



## MUNICIPAL FLEET EFFICIENCY POLICY

Type of policy: New () Amendment ()

Approved by Mayor:

Date:

Approved by School Committee:

Date:

Level: Department () Division () Citywide ()

Formatted: Tab stops: 0.5", Left + Not at 2"

Formatted: Indent: First line: 0.5"

### I. PURPOSE

The purpose of the Municipal Fleet Efficiency Policy is to set standards and guidelines for the purchase, operation, and maintenance of the City of Framingham and the Framingham Public School's fleet vehicles that will advance the economic, energy, and climate sustainability of municipal operations by achieving long-term reductions in energy costs, energy consumption, and greenhouse gas (GHG) emissions. The primary objectives of this policy are to:

- Accelerate the adoption of emissions-reduction technologies and the transition of the fleet to all-electric or other environmentally-advantageous vehicles;
- Minimize the long-term environmental and financial impacts of fleet vehicles;
- Optimize the composition of the fleet to achieve maximum fuel efficiency;
- Advance the development of electric charging infrastructure across municipal facilities;
- Prioritize the utilization of grants, rebates, and incentives to support the acquisition of vehicles and technologies that will improve efficiency and reduce GHG emissions.

This policy shall not require a department to take any action which conflicts with local, state, or federal requirements nor mandate the procurement of products that do not perform adequately for their intended use, exclude adequate purchasing competition, or require the purchase of vehicles that are not commercially available or practicable at a reasonable price.

### II. APPLICABILITY

This policy applies to all departments and divisions of the City of Framingham and the Framingham Public Schools. Unless specifically noted otherwise, each section of the policy applies to municipal vehicles within fleets of the City of Framingham and the Framingham Public Schools. Likewise, the terms 'department(s)' and 'division(s)' shall apply to both the City of Framingham and the Framingham

Formatted: Font: Italic

Formatted: Font: Italic

Formatted: Font: Not Bold, Italic

Public Schools when approved by the Mayor for City Departments and Divisions and the Framingham School Committee for the Framingham Public Schools.

### III. DEFINITIONS

**Battery Electric Vehicles (BEVs) or All-Electric Vehicles:** Vehicles that have a battery or batteries, that rely solely on electric power, and that are charged by plugging them into charging equipment.

**Combined City and Highway MPG (EPA Combined fuel economy):** Combined Fuel Economy means that fuel economy from driving a combination of 45% city and 55% highway miles and is calculated as follows:  $=1 / ((0.45/\text{City MPG}) + (0.55/\text{highway MPG}))$

**Drive System:** The manner in which mechanical power is directly transmitted from the drive shaft to the wheels. The following codes are used in the drive field:

- AWD = All Wheel Drive: four-wheel drive automatically controlled by the vehicle powertrain system
- 4WD = 4-Wheel Drive: driver selectable four-wheel drive with 2-wheel drive option
- 2WD = 2-Wheel Drive

**Gross Vehicle Weight Rating (GVWR)** – The gross vehicle weight rating (GVWR) of a vehicle refers to its maximum operating weight including passengers and cargo.

**Heavy-duty Vehicle:** A vehicle with a manufacturer's gross vehicle weight rating (GVWR) of more than 8,500 pounds. If a vehicle can be found listed on [fuelconomy.gov](http://fuelconomy.gov), it has a GVWR of less than 8,500 pounds and cannot be exempt based on its GVWR.

**Hybrid Electric Vehicles (HEVs):** Vehicles that are powered by an internal combustion engine and an electric motor that uses energy stored in a battery. The vehicle is fueled with gasoline to operate the internal combustion engine, and the battery is charged through regenerative braking, not by plugging in.

**Light-Duty Vehicle** – A vehicle with a GVWR of less than 8,500 pounds.

**Plug-in Hybrid Vehicles (PHEVs):** Vehicles that are powered by an internal combustion engine and an electric motor that uses energy stored in a battery that can be charged by plugging in. As opposed to HEVs, PHEVs can operate in an all-electric mode.

### IV. VEHICLE PROCUREMENT GUIDELINES

#### Fleet Vehicle Prioritization

Effective in FY 2023 for implementation in the FY 2024 operating and capital budgets and all years following, all departments and divisions **MUST** prioritize the acquisition of all new or replacement fleet vehicles that are all-electric, as specified in the ordered list below:

1. Battery Electric Vehicles (BEVs)
2. Plug-in Hybrid Vehicles (PHEVs)
3. Hybrid Electric Vehicles (HEVs) or Other Alternative Fuel Vehicles
4. Standard Internal Combustion Engine (ICE) Vehicles

For example, if commercially-available BEVs are determined not to be suitable for a targeted replacement, the applicable Department shall then evaluate commercially-available PHEVs, then hybrid electric or other alternative fuel vehicles. All planned vehicle purchases must be submitted for approval on an annual basis as part of the capital or operating budget preparation and the budget shall include what type of vehicle is anticipated to be purchased.

