

CONTROLLER

January 9, 2019

Honorable Eric Garcetti, Mayor Honorable Michael Feuer, City Attorney Honorable Members of the Los Angeles City Council

#### Shifting Gears: A Review of the City's Passenger Vehicle Motor Pool

To help steer a more modernized approach to vehicle fleet management, I am releasing my latest report on the City's passenger vehicles. My report offers several strategies for the City's consideration as it should both modernize and reduce the number of passenger vehicles in the fleet in the coming years.

The City has an overall fleet of tens of thousands of vehicles, including police cars, fire trucks, ambulances, utility trucks and more. Among these, the General Services Department (GSD) maintains approximately 11,000 vehicles - more than 1,800 of which comprise the so-called passenger vehicle motor pool. This includes sedans, light trucks, vans and SUVs for use by City employees to drive for City business. The City has typically opted to purchase and maintain these vehicles in-house, often holding on to cars as long as possible so as to avoid budgeting for replacements. The average age of vehicles in the motor pool is 11 years old, and 22 percent are more than 15 years old.

Since older vehicles often require more corrective maintenance, the City expends considerable resources to maintain its aging motor pool. Over the past four years, GSD reported spending more than \$8.3 million solely in direct labor and parts on the 1,800-plus vehicles in the motor pool - not including indirect costs, such as benefits and various forms of overhead. One of the City's Ford F250 passenger trucks purchased in 2001 for \$22,000, for example, has already incurred \$76,000 in maintenance and repair costs - more than three times its initial purchase price.

Advances in transportation technologies, along with more innovative procurement strategies, provide an opportunity for the City to consider alternatives to how we provide transportation services for our employees in their performance of City business.

My recommendations include:

- **Pursue commercial lease agreements:** Cost savings may be achieved by leasing vehicles from commercial vendors, which is something the City generally has not done;
- Explore alternative transportation methods: Public transportation, mileage reimbursement for employees driving their own vehicles or telephone/video conferencing may prove more cost effective than driving City-owned vehicles to and from meetings. Moreover, too many City vehicles tend to sit idle in City parking lots and garages;
- Engage fleet management companies and use data: Consider how to best utilize and engage companies that specialize in fleet management. These companies can assist the City in making strategic decisions related to procurement, maintenance and administration. The use of technology, such as GPS tracking, can also help provide better data and information to manage vehicle usage; and
- **Partner with transportation network companies:** Ride sharing has changed the way all Angelenos, including City employees, travel and partnership opportunities should be explored.

I encourage the Council and Mayor to consider these strategies to ensure the transportation needs of its employees - and the goals for the City's management of its fleet - are met in the most cost-effective way possible.

Respectfully submitted,

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RON GALPERIN L.A. Controller

# Shifting Gears: A Review of the City's Passenger Vehicle Motor Pool







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## **SUMMARY**

The City owns a large fleet of vehicles and equipment so employees can perform work-related functions across approximately 469 square miles. The Department of General Services (GSD) procures vehicles for all Council-controlled Departments and is responsible for fleet maintenance and repair of non-public safety vehicles. Staff from the Los Angeles Police Department (LAPD) and Los Angeles Fire Department (LAFD) are responsible for maintaining vehicles assigned to their respective departments. The City's Proprietary Departments (Los Angeles Department of Water and Power, Los Angeles World Airports, and Port of Los Angeles) each procure, maintain, and administer their own vehicle fleets.

Of the 11,000 vehicles and equipment that GSD maintains, approximately 2,000 are passenger vehicles such as cars, SUVs, vans, and light trucks that are used for general business purposes, such as travel to offsite meetings. These passenger vehicles can be categorized into three major groups:

- 1. departmental fleets consisting of vehicles that are controlled by departments and can be assigned to an individual employee or shared by multiple employees;
- 2. the Executive Fleet consists of vehicles assigned to elected officials, elected officials' staff, or department heads; and
- 3. the General Motor Pool consists of vehicles that are controlled by GSD and can be temporarily checked-out by employees to conduct work-related functions during business hours.

According to GSD data, the average age of passenger vehicles assigned to these pools (i.e., departmental fleets, Executive Fleet, and General Motor Pool) is eleven years old. The cost of performing corrective maintenance on these vehicles is significant; the City spent approximately \$8.3 million on direct labor and parts over the last four years (not including employee benefits and other overhead costs).

As vehicles owned and operated by the City age, advances in transportation technologies, along with innovative procurement options and maintenance strategies, afford the City a unique opportunity to reassess how it provides transportation services to its employees. The focus of this review is on strategies to administer and maintain passenger vehicles used for general business purposes. Many of the concepts recommended within this report can also be applied to the City's management of all fleet vehicles and equipment.

A historical reliance on purchasing and maintaining vehicles in-house, combined with funding instability and budgetary constraints, has challenged GSD's ability to maintain an optimal replacement cycle. As a result, the City expends significant resources on corrective maintenance that otherwise would not be required if alternative procurement and transportation options were pursued, and the City was able to maintain a smaller, and newer, fleet of passenger vehicles.

