

**Justification for Retaining Emissions Inventories for Point, Nonpoint, and Marine, Rail, and Airport (MAR) Sources for 2025 and 2030 for the 2008 Ozone NAAQS Maintenance Plan Update (Draft)<sup>1</sup>**

The Washington region is proposing to retain projected emissions inventories for point, non-point, and marine, rail, and airport (MAR) sources for 2025 and 2030 in the 2008 ozone NAAQS maintenance plan for the reasons mentioned below.

Point sources - We don't believe there are any meaningful changes to point source inventories since they were submitted in 2018 as part of the above plan.

Nonpoint & MAR sources – Our analysis provided in Table 1 below shows relatively minor/insignificant changes to growth factors (GFs) used for projecting nonpoint and MAR source emissions from 2014 to 2025 and 2030. The new set of GFs are based on latest estimates from COG's Cooperative Forecasts Round 9.2 and Constrained Long Range Transportation Plans (CLRP).

**Table 1**

| <b>Growth Factor</b>   | <b>2008 Ozone NAAQS Maintenance Plan</b> | <b>COG Cooperative Forecasts 9.2 (Final)</b>        |
|------------------------|--|---|
| Employment (2025/2014) | 1.14                                     | 1.14  |
| Employment (2030/2014) | 1.21                                     | 1.21  |
| Population (2025/2014) | 1.12                                     | 1.13  |
| Population (2030/2014) | 1.17                                     | 1.18  |
| Household (2025/2014)  | 1.14                                     | 1.13  |
| Household (2030/2014)  | 1.19                                     | 1.20  |
|                        | <b>2008 Ozone NAAQS Maintenance Plan</b> | <b>2020 &amp; 2022 Amendments to Visualize 2045</b> |
| VMT (2025/2014)        | 1.12                                     | 1.12  |
| VMT (2030/2014)        | 1.17                                     | 1.16  |
| Lane Miles (2025/2014) | 1.06                                     | 1.04  |
| Lane Miles (2030/2014) | 1.06                                     | 1.06  |

As seen above in Table 1, only population GFs (for 2025 and 2030) and households GFs (for 2030) increased by just about 1% based on latest estimates. Rest others, such as, growth factors for employment, households (for 2025), VMT lane miles, and MOVES3 refueling emissions (Item 3, MOVES3 and updated MVEBs\_Ver2.pdf at <https://www.mwcog.org/events/2022/9/13/mwaqc-tac/>, Slide 6) seem to either remain at the same level or have decreased between 1% to 2%. Though sources using population GFs contribute to about 60% and 26% of total VOC and NOx emissions respectively in the 2008 ozone NAAQS maintenance plan, 1% increase in population GFs together with some amount of decrease in other GFs should keep overall increase in non-point and MAR source emissions in 2025 and 2030 to be relatively very small. This slight increase in emissions in future years should not change the overall conclusion of the 2008 ozone NAAQS maintenance plan. This analysis demonstrates that there is really no need to update those nonpoint and MAR sources in the above plan.

<sup>1</sup> This draft write-up is based on the two documents (Item 2: Proposal to EPA on 2008 O3 MP Update\_rev.docx & Item 3: GF Comparison\_2008 O3 MP vs Latest Estimates.xlsx) that were presented to MWAQC-TAC in October 2022. The two documents had details of the proposed methodology to update the 2008 ozone NAAQS maintenance plan and a comparison of growth factors used in the 2008 ozone NAAQS maintenance plan and COG's latest Cooperative Forecasts 9.2 (Final).