MIDWEST OZONE GROUP COMMENTS ON ENVIRONMENTAL JUSTICE CONSIDERATIONS FOR 2015 OZONE TRANSPORT RULEMAKINGS DOCKET NO. EPA-HQ-OAR-2021-0668

NOVEMBER 23, 2021

These comments[1] are offered on behalf of the Midwest Ozone Group ("MOG") in response to the non-regulatory request of United States Environmental Protection Agency ("EPA") for stakeholder insights related to environmental justice considerations for 2015 ozone transport rulemakings.

MOG is an affiliation of companies and associations that draws upon its collective resources to seek solutions to the development of legally and technically sound air quality programs.[2] MOG's primary efforts are to work with policy makers

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[2] The members of and participants in the Midwest Ozone Group include: American Electric Power, American Forest & Paper Association, American Wood Council, Ameren, Alcoa, Appalachian Region Independent Power Producers Association (ARIPPA), Associated Electric Cooperative, Big Rivers Electric Corp., Buckeye Power, Inc., Citizens Energy Group, Cleveland Cliffs, Council of Industrial Boiler Owners (CIBO), Duke Energy Corp., East Kentucky Power Cooperative, ExxonMobil, FirstEnergy Corp., Indiana Energy Association, Indiana-Kentucky Electric Corporation, Indiana Utility Group, LGE / KU, Marathon Petroleum Company, National Lime Association, Ohio Utility Group, Ohio Valley Electric Corporation, Olympus Power, and City Water, Light & Power (Springfield IL).

in evaluating air quality policies by encouraging the use of sound science to achieve improved ambient air quality. MOG has been actively engaged in a variety of issues and initiatives related to the development and implementation of air quality policy, including the assessment of exceptional events, the development of transport rules, National Ambient Air Quality Standards ("NAAQS") , nonattainment designations, petitions under Sections 126, 176A and 184(c) of the Clean Air Act ("Act" or "CAA"), NAAQS implementation guidance, the development of Good Neighbor state implementation plans (SIPs) and related regional haze and climate change issues. Specifically, MOG has participated in the development of each of the previous ozone transport rules (e.g., NOx SIP Call (1998), CAIR (2005), CSAPR (2011), CSAPR Update (2016), and the Revised CSAPR Update (2021) by attending meetings with state and federal agencies, providing written comment and air quality-related research, and in judicial challenges to those rules. MOG Members and Participants own and operate numerous stationary sources that are potentially affected by any new "good neighbor" transport rule related to the 2015 ozone NAAQS. MOG seeks the development of technically and legally sound air pollution rules and actions that may impact their facilities, communities, employees, contractors, and the consumers of their products.

1. The Clean Air Act Provides A Robust Framework For the Protection of Human Health and Welfare With an Adequate Margin of Safety.

The CAA directs EPA to establish NAAQS for air pollutants such as ozone for the specific purpose of assuring that human health and welfare are protected "allowing an adequate margin of safety." CAA § 109(b). The CAA requires these rules to be continuously reviewed and adjusted as appropriate to reflect current science.

Section § 181 of the CAA requires each state in which an area is designated as "nonattainment" (i.e., air quality within the designated nonattainment area does not meet the NAAQS) to develop a plan, known as a State Implementation Plan ("SIP") to demonstrate the strategy by which the state will bring the nonattainment area within that state into compliance with the ozone NAAQS by a certain date. The states must submit their SIPs to EPA for approval. The next attainment date for the 2015 ozone NAAQS is 2024, making the target year for any new controls to be the ozone season of 2023.

In addition, CAA Section 110(a)(2)(D), known as the "good neighbor" provision, requires each state whose emissions "contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any [primary or secondary NAAQS] to submit a SIP that demonstrates how that state (a so-called "upwind state") will eliminate its emissions that adversely affect the other state (a so-called "downwind state"). The SIPs must contain adequate provisions "prohibiting . . . any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will (l) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any . . . national ambient air quality standard." CAA § 110(a)(2)(D)(i). With respect to the 2015 ozone NAAQS, the next attainment date is 2023, which becomes that target date for assessment of any new good neighbor transport rule.[3]

The relationship between upwind and downwind states relative to ambient air quality has been a contentious debate about CAA responsibilities often involving the federal appellate courts and the United States Supreme Court. The clear direction from these courts, however, is that there must be alignment of the different and unique obligations of upwind and downwind states.

