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September 25, 2014

Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

Re: Docket No. FHWA-2013-0018

To the Federal Highway Administration:

The American Association of State Highway and Transportation Officials (AASHTO) welcomes the opportunity to submit these comments on the Notice of Proposed Rulemaking (NPRM) published by the Federal Highway Administration (FHWA) in the Federal Register on August 4, 2014, regarding “weighting factors” to be used in funding calculations for the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. (79 Fed. Reg. 45146).

AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. It represents all transportation modes. AASHTO’s primary goal is to foster the development, operation, and maintenance of an integrated national transportation system. Our members work closely with USDOT agencies to operate, maintain, and improve the nation’s transportation system.

We appreciate the opportunity to comment on this interim guidance and thank FHWA for its consideration. If you have any questions regarding these comments, please contact Matthew Hardy, AASHTO’s Program Director for Planning and Policy at (202) 624-3625 or Jennifer Brickett, AASHTO’s Senior Program Manager for Environment at (202) 624-8815.

Sincerely,

A handwritten signature in black ink, appearing to read "Bud Wright".

Bud Wright
Executive Director
AASHTO

A handwritten signature in black ink, appearing to read "Mike Hancock".

Mike Hancock
President, AASHTO
Secretary, Kentucky Transportation Cabinet

BACKGROUND

This rulemaking implements Section 1113(b)(6) of MAP-21, which amends the 29 U.S.C. 149 to require a portion of a State's CMAQ funds to be used for projects that reduce PM2.5 emissions, if the State has nonattainment or maintenance areas for PM2.5. The set-aside for projects that reduce PM2.5 emissions is defined in the statute as:

“an amount equal to 25 percent of the funds apportioned to each State under section 104(b)(4) for a nonattainment or maintenance area that are based all or in part on the weighted population of such area in fine particulate matter nonattainment...”¹

This statutory language requires a calculation: to determine the amount of the set-aside, FHWA must first determine how much of the State's total CMAQ apportionment was based on the share of the State's population living in PM2.5 non-attainment or maintenance areas. Twenty-five percent of that amount is required to be dedicated to projects that reduce PM2.5 emissions.

The difficulty in implementing this set-aside provision is that MAP-21 eliminated the statutory provision that apportioned CMAQ funds be based on a population-weighted formula.² Thus, the set-aside for PM2.5 assumes that CMAQ funds are apportioned based on a population-weighted formula, when in fact such a formula is no longer being used. This difficulty is compounded by the fact that the statute provides no direction regarding the weighting factor to be used in determining the amount of the PM2.5 set-aside.

In the Interim Program Guidance issued in November 2013, FHWA announced that it would fill this gap in the statute by conducting a rulemaking to set the weighting factor used in determining the amount of the PM2.5 set-aside. In our comments on that guidance, we agreed that a rulemaking is an appropriate way to determine the weighting factor.³

Because the rulemaking has not yet been completed, FHWA has determined the amount of the set aside during the past two fiscal years (FY 2013 and FY 2014) “by making an administrative determination to use a weighting factor of 1.2 for PM2.5 areas.”⁴ The NPRM provides the following rationale for using the 1.2 weighting during the past two fiscal years:

The administrative determination to use a weighting factor of 1.2 for the PM2.5 areas was based on the following: first, FHWA noted that the earlier Senate version of MAP-21 (section 1113(j)(6) of S. 1813) included a 1.2 weighting factor for an apportionment formula for areas designated nonattainment or maintenance for PM2.5. Second, historically, the weighting factors applied ranged

¹ 23 U.S.C. 149(k)(1)

² MAP-21 provides that each State's current CMAQ funding level should be equal, in percentage terms, to its 2009 CMAQ funding level as a share of the State's total apportionment of federal-aid funding.

³ See Docket No. FHWA-2013-0023, AASHTO Comments, January 13, 2014.

