

2022 Green Fleet Annual Report

1. Introduction

Background

Local Law #9 of 2015, establishing a Sustainable Green Fleet Policy, was adopted by the Ulster County Legislature in August of 2015 and approved by the County Executive in September of 2015. The Green Fleet Law recognizes that, while vital to the operation and function of County Government, fleet operations represent a significant environmental and economic cost to Ulster County. The law outlines ways to reduce these costs and impacts and includes requirements to inventory the fleet, monitor fuel use, optimize use of existing vehicles, and purchase green vehicles to meet a defined green fleet goal.

<u>Local Law No. 3 of 2022</u> amended the Sustainable Green Fleet Policy to update goals and strategies.

Reporting Requirements

The Green Fleet Law requires an annual report to be filed with the County Executive and the designated Ulster County Legislative Standing Committee(s) on or before March 1^{st} .

The report shall include but not be limited to:

- Information addressing the intent and purpose of the law, the fleet inventory, and the Green Fleet Policy implementation strategies;
- Documentation of fuel use and emissions associated with the fleet;
- Assessment of goals as outlined in policy and whether they have been attained; and
- Recommendations regarding actions to be taken to meet the goals as well as recommendations as to specific changes or modifications to the policy.

Methodology

The monitoring and implementation of the Green Fleet Law is a collaborative effort between various Executive Departments, including the Department of the Environment and the Department of Public Works (Fleet Manager) as well as UCAT, the UC Purchasing Department and others.

The Green Fleet Policy requires monitoring and detailed analysis of fleet composition and fuel consumption. The information in this report was compiled from several data sources to determine the average efficiency of the Ulster County fleet by individual vehicle, vehicle class and Ulster County department. The data contained within is gathered and maintained by the Department of the Environment for this report and for subsequent trend analysis.

Green Vehicle Definitions

Per the Local Law, *Green Vehicle* refers to any vehicle that employs technology that reduces fuel consumption or emissions and shall include, but is not limited to:

- Hybrid vehicles (HEV): HEVs have electric components but use a combustible fuel source (such as gasoline) to power the vehicle. The battery can only be recharged by operating the vehicle (i.e. no plug).
- Plug-in hybrid vehicles (PHEV): PHEVs have a larger battery that will enable a portion of driving range available as "all-electric" mode. The batteries can be recharged by plugging the vehicle into an electric power source.
- Battery electric vehicles (BEV): BEVs are powered solely by electricity stored in batteries and have no internal combustion engine in the vehicle.

2. Fleet Size and Composition

Number of Vehicles

As of December 31st, 2022, the County's active inventory included 477 vehicles in 27 departments/divisions. This number includes all vehicles in Ulster County's vehicle fleet and transit fleet. This total does not include construction equipment, unpowered fleet assets (e.g. trailers) and non-road vehicles.

New Vehicles

Ulster County added 44 new vehicles to its fleet in 2022. The UC DPW Fleet Manager continues to work with departments to review the intended use and need for each vehicle request selecting the most efficient vehicle practicable for the application, ensuring "right-sizing" of the fleet as older vehicles are replaced. Using a "right-sizing" approach, the County can improve the average efficiency of the fleet, even if the size of the fleet increases due to increased operational requirements.

Retired/Auctioned Vehicles

A total of 41 vehicles were retired and auctioned in 2022. A detailed list of auctioned vehicles is included as Appendix C.

TABLE 1: VEHICLES AUCTIONED AND NEW TO SERVICE (2022)

Green Fleet Class	Auctioned in 2022	New to Service in 2022
Passenger Vehicle	16	1 (1) Passenger sedan - Sheriff
Light Duty Truck	2	5 *(1) Chevrolet Bolt - Probation (3) Dodge Charger — District Attorney *(2) Ford Mach-e — Probation (1) Jeep Cherokee — District Attorney
Medium Duty Vehicle	23	(1) Chevrolet 3500 – DPW Highway (2) Chevrolet Tahoe – Sheriff *(4) Chrysler Pacifica – DSS *(1) Chrysler Pacifica – OFA (7) Dodge Durango – Sheriff (2) Ford E450 - UCAT (3) Ford E-Transit – UCAT (1) Ford Expedition – District Attorney *(4) Ford Explorer Hybrid – Emergency Services *(2) Ford Explorer Hybrid – Sheriff (1) Ford F-53 – DSS (2) Jeep Grand Cherokee – District Attorney *(2) Jeep Grand Cherokee Hybrid – Probation *(4) Jeep Grand Cherokee Hybrid – Sheriff (2) Dodge Ram – DPW Buildings & Grounds