Specifically, the United States Supreme Court has ruled that the obligation of upwind states is "to eliminate" those "amounts" of pollution that "*contribute significantly to nonattainment* in downwind states." *EPA v. EME Homer II*, 134 S. Ct. 1584, 1603 (2014) (emphasis added). In addition, the D.C. Circuit has ruled that EPA must harmonize the deadline for upwind state contributors to eliminate their significant contribution with the attainment deadlines for downwind areas. *North Carolina v. EPA*, 531 F.3d 896, 912 (D.C. Cir. 2008).

Most recently, the D.C. Circuit addressed the interstate transport obligations of upwind states in connection with the *Wisconsin* remand in which the Court stated, "the Good Neighbor Provision calls for the elimination of upwind States' *significant contribution* on par with the relevant downwind attainment deadline." *Wisconsin v. EPA*, 938 F.3d 303, 315 (D.C. Cir. 2019) (emphasis added). In addition, the court in the *Wisconsin* remand went on address the need for fairness and equity of states failing to meet their statutory obligations and forcing additional responsibility on

[3] Any transport rule related to the good neighbor provisions must be forward looking and be directed at the next applicable attainment date. *Wisconsin v. EPA*, 938 F.3d 303**, 322** (D.C. Cir. 2019).

their neighbors. Principles of fairness and equity are embedded in the Act. As was explained by the court "… it is the statutorily designed relationship between the Good Neighbor Provision's obligations for upwind States and the statutory attainment deadlines for downwind areas that generally calls for parallel timeframes." Id. at 316. The Court offered the following explanation:

> The Good Neighbor Provision was enacted "to enable downwind States to keep their levels of [air pollution] in check." A "reasonable statutory interpretation" of the Provision "must account for . . . the broader context of the statute as a whole." And the attainment deadlines, the Supreme Court has said, are "the heart" of the Act. … ("the attainment deadlines are central to the regulatory scheme"). The Act's central object is the "attain[ment] [of] air quality of specified standards [within] a specified period of time."

The law is therefore clear that the development of any new transport rule related to the 2015 ozone NAAQS must be based on the premise that the analytic year for that rule as applied to upwind states would be 2023 and that downwind states would also have imposed controls on their own sources by that date to satisfy the nonattainment obligations of the CAA. Any other interpretation of the CAA would be inconsistent with applicable case law and would have the effect of shifting the burden of CAA requirements from one group of states to the other fostering an unfair and inequitable result.

2. 2015 Ozone Ambient Air Quality Predictions.

In connection with consideration of any new transport rule related to the 2015 ozone NAAQS, it is significant that there are a very limited number of areas in the East that are predicted to exceed the 2015 ozone NAAQS in 2023. The majority of the areas in the East are predicted to attain the 2015 ozone NAAQS and therefore to achieve protection of human health and welfare as required by the CAA. Set forth below is a map and table that identify the areas in the East that are predicted to achieve attainment of the 2015 ozone NAAQS and those limited number of areas that are not.

AQS Site ID	State	County	2023 Ozone Design Value (ppb) Revised CSAPR Update
90010017	Connecticut	Fairfield	73.4
90013007	Connecticut	Fairfield	74.3
90019003	Connecticut	Fairfield	76.9
90099002	Connecticut	New Haven	71.7
482010024	Texas	Harris	74.0
550590019	Wisconsin	Kenosha	71.2
551170006	Wisconsin	Sheboygan	73.0