⁴ 79 Fed. Reg. 45148.

from 1.0 for CO and the lowest ozone classification to 1.4 for the highest ozone classification. A weighting factor of 1.2 is the midpoint value of that range, which would put PM2.5 at a comparable level with the two other criteria pollutants (CO and ozone) under prior legislation. Finally, FHWA considered that, while a weight of 1.2 would set the floor for the 25 percent set-aside, it would not preclude a State from investing more funding on PM2.5 strategies if the State determined that it was the most appropriate use of its funds.⁵

In a departure from that approach, this NPRM proposes to adopt a much heavier weighting factor for PM2.5 nonattainment areas - a weighting of 5.0. The NPRM provides the following rationale for the increased weighting:

Based upon FHWA's review of the serious health impacts of PM2.5 as described above, and Congress' direction to reduce PM2.5 emissions, as evidenced by its action to set-aside a portion of CMAQ funds to address PM2.5 emissions, FHWA believes it is reasonable to establish a weighting factor of 5. Given the severity of PM2.5 health impacts, a weight substantially higher than the weights for ozone and carbon monoxide is appropriate. Setting higher weight for PM2.5 relative to the other two criteria pollutants is consistent with the emphasis by Congress on PM2.5 reduction strategies by singling them out for the set-aside. Using the combined weight for the two other criteria pollutants, ozone and carbon monoxide, as a point of reference, FHWA believes that a weight for PM2.5 of approximately twice the weight for both of these criteria pollutants combined is reasonable. The highest combined weight for ozone and carbon monoxide populations is 2.4. Given the severe health impacts of PM2.5 as discussed above, FHWA, therefore, believes that a weight for PM2.5 populations of 5 is appropriate.⁶

In addition to setting a weight of 5.0 for PM2.5 nonattainment areas, the NPRM proposes a weighting of 1.0 for PM2.5 maintenance areas. The NPRM also proposes weighting to be used for ozone and carbon monoxide (CO) nonattainment and/or maintenance areas, for areas that are nonattainment and/or maintenance for various combinations of pollutants.

⁵ 79 Fed. Reg. 45148.

⁶ 79 Fed. Reg. 45149.

PRINCIPAL COMMENTS

1) PROJECTS “THAT REDUCE” PM2.5 EMISSIONS

The Interim Program Guidance, released in November 2013, stated that the 25% set-aside must be used for “projects targeting PM2.5 reductions” in nonattainment and maintenance areas.⁷ In our comments on that guidance, we expressed concern that the word “targeting” was not consistent with the statute and could unduly limit the range of projects that count toward the set-aside. We recommended using the language directly from the statute, which requires the set-aside funds to be used for “projects that reduce” PM2.5 emissions.⁸

The language in the NPRM is consistent with our previous recommendation: Section 790.101 of the proposed rule states that the set-aside funds “must be obligated to fund projects that reduce PM2.5 emissions in such area.”⁹ AASHTO supports this language and recommends that this language be retained in the final rule.

2) WEIGHTING FACTOR FOR PM2.5 NONATTAINMENT AREAS

We recommend retaining the existing weighting of 1.2 for PM2.5 nonattainment areas, for all of the reasons cited by FHWA in support of its decision to adopt this weighting for FY 2013 and 2014. Specifically, a weighting of 1.2 should be adopted because:

- The earlier Senate version of MAP-21 included a 1.2 weighting factor for an apportionment formula for areas designated nonattainment or maintenance for PM2.5. Thus, to the extent that the legislative history indicates the intent of Congress, it supports using a rating of 1.2.
- The weighting factors used prior to MAP-21 (to determine CMAQ apportionments) ranged from 1.0 for CO to 1.4 for the highest ozone classification. As the NPRM notes, a weighting factor of 1.2 is in the midpoint value of that range; a weighting factor of 5.0 would be far outside that range. The most reasonable inference is that Congress intended for FHWA to adopt a weighting factor within the range of those already in use.
- Finally, the PM2.5 set-aside level - wherever it may be set - simply sets the floor for funding dedicated to reducing PM2.5 emissions; it does not preclude a State from committing additional funding to reduce PM2.5 emissions.