Heavy Duty Vehicle	0	1 (1) International 4900 – Emergency Services
Total	41	44

^{*} indicates new vehicles meeting the Sustainable Green Fleet Policy definition of a Green Vehicle

Green Vehicle Integration

As of December 31st, 2022, the County fleet included 65 Green vehicles, per the policy definition, including:

TABLE 2: GREEN VEHICLE COMPOSITION (2022)

Green Fleet Class	Battery Electric (BEV)	Plug-In Hybrid (PHEV)	Hybrid
Heavy Duty Vehicle	3 - Transit Fleet		3 - Transit Fleet
Medium Duty Vehicle	3 - Transit Fleet	19 - Vehicle Fleet	6 - Vehicle Fleet
Light Duty Truck	3 - Vehicle Fleet	4 - Vehicle Fleet	2 - Vehicle Fleet
Passenger Vehicle	1 - Vehicle Fleet	9 - Vehicle Fleet	12 - Vehicle Fleet

Figure 1 below shows the percentage of green vehicles in the fleet. Per Local Law No. 3 of 2022, the County's goal is that green vehicles will constitute 20% of the fleet by 2025.

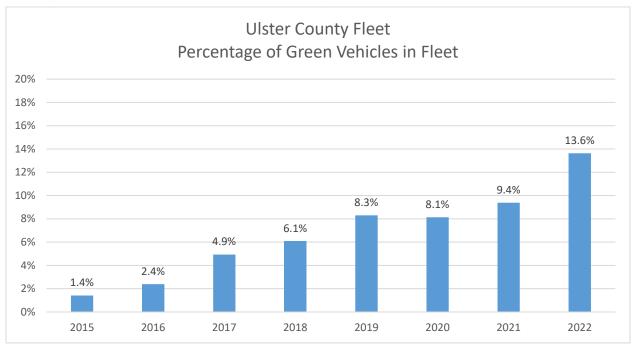


FIGURE 1: PERCENTAGE OF GREEN VEHICLES IN ULSTER COUNTY FLEET AS OF DECEMBER 31, 2022

Figure 2 below shows the percentage of green vehicles in the fleet that are battery electric vehicles (BEV). Per Local Law No. 3 of 2022, at least 20% of green vehicles in the fleet shall be battery-only by 2025.

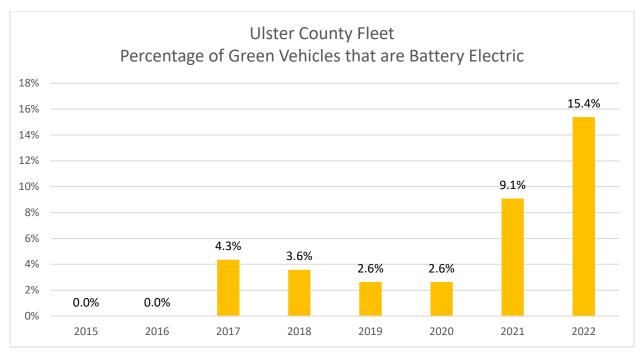


FIGURE 2: PERCENTAGE OF GREEN VEHICLES THAT ARE BATTERY ELECTRIC (BEV) AS OF DECEMBER 31,2022

3. Fuel Consumption and Cost

Fleet fuel is purchased and tracked using the following systems:

- **WexOnline:** WexOnline® is a credit card procurement system that allows vehicle drivers to purchase fuel at commercial service stations. This system tracks transaction data including vehicle, mileage, user and department.
- FuelMaster: DPW maintains diesel fuel tanks at the Quarry and various Highway Substations for use with Heavy Duty vehicles and equipment. These tanks are filled by the County's diesel fuel vendor or through pickup at a local fuel terminal with a County-owned fuel truck. The Fuelmaster system provides data on fuel dispensed at these tanks.
- UCAT Gasoline and Diesel Tanks: UCAT maintains diesel and gasoline tanks on site for operation of the UCAT bus fleet. UCAT vehicles fuel from these tanks to the maximum extent possible, though occasionally UCAT vehicles use the WexOnline® system for fueling. UCAT's fueling management system provides data on fuel dispensed from these tanks.
- SUNY New Paltz Fuel: Ulster County used approximately 7,000 gallons of diesel fuel from pumps at SUNY New Paltz for the New Paltz bus loop. This fuel is procured through an agreement with SUNY New Paltz. The usage is reported quarterly to the County and is included in the fuel usage totals in this report.