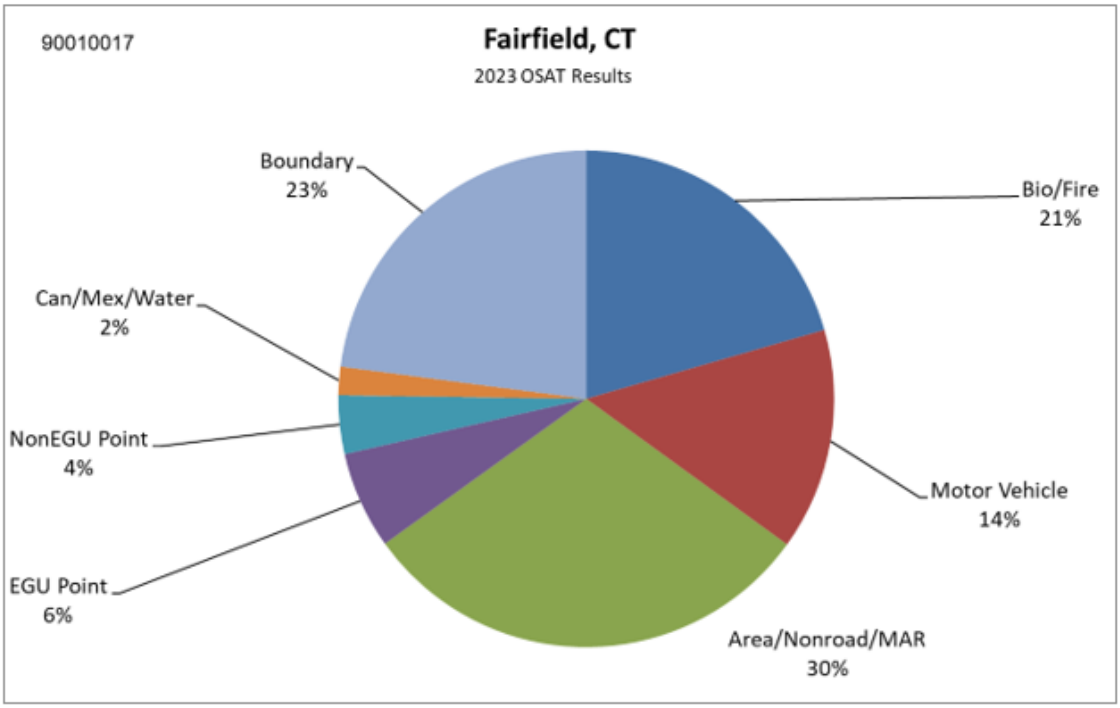
3. Although EPA Has Asked For Comments Specific To Power Plants And Other Industrial Facilities, It Is On-Road And Non-Road Mobile Sources That Have The Dominant Impact On 2015 Ozone NAAQS Nonattainment Areas, Which Are Predicted To Remain In Nonattainment In 2023.

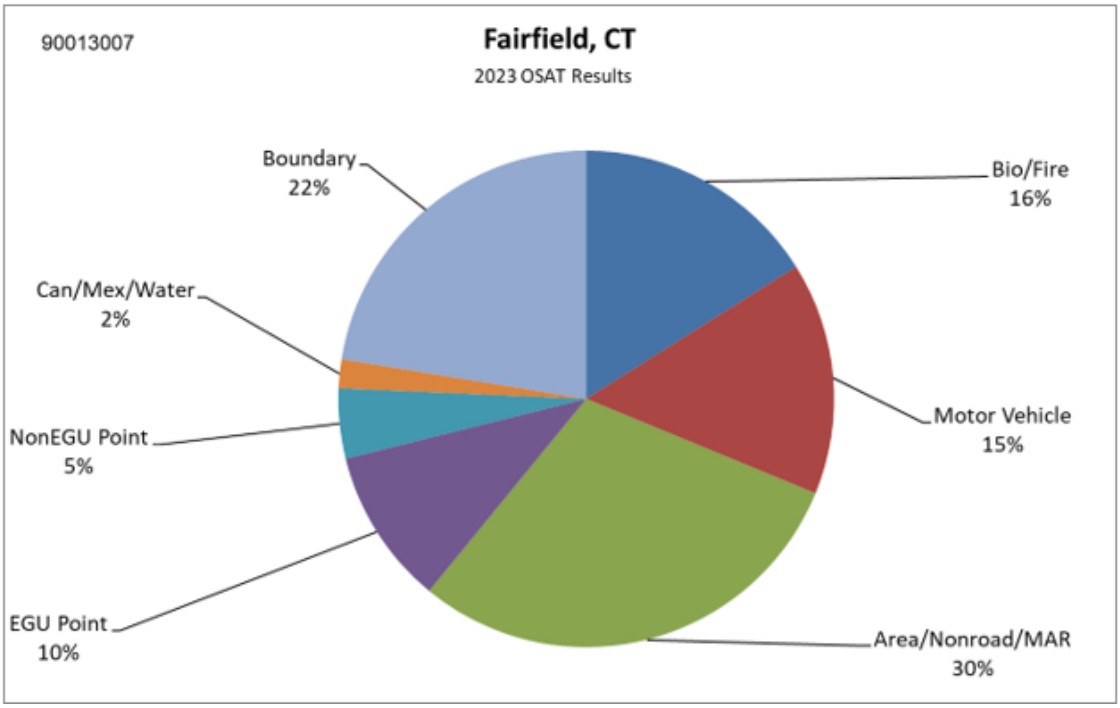
In EPA's invitation for comments, one of the subjects that participants have been asked to address is as follows:

