

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  
(FY18 and FY19)

# 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; a new citywide fuel management system for in-house fueling and DCAS has also increased live telematics tracking for individual fleet units.

In early FY19 DCAS began the rollout of real-time telematics on all 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 this report we are using the usage that is being recorded by these devices rather than usage reported via work orders or manually entered into fuel tracking systems or the fleet management system. The citywide telematics system will be used to create this report for FY20 for all installed vehicles. These changes in technology increased the number of reporting vehicles from 4,869 for FY18 to 5,839 in FY19 an increase of over 20%.

The report provided below excludes a small number of vehicles reporting under 5 mpg or over 60 mpg. These data points are outliers which represent some limitations in the reporting system involving older model units and other technical issues. This report provides FY18 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 2,200 EV units. This represents an increase of over 500 plug in units since last year's report and over 1,400 since FY17. The MPG effect of these fully electric vehicles is not represented. The report also excludes compressed natural gas sedans, mostly at Parks which also do not use liquid fuel.



Some of the results are as follows:

- Light duty vehicles such as sedans are far more fuel efficient (over 100%) than medium duty such as pickups and vans. DCAS works with agencies to down-size and right-size fleet units wherever possible. Hybrid as well as plug in units also are achieving twice the fuel economy in general than their gas only versions.
- Overall fuel efficiency increased between FY18 and FY19 among liquid fueled light and medium duty vehicles from 17.79 to 22.54 average MPG. This was an improvement of just under 27% for liquid fueled vehicles covered under this local law. This was a result of a further transition from gasoline only vehicles to hybrids and electric (PHEV) vehicles. The FY18 report covered 4,869 vehicles. The FY19 report covers 5,839 vehicles.
- Plug in electric vehicles and hybrid electric vehicles achieve far greater use-based fuel economy than gasoline vehicles. A plug-in hybrid light duty vehicle such as the Chevy Volt is achieving more than double the fuel economy of a regular gas light duty unit. There was also an increase in MPG among electric/gas plug in vehicles from 29.90 in FY18 to 39.70 in FY19 due to an increased focus on using electricity instead of liquid fuels on these vehicles. The expansion of the city's internal charging network including solar car ports, portable charging, and solar canopies will allow for a further improvement for FY20 and beyond.
- In FY17 pure EV miles were 800,000, followed by 1.4 million in FY18. In FY19 this increased to over 2.3 million miles, nearly tripling our EV usage in just two years. The EPA equivalent for MPG for EVs is 124 MPG. The miles traveled by the pure electric fleet are not accounted for in the tables below.
- Diesel pickups and vans are significantly more fuel efficient than gasoline pickups and vans. In FY19 diesel pickups had a 32% improvement in MPG over gasoline equivalent pickups. Diesel vans in FY19 saw a 43% improvement in MPG over gasoline equivalent vans. Through an initiative supported by OMB the city is transitioning towards an increased number of diesel pickups and vans. This transition also allows the city a further reduction in green house gas emissions since these vehicles are fueling either with biodiesel or renewable diesel at in house fueling sites.

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 FY18 AND FY19

## Local Law Report

### 2018

Agency	Count of Units
DCAS	2,256
DEP	878
DHMH	282
DOCN	2
DOTR	801
DPAR	333
DSNY	8
<b>Total</b>	<b>4,869</b>

### 2019

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

### 2018

Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	3,772	25,868,947	1,155,243	22.39
Medium	1,097	6,123,877	643,003	9.52
<b>Total</b>	<b>4,869</b>	<b>31,992,824</b>	<b>1,798,247</b>	<b>17.79</b>

### 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
<b>Total</b>	<b>5,839</b>	<b>47,897,161</b>	<b>2,124,955</b>	<b>22.54</b>

## 2018

	Count of Units	Total Miles	Total Gallons	MPG
Light	3,772	25,868,947	1,155,243	22.39
Plug-in	353	2,071,871	69,283	29.90
Hybrid	2,508	16,181,810	556,005	29.10
Gas	910	7,615,168	529,941	14.37
Diesel/Bio	-	-	-	-
Medium	1,097	6,123,877	643,003	9.52
Hybrid	3	8,399	436	19.25
Diesel/Bio	160	834,531	66,553	12.54
Gas	934	5,280,947	576,014	9.17
<b>Grand Total</b>	<b>4,869</b>	<b>31,992,824</b>	<b>1,798,247</b>	<b>17.79</b>

## 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
<b>Grand Total</b>	<b>5,839</b>	<b>47,897,161</b>	<b>2,124,955</b>	<b>22.54</b>



NYC Fleet

---

**NYC**  
**DCAS**  
Citywide Administrative  
Services