TABLE 3: TOTAL FUEL USAGE BY TYPE — ALL REPORTING YEARS

Fuel Type	2015	2016	2017	2018	2019	2020	2021	2022
Diesel (gallons)	286,963	260,584	269,670	276,476	301,466	218,628	276,263	264,554
Biodiesel (gallons)	-	3,986	3,226	3,521	2,610	-	3,150	2,738
Gasoline (gallons)	220,950	243,530	226,218	239,060	249,513	228,165	232,559	259,303
Ethanol (gallons)	24,550	27,059	25,135	26,562	27,724	24,933	25,840	28,720
Electricity (gallons equivalent)	-	66	172	239	608	473	414	2,347
Total	532,463	535,225	524,421	545,858	581,921	472,198	538,225	557,662

Notes:

- 1. Fuel usage is the total fuel dispensed to vehicles in the calendar year reported. This accounting methodology was updated in 2019. Totals prior to 2019 are for fuel purchased, not necessarily fuel used.
- 2. UCAT began using biodiesel in 2015 and began reporting usage in 2016. In 2020, the UCAT fleet did not use biodiesel blend fuel due to a large reduction in usage of diesel fuel in the spring and summer months and the need to ensure tanks were filled with conventional diesel fuel in the fall and winter months (to reduce the possibility of fuel gelling).
- 3. Gasoline purchased at local filling stations is assumed to be (on average) an E10 blend of 90% conventional fossil-derived gasoline and 10% renewable ethanol. The Gasoline delivered to UCAT tanks is an E10 blend of 90% conventional gasoline and 10% ethanol.
- 4. Ulster County put its first electric vehicles into service in 2016.
- 5. Gasoline equivalent was calculated using the EPA conversion estimate of 33.7 kWh per gallon of gasoline. Total electricity use in 2022 for fleet operations was 79,090 kWh.

TABLE 4: FLEET FUEL PURCHASED (2022)

Fleet	Fuel Type	Purchases (gallons)	Cost (\$)
Vehicle	E10 Gasoline	241,584.1	\$844,819.86
	Diesel	173,575.5	\$678,054.56
	Electricity	510.7 (gallons equivalent)	\$2,481.88
Transit	E10 Gasoline	42,336.0	\$138,262.40
	Diesel	71,327.0	\$258,292.10
	B5 Biodiesel Blend	65,815.7	\$301,665.50
	Electricity	1,836.2 (gallons equivalent)	\$12,995.07
Non-Road	E10 Gasoline	6,208.7	\$37,399.47
	Diesel	37.5	\$204.45
Total	All Fuels	603,231.3	\$2,274,175.29

Notes:

- 1. Fuel purchased is fuel delivered to an Ulster County-owned tank or purchased through the Wex fueling system. This number differs from fuel usage above due to the tank levels at the end of the year and fuel acquired from other sources.
- 2. The estimated average blended electricity cost for UC Buildings with EV charging stations installed is \$0.144/kWh.
- 3. Non-Road fuel usage consists of fuel used by:
 - a) DPW Buildings & Grounds division for grounds maintenance and other tasks using small engine equipment. This fuel is purchased through the WexOnline system and transported in gas cans or the equipment.
 - b) Sheriff's Department for boats. This fuel is purchased from local marinas.

4. Fleet Efficiency

Fuel efficiency was calculated for all fleet vehicles with accurate annual mileage data. This analysis includes vehicles tracked in the WexOnline system, the FuelMaster system and UCAT vehicles, but does not include vehicles without accurate mileage data available. Annual miles traveled is calculated using either: 1) user reported odometer readings in the Wex fleet system, 2) odometer readings recorded in the FuelMaster system and 3) end of year mileage readings compiled by UCAT for transit vehicles. An annual efficiency value cannot be calculated where odometer information is missing, incomplete or inaccurate. A summary of fleet fuel efficiency is contained in the following charts.