#### Summary

This review provides financial and operational data on general purpose passenger vehicles owned and operated by the City, and explores options, such as vehicle leasing, mileage reimbursement, and alternative maintenance strategies. These options should be considered as they could provide more cost effective solutions for procurement, maintenance, and replacement of passenger vehicles. With an aim to reduce and modernize the City's fleet of passenger vehicles, this review recommends that the City consider the following strategies.

#### **Implement Alternative Procurement Models to Meet Operational Needs**

Leasing is a common practice for federal, State, and local government agencies to consider when procuring passenger vehicles. Cost savings may be achievable through bulk leasing of vehicles through commercial vendors.

#### Reduce Corrective Maintenance Costs and Enhance Vehicle Safety through Leasing

Newer vehicles obtained through leases are less likely to incur significant corrective maintenance costs, and vehicle issues may be covered by manufacturer warranty. In addition, newer models may be equipped with the latest safety features such as backup cameras, automatic emergency braking, electronic stability control, and blind-spot warning systems.

#### Promote Alternative Options for Employee Transportation

In lieu of utilizing pool vehicles to conduct City business, options such as public transportation, personal vehicle mileage reimbursement, and telephone/video conferencing should be promoted to reduce the overall size of the City's fleet.

#### **Consider How to Best Utilize and Engage Fleet Management Companies**

The City may achieve cost savings through partnering with fleet management companies that specialize in assisting large organizations with many aspects of fleet management including procurement, maintenance, administration, and vehicle monitoring using GPS/telematics.

# Partner with Transportation Network Companies to Provide Innovative Employee Transportation Solutions

Advances in transportation technologies have disrupted traditional fleet management models. With several Transportation Network Companies (TNCs) already operating in the local area, the City could leverage the technology and network capabilities of TNCs by establishing formal partnerships that provide enhanced transportation services to City employees at favorable costs, reducing the need for the City to procure and maintain passenger vehicles.

#### **Review of Report**

A draft of this report was provided to GSD management on September 4, 2018 for review. GSD noted the distinction between vehicles in the general/executive motor pools and the vehicles assigned to departmental fleets. We considered these comments as we finalized this report for

#### Summary

issuance. Specifically, we clarified that the issues and suggested actions noted in this review are relevant to the City's entire fleet of passenger vehicles that are used for general business purposes.

## BACKGROUND

The City of Los Angeles (City) encompasses approximately 469 square miles, and safe and reliable transport for City employees is necessary to ensure they can perform their jobs effectively. To help meet their needs for transportation, the City procures and maintains passenger vehicles for use by employees, which are part of the City's vehicle fleet.

The Fleet Services Division within the City's General Services Department (GSD) is responsible for procurement for all vehicles assigned to Council-controlled Departments. GSD also provides maintenance services for the vehicles, except those assigned to the Los Angeles Police Department (LAPD) and Los Angeles Fire Department (LAFD).

While departments determine their vehicle needs to perform operational functions, GSD staff work with departments to establish vehicle specifications and administer all vehicle procurement functions. The three Proprietary Departments (Los Angeles World Airports (LAWA), Port of Los Angeles (POLA), and Los Angeles Department of Water & Power (LADWP)) each procure, maintain, and administer their own vehicle fleets, which include passenger vehicles.

Department	Number of Active Passenger & Light Duty Vehicles	Average Vehicle Age (in years) <sup>c</sup>
GSD <sup>a</sup>	1,844 <sup>b</sup>	11.0
LADWP	247	7.3
LAWA	82	10.0
POLA	15	5.4
LAFD	375	Data Incomplete
LAPD	118 <sup>d</sup>	5.3 <sup>d</sup>

Figure 1: City Departments that Administer and/or Maintain Passenger Vehicles

<sup>a</sup> Includes passenger vehicles assigned to Council-controlled Departments.

<sup>b</sup> Includes 759 Type "A" Passenger Vehicles [Sedans and Subcompacts) & 1,085 Type "B" Light Duty Vehicles (Light Trucks, SUVs, and Vans).

<sup>c</sup> Calculated, based on all active passenger vehicles as of May 2018.

<sup>d</sup> Includes 68 recently leased electric vehicles.

Each of the departments listed in Figure 1 utilize a Vehicle Management System (VMS) to track maintenance and repair of City-owned vehicles. Important data such as vehicle mileage and procurement/maintenance costs are generally tracked in VMS. However, the current systems utilized by Council-controlled Departments lack features such as data sharing with other City management systems (e.g., FMS) and integration with GPS/telematics technology.<sup>1</sup>

While the systems are based on a similar platform, each department uses its VMS differently; therefore, comparisons of average cost data between departments should be performed with

<sup>&</sup>lt;sup>1</sup> The City's Council-controlled Departments with vehicle maintenance responsibilities (i.e., GSD, LAFD, and LAPD) are in the process of upgrading their respective VMS and related systems.

#### Background

caution. (Appendix I provides summary operational and financial statistics that were calculated using departmental VMS data.)