~~Municipal-City~~ departments and the Framingham Public Schools must review their proposed vehicle purchases with the Sustainability Coordinator as well as the Mayor/Chief Operating Officer or the Framingham School Committee, respectively. The City and Schools commits to purchasing BEV and PHEV light-duty trucks as they become commercially available and are economically sound.

**The City and the Schools shall seek to optimize the selection of procured vehicles to maximize fuel efficiency, taking into consideration factors such as vehicle class, size, and weight to ensure that each replacement vehicle is the most suitable and efficient vehicle for its purpose and the positions that will utilize it.** On an annual basis, as part of the development of the capital and operating budgets, the City and Schools shall evaluate whether a replacement is necessary for any vehicles that are retired from the fleet prior to any evaluations of replacement vehicles and determine if opportunities exist to share vehicles between departments.

For vehicle specifications for which BEVs, PHEVs, or hybrid electric vehicles and other alternative fuel vehicles are determined not to be suitable and a standard ICE vehicle is selected as the only suitable option, the City and the Schools shall consider leasing the vehicle if suitable electric options are anticipated during the life-cycle of that vehicle, subject to approval of the financial viability of leasing by the Chief Financial Officer. ~~Municipal Departments and the Framingham Public Schools~~ **All departments must also demonstrate why BEV, PHEV, or hybrid electric or other alternative fuel vehicle models are not suitable for requested non-exempt vehicles.**

The Chief Operating Officer and Chief Financial Officer shall confer with the Sustainability Coordinator prior to finalizing the capital and operating budgets that include fleet vehicle purchases. The final determination shall be made by the Mayor and Chief Operating Officer.

#### Minimum Fuel Efficiency Standards

**If BEVs or PHEVs are determined to not be suitable for a specific vehicle acquisition (whether due to availability, capacity, capabilities, or significant cost differences), all departments should seek to acquire the most efficient vehicle in the given class and MUST meet the current minimum fuel efficiency standards published by the Green Communities Program under Criteria 4 (see Appendix).**

The Chief Procurement Officer shall ensure that Green Communities' Guidance for Criterion 4 ~~must~~ be included as minimum specifications for all vehicle purchases. The Green Communities' Guidance for Criterion 4 must be checked for updates prior to procuring new or replacement vehicles (the most recent guidance for Criterion 4 has been attached to this policy for reference). These limits are based on the most recently published U.S. Environmental Protection Agency combined city and highway MPG ratings (see [fuelconomy.gov](http://fuelconomy.gov)). The EPA maintains a database on vehicle fuel efficiency that is updated throughout the year as new models are released. As increasing numbers of fuel-efficient vehicle models are released, the minimum combined MPG requirements of the Green Communities Program may be revised from time to time. All procurements shall comply with the then effective Green Communities' Guidance.

Formatted: Default Paragraph Font, Font: (Default) Times New Roman

#### Exemptions from Minimum Fuel Efficiency Standards

The following criteria define vehicles that are exempt from the minimum fuel efficiency requirements:

- Heavy-duty vehicles, including fire-trucks, ambulances, and some public works trucks that meet the definition of heavy-duty vehicle.
- Police cruisers; **however, starting in FY 2024 (July 1, 2023), police cruisers will no longer be exempt and new acquisitions will have to adhere to the applicable minimum fuel efficiency requirements (see Appendix).**
- Off-road vehicles.

Other Emergency Response vehicles that are under 8,500 pounds and for which fuel-efficient models are available **are NOT exempt**. Additionally, Police and Fire Department administrative vehicles **MUST** meet fuel efficiency requirements.

**While not required to meet the minimum fuel efficiency requirements, the selection of vehicle models for vehicles classified as exempt given their GVWR or use category must still prioritize fuel types according to the ordered list specified at the beginning of this Section.**

Additionally, if a standard internal combustion engine (ICE) vehicle is determined to be the most suitable option for an exempt vehicle, fuel-reduction and emissions-reduction technologies shall be considered, such as diesel particulate filters, selective catalytic reduction systems, exhaust gas recirculation, NOx absorbers, oxidation catalysts, **and** anti-idling devices.

Where the City and the Framingham Public Schools contract for transportation services, the procurement process to select these services shall prioritize proposals that integrate the use of electric and/or fuel-efficient vehicles and technologies.

As funding opportunities become available, the City **and Schools** shall seek to leverage grants and incentives to purchase energy efficient vehicles and pilot electric versions of heavy-duty vehicles and other exempt vehicles.