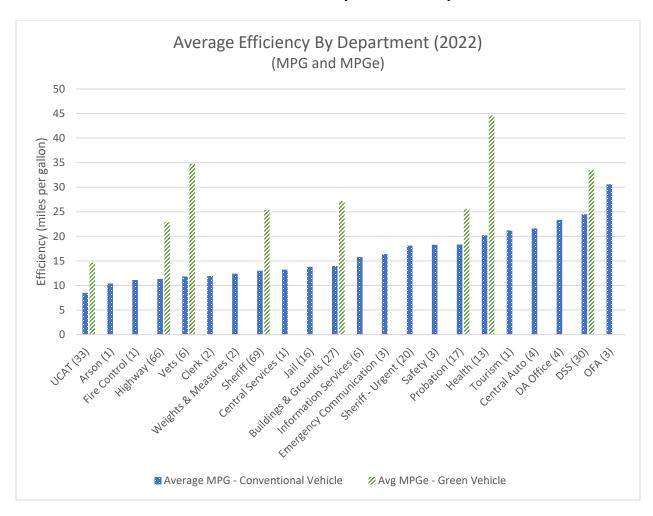


FIGURE 3: AVERAGE EFFICIENCY BY DEPARTMENT (2022)

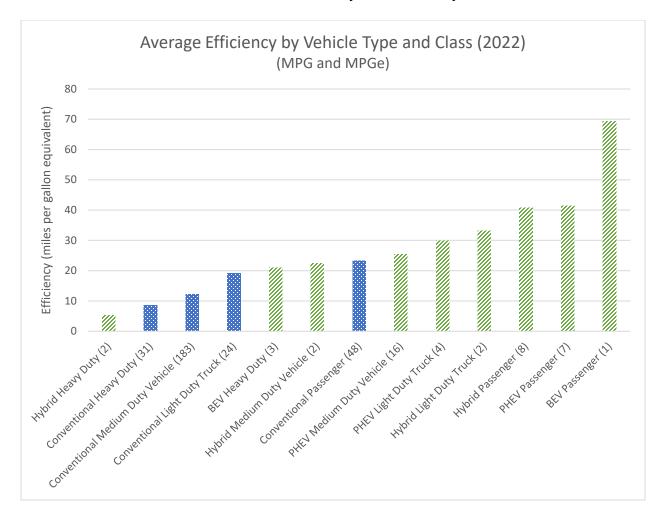


FIGURE 4: AVERAGE EFFICIENCY BY VEHICLE TYPE AND CLASS (2022)

Notes:

- 1. The number listed in parentheses beside each department name indicates the number of vehicles with accurate mileage data reported
- 2. Plug-in electric vehicles in the fleet charge primarily using Ulster County's ChargePoint® network. Usage totals have not been adjusted to account for out of network charging.

5. Greenhouse Gas Emissions

In 2022, Ulster County fleet operations resulted in emissions of 5,075 metric tons CO2e. 96.8% of total fleet emissions resulted from the combustion of fossil fuels, with the remaining portion of emissions resulting from the use of renewable electricity or the combustion of biomass-based, or biogenic, fuels. In accordance with the accepted protocol, this type of carbon is not included in Scope 1 emissions as the carbon concerned is of biogenic origin and would have been emitted to the atmosphere through the natural process of decay. In 2022, biogenic emissions from biofuel combustion totaled 191 metric tons of CO2e.

Per the EPA's carbon equivalencies calculator, Ulster County's 2022 fleet emissions quantity is equivalent to that released by burning 28 railcars worth of coal or 11,750 barrels of oil. Alternatively, this amount of carbon could be offset through the annual carbon sequestration of 6,006 acres of U.S. Forest land.¹

¹ Calculator available here: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

TABLE 5: FLEET GREENHOUSE GAS EMISSIONS, SCOPE 1 & 2

Year	Total Scope 1 - Direct Combustion Emissions (metric tons CO2e)	Total Scope 2 Emissions (metric tons CO2e)
2015	5,076.5	N/A
2016	4,883.1	0
2017	4,761.2	0
2018	5,015.3	0
2019	5,372.1	0
2020	4,318.2	0
2021	4,353.6	0
2022	5,075.1	0

Emissions Factors Disclosure:

Ulster County accounts for GHG emissions in accordance with the Local Government Operations Protocol developed by Local Governments for Sustainability (ICLEI).