The average age of the City's passenger vehicles maintained by GSD is eleven years old. While GSD uses 10 years as the targeted lifecycle for sedans, we noted that 70% exceed that criteria, with 22% more than 15 years old. Since older vehicles typically require more corrective maintenance, the City inherently requires additional resources to maintain aging vehicles over the long term.<sup>2</sup>

#### Citywide Vehicle Purchasing is Subject to Financial Limitations and Constraints

The City's budget identifies three funding sources for the City's Vehicle and Equipment Replacement Program: 1) Municipal Improvement Corporation of Los Angeles (MICLA) Financing; 2) General Fund; and 3) Sewer Construction and Maintenance Fund (SCMF).<sup>3</sup> For FY 2018-19, the total proposed budget for citywide vehicle and equipment replacement was \$90 million; 24% of that amount was allocated towards 674 non-emergency passenger vehicles, as noted below.

		Non-Emergency Passenger Vehicles		
Funding Source	Total Replacement Program	# of "Type A" <sup>a</sup> Vehicles	# of "Type B" <sup>b</sup> Vehicles	Budgeted Cost
MICLA	\$76,195,000	234	142	\$17,995,000
General Fund	\$6,361,000	275 <sup>c</sup>	0	\$2,850,000
SCMF	\$8,096,000	5	18	\$968,000
Total	\$90,652,000	514 <sup>c</sup>	160	\$21,813,000

Figure 2: FY 2018-19 Citywide Budget Allocation for Vehicle Replacement

<sup>a</sup> GSD defines "Type A" vehicles as subcompacts, sedans, and station wagons

 $^{\rm b}$  GSD defines "Type B" vehicles as light trucks, SUVs, and vans

<sup>c</sup> 235 non-emergency Police Department vehicles noted as "leased" within the FY 2018-19 budget

As demonstrated above, MICLA funds are primarily used for vehicle and equipment replacement. MICLA is a non-profit financing entity that was formed to assist the City in acquiring capital assets through the issuance of bonds, certificates of participation, and commercial paper. MICLA provides the necessary capital to purchase replacement vehicles at advantageous interest rates.

<sup>&</sup>lt;sup>2</sup> GSD indicated it has submitted multiple budget requests for a five-year investment strategy to replace all units past their life cycle; and noted that although not all requested funding has been provided, it continues to provide safe and reliable equipment to its customers.

<sup>&</sup>lt;sup>3</sup> GSD indicated there are additional sources used to fund the City's vehicle and replacement program, such as Sanitation Equipment Charge, Street Lighting Assessment Fund, and Recreation and Parks Turf and Small Equipment Replacement Fund.

#### Background

The City and MICLA enter into lease-purchase agreements, where MICLA serves as the lessor. In the debt agreements, the City has covenanted to make payments corresponding to MICLA's debt service requirements and related costs. Currently, MICLA funds cannot be used to pay lease costs with an external (non-City) entity, though all lease obligations for capital equipment count towards the City's debt limit.

By restricting the use of MICLA funds for purchases of capital assets and equipment, the ability of the City to pursue alternative vehicle procurement strategies (i.e. leasing) is constrained. Alternative procurement strategies currently require non-MICLA funding sources, such as the City's General Fund. An example of this is a General Fund budget allocation of \$1.4 million in FY 2018-19 for the leasing of 235 all-electric vehicles for use by the LAPD (LAPD Lease).

#### GSD Study: "The Fleet Leasing Option and Maintenance Alternatives"

Historically, the City has generally opted to purchase passenger vehicles and maintain them with GSD staff.

In December 2012, GSD management performed an internal analysis (Leasing Option Report) that evaluated leasing and maintenance options for the City's vehicle and equipment fleet. Within the internal report, GSD noted that, "leasing vehicles may or may not be the most cost effective option or prudent method of acquiring and fielding vehicles." Further, the report stated that, "when City departments independently enter into lease agreements without the benefit of professional fleet management, they will be inclined to choose the lease that appears to have the lowest cost based on upfront calculations without considering the entire lifecycle."

The GSD report primarily included lifecycle cost analyses for specialty equipment; however, there was a lifecycle cost analysis performed on a passenger vehicle: the 2013 Ford Explorer XLT Sport Utility Vehicle.

GSD concluded it would have cost 26% more over the life of the vehicle to lease rather than purchase the Ford Explorer. Variables such as interest rates, maintenance costs, lease payments, administrative costs, and remaining equity were all estimated and included within the analysis. The GSD report summarized their conclusion by stating that, *"if lease management costs were excluded (…), good arguments could be made for either decision* [to lease or to purchase]. [However], when management costs are included, leasing becomes cost prohibitive."

Contrary to this conclusion, our analysis in the following section demonstrates that cost savings and non-financial benefits (e.g., improved safety and technology) may be achievable through bulk leasing of passenger vehicles.