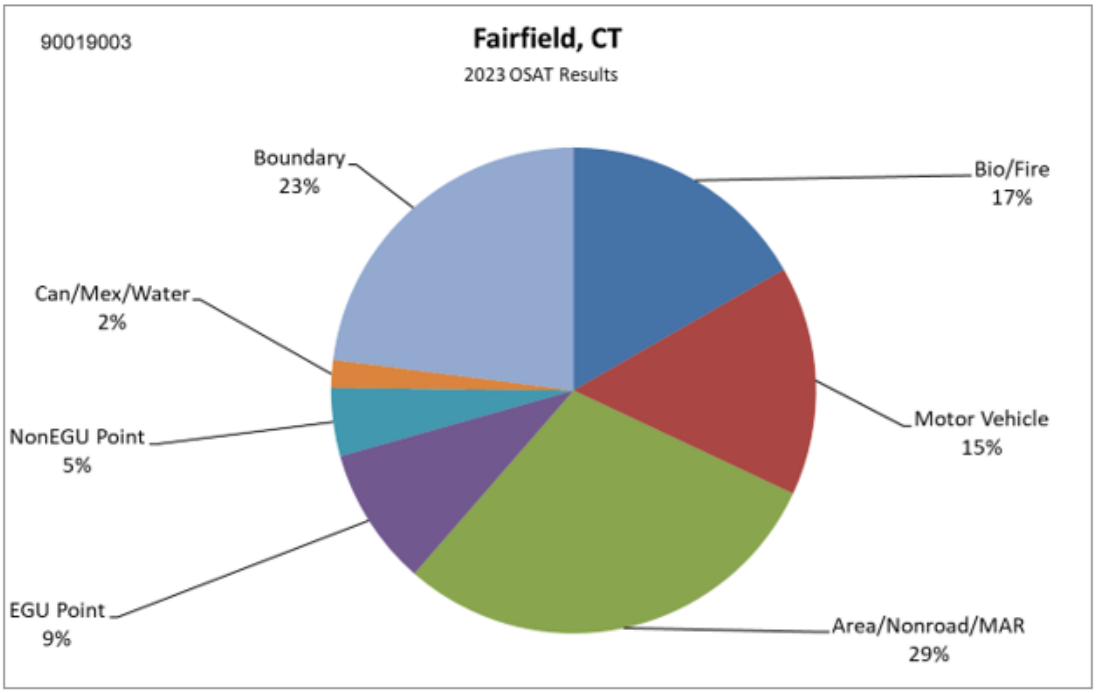
(e) Please comment on the methodology you think EPA should consider for which communities are disproportionately impacted by interstate air pollution from power plants and other industrial facilities.