Ulster County uses emissions factors published by the EPA in the document Emissions Factors for Greenhouse Gas Inventories (last modified 4/1/2021).

100-year global warming potential (GWP) multipliers were applied as published in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.

Ulster County does collect and maintain data on vehicle miles traveled (VMT) for vehicle fleet and transit fleet vehicles to the extent possible. However, to simplify the accounting process for mobile combustion, Methane (CH4) and Nitrous Oxide (N2O) emissions were estimated on a per-gallon basis as described in the New York Community and Regional GHG Inventory Guidance (Version 1.0, September 2015). To do so, CO2 emission factors were multiplied by 0.1% for CH4 and 1.8% for N2O to obtain emission factors for these greenhouse gases.

6. Electric Vehicle Implementation

Fleet Electric Vehicle Performance

For plug-in hybrids and battery electric vehicles, an efficiency value of MPGe (miles per gallon equivalent) can be calculated using both gasoline and electricity consumption data, using the EPA's assumption that 33.7 kWh is equivalent to 1 gallon of conventional gasoline². The MPGe efficiency value is a standardized way to quantify the total amount of energy required to operate the vehicle and compare its efficiency to vehicles that use fossil fuels.

In 2022, the green vehicles in the Ulster County vehicle fleet achieved an average efficiency of 33.1 MPGe over 381,370³ miles traveled. Green vehicles in the Ulster County transit fleet achieved an average efficiency of 14.7 MPGe over 78,262 miles traveled.

TABLE 6: AVERAGE EFFICIENCY OF GREEN FLEET VEHICLES (2022)

 $^{{}^2\}text{More information here:} \ \underline{\text{https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revisions-and-additions-motor-vehicle-fuel}$

³ This is the total for vehicles with accurate mileage data.

Vehicle Type	2022 Sample Size	Average Efficiency (MPGe)
Battery Electric (BEV) Passenger	1	69.3
Plug-In Hybrid (PHEV) Passenger	7	41.4
Hybrid Passenger	8	40.8
Hybrid Light Duty Truck	2	33.2
Plug-In Hybrid (PHEV) Light Duty Truck	4	29.9
Plug-In Hybrid (PHEV) Medium Duty	16	25.4
Hybrid Medium Duty	2	22.5
Battery Electric (BEV) Heavy Duty	3	21.0
Hybrid Heavy Duty	2	5.2

Electric Vehicle Infrastructure

Ulster County hosts a total of forty (40) publicly available Level 2 (240V) EV charging ports County-wide. The charging station network is used by three distinct groups:

- employees operating fleet vehicles
- employees and contract employees charging personal vehicles at work
- the public (Ulster County residents and visitors)

Ulster County fleet charging sessions accounted for 15% of energy dispensed from Ulster County Level 2 stations in 2022. These totals are included in Appendix B. The cost of this energy is included in the electricity bills of the Ulster County properties where charging stations are located and is reported in the annual building benchmarking report, as it cannot be separated accurately from the cost of the electricity consumed to operate the building. Electricity costs contained in this report are estimated based on the average cost of electricity at properties where EV charging stations are installed.

The County's charging network provides access to workplace charging for 97% of the County's workforce. Currently, workplace charging does not represent a significant portion of usage, however, access to infrastructure is an important first step to ensure that Ulster County employees can consider the purchase of a green vehicle. When an employee purchases a green vehicle, the benefit of decreased emissions extends beyond the commute—a benefit to the entire community. Workplace charging not only reduces the County's carbon footprint but leads to wider community and regional benefits. Ulster County is invested in increasing the rate of employee electric vehicle adoption.

Starting in 2020, Ulster County initiated a fee for charging model, charging no fee for the first two hours and \$0.50 per hour beyond 2 hours. In 2022, public charging fees yielded \$4,543 in revenue.

