



**DCAS Report on the Use-Based Fuel
Economy of Light and Medium Duty Non-
Emergency Vehicles in the City Fleet
(Fiscal Year 2023)**

Local Law 75 (2013)

| 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 currently reports on the EPA certified 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 A/C 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. As part of Mayoral Executive Order 41 of 2019, DCAS added live telematics tracking for all on-road City vehicles. This initiative is managed through the DCAS Fleet Office of Real Time Tracking (FORT).

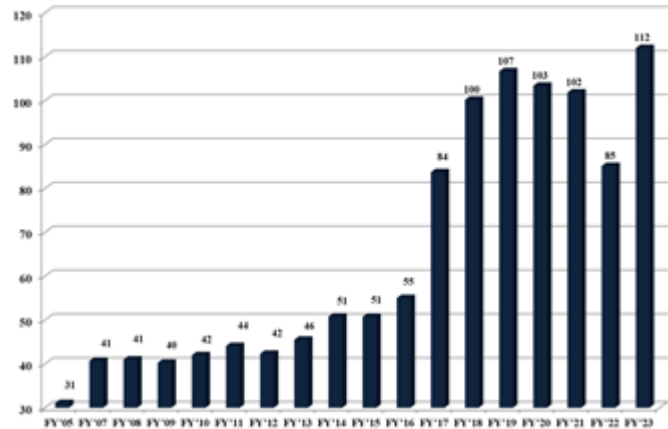
The telematics devices can read fuel consumption and usage directly from the vehicle computer. In FY20, for the first time, DCAS reported real world MPG using the telematics system to produce the calculated MPG. From FY20 to FY23 we further expanded the telematics program to include additional vehicles and usage. The FY23 report tracks a record 44 million miles of use.

Key results:

- **Increased Fleet Reporting:** The use of telematics has enabled DCAS to improve reliability of use-based fuel economy data while increasing the total units and miles tracked. In the first year of Local Law 75 reporting in 2015, DCAS reported on 5,202 vehicles. In FY23, DCAS is reporting on 8,776 vehicles, an increase of 3,574 (+69%). The 44 million miles reported on in the FY23 report is also the most to date. This local law report does not cover law enforcement, FDNY, and other emergency service vehicles.

- Record EPA Fuel Economy:** The average EPA fuel economy of new light duty units, as reported in Local Law 38 of 2005, achieved a record 113 miles per gallon in FY23. For comparison, the average EPA fuel [economy](#) for these same vehicles in the United States in 2023 was 28 MPG.

NYC Fleet: Light Duty Fuel Economy by Fiscal Year
Local Law 38 of 2005



- Record Light Duty Actual Use-Based Fuel Economy:** In FY23, DCAS achieved 36.5 actual use-based miles per gallon for the light duty fleet across 5,573 units tracked. This was the most fuel-efficient light duty fleet in 9 years and represents a 55% increase in actual fuel economy since the reporting began in 2015. As would be expected, the trends for actual use-based fuel economy follow the trend lines for the EPA new vehicle fuel economy with both trends steadily improving.

- Overall Fuel Economy Improvement of 16% from FY22 to FY23:** FY23 saw a major one-year increase in fuel economy across all units tracked of 16%. The most fuel efficient of the gas-burning units were the plug-in hybrids (PHEVs) which achieved 42.94 fuel economy in actual use. These units can both plug in and use liquid fuels when the battery is at low charge.



- Diesel Medium Duty Units are More Fuel Efficient than Gas Medium Duty Units:** Diesel units are 30% more fuel efficient than gasoline units in actual use. The fleet includes both diesel and gasoline pickups and vans. In 2023, DCAS made the first major investments in electric pickups and vans. The fuel economy for those electric units will show up in the FY24 Local Law 75 report. DCAS also replaced fossil diesel with renewable diesel in 2023. DCAS will procure electric medium duty units wherever available in the marketplace as long as the units meet the operational needs of agencies. However, wherever suitable electric medium duty units are not yet available, diesel medium units are both more fuel efficient and are able to use renewable diesel, eliminating all fossil fuel use.
- Major Increase in Electric Vehicle Use from FY22 to FY23:** DCAS reported over 4.3 million miles of use with the all-electric Battery Electric Vehicles (BEV) included in Local Law 75 reporting. This was nearly double the 2.38 million miles of all electric use in FY22. DCAS expects a further large jump in FY24 as the impact of nearly 1,000 electric vehicles purchased in FY23 comes into the report.
- Hybrid and Plug in Hybrid Light Duty Vehicles Achieve Dramatically Better Actual Fuel Economy than Gasoline Units:** Light duty plug in hybrids achieved 42.94 MPG in FY23 and light duty hybrids achieved 33.28 MPG. Light duty gasoline units achieved 21.70 MPG. Light duty hybrid units were 53% more fuel efficient than light duty gasoline