## **RESEARCH & ANALYSIS**

#### SECTION I: The City's Passenger Vehicle Fleet Requires Strategic Investment

The City needs a reliable, safe motor pool. Without a long-term investment strategy that addresses replacement and maintenance of passenger vehicles, the City will continue its heavy reliance on corrective maintenance. Over the past four years, GSD reported spending more than \$8.3 million on direct labor and parts related to corrective maintenance for approximately 2,000 passenger vehicles.<sup>4</sup>

As a vehicle ages, corrective maintenance becomes more costly and eventually may exceed the value of the vehicle. This concept is demonstrated in the economic theory of vehicle replacement, illustrated by the figure below.



Figure 3: Economic Theory of Vehicle Replacement

Ideally, a vehicle or piece of equipment should be replaced around the time the rise in annual operating costs begin to outweigh the decline in annual capital costs – that is, when the two cost curves intersect and the total cost curve begins to turn upward.

Optimal vehicle lifecycles may vary depending on the type of vehicle, how it is operated, and the quality of maintenance provided. Most organizations develop a recommended replacement cycle for each class or type of vehicle, which will approximate the optimal replacement cycle for the units in that particular class.

#### The City Should Implement Alternative Procurement Models to Meet Operational Needs, Enhance Service Delivery, and Improve Vehicle Safety

As the City's passenger vehicles age, there are opportunities to strategically replenish the fleet using approaches other than purchasing. Leasing is a common practice for federal, State, and

<sup>&</sup>lt;sup>4</sup> \$2.4 million for 884 cars (Type A vehicles), and \$5.9 million for 1,303 light trucks/SUVs/vans (Type B vehicles).

local government agencies to consider when procuring passenger vehicles. Each vehicle procurement scenario is unique, requiring analyses related to financing, utilization, and lifecycle costs.

#### Vehicle Procurement Decisions Require Complex Analysis

Several financial and non-financial factors need to be considered for each vehicle procurement decision.

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	Advantages	Disadvantages
Purchasing	<ul> <li>Rights of ownership</li> </ul>	<ul> <li>Higher initial expenses</li> </ul>
	<ul> <li>More streamlined processes</li> </ul>	<ul> <li>Less available liquidity</li> </ul>
	Tax benefits*	<ul> <li>Vehicle obsolescence</li> </ul>
	<ul> <li>Control over maintenance cycle</li> </ul>	
Leasing	<ul> <li>Limited upfront costs</li> </ul>	<ul> <li>Payment obligations throughout</li> </ul>
	<ul> <li>More available liquidity</li> </ul>	the entire term
	<ul> <li>Flexible payment options</li> </ul>	<ul> <li>Maintenance requirements</li> </ul>
	<ul> <li>Easier to upgrade/replace</li> </ul>	<ul> <li>No salvage revenue</li> </ul>
	<ul> <li>Improved safety and technology</li> </ul>	<ul> <li>Mileage restrictions</li> </ul>

\* Tax credits for purchases or leases of alternative fuel vehicles may be available at the time of purchase.

In addition, there are both financial and non-financial factors to consider in assessing lease versus purchase decisions.

Financial variables to consider:	Non-financial variables to consider:
<ul> <li>Cash purchase price of vehicles</li> </ul>	<ul> <li>Useful economic life of vehicles</li> </ul>
<ul> <li>Cost of capital / Interest rates (MIC</li> </ul>	<ul> <li>Utilization rate and purpose of vehicles</li> </ul>
<ul> <li>Available discounts (i.e. volume purchases/leases)</li> </ul>	<ul> <li>Warranty terms and service provisions</li> </ul>
<ul> <li>Administrative Costs         <ul> <li>(specification development, procur inspection, preparation, parking/stop</li> </ul> </li> </ul>	<ul> <li>Availability of maintenance and parts providers (internal and external)</li> <li>brage)</li> </ul>
<ul> <li>Lifecycle Maintenance &amp; Fuel Costs</li> </ul>	<ul> <li>Availability of capable maintenance staff</li> </ul>
<ul> <li>Lease payment amounts and terms</li> </ul>	<ul> <li>Procurement regulations and mandates (e.g., Mayor's Sustainable City Plan)</li> </ul>

#### Figure 5: Financial and Non-Financial Variables to Consider for Vehicle Procurement

Within the GSD Leasing Option Report that supported vehicle purchasing over leasing, cost estimates for maintenance and administration were used to analyze lifecycle costs. The labor rate used in the analysis (\$53/hour) was calculated using budgeted salaries and the number of authorized positions from the City's FY 2012-13 Adopted Budget. However, using actual labor data from the VMS, and including indirect overhead costs, produces higher projections for the cost of ownership.

#### An Adjusted Analysis Based on Cost/mile of City-Owned Passenger Vehicles Favors Leasing

According to GSD staff, VMS data for labor costs is calculated using *actual* salary and overtime expenses divided by the *actual* number of productive labor hours related to preventive and corrective maintenance. Using this methodology, GSD calculated hourly labor rates between \$72 and \$75 during the five most recent fiscal years. However, VMS maintenance costs do not include overhead costs such as fringe benefits and compensated time off paid; or an allocation of departmental administration and support costs.