In 2022, the Ulster County charging network hosted a total of 726 unique users from the public.

Table 7: Ulster County Electric Vehicle Charging Network (as of 12/31/22)

Location	# of Ports
Carr Building	2
Department of Public Works	2
Golden Hill Office Building / Health Department	8
Hall of Records	2
Kingston SUNY Extension	2
Probation Department	2

SUNY Ulster	2
Trudy Resnick Farber Building	2
Ulster County Courthouse	4
Ulster County Law Enforcement Center	4
Ulster County Office Building	2
Ulster County Office Complex / Dept. of Social Services	6
Ulster County Pool	2
Total	40

EV Charging Station Usage

The charts below show the rate of charging station utilization by year. To ensure accurate reporting of the number of charging sessions, any sessions drawing less than 0.1 kWh of electricity have been removed from the data.

Detailed information on the usage of the County's network of stations (by the public and the UC fleet) is included as Appendix B.

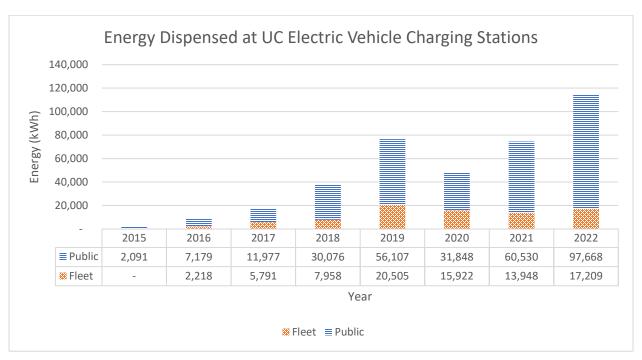


FIGURE 5: ENERGY DISPENSED AT UC ELECTRIC VEHICLE CHARGING STATIONS (2015-2022)

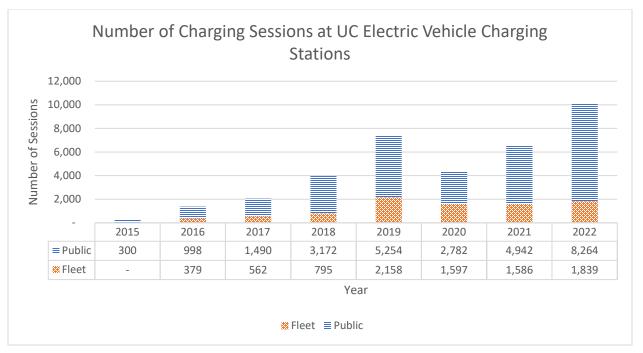


FIGURE 6: NUMBER OF SESSIONS AT UC CHARGING STATIONS (2015-2022)

7. Recommendations

Local Law No. 9 of 2015 specifies that, in an annual report, the Department of the Environment shall include recommendations regarding actions to be taken to meet the goals of the Green Fleet policy, as well as recommendations as to specific changes or modifications to the policy that would promote the goals of the policy.

Additionally, Executive Order 1 of 2023 requires the Department of the Environment to review the Sustainable Green Fleet policy in light of the findings of the Integration Analysis for the NYS Scoping Plan and Plan recommendations and make recommendations by August 2023 to the Ulster County Legislature to strengthen the policy, as appropriate.

Recommended actions for meeting the goals of the Green Fleet Policy

 Develop a capital project in the 2024-2029 Capital Program to replace fossil fuel powered non-road equipment with zero-emission equipment

The efficiency of non-road vehicles is not tracked as part of the County's vehicle fleet, but their fuel consumption contributes to the total amount of fuel purchased by the County each year.

The capital project will focus on the replacement of construction equipment, highway maintenance equipment, grounds maintenance equipment with zero emission equivalents, where feasible.