units. Light duty plug in hybrids (PHEVs) were 98% more fuel efficient than light duty gasoline units and 29% more fuel efficient than light duty hybrids. In 2020, DCAS reported that hybrids were achieving better actual fuel economy against their EPA ratings than gasoline vehicles.

DCAS also operates a small number of hybrid medium duty units. There were 160 reported in the FY23 report. These hybrid medium duty units did not report improved fuel economy from FY22 to FY23 and did not report superior fuel economy over either gasoline or diesel medium units. DCAS is de-emphasizing procurement of hybrid versions of diesel trucks as the focus turns to all-electric options.

- **Hybrid vehicles showed slight declines in actual fuel economy from FY22 to FY23:** DCAS does not believe this represents actual reductions in hybrid efficiency but changes in the set of vehicles tracked. For example, sedans are being converted to electric versions more quickly than SUVs. Sedans have better fuel economy than SUVs. As those units leave the tracking, SUV emissions have a greater impact on the remaining units. There were 311 fewer light duty hybrids tracked in FY23 as compared to FY22 while 387 more PHEV and BEV electric units were tracked.

DCAS will use these results to further inform our vehicle procurement and fleet sustainability efforts.

Use Based Fuel Economy Report for FY22 and FY23

Local Law Report

2022	
Agency	Count of Units
DCAS	3,162
DEP	1,178
DHMH	215
DOCN	391
DOT	1,260
Parks	1,447
DSNY	1,193
Total	8,846

2023	
Agency	Count of Units
DCAS	3,059
DEP	1,211
DHMH	204
DOCN	407
DOT	1,458
Parks	1,268
DSNY	1,169
Total	8,776

2022				
Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	5,799	28,883,179	918,944	31.43
Medium	3,047	11,774,389	1,305,818	9.02
Total	8,846	40,657,568	2,224,762	18.27

2023				
Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	5,573	31,209,315	854,985	36.50
Medium	3,203	12,802,425	1,201,925	10.65
Total	8,776	44,011,740	2,056,910	21.39

2022				
	Count of Units	Total Miles	Total Gallons	MPG
Light	5,799	28,883,179	918,944	31.43
Plug-in	1,068	5,319,405	124,780	42.63
Hybrid	2,206	16,383,446	443,995	36.90
Gas	1,168	4,528,402	329,009	14.79
All Electric	1,306	2,372,826	0	-
Diesel/Bio	51	279,100	21,160	13.19

2023				
	Count of Units	Total Miles	Total Gallons	MPG
Light	5,573	31,209,315	854,985	36.50
Plug-in	1,310	8,273,167	192,669	42.94
Hybrid	1,895	12,884,317	387,158	33.28
Gas	881	5,613,028	258,565	21.70
All Electric	1,451	4,171,592	--	-
Diesel/Bio	36	267,211	16,593	16.10

2022				
	Count of Units	Total Miles	Total Gallons	MPG
Medium	3,047	11,774,389	1,305,818	9.02
Hybrid	73	352,706	42,546	8.29
Diesel/Bio	1,221	4,664,332	405,935	11.49
Gas	1,726	6,751,477	857,337	7.87
All Electric	27	5,874	-	-

2023				
	Count of Units	Total Miles	Total Gallons	MPG
Medium	3,203	12,802,425	1,201,925	10.65
Hybrid	160	759,055	94,232	8.05
Diesel/Bio	1,239	5,537,385	443,736	12.47
Gas	1,558	6,371,328	663,957	9.59
All Electric	246	134,657	-	-

DCAS

nyc.gov/dcas

NYC[®] Citywide
Administrative
Services