To account for these factors, we calculated the average per mile cost (excluding fuel) for all passenger vehicles maintained by GSD, and applied an indirect overhead rate to the labor costs associated with preventive and corrective maintenance. By adjusting labor costs for these indirect costs, the average annual cost of ownership increased from \$5,586 to \$6,202 (Type A vehicles) and \$6,404 to \$7,316 (Type B vehicles), when applying a target lifecycle of ten years or 100,000 miles.

Vehicle Type	Avg. Cost Per Mile <sup>6</sup>	Avg. Annual Ownership Cost <sup>7</sup>	<u>ADJUSTED w/</u> <u>INDIRECT</u> Avg. Cost Per Mile	ADJUSTED w/ INDIRECT Avg. Annual Ownership Cost
Cars (Type A)	\$0.56	\$5 <i>,</i> 586	\$0.62	\$6,202
Lt. Trucks/SUVs/Vans (Type B)	\$0.64	\$6,404	\$0.73	\$7,316

Figure 6: Analysis of Adjusted Annual Vehicle Ownership Costs<sup>5</sup>

The U.S. General Services Administration (GSA) has a framework that allows *federal agencies* to lease sedans, light trucks, and SUVs directly from a pre-approved list of vendors for a period of one to five years. The list, referred to as GSA Schedule 751, primarily includes model year 2018 vehicles and a mix of different vehicle types (i.e., gasoline, hybrid, electric). Monthly lease costs are directly passed through GSA to the vendor. Although the specific vehicles listed on GSA Schedule 751 may differ from vehicles in the City's fleet, and the City is not authorized to use these GSA leasing agreements, this example demonstrates that cost savings may be achieved through bulk leasing. A review of the monthly lease costs for Type A and Type B vehicles on GSA Schedule 751 shows lower annual costs than the adjusted annual ownership costs shown in Figure 6.

Figure 7: Estimated Annual Lease Costs for Vehicles from GSA Schedule 751<sup>8</sup>

Vehicle Type	Avg. Monthly Lease Rate	Estimated Annual Lease Costs
Cars (Type A)	\$463	\$5,556
Lt. Trucks/SUVs/Vans (Type B)	\$428	\$5,136

<sup>&</sup>lt;sup>5</sup> Since Fleet Services Division is included in the City's Central Services indirect cost, we used an estimated indirect cost rate (80%) for fringe benefits, CTO, and department overhead based on GSD indirect costs rates for other divisions from the citywide Cost Allocation Plan for FY 2016-17 (CAP 39).

<sup>&</sup>lt;sup>6</sup> Value calculated from VMS data shown in Appendix I.

<sup>&</sup>lt;sup>7</sup> Based on average use of 10,000 miles per year.

<sup>&</sup>lt;sup>8</sup> Cost estimates were developed using a closed-end lease for a 36-month period with a maximum allowance of 15,000 miles per year.

Preventive or corrective maintenance services are not included as part of the standard lease terms offered by vendors on GSA Schedule 751. However, it is important to note that: (1) new vehicles are less likely to incur significant costs associated with labor and parts; and (2) vehicles are covered by the manufacturers' standard warranty (three years, 36,000 miles) and some include roadside assistance. For issues not covered by manufacturers' warranty, the City could provide services using GSD personnel, contract with external service providers, or purchase maintenance coverage directly from the lessor.

In addition, administrative costs associated with tasks such as developing vehicle specifications, negotiating lease terms, and processing monthly lease payments are not included in the estimated annual costs noted. However, it is possible that the City may realize cost savings even when these costs are included, particularly with Type B vehicles.

#### Reduced Maintenance Costs and Enhanced Vehicle Safety Could Be Achieved Through Leasing

In general, vehicle leases are structured to ensure that the value of a vehicle is maintained at reasonable levels. Typically, this is a major factor in determining lease costs, and requires the lessee to adhere to maintenance and mileage limitations throughout the term of the lease. For example, the LAPD BMW Lease has mileage limitations of 10,000 and 12,000 miles per year, and requires vehicles to be serviced by certified high voltage mechanics to avoid safety issues. Since these requirements are incorporated into the City's monthly lease payments, minimal maintenance service costs are incurred by City staff.

From a safety perspective, leasing would also appear a superior option since vehicles would be replaced/renewed at expiry of the lease term, which would be significantly shorter than GSD's targeted lifecycle of ten years for sedans. New models may be equipped with the latest safety features such as backup cameras, automatic emergency braking, electronic stability control, and blind-spot warning systems. Therefore, as leased vehicles are replaced, safety is consistently addressed and the cycle of improving safety is perpetuated.

Although each vehicle procurement decision varies, other jurisdictions have successfully implemented vehicle leasing programs as a strategy to lower maintenance costs and acquire newer vehicles. In 2011, the City of Chicago initiated a pilot program that leased 125 non-emergency light duty vehicles. Based on the results of the pilot, Chicago's fleet managers gradually expanded the number of leased vehicles to 400, or approximately 40% of their non-emergency light duty fleet.

