OM-03: Vehicle Fuel Efficiency and Use

1-15 points

Goal: Reduce fossil fuel use and emissions in vehicles used for operations and maintenance.

Affected Triple Bottom Line Principles

Sustainability Linkage

Reducing fossil fuel usage contributes to all of the triple bottom line principles by improving public health, reducing energy usage and costs, and reducing the impacts from associated emissions.

Background and Scoring Requirements

Background

Reducing fossil fuel consumptions is the overall goal of this criteria, whether that is achieved through the use of electric vehicles, alternative fuels, reduced idling, etc. The performance measurement tool should be used to report actual percentage reduction of fossil fuels used. If an increase or decrease in overall fleet size is required during the program, it could be used as an opportunity for improvement. For more information on alternative fuel and efficiency best practices, visit AASHTO's Equipment Management Technical Service website[1].

Scoring Requirements

Requirement OM-03.1

2 or 4 points. Set Fuel Reduction Goals

Set goals for fuel use reduction (primarily fossil fuels) and set a time frame in which these goals should be achieved. Some agencies manage their light-duty fleet vehicles separately from their heavy-duty fleet and off-road equipment—in these cases, goals may be included in multiple documents.

One of the following scores applies:

- **0 points.** No goals are set.
- **2 points.** Goals are set by the agency for either light-duty fleet or for heavy-duty and off-road equipment. Or, goals are set for light-duty and/or heavy-duty fleet for the agency by an executive board or other governing entity and no additional goals are developed by the agency.
- **4 points.** Goals are set by the agency for both light-duty fleet and for heavy-duty and off-road equipment.

Requirement OM-03.2

2 or 4 points. Develop a Fleet Management Plan

Have a documented fleet management plan that, at a minimum, describes the agency's planned actions to reduce fossil fuel usage, transition to alternative fuels or energy sources, increase overall fuel efficiency, and reduce vehicle miles travelled (VMT). The plan may be comprised of multiple documents or a consolidated single document. Some examples of reduction actions include:

- **Higher efficiency and Alternate energy vehicles**. The purchase of vehicles powered by such alternative fuels as electricity, propane, natural gas, E-85, or biodiesel can result in lower greenhouse gas emissions. Hybrid electric and other high efficiency vehicles can reduce fossil fuel use and greenhouse gas emissions.

- **Anti-idling policy**. Anti-idling policies can be implemented that reduce the amount of fuel used unnecessarily when the vehicle is not in motion. These policies often specify a time limit for any vehicle idling or an amount of idling allowed during a certain time frame. There are idling reduction technologies that can be installed on heavy vehicles to help reduce idling. See the EPA website[2] for types of idling reduction technologies and strategies.
- **Maintenance and operation.** Proper maintenance and operation can improve fuel efficiency. Training employees to properly inspect vehicles before use, drive efficiently, and identify maintenance issues can help prevent fuel waste.
- **Right-sizing vehicles.** Agencies may want to examine what each vehicle in their fleet is used for and ensure that vehicles are sized appropriately. For example, using light-duty trucks instead of heavy-duty trucks can often meet the needs of the user while reducing the amount of fuel consumed.
- **Vehicle technologies.** Tow plows and wing plows are two examples of modifications of snow plow equipment that can contribute to overall fuel efficiency by using a single vehicle to do more work without requiring significantly more fuel. Installing GPS in vehicles has also been shown to reduce the miles actually travelled by vehicle operators.
- **Employee training**. Appropriate training of staff that operate equipment and vehicles can significantly improve adherence with planned reduction actions and the commitment to help achieve the set goals.

One of the following scores applies:

- **0 points.** No plan is created.
- **2 points.** A plan is developed for either light-duty fleet or for heavy-duty and off-road equipment.
- **4 points.** A plan is developed for both light-duty fleet and for heavy-duty and off-road equipment.

Requirement OM-03.3

3 points. Test Alternative Fuels and Reduction Methods

The agency is actively testing the use of alternative fuels or reduction methods in order to analyze the feasibility for incorporation in the agency's light-duty fleet or heavy-duty or off-road equipment use.

Requirement OM-03.4

2 points. Measure Progress and Monitor Performance

Have a fleet tracking program, spreadsheet, or other document that monitors vehicle use and fuel consumption. This could likely be integrated into an existing vehicle usage or maintenance database. Use this tool to identify where the greatest improvements can be made and to monitor progress once improvements are implemented. This applied to Fuel Reduction Plans described above and/or Testing of Alternative Fuels and Reduction Methods as noted above.

In addition to measuring fuel consumption, other measures may help the organization analyze where fuel consumption is reduced. Examples include measuring vehicle miles traveled or carbon footprint reduction (which would measure emissions reductions as well as fuel reductions).

Requirement OM-03.5

2 points. Demonstrate Sustainable Outcomes

To earn credit for this scoring requirement, the agency must have a fleet tracking program, spreadsheet, or other document that monitors vehicle use and fuel consumption as described in scoring requirement OM-03.4. Use the

fleet tracking system that was set up to measure performance and track progress toward these goals for at least one year. Show that progress has been made toward the stated goals.

Resources

The following resources are referenced in this criterion and consolidated here:

1. AASHTO, Equipment Management Technical Service website, http://www.emtsp.org/
2. EPA, *Learn About Idling Reduction Technologies (IRTs) for Trucks and School Buses*, https://www.epa.gov/verified-diesel-tech/learn-about-idling-reduction-technologies-irts-trucks-and-school-buses

Scoring Sources

The program is considered to have met this criterion if the requirements above can be reasonably substantiated through the existence of one or more of the following documentation sources (or equal where not available):

1. Fleet management plan to reduce fossil fuel usage.
2. Copy of fleet performance tracking tool with list of current fleet vehicles and fuel usage.
3. Goal statement and documentation of progress toward goals for at least the first year.