The reasons cited in the NPRM for adopting a weighting factor of 5.0 are not persuasive. In essence, the NPRM justifies this factor by doubling the highest combined weighting used under pre-MAP-21 formulas for CO and ozone nonattainment areas (2.4), and then rounding up to 5.0. There is no basis in the legislation for concluding that PM2.5 should be assigned a weighting that

⁷ Interim Program Guidance, p. 7.

⁸ See Docket No. FHWA-2013-0023, AASHTO Comments, January 13, 2014.

⁹ 79 Fed. Reg. 45151.

is twice as great as the other two pollutants combined, nor does the NPRM identify any scientific basis for assigning such a weighting. For all of the reasons noted above, we believe there is a far stronger basis for simply continuing the current weighting of 1.2 for PM2.5 nonattainment areas.

In the event that a weighting of 1.2 is not retained for PM2.5 nonattainment areas, we recommend adopting a weighting no higher than the highest weighting in effect at the time MAP-21 was enacted - that is, a weighting of 1.4, which applied to “extreme” ozone nonattainment areas.¹⁰ This approach would ensure that the weighting for PM2.5 nonattainment areas is within the range contemplated by Congress when it enacted MAP-21, while also reflecting the heightened severity of PM2.5’s health effects.

3) WEIGHTING FACTOR FOR PM2.5 MAINTENANCE AREAS

The NPRM proposes a weighting of 1.0 for PM2.5 maintenance areas. We support this weighting and recommend that it be retained in the final rule. The weighting of 1.0 for PM2.5 maintenance areas is consistent with the weighting given to both ozone maintenance areas and CO maintenance areas prior to MAP-21 and in Section 790.101(a) and (b) of the proposed rule.¹¹

4) WEIGHTINGS IN AREAS DESIGNATED AS NONATTAINMENT AND/OR MAINTENANCE FOR MULTIPLE POLLUTANTS

We recommend that the final rule provide the specific weightings to be used for each possible combination of nonattainment and maintenance areas. The following combinations are not addressed in the proposed rule, and should be added to the final rule:

- Ozone nonattainment and maintenance areas that are also designated as PM2.5 maintenance areas
- CO nonattainment or maintenance areas that are also designated as PM2.5 nonattainment areas
- CO nonattainment or maintenance areas that are also designated as PM2.5 maintenance areas
- Ozone nonattainment and maintenance areas that are also designated as CO nonattainment or maintenance areas and are designated as PM2.5 nonattainment areas
- Ozone nonattainment and maintenance areas that are also designated as CO nonattainment or maintenance areas and are designated as PM2.5 maintenance areas

These combinations should be specifically addressed in the final rule even if the weighting for one or more of the individual pollutants (e.g., CO) is 1.0. The benefit of specifying the

¹⁰ 79 Fed. Reg. 45148 (noting that “historically, the weighting factors applied ranged from 1.0 for CO and the lowest ozone classification to 1.4 for the highest ozone classification”).

¹¹ 79 Fed. Reg. 45151.

weighting factor for each possible combination is that it ensures clarity and certainty in implementation of the rule. Our specific recommendations are provided in a table attached to this comment letter.

5) PM2.5 AREAS IN WHICH TRANSPORTATION SOURCES ARE INSIGNIFICANT

There are several states in the country that have PM2.5 nonattainment and maintenance areas that primarily result from non-transportation sources such as wood burning stoves or off-highway, mining related dust issues. For example, in one state with a PM2.5 nonattainment area, a chemical mass balance study done by the state air agency found that residential wood combustion was primarily responsible for PM2.5 in the area, while the on-road contributors were minor. There are similar examples throughout the U.S.

AASHTO recommends providing increased flexibility in the application of PM2.5 set-aside requirements for PM2.5 nonattainment and maintenance areas in which transportation sources are insignificant contributors to PM2.5 nonattainment or maintenance status under State Implementation Plans (SIPS) or otherwise addressed. Increased flexibility should be provided to areas that are in nonattainment and maintenance areas by making the weighting for PM2.5 zero (0) if transportation sources are determined to be an insignificant contributor to the PM2.5 nonattainment or maintenance status. Under this approach, States would not lose flexibility in programming CMAQ funds when it has been determined that transportation is not the cause of the nonattainment or maintenance status.