#### **SECTION II: Alternative Options for Employee Transportation**

In lieu of utilizing a general pool vehicle to conduct City business, there are additional transportation options currently available to City employees:

- public transportation (e.g. LADOT/DASH Buses);
- personal mileage reimbursement (certified employees only); and
- telephone/video conferencing.

#### DASH Buses

With most departmental offices located within the Downtown Los Angeles area, the City's general policy is for employees who are headquartered Downtown and are not assigned a vehicle to utilize DASH buses to conduct City business within the Downtown area. City Departments encourage employees to utilize DASH by providing prepaid bus passes to employees for business trips within the Downtown area. This policy eliminates administrative costs related to the use of pool vehicles and/or mileage reimbursement, and also eliminates any parking costs or space requirements that would be necessary if a vehicle were utilized. The policy also reduces the need for general pool vehicles to be used for relatively short-trips within the Downtown area; however, factors such as convenience, availability, passenger counts, and traffic should also be considered.

#### Personal Vehicle Mileage Reimbursement

Another transportation option available to some City employees is providing reimbursement for the use of a personal vehicle in conducting City business. This is a common practice for some City employees, including building inspectors and tax auditors who conduct their work at various field locations, as their job requires. Employees must be approved to receive mileage reimbursement by their department General Manager or Board Executive Officer, and adhere to policy guidelines in order to qualify for mileage reimbursement. In addition, employees and/or officers that are certified for mileage reimbursement are also subject to review and approval by the City Administrative Officer (CAO).

Excluding fuel and indirect costs, the City's average cost per mile for using fleet cars is \$0.56. While comparable to the IRS mileage reimbursement rate (currently \$0.545 per mile), the cost difference is greater after considering indirect costs (an estimated \$0.62 per mile), and even more when fuel costs are included (estimated at \$0.75<sup>9</sup>). Therefore, it would appear more cost effective to pay mileage reimbursement than to provide general pool vehicles. However, if mileage reimbursement were available to substantially more employees, additional

<sup>&</sup>lt;sup>9</sup> Adding the additional incremental fuel cost of \$0.13/mile, based on an assumed fuel cost of \$3.25/gallon and assumed average 25/mpg for passenger vehicles.

administrative costs would be incurred to manage and support the mileage reimbursement processes and required approvals.

Los Angeles County's general motor pool of 250 passenger vehicles is much smaller than the City's total pool of passenger vehicles (GSD and departmental assigned). Instead of maintaining a large fleet of passenger vehicles, Los Angeles County allows mileage reimbursement for employees who are designated as permittees by their department management. According to LA County Internal Services Department (LA County ISD) staff, the main reason for allowing employees to claim mileage reimbursement is because of the cost-prohibitive nature of assigning (or making available) a County-garaged vehicle to every employee who may have a business need for one. Mileage reimbursement is also a more viable solution for County workers, since County office locations are spread over such a large geographical area, covering over 4,000 square miles.

#### Telephone/Video Conferencing

General pool vehicles are commonly used by City employees to travel to meetings. Another alternative is for City employees to better leverage modern communication technologies. In many cases, telephone or video conferencing can be considered a viable substitute for conducting an in-person meeting. By investing in and encouraging the use of modern communication technologies, the City would reduce the frequency of need for general pool vehicles.

### SECTION III: Alternative Fleet Management Models and Technology-Based Solutions

City policymakers should also consider alternatives to leverage advances in transportation technology and potentially reduce administrative and maintenance costs related to City ownership of vehicles.

#### Considering How to Best Utilize and Engage Fleet Management Companies

It is a common practice for large agencies to execute service agreements with external fleet management companies. In addition to service agreements with vehicle leasing arrangements, several fleet management companies specialize in assisting large organizations with many aspects of fleet management, including vehicle procurement, maintenance, and administration.

For example, the County of Los Angeles generally outsources **all** vehicle maintenance. Costs for services to maintain vehicles assigned to County departments are directly billed to those departments, as time and materials costs invoiced by the vendor, plus an ISD indirect charge of 14.14%. The current contracted "Light Mechanical" labor rate is \$69.48; including the indirect charge, this equates to a County department cost of approximately \$80 per labor hour.

The County's general motor pool includes approximately 250 passenger vehicles, and ISD Fleet Services acts as a "rental agency" for County departments. Consistent with the County's internal service chargeback policy, departments are billed by ISD based on a daily rate schedule; rates are based on cost recovery and vary depending on vehicle type. Figure 8 provides the current daily rental rates charged by vehicle type.

LA County General Motor Pool Vehicle Type	LA County ISD Rate
Compact Vehicles	\$28.08 per day
Midsize Vehicles	\$30.24 per day
Specialty Car	\$36.50 per day
Wagon	\$31.50 per day
Mini-van	\$32.00 per day
Full-size ½ ton Van/Pick-up	\$37.00 per day
¾ ton Van/Pick-up; 1 ton Utility	\$47.50 per day

#### Figure 8: LA County Internal Services Department (ISD) Vehicle Rate Schedule

Included in GSD's Leasing Option Report (as discussed in Section I), was a consultant's survey of 11 large public agencies regarding leasing and outsourced maintenance. Eighty-two percent of

the surveyed agencies outsourced a portion of their vehicle maintenance. In addition, the majority of the surveyed public agencies utilize a combined purchase and leasing procurement program, and three agencies stated their fleet was comprised of about 20% leased vehicles and 80% purchased.