 Conduct an assessment and develop an operating procedure to reduce vehicle miles traveled (VMT) by the County vehicle fleet

Transportation emissions are generally directly proportional to the number of miles traveled by fleet vehicles. The County should assess County operations to identify opportunities to 1) reduce the need to travel, and 2) complete necessary functions with fewer miles traveled. This approach is consistent with the GHG reduction strategy in the Ulster County Government Operations Climate Action Plan. The assessment should analyze operations across the vehicle fleet and make recommendations on how to change operations to achieve the same results more efficiently. The study should assess:

- -fixed route operations such as road maintenance (plowing), mail delivery, and
- -scheduling and trip routing of routine visits and site inspections
- -opportunities for combining multiple government functions in each vehicle trip
- -suitability of videoconferencing for aspects of operations

Following the study, the County should implement a procedure to incorporate the recommendations of the study into operations. This procedure should include a method for tracking vehicle miles traveled, either through an Auto Vehicle Locator (AVL) system or a user reporting mechanism. The goal of the procedure should be to substantially reduce the amount of vehicle miles traveled each year by the County's vehicle fleet.

• Focus on Right Sizing of the Fleet

The Fleet Manager should continue to actively manage the fleet for efficiency and overall size. Older, less-efficient vehicles are retired from the fleet as they reach the end of service life. Retired vehicles are auctioned each year as documented in Appendix C. When acquiring vehicles, the Fleet Manager works with departments to determine their needs and provides vehicles of an appropriate vehicle-class and type for the job, targeting optimum fuel efficiency for the application. As more models of electric vehicles, plug-in hybrids and hybrids become available, there will be additional options for a green vehicle to be used as a replacement to an existing vehicle.

Recommended actions to strengthen the policy to promote the goals of the policy and align the policy with the NYS Climate Act Final Scoping Plan⁴

As stated in the Final Scoping Plan, energy efficiency and end-use electrification are essential parts of the pathway that achieves New York State's greenhouse gas reduction goals. This change will involve displacing fossil fuels with low-carbon electricity and other fuels, including hydrogen and bio-based fuels. As it is on track to achieve its existing goals for 2025, the County should identify longer term goals for a fully zero emission vehicle fleet.

• Align the County's Policy with the State's commitment to operate a fully zero-emission fleet of passenger vehicles by 2035.

The County should focus on converting 100% of passenger vehicles to zero emission technology by 2035, ensuring that the County and the State's greenhouse gas reduction goals are met ahead of schedule. Vehicles are currently available on the market for most passenger vehicle applications within government operations.

 Align the County's Policy with the State's commitment to a zero-emission fleet of medium and heavy-duty (MHD) vehicles, where technically feasible, by 2040.

The medium and heavy-duty vehicles generate approximately 2/3 of Ulster County fleet emissions, yet viable zero emission replacements are not readily available for many applications. Forthcoming vehicle options in the MHD sector will include a mix of battery electric and hydrogen fuel cell vehicles.

⁴ Available here: https://climate.ny.gov/-/media/project/climate/files/NYS-Climate-Action-Council-Final-Scoping-Plan-2022.pdf

•	Set an interim commitment for 100% zero emission transit vehicles in the Ulster County Fleet by 2035 In 2021, the County completed a Transit Electrification Feasibility Study ⁵ that was partially funded by NYSERDA through the Public Transit Technology and Innovation Program (PON 3914). This study assessed the viability of replacing the UCAT fleet with electric vehicles over a 10-year planning window. Appendix I of the Study contains a phased procurement plan for achieving electrification of all feasible routes by 2032 and discusses the need to procure fuel cell technology to achieve a 100% zero emission fleet.

⁵ Available here:

8. Appendices

Appendix A: Fleet Usage Summary

TABLE 8: FLEET USAGE SUMMARY (2022)

