

NYC Fleet

NYC
DCAS

Citywide Administrative
Services



REPORT ON LOCAL LAW 75 OF 2013

The Use-Based Fuel Economy
of Light and Medium
Non-Emergency Fleet Vehicles
(FY19 and FY20)

ABOUT DCAS

The Department of Citywide Administrative Services (DCAS) provides value-added and effective shared services to support the operations of New York City government. Its commitment to equity, effectiveness, and sustainability guides its work with City agencies on recruiting, hiring, and training employees; providing facilities management for 56 public buildings; acquiring, selling, and leasing City property; purchasing more than \$1 billion in supplies and equipment each year; and implementing conservation and safety programs throughout the City's facilities and vehicle fleet.

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SUMMARY

In 2013, the City Council passed Local Law 75 regarding the use-based fuel economy of the City's non-emergency light and medium-duty vehicles. DCAS already reports on the manufacturer's listed miles per gallon (MPG) as part of Local Law 38 of 2005, which governs the purchase of new light and medium-duty vehicles. Local Law 75 of 2013 requires the reporting of the actual "use-based" fuel economy of City vehicles, as impacted by weather, traffic, use of AC and heaters, idling, and other road and operational conditions.

In 2013, DCAS did not have the reporting capacity to provide use-based fuel economy in the manner required by the law. Since 2013, DCAS has implemented a new fleet management system, NYC Fleet Focus; a new gas card contract for private retail fueling; and a citywide fuel management system for in-house fueling.

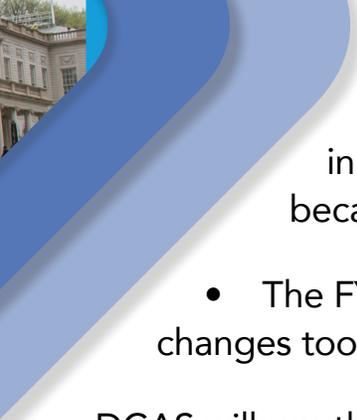
Starting in early FY19 DCAS began the rollout of real-time telematics on fleet vehicles. One major improvement of this system is that the telematics devices can read fuel consumption and usage directly from the vehicle computer. For the FY19 report, we used the usage that was recorded by these devices rather than usage reported via work orders or through the fuel or fleet management systems. Both the fuel and fleet management systems must contend with quality control issues caused by the inadvertent entry of incorrect mileage records by fleet staff and operators. The telematics system avoids this issue. The FY20 report is the first report solely using the telematics system. This change also resulted in reporting for more than 1,500 additional vehicles. The increase in reporting is a positive development. However, these vehicles were primarily medium-duty trucks which have lower fuel economy than sedans and SUVs. This lowered reported average fuel economy for this segment of vehicles.

In previous years, the report excluded a small number of vehicles reporting under 5 mpg or over 60 mpg. These data points were outliers which represent some limitations in old methodology. Using telematics, these limitations have been eliminated. This report provides FY19 data for comparison purposes.

This report includes hybrid plug-in EV vehicles like the GM Volt (PHEVs) but excludes dedicated EV vehicles, like the GM Bolt (BEVs), which use no liquid fuels. The City has been working to expand the number of electric vehicles, both PHEV and BEV, and now operates over 2,300 EV units. This represents an increase of 100 since FY19. The report also excludes compressed natural gas sedans, mostly at the NYC Parks Department, which also do not use liquid fuel.

Some of the results of the report are as follows:

- The FY19 report covered 5,839 vehicles. The FY20 report covers 6,734, an increase of 895 vehicles (15%) which reflects the transition to using telematics for fuel MPG reporting. Of these, 771 or 86% were medium-duty diesel trucks of various models and weights (gross vehicle weight GVW). **The increase in the number of trucks tracked lowered average fuel economy for that segment. It does not represent a decrease in the fuel efficiency of our fleet but an increase in the number of diesel trucks, including of larger model sizes, involved in the review.**
- Through the NYC Clean Fleet initiative, DCAS is focused on the implementation of hybrid and electric vehicles. **In this report, the total number of light-duty hybrid and plug-in electric vehicles tracked increased 6% from 3,215 in FY19 to 3,398 in FY20. The actual fuel economy for hybrids increased 9%. The actual fuel economy for plug-in hybrids increased 4%.**
- **Our hybrid cars were nearly three times more fuel-efficient than our comparable gas cars, 41 MPG compared to 14 MPG.**
- In FY20 all-electric fleet vehicles traveled over 2.3 million miles. The miles traveled by the pure electric fleet are not accounted for in the tables below since this report focuses on liquid fuel economy. **The actual fuel economy of the entire City fleet improved 8% from FY19 to FY20 as reported in the Mayor's Management Report (MMR) Fleet Section.**
- Diesel pickups and vans remain more fuel-efficient than gas models. DCAS has focused procurement of vans and pickups on diesel models for fuel efficiency and to enable biodiesel and future renewable diesel use. The relative improvement



in fuel efficiency decreased from FY19 to FY20. This appears to be because of the large increase and change in total trucks tracked.

- The FY20 report includes the period from March through June where large changes took place in fleet operations due to the COVID-19 emergency.

DCAS will use these results to further inform our sustainability efforts as part of the NYC Clean Fleet initiative.

USE-BASED FUEL ECONOMY REPORT FOR FY19 AND FY20

Local Law Report

2019

Agency	Count of Units
DCAS	2,396
DEP	1,214
DHMH	288
DOCN	34
DOTR	1,350
DPAR	544
DSNY	13
Total	5,839

2020

Agency	Count of Units
DCAS	2,065
DEP	863
DHMH	225
DOCN	388
DOTR	1,436
DPAR	1,042
DSNY	715
Total	6,734

2019

Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	4,235	36,397,977	1,263,208	28.81
Medium	1,604	11,499,184	861,747	13.34
Total	5,839	47,897,161	2,124,955	22.54

2020

Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	4,359	30,132,195	1,064,257	28.31
Medium	2,375	12,996,661	1,232,645	10.54
Total	6,734	43,128,856	2,296,902	18.78

2019

	Count of Units	Total Miles	Total Gallons	MPG
Light	4,235	36,397,977	1,263,208	28.81
Plug-in	656	5,185,637	130,620	39.70
Hybrid	2,559	20,603,444	558,510	36.89
Gas	1,019	10,607,906	574,020	18.48
Diesel/Bio	1	990	58	17.04
Medium	1,604	11,499,184	861,747	13.34
Hybrid	19	142,000	8,004	17.74
Diesel/Bio	324	2,146,298	118,050	18.18
Gas	1,261	9,210,886	735,693	12.52
Grand Total	5,839	47,897,161	2,124,955	22.54

2020

	Count of Units	Total Miles	Total Gallons	MPG
Light	4,359	30,132,195	1,064,257	28.31
Plug-in	942	6,346,667	153,372	41.38
Hybrid	2,456	17,121,278	425,108	40.27
Gas	932	6,433,233	471,301	13.65
Diesel/Bio	29	231,015	14,475	15.96
Medium	2,375	12,996,661	1,232,645	10.54
Hybrid	40	161,822	14,676	11.03
Diesel/Bio	919	4,310,179	369,109	11.68
Gas	1,416	8,329,362	831,548	10.01
Grand Total	6,734	43,128,856	2,296,902	18.78

Note: Decrease in total MPG reflects large increase in trucks, including larger diesel trucks tracked through this report and not an actual reduction in fuel economy. Fuel economy for plug-in hybrids and hybrids improved.



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