Agreements can be constructed in a way that harnesses the expertise of City staff, while seeking optimization of citywide vehicle procurement and maintenance practices. Structuring an agreement with one or more of these companies for portions of fleet management activities warrants consideration, and could significantly improve the cost effectiveness of maintaining passenger vehicles.

In addition, the City may benefit from partnering with fleet management companies that specialize in technology such as vehicle GPS/telematics. Installing this technology on light duty passenger vehicles would improve the City's ability to monitor vehicle usage and collect data that could be used to make fleet-related management decisions.

## Partnering with Transportation Network Companies Could Provide Innovative Employee Transportation Solutions

Recent advances in transportation technologies have disrupted traditional transportation service models. Transportation Network Companies (TNCs) such as Zipcar, Uber, and Lyft have significantly increased the cost effectiveness, availability, and convenience of on-demand vehicular transportation, especially within large metropolitan areas such as Los Angeles.

With several TNCs already operating within the local area, the City could leverage the network capabilities of TNCs by establishing formal partnerships that provide enhanced transportation services to City employees at favorable costs; reducing the need for the City to procure and maintain so many passenger vehicles.

## APPENDIX I: PASSENGER VEHICLE OPERATIONAL & COST STATISTICS

After an evaluation and walk-through of VMS processes with GSD staff, we requested specific operational and cost data related to passenger vehicles for all six departments that maintain passenger vehicle fleets (GSD; LADWP; LAWA; POLA; LAFD and LAPD). The data summarized within the tables below reflect cumulative vehicle lifecycle statistics for active passenger vehicles as of May 2018. These statistics were calculated using reported VMS data from each department, and are provided for general information only. Due to the varied processes and programming that exist between each departmental VMS, caution should observed when making comparisons between the data since each VMS is operated independently.<sup>10</sup>

USD-Ividification assenger vehicles
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		Type "A"	Type "B"
		Active Passenger Vehicles	Active Passenger Vehicles
		[Sedans & Subcompacts]	[Light Duty Trucks, Vans, and SUVs]
A)	Number of Active Vehicles <sup>12</sup>	759	1,085
B)	Average Age	11.29 Years	10.71 Years
C)	Average Purchase Price	\$23,596	\$25,791
D)	Total Cumulative Direct Maintenance Labor Hours (Preventative & Corrective)	46,856 hours	100,236 hours
E)	Total Cumulative Preventative & Corrective Maintenance Labor Costs	\$3,164,293	\$6,847,489
F)	Total Cumulative Parts Cost	\$1,881,916	\$3,629,326
G)	Total Cumulative Maintenance Costs Per Vehicle (Preventative, Corrective, & Parts Combined) [E + F]	\$5,046,209	\$10,476,814
H)	Average Cumulative Maintenance Costs Per Vehicle [G ÷ A]	\$6,649	\$9,656
I)	Average Yearly Cumulative Maintenance Costs Per Vehicle [H ÷ B]	\$589	\$902
1)	Average Mileage Per Vehicle (as of May 2018)	54,147 miles	55,351 miles
K)	Average Cost Per Mile Driven (excluding fuel or indirect costs [(C + H) ÷ J]	\$0.56	\$0.64

<sup>&</sup>lt;sup>10</sup> The validity and reliability of the obtained VMS data sets were not tested.

<sup>&</sup>lt;sup>11</sup> GSD separately tracks repair costs related to vehicle accidents, described as "incidents". These can be considered extraordinary costs and therefore are not included as a preventative or corrective cost.

<sup>&</sup>lt;sup>12</sup> GSD data includes data for passenger vehicles assigned to other Council-controlled Departments (except LAPD and LAFD). While GSD procures and maintains these vehicles, operational assignments are controlled by assigned departmental management.

		LADWP Active Passenger Vehicles <sup>a</sup>
A)	Number of Active Vehicles	247
B)	Average Age	7.34 Years
C)	Average Purchase Price	\$28,707
D)	Total Cumulative Direct Maintenance	
	Labor Hours	38,154 hours
	(Preventative & Corrective)	
E)	Total Cumulative Preventative &	\$6 213 228
	Corrective Maintenance Labor Costs	÷0,213,228
F)	Total Cumulative Parts Cost	\$1,083,659
G)	Total Cumulative Maintenance Costs	
	Per Vehicle (Preventative, Corrective,	\$7,296,887
	& Parts Combined) [E + F]	
H)	Average Cumulative Maintenance	
	Costs Per Vehicle	\$29,542
	[G ÷ A]	
1)	Average Yearly Cumulative	
	Maintenance Costs Per Vehicle	\$4,025
	[H ÷ B]	
) (L	Average Mileage Per Vehicle (as of	64 775 miles
	May 2018)	04,775 miles
К)	Average Cost Per Mile Driven,	
	(excludes fuel costs)	\$0.90
	[(C + H) ÷ J]	