Department	Number of Vehicles	Number of Vehicles Reporting Valid Mileage	Total Distance Driven (miles)	Total Fuel Usage (gallons equivalent)	Total Fuel Cost		Average Energy Cost per Mile	
Arson	1	1	9,161	879	\$	2,924	\$	0.32
Buildings & Grounds	33	27	168,282	13,864	\$	48,476	\$	0.29
Central Auto	11	4	12,188	503	\$	1,742	\$	0.14
Central Services	2	1	5,876	443	\$	1,421	\$	0.24
Clerk	3	2	6,961	515	\$	1,740	\$	0.25
DA Office	13	4	49,872	2,041	\$	6,767	\$	0.14
DSS	34	30	319,679	11,308	\$	37,263	\$	0.12
Elections	1	1	1,254	110	\$	320	\$	0.25
Emergency Communication	10	3	19,428	774	\$	2,753	\$	0.14
Environment	1	1	1,200	17	\$	84	\$	0.07
Executive	1	1	2,114	59	\$	211	\$	0.10
Fire Control	2	1	8,645	777	\$	2,560	\$	0.30
Health	14	13	123,574	5,082	\$	17,697	\$	0.14
Highway	138	66	1,030,790	94,547	\$	323,068	\$	0.31
Information Services	6	6	13,707	869	\$	2,852	\$	0.21
Jail	20	16	200,340	14,148	\$	49,824	\$	0.25
OFA	7	3	9,566	354	\$	1,136	\$	0.12
Planning	1							
Probation	21	17	95,802	5,395	\$	18,741	\$	0.20
Public Defender	1							
Safety	3	3	13,013	771	\$	2,532	\$	0.19
Sheriff	73	69	1,385,708	94,220	\$	322,231	\$	0.23
Sheriff - Urgent	22	20	237,936	15,070	\$	50,598	\$	0.21
Tourism	1	1	1,535	72	\$	241	\$	0.16
UCAT	50	33	1,142,812	144,394	\$	566,958	\$	0.50
Vets	6	6	90,890	6,644	\$	21,619	\$	0.24
Weights & Measures	2	2	25,581	2,024	\$	6,537	\$	0.26

Note: Only vehicles with valid mileage data are included in the totals reported above.

Appendix B: Ulster County Electric Vehicle Charging Stations

Detailed Usage Report - Pursuant to Resolution No. 332 of 2015

TABLE 9: ULSTER COUNTY CHARGING STATION USAGE (2022)

	Fleet	Public	Total
Total Energy Usage (kWh)*	17,209	97,688	114,877
Total Energy Cost to County**	\$2,482	\$14,086	\$6,528
Revenue from Public Charging Fees	-	\$4,543	\$4,543
Number of Charging Sessions	1,586	4,942	16,567
Average Energy Dispensed per Session (kWh)	9.4	11.8	-
Average Electricity Cost per Session	\$1.53	\$1.70	-
Greenhouse Gas Avoided (kg CO2e)***	7,228	41,021	48,248
Gallons of Gas Saved***	2,159	12,254	14,414
Median Time Charging	1:54	2:17	1:57
Number of Unique Users	27	726	753

^{*}Sessions drawing less than 0.1 kWh of electricity have been removed

^{**}Based on an estimated blended cost of electricity for previous year - \$0.144/kWh

^{***}Calculated using conversions provided by ChargePoint, Inc.

Appendix C: Fleet Vehicles Auctioned in 2022

TABLE 9: FLEET VEHICLES AUCTIONED IN 2022

Vehicle ID	Year Make Model
36	2001 Ford F350
73	2005 Chrysler Town & Country
109	2005 Dodge Durango
121	2004-FORDX-TAURUS
151	2000 Ford Econoline
175	2006 Ford Taurus
176	2006-FORDX-TAURUS
181	2007-FORDX-TAURUS
184	2007-DODGE-CARAVAN
186	2007-FORDX-TAURUS
198	2008 CHEVL IMPALA
251	2008-CHEVL-EXPRESS
263	2008-CHEVL-IMPALA
264	2008 Chevrolet Impala
267	2008-CHEVL-IMPALA
302	2009 Ford F150
303	2007 Dodge Charger
319	2008 Dodge Durango
320	2009 Chevrolet Tahoe
329	2010 Ford Crown Victoria
338	2011 Ford Crown Victoria
353	2011-DODGE-GRAND CARAVAN
354	2011-FORDX-CROWN VICTORIA
355	2011-FORDX-EXPEDITION
360	2011 Chevrolet Tahoe
363	2006-FORDX-ECONOLINE
370	2006-FORDX-E-350
418	2012 Chevrolet Caprice
422	2012-FORDX-FUSION
451	2013 Chevrolet Tahoe
455	2013-CHEVL-CAPRICE
479	2014-DODGE-GRAND CARAVAN
483	2015 Ford Explorer
504	2015 Ford Explorer
511	2015 Ford Explorer
555	2017 Ford Explorer
592	2017 Ford Explorer
2970	1988 Chevrolet Utility Truck
5570	1994 Samsung SE210LC
7000	1997 Broce R3300
9880	2004 Ford F550