

Local Law 75 Report

Fiscal Year 2021





NYC Fleet

NYC DCAS Citywide Administrative Services



DCAS Report on the Use-Based Fuel Economy of Light and Medium Non-Emergency Vehicles in the City Fleet (Fiscal Year 2020 and Fiscal Year 2021)

Summary

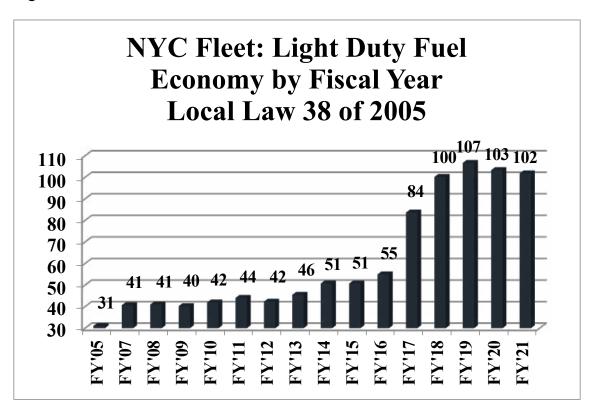
In 2013, the city council passed Local Law 75 regarding the use-based fuel economy of the City's non-emergency light and medium duty vehicles. DCAS already reports on the manufacturer's listed miles per gallon (MPG) as part of Local Law 38 of 2005, which governs the purchase of new light and medium duty 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 air conditioning 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 new citywide fuel management system for in-house fueling.

Starting in early FY19, DCAS began the rollout of real-time telematics on fleet vehicles, managed through the DCAS Fleet Office of Real Time Tracking (FORT). One major improvement of this system is that 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. In both FY20 and FY21, DCAS further expanded the telematics program. During FY22, the program is expanding even further and future versions of this report will include those vehicles.

Key results:

- The first report under this Local Law was in 2015. At that time, DCAS reported on the use-based fuel efficiency of 5,192 vehicles. In FY21, DCAS is reported use-based fuel economy for 8,641 units, an increase of 3,449 or 65%. The increase in light duty units tracked was 2,391 units, or 67%, and the increase in medium duty units was 1,052 units, or 64%. The increase in medium duty units is heavily influenced by additional DSNY and DEP trucks, which are heavier duty models. DCAS expects to expand further the number of units tracked in FY22.
- In the FY17 report, for the first time, DCAS reported on the total number of miles travelled using all-electric vehicles (BEVs). In FY17, this was 800,000 miles. For FY21, all-electric vehicles travelled 2.5 million miles, an increase of over 300%. NYC currently operates the largest plug-in fleet (3,100+ vehicles) and electric vehicle (EV) charging network (1,070+ ports) in New York state. Under Executive Order 53 of 2020, the City will be transitioning to an all-electric City fleet. In September 2021 the mayor announced a \$75 million dollar investment in electrifying the fleet, including an expansion of the vehicle charging network, repowering of existing diesel trucks to electric, and the purchase of electric police cars, cargo vans, and SUVs. (Learn more)
- The EPA fuel economy of new light duty units, as reported in Local Law 38 of 2005, has doubled since FY15, going from 51 MPG to 102 MPG. For the fourth year in a row, the City fleet averaged over 100 MPG for new light duty vehicles as reported through Local Law 38.



- Total fuel use by the City fleet has decreased by 4 million gallons, or 14%, in the last four years. (Learn more.)
- In FY15, this report included 49 plug-in hybrid units with a fuel economy of 39.9 MPG. In FY21, this report includes 1,465 plug-in hybrids, an increase of 23 times, with an average fuel economy of 45.15 MPG, or 13% more. In total, the City now operates 3,139 plug-in or solar units, including both on and off-road.
- In FY15, the fuel efficiency of the City fleet's hybrid vehicles was 29.1 MPG. In FY21, the fuel efficiency of the fleet's hybrid vehicles was 43.1 MPG, an increase of 48%.
- In FY15, the fuel efficiency of all light duty vehicles was 23.5 MPG. In FY21, the fuel efficiency was 30.28 MPG, a 29% increase.
- In FY15, the fuel efficiency of our medium duty units was 11.7 MPG. For the FY21 report, this declined to 8.94. This reflects the addition of heavier models of DSNY and DEP medium duty trucks to the report. There has also been more progress in electric and efficient models for light duty units than for medium duty pickups and vans. In FY22, DCAS is investing in a large order of hybrid pickup trucks, and planning a large order of all-electric cargo vans. The order of electric cargo vans will be our first. DCAS expects to achieve substantial improvement in medium duty actual MPG when these replacement vehicles go into operation.
- For the first time, this report includes all-electric vehicles. This report excludes compressed natural gas sedans and vans which do not use liquid fuel. The City fleet is transitioning away from the use of CNG as we prioritize electric for light duty.
- Total miles driven by the liquid fueled light duty and medium duty fleet decreased from 43,128,856 miles in FY20 to 37,329,882 miles in FY21, representing a decrease of 5,798,974 miles, or 13%. This reflected the impact of the COVID-19 disruptions to City non-emergency fleet operations. COVID-19 also altered the pattern of vehicle usage throughout the City fleet.

DCAS will use these results to further inform our sustainability efforts.

Use based fuel economy report for FY20 and FY21

Local Law Report

Notes:

- Increase in NYC Department of Sanitation (DSNY) and NYC Department of Environmental Protection (DEP) units reflect additional units on live vehicle tracking through the DCAS Fleet Office of Real Time Tracking (FORT).
- The decrease in total MPG does not reflect a less fuel-efficient fleet. The additional
 units added to the tracking from the DSNY and DEP representing heavier duty
 models of pickups, vans, and small trucks, decreasing medium duty fuel efficiency
 compared to last year when those units were not reported.

2020

Agency	Count of Units
DCAS	2,211
DEP	985
DHMH	231
DOCN	421
DOT	1,459
Parks	1,296
DSNY	734
Total	7,337

2021

Agency	Count of Units		
DCAS	2,606		
DEP	1,314		
DHMH	258		
DOCN	467		
DOT	1,518		
Parks	1,328		
DSNY	1,150		
Total	8,641		

Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	4,962	32,572,903	1,064,257	30.61
Medium	2,375	12,996,661	1,232,645	10.54
Total	7,337	45,569,564	2,296,902	19.84

Subgroup	Count of Units	Total Miles	Total Gallons	MPG
Light	5,948	24,870,528	821,110	30.28
Medium	2,693	12,459,354	1,393,635	8.94
Total	8,641	37,329,882	2,214,745	16.86

2020

	Count of Units	Total Miles	Total Gallons	MPG
Light	4,962	32,572,903	1,064,257	30.61
Plug-in	1,011	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
All Electric	534	2,440,708	0	
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

2021

	Count of Units	Total Miles	Total Gallons	MPG
Light	5,948	24,870,528	821,110	30.28
Plug-in	1,465	4,930,922	109,212	45.15
Hybrid	2,707	12,558,564	291,382	43.10
Gas	1,122	4,216,364	370,955	11.37
All Electric	579	2,503,028	0	
Diesel/Bio	75	661,650	49,561	13.35
Medium	2,693	12,459,354	1,393,635	8.94
Hybrid	66	217,457	30,348	7.17
Diesel/Bio	1,148	4,629,884	501,607	9.23
Gas	1,479	7,612,013	861,680	8.83



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