fill that request. Fleet should only buy a vehicle after considering these alternatives.

Fleet management said that they are testing out new technology that will provide Fleet with more information about how vehicles are used and help them make better decisions about whether a new vehicle is needed. Fleet said they will use this information for the first time when they are making purchase decisions for the fiscal year 2021 budget.

We also noted that Fleet is trying to find ways to encourage rental pool usage. A new system is expected to make it easier for employees to quickly access a rental pool vehicle when they need it. Fleet is also considering how to add vehicles that are not frequently used by departments to the rental pool to make more vehicles available. However, it appeared that Fleet was waiting on departments to add these vehicles to the rental pool rather than doing it themselves.

#### **Fleet did not appear to verify that departments needed the types of vehicles they requested**

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A department may request a large gas-fueled van when a smaller electric car would work.

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It is important for the City to buy the right types of vehicles. The right vehicle balances costs, environmental goals, and departmental needs. However, we did not find evidence that Fleet made sure departments got the right type of vehicle. For example, a department may request a large gas-fueled van when a smaller electric car would work.

In our review of vehicle purchase requests, departments did not always include specific information about how the requested vehicle would be used. For example, one department requested a pickup truck to support maintenance activities but did not include details about tools or equipment that the truck may need to carry. As a result, we could not determine if a smaller electric vehicle would have been sufficient for those activities.

When departments did provide more detailed information about the vehicle requirements, we did not see evidence that Fleet verified the stated vehicle requirements. Fleet management said they work with departments to identify the right type of vehicle to purchase and rely primarily on the department fleet liaisons to ensure vehicle information is accurate.

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## Additional Observation

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Plug-in hybrid electric vehicles run on gasoline and electricity. Battery electric vehicles run only on electricity.

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The City's goal is to add 330 electric vehicles to the City's fleet by the end of calendar year 2020. This goal was set in the 2016 Fleet Electrification Plan, which called for replacing 72 vehicles with plug-in hybrid electric vehicles (PHEV) and 258 with battery electric vehicles (BEV). Plug-in hybrid electric vehicles run on gasoline and electricity. Battery electric vehicles run only on electricity.

We found that Fleet is trying to buy electric vehicles when possible and appears to be on pace to meet this goal. However, Fleet has bought more PHEVs than originally planned. Fleet management said they plan to buy more BEVs in future years because there will be more charging infrastructure and newer BEVs can driver farther on a single charge.

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# Recommendations and Management Response

**1** | The Director of Fleet Mobility Services should update replacement inspection criteria. The new criteria should consider fuel type, vehicle usage, driver performance, and other relevant data points.

**Management Response:** Agree

**Proposed Implementation Plan:** Fleet Mobility Services Management has begun implementation of the following systems.

- Fleet is currently using the CAM Capital Asset Management Fleet Forecasting and Planning Software to manage the following:
  - Optimize costs and condition of the fleet asset life-cycle
  - Stabilize capital outlay through advanced forecasting
  - Data driven replacement analytics based on TCO modeling (Asset cost, depreciation expense, maintenance costs, downtime, years in service, and utilization rates)
- Advanced Telematics to manage the following:
  - Create Visibility for Fleet Assets and Operations
  - Accidents and workers compensation legal cost reductions
  - Positive Behavioral Change and Efficient Driver Coaching
  - Reduce fleet expenses and optimize vehicle health and utilization
  - Right fit and right sizing of fleet

Once data is gathered and analyzed we will update criteria as needed.

**Proposed Implementation Date:** 10/1/2022

**2** | The Director of Fleet Mobility Services should consider whether it is possible to address vehicle purchase requests through options other than new vehicle purchases such as: mileage reimbursement, the Fleet Rental Pool, or with another City vehicle. This consideration should be documented for every vehicle purchase request, including for replacement vehicles.

**Management Response:** Agree

**Proposed Implementation Plan:** Fleet Mobility Services will continue to expand its Motor Pool program, which includes the following:

- Inside and outside Fleet Rental program
- Long term and short-term lease program
- Shuttle Ride Share program
- Re-purposing underutilized fleet assets into it an online reservation program

Fleet Mobility Services will improve the documentation process of challenging the Departments on type of modality required to complete the mission of the operation. Additionally, Fleet will include additional questions on the current justification form to better capture purpose and use of new vehicle to ensure that the most efficient vehicle is purchased.

Fleet will include mileage reimbursement to the justification process (requires sign off) as mileage reimbursement authorization would be the responsibility of the requesting Department management team.

**Proposed Implementation Date:** 10/1/2022

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The Director of Fleet Mobility Services should increase use of the rental pool. This should be accomplished by:

- adding underutilized vehicles to the rental pool; and
- implementing new fleet rental pool reservation technology.

Management Response: Agree

Proposed Implementation Plan: Adding appropriate underutilized vehicles to the rental pool and implementing new fleet rental pool reservation technology.

Proposed Implementation Date: 10/1/2021



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## Management Response

Fleet Mobility Services appreciates the efforts of the Office of the City Auditor's efforts into reviewing our current replacement practices and offering recommendations for improvement. Much time and effort was spent by both parties involved in reviewing this complex issue. Fleet Mobility Services agrees with the auditor's recommendations, and had already begun implementing technologies needed to optimize the vehicle acquisition process.

Fleet management is at an exciting cross road of new technology and big data giving us insight into the City of Austin's fleet assets and how they are used like never before. It is our intention to make the best use of these new tools by implementing Fleet's Mobility strategy consisting of "Forecasting and planning software, Connectivity, Telematics, Artificial Intelligence (AI), Sharing, Electric vehicles and Autonomous Mobility Services" for City departments to provide cost effective, accessible forms of modality to transport City employees, tools, and equipment to conduct the business of the City. The primary goals are to continue to provide vehicles and equipment vital to the continuity of city operations while doing our part to reduce acquisition and transportation costs, traffic congestion and underutilized fleet assets while improving the health, environment, safety and livability of Austin residents.



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## Scope

Fleet Mobility Services' activities related to vehicle purchases from FY15 to FY20.

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## Methodology

To complete this audit, we performed the following steps:

- interviewed staff from Fleet Mobility Services;
- reviewed City policies and procedures related to fleet acquisition and management;
- reviewed general fund vehicle purchases from FY19 and FY20;
- analyzed results of fleet replacement inspections;
- analyzed City mileage reimbursement costs compared to vehicle purchase costs;
- analyzed rental pool costs compared to vehicle purchase costs;
- reviewed the 2016 Fleet Electrification Plan;
- analyzed information on electric vehicle purchases and electric charging infrastructure installation;
- reviewed information on new technology purchases;
- reviewed Fleet departmental presentations on fleet optimization;
- reviewed information about changes to the Fleet Rental Pool;
- evaluated IT-related risks associated with fleet management software;
- evaluated fraud-related risks associated with fleet acquisition and management; and
- evaluated internal controls related to fleet acquisition.

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## Audit Standards

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Office of the City Auditor was created by the Austin City Charter as an independent office reporting to City Council to help establish accountability and improve City services. We conduct performance audits to review aspects of a City service or program and provide recommendations for improvement.

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