## Self-Assessment: 15.0 Maintenance

This self-assessment worksheet is intended to assist State DOT maintenance staff in determining where their organization falls on the GHG engagement spectrum and to identify additional activities to estimate and reduce GHG emissions related to maintenance.

#### Primary GHG Interests and Responsibilities

The maintenance unit can support GHG emissions estimation and reduction through:

* Minimization of GHG emissions from fuels and materials used in maintenance activities.
* Minimization of infrastructure and system-user life-cycle GHG emissions through sound maintenance practices that avoid traffic disruptions and reduce the need for major reconstruction and rehabilitation work.

#### Key Staff Responsibilities

List the key staff person(s) responsible for ensuring GHG is considered in maintenance activities. **Lead** = management/oversight; **Support** = technical or procedural support (e.g., emissions calculations).

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| Unit | Title/Position/Topic | Name | Role (Lead/Support) |
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#### Level of Engagement

Select the level that best describes how engaged your agency, as a whole, is now on addressing GHG in maintenance activities and how engaged you might want to be in the next few years.

| Now | Within 3 Years? | Does Your Agency Consider GHG Impacts from Maintenance Activities? | Level |
| --- | --- | --- | --- |
| \_\_\_\_\_ | \_\_\_\_\_ | No policy related to GHG emissions reduction that requires consideration in Maintenance. | 1 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy to consider GHG emissions in Maintenance. Possible qualitative GHG goals, no quantitative estimates or targets. No formal consideration. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy that sets reduction goals or targets for GHG emissions from the agency’s maintenance activity and requires consideration in budgeting and operations. Baseline GHG inventory and forecast for Maintenance. Limited strategy identification and assessment. Qualitative consideration at the program level.  | 3 |
| \_\_\_\_\_ | \_\_\_\_\_ | Policy that sets Maintenance GHG reduction goals or targets and monitors progress on a Region/District basis. Quantitative consideration with mitigation strategies identified, including both fuels and materials as well as review of program operations as they bear on GHG emissions, using a “Plan, Do, Check, Act” approach.  | 4 |

#### GHG Estimation and Reduction Strategies

Identify specific strategies your unit/functional area is undertaking now and which ones you might want to be undertaking in a few years. The table indicates what “level of engagement” (1–4) the strategy may be associated with. More advanced strategies indicate higher levels of engagement that also require more effort. Note that many of these strategies are similar to and should be implemented in cooperation with Design and Construction.

| Doing Now? | Within 3 Years? | Programmatic Strategy | Level of Engagement |
| --- | --- | --- | --- |
| \_\_\_\_\_ | \_\_\_\_\_ | Maintain facilities in a state of good repair (minimize traffic delays and detours caused by “demand maintenance”). | 1 |
| \_\_\_\_\_ | \_\_\_\_\_ | Change to lower carbon fuels (biodiesel, renewable diesel, and electricity where feasible). | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Develop procedures to improve traffic flow and reduce congestion and idling in detours. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Include low-carbon materials specifications in outsourced work bids. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Use low-GHG fuels and technologies for space heating and lighting in maintenance facilities. | 2 |
| \_\_\_\_\_ | \_\_\_\_\_ | Plan work to reduce unneeded travel.  | 3 |
| \_\_\_\_\_ | \_\_\_\_\_ | Develop low-carbon standardized specifications for both concrete and asphalt in cooperation with Design and Construction. | 4 |
| \_\_\_\_\_ | \_\_\_\_\_ | Introduce electrical vehicles and equipment in maintenance applications, as technology is ready. | 4 |

#### Action Plan

What actions will you take to implement the strategies you identified above to increase your agency’s engagement?

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| Action | Timeframe | Lead Responsibility |
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