Similarly, in instances where transportation is a greater contributor to PM2.5 nonattainment or maintenance status than “insignificant”, and there is another contributor to the nonattainment or maintenance status that is more than “insignificant”, the rule should have FHWA reduce the weighting, by an amount it determines, greater than zero but less than 1.2 for nonattainment areas and greater than zero but less than 1.0 for maintenance areas, to reflect the more limited contribution of transportation to the nonattainment or maintenance status. See Table 1 below for example scenarios.

Table 1. Example Scenarios

| Scenario | Transportation Sources | Non-Transportation Sources (e.g., Power Plant Sources) | PM2.5 Nonattainment Weighting Factor | PM2.5 Maintenance Weighting Factor |
|-----------------|-------------------------------|---------------------------------------------------------------|---------------------------------------------|-------------------------------------------|
| Scenario 1 | Significant | Insignificant | 1.2 | 1.0 |
| Scenario 2 | Significant | Significant | Between 0 and 1.2 | Between 0 and 1.0 ¹² |
| Scenario 3 | Insignificant | Significant | 0 | 0 |

¹² Maintenance areas are areas formerly in nonattainment but now in attainment though not literally designated as in attainment. So, any reference in this table and in the discussion on this page to a more than insignificant contribution by transportation sources to maintenance status is, at least in large part, a historical reference.

**ATTACHMENT 1: PROPOSED WEIGHTING FACTORS FOR 23 CFR
790.107 WHERE TRANSPORTATION SOURCES FOR PM2.5 ARE
SIGNIFICANT AND NON-TRANSPORTATION SOURCES FOR PM2.5
ARE INSIGNIFICANT**

| Section 790.107 | Classification | Proposed Rule | AASHTO Proposal for Weighting Factors for Determining Weighted Population |
|----------------------------|------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (a) | Ozone nonattainment or maintenance | Ozone factor | Same as proposed rule |
| (b) | CO nonattainment or maintenance | 1.0 | Same as proposed rule |
| (c) | Ozone nonattainment or maintenance and CO nonattainment or maintenance | Ozone factor x 1.2 | Same as proposed rule |
| (d) | PM2.5 nonattainment | 5.0 | 1.2 <i>Maintains existing weighting as stated in FHWA guidance. See comment letter.</i> |
| (d) | PM2.5 maintenance | 1.0 | Same as proposed rule |
| (e) | Ozone nonattainment or maintenance and PM2.5 nonattainment | Ozone factor x 5.0 | (Ozone factor) x 1.2 <i>Recommended for consistency with change to paragraph (d).</i> |
| (f) [new] | Ozone nonattainment or maintenance and PM2.5 maintenance | Not addressed | (Ozone factor) x 1.0 <i>Ozone weighting is the same as in paragraph (e); PM2.5 weighting is 1.0 for consistency with paragraph (d).</i> |
| (g) [new] | CO nonattainment or maintenance and PM2.5 nonattainment or maintenance | Not addressed | (PM2.5 factor) x 1.0 <i>PM2.5 weightings are the same as in paragraph (d); CO weighting is 1.0 for consistency with paragraph (b)</i> |
| (h) [new] | Ozone nonattainment or maintenance and CO nonattainment or maintenance and PM2.5 nonattainment | Not addressed | (Ozone factor) x 1.2 x 1.2 <i>Ozone and CO weightings are the same as in paragraph (c); PM2.5 weighting is 1.2 for consistency with paragraph (d) (for nonattainment areas).</i> |

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|--------------|----------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i) [new] | Ozone nonattainment or maintenance and CO nonattainment or maintenance and PM2.5 maintenance | Not addressed | (Ozone factor) x 1.2 x 1.0 <i>Ozone and CO weightings are the same as in paragraph (c); PM2.5 weighting is 1.0 for consistency with paragraph (d) (for maintenance areas).</i> |
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