#### LADWP-Maintained Passenger Vehicles

<sup>a</sup> Includes cars, trucks, and passenger vans

#### LAWA-Maintained Passenger Vehicles

		LAWA Active Passenger Vehicles
A)	Number of Active Vehicles	82
B)	Average Age	10.04 Years
C)	Average Purchase Price	Not reported
D)	Total Cumulative Direct Maintenance	
	(Preventative & Corrective)	Not reported
E)	Total Cumulative Preventative & Corrective Maintenance Labor Costs	\$740,384
F)	Total Cumulative Parts Cost	Included in E
G)	Total Cumulative Maintenance Costs Per Vehicle (Preventative, Corrective, & Parts Combined) [E + F]	\$740,384
H)	Average Cumulative Maintenance Costs Per Vehicle [G ÷ A]	\$9,029
1)	Average Yearly Cumulative Maintenance Costs Per Vehicle [H ÷ B]	\$899
1)	Average Mileage Per Vehicle (as of May 2018)	58,627 miles
K)	Average Cost Per Mile Driven, (excludes fuel costs) [(C + H) ÷ J]	Not Available

		POLA Active Passenger Vehicles
A)	Number of Active Vehicles	15
B)	Average Age	5.37 Years
C)	Average Purchase Price	\$30,948
D)	Total Cumulative Direct Maintenance	
	Labor Hours	756 hours
	(Preventative & Corrective)	
E)	Total Cumulative Preventative &	\$20.405
	Corrective Maintenance Labor Costs	\$30,493
F)	Total Cumulative Parts Cost	\$9,102
G)	Total Cumulative Maintenance Costs	
	Per Vehicle (Preventative, Corrective,	\$39,597
	& Parts Combined) [E + F]	
H)	Average Cumulative Maintenance	
	Costs Per Vehicle	\$2,640
	[G ÷ A]	
I)	Average Yearly Cumulative	
	Maintenance Costs Per Vehicle	\$492
	[H ÷ B]	
J)	Average Mileage Per Vehicle (as of	20 602 miles
	May 2018)	39,003 miles
K)	Average Cost Per Mile Driven,	
	(excludes fuel costs)	\$0.85
	[(C + H) ÷ J]	

#### **POLA-Maintained Passenger Vehicles**

		LAFD Passenger Vehicles
A)	Number of Active Vehicles	375
B)	Average Age	11.89 Years
C)	Average Purchase Price	Not Available,
		Incomplete Data
D)	Total Cumulative Direct Maintenance	
	Labor Hours	23,479 Hours
	(Preventative & Corrective)	
E)	Total Cumulative Preventative &	\$1 902 909
	Corrective Maintenance Labor Costs	\$1,002,090
F)	Total Cumulative Parts Cost	\$1,117,460
G)	Total Cumulative Maintenance Costs	
	Per Vehicle (Preventative, Corrective,	\$2,920,358
	& Parts Combined) [E + F]	
H)	Average Cumulative Maintenance	
	Costs Per Vehicle	\$7,788
	[G ÷ A]	
1)	Average Yearly Cumulative	
	Maintenance Costs Per Vehicle	\$655
	[H ÷ B]	
J)	Average Mileage Per Vehicle (as of	84,900 miles
	May 2018)	
K)	Average Cost Per Mile Driven,	Not Available, Incomplete Data
	(excludes fuel costs)	
	[(C + H) ÷ J]	

#### LAFD-Maintained Passenger Vehicles (Non-Emergency Vehicles)

#### LAPD-Maintained Passenger Vehicles (Non-Emergency Vehicles)

		LAPD Passenger Vehicles
A)	Number of Active Vehicles	118 *
B)	Average Age	5.3 <sup>*</sup>
C)	Average Purchase Price	27,210
D)	Total Cumulative Direct Maintenance	
	Labor Hours	Not Available, Incomplete Data
	(Preventative & Corrective)	
E)	Total Cumulative Preventative &	Not Available Incomplete Data
	Corrective Maintenance Labor Costs	Not Available, incomplete Data
F)	Total Cumulative Parts Cost	Not Available, Incomplete Data
G)	Total Cumulative Maintenance Costs	
	Per Vehicle (Preventative, Corrective,	Not Available, Incomplete Data
	& Parts Combined) [E + F]	
H)	Average Cumulative Maintenance	
	Costs Per Vehicle	Not Available, Incomplete Data
	[G ÷ A]	
I)	Average Yearly Cumulative	
	Maintenance Costs Per Vehicle	Not Available, Incomplete Data
	[H ÷ B]	
J)	Average Mileage Per Vehicle (as of	21 450 *
	May 2018)	21,430
К)	Average Cost Per Mile Driven,	
	(excludes fuel costs)	Not Available, Incomplete Data
	[(C + H) ÷ J]	

\* Includes 68 Leased Electric Vehicles which make up 57% of all active LAPD Passenger Vehicles.