#### **V. VEHICLE TRANSFERS/RECYCLING**

Recycling of vehicles – i.e., moving a previously purchased and used vehicle from one municipal department to another municipal department in need of a vehicle **is only allowed after approval of the Chief Operating Officer and Chief Financial Officer, with input from the Sustainability Coordinator, and if the vehicle being recycled to a new department is more fuel efficient than the vehicle it is replacing.** Departments are responsible for notifying the Chief Operating Officer immediately should they anticipate seeking an exception to this fuel efficiency criterion due to extenuating circumstances so that an amenable solution may be reached.

#### **VI. FLEET INVENTORY**

The following information shall be included in a vehicle inventory list and said list shall be updated on an annual basis:

- Model
- Make
- Year
- Year/Month Purchased
- Drive System (2WD, 4WD, or AWD)
- Weight Class > 8,500 lbs.
- MPG

- Exempt or Non-Exempt
- Vehicle Function
- 

All departments and divisions may use EPA combined MPG estimates or actual combined MPG.

Formatted: Bulleted + Level: 1 + Aligned at: 0.32" + Indent at: 0.57"

## VII. FLEET EV CHARGING INFRASTRUCTURE

Prior to the procurement of BEVs or PHEVs, each Department shall confirm whether additional EV charging capacity is required and feasible to support new vehicles. Where space or capacity is limited, sites may require flexibility in the use of planned or existing EV charging stations. Departments should seek to leverage grants and incentives to support the cost of new EV charging infrastructure and equipment and shall work with the Sustainability Coordinator on this effort.

## VIII. VEHICLE EARLY RETIREMENT PLAN

Effective in FY 2024, all municipal departments and divisions of the City of Framingham and the Framingham Public Schools with fleet vehicles shall develop a plan to replace all non-exempt vehicles with fuel efficient vehicles (according to the list in Section IV). Said plan shall prioritize vehicle replacement according to the life cycle cost, outline the process by which the City and Schools will replace vehicles, and set goals for when the existing fleet will be replaced. The Early Retirement Plan shall be reviewed and revised, as necessary, on an annual basis and shall be submitted to the Chief Operating Officer and the Chief Financial Officer.

## IX. VEHICLE OPERATION AND MAINTENANCE

### Vehicle Anti-Idling

Idling vehicles can use up to a quarter to half a gallon of fuel per hour and pollute the air, presenting health and environmental hazards. In addition, Massachusetts General Law (MGL Chapter 90, Section 16A) and the Massachusetts Department of Environmental Protection (DEP) idling reduction regulation (310 CMR 7.11(1)(b)) both prohibit unnecessary vehicle idling by stating that the engine must be shut down if the vehicle will be foreseeably stopped for more than five minutes. Municipal-City and School employees shall reduce idling as much as is practicable. The City and Schools shall also seek to incorporate anti-idling education into other health and sustainability outreach and education for the general public.

### Efficient Use of Vehicles

Municipal-City and School employees shall seek to drive efficiently - accelerating and breaking smoothly, observing the speed limit, removing unnecessary weight from the vehicle, and consider carpooling or alternate travel practices to reduce the vehicle miles traveled and increase the fuel efficiency of the fleet. More information on efficient driving practices can be found on the U.S. DOE's Fuel Economy website: [fuelconomy.gov](http://fuelconomy.gov).

### Vehicle Maintenance

According to the Department of Energy, proper maintenance of vehicles can improve fuel economy by up to 10% through rigorous preventative maintenance practices. Preventative maintenance that entails tire pressure checks, verification of oil and coolant levels and condition, and checks for any signs of fluid leaks should be performed on a regular basis to ensure maximum efficiency of the municipal-City and Sschool fleets.

The City and Schools will dispose of hazardous materials such as waste oil, lubricants, antifreeze, and batteries safely through environmentally-responsible practices and in accordance with all applicable state and federal regulations.

**X. APPENDIX**

**Reference to Green Communities’ Guidance for Criterion 4 (July 8, 2022)**

The most recent Green Communities’ Guidance for Criterion 4 can be found on the Department of Energy Resource’s website: [mass.gov/guides/becoming-a-designated-green-community#-criterion-4](https://mass.gov/guides/becoming-a-designated-green-community#-criterion-4) and shall be checked for updates before the procurement of any new vehicles. At the time this policy was published, minimum fuel efficiency requirements are:

- 2-wheel drive car: 30 MPG
- 4-wheel drive car: 29 MPG
- 2-wheel drive van 22 MPG
- 4-wheel drive van 20 MPG
- 2-wheel drive pick-up truck: 21 MPG
- 4-wheel drive pick-up truck: 18 MPG
- 2-wheel drive sport utility vehicle: 24 MPG
- 4-wheel drive sport utility vehicle: 21MPG

Many vehicles that meet the above criteria can be found on statewide contract VEH110, “Purchase of Light Duty Vehicles – Passenger Cars, SUVs, Trucks, Vans, SSVs and PPVs,” located in [commbuys.com](https://commbuys.com).

Field Code Changed

Formatted: Tab stops: Not at 3.23"