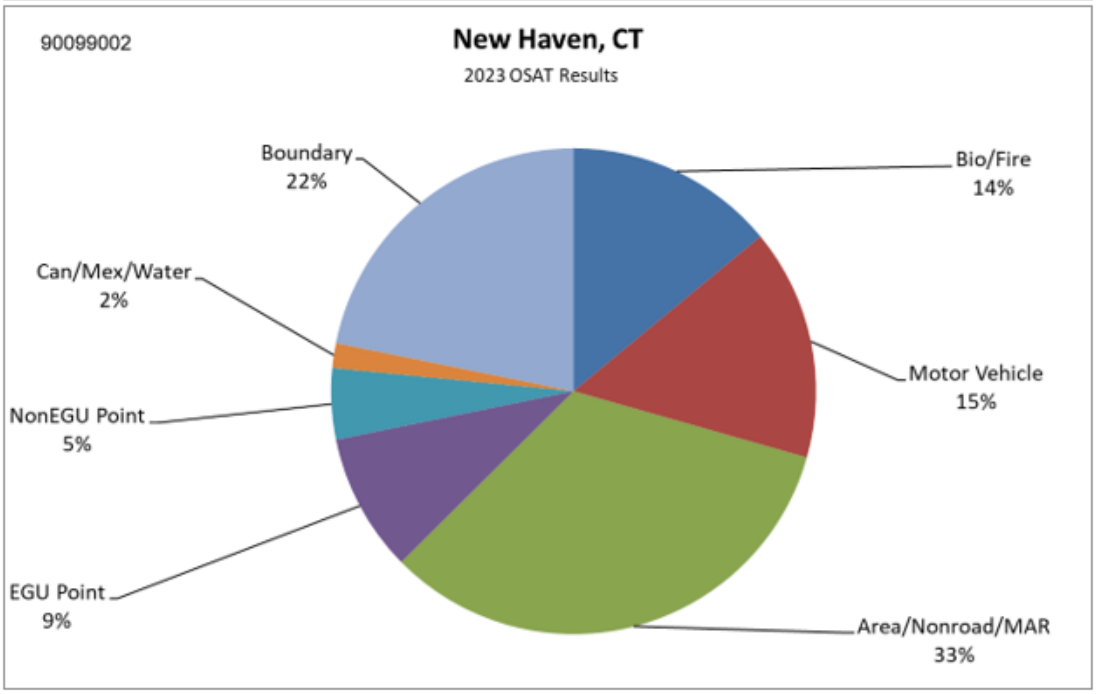
The goal of environmental justice is to provide equal access to the decision-making process to have a healthy environment in which to live, learn, and work. The question posed misguides and artificially narrows the discussion of impact by focusing on impacts from interstate power plant and industrial sources. Discussion set forth later in these comments describes significant work by the power sector to reduce impacts on ambient air quality. Completely missing in this request is the acknowledgement that available source apportionment modeling data clearly demonstrate that mobile sources are the most significant contributors to the only remaining nonattainment monitors in the East, not emissions from power plants or industrial facilities. Thus, the assumption on which this comment request is based is faulty. The following graphs, prepared for MOG by Alpine Geophysics,[4] are illustrative of the magnitude of contributions from source sectors to remaining nonattainment monitors. (Note: the monitor number is noted in the top left of each graph.).

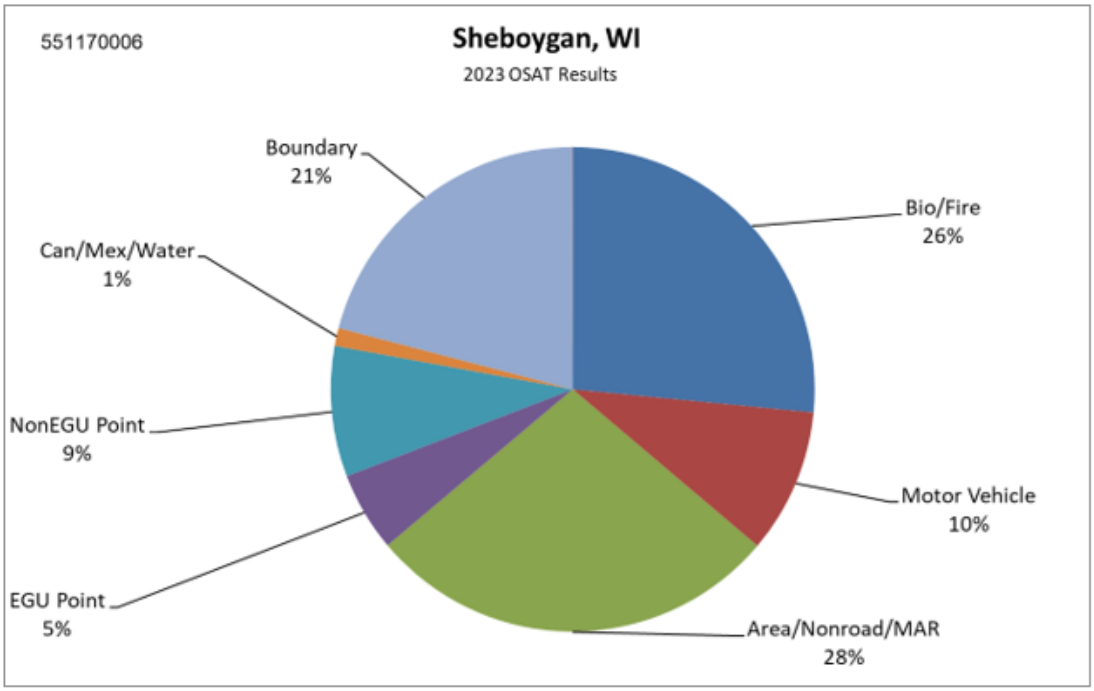
[4] https://www.midwestozonegroup.com/wp-content/themes/MidwestOzoneGroup/files/FinalTSD-OzoneModelingSupportingGNSIPObligationsJune2018.pdf

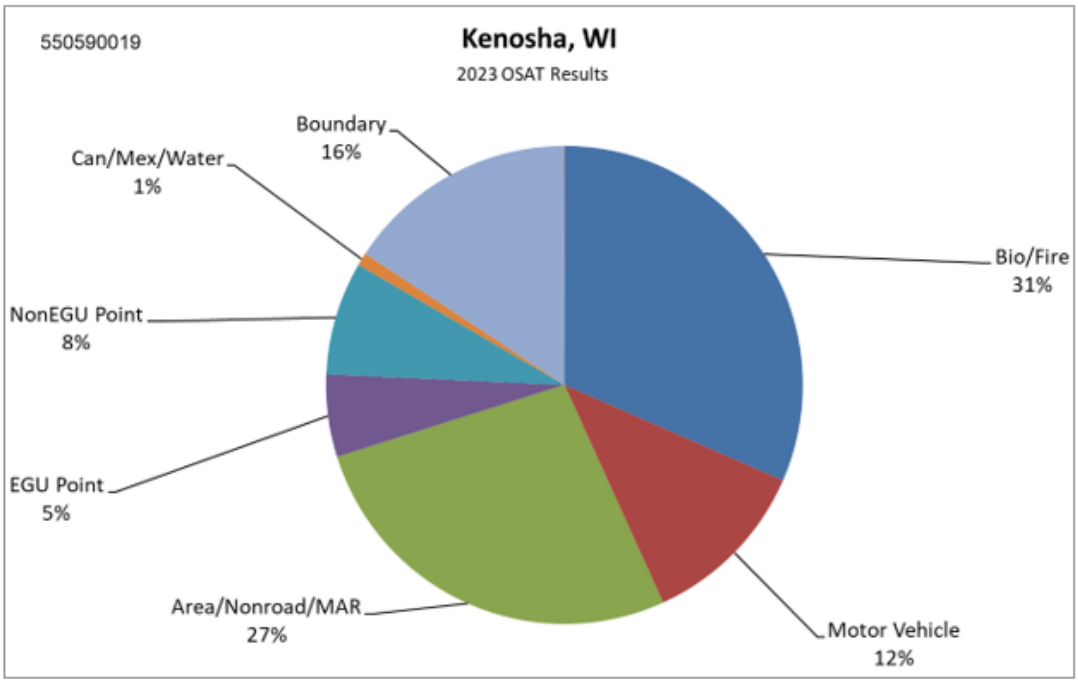

90010017
Fairfield, CT
2023 OSAT Results
Boundary
23%
Bio/Fire
21%
Can/Mex/Water
2%
NonEGU Point
4%
Motor Vehicle
14%
EGU Point
6%
Area/Nonroad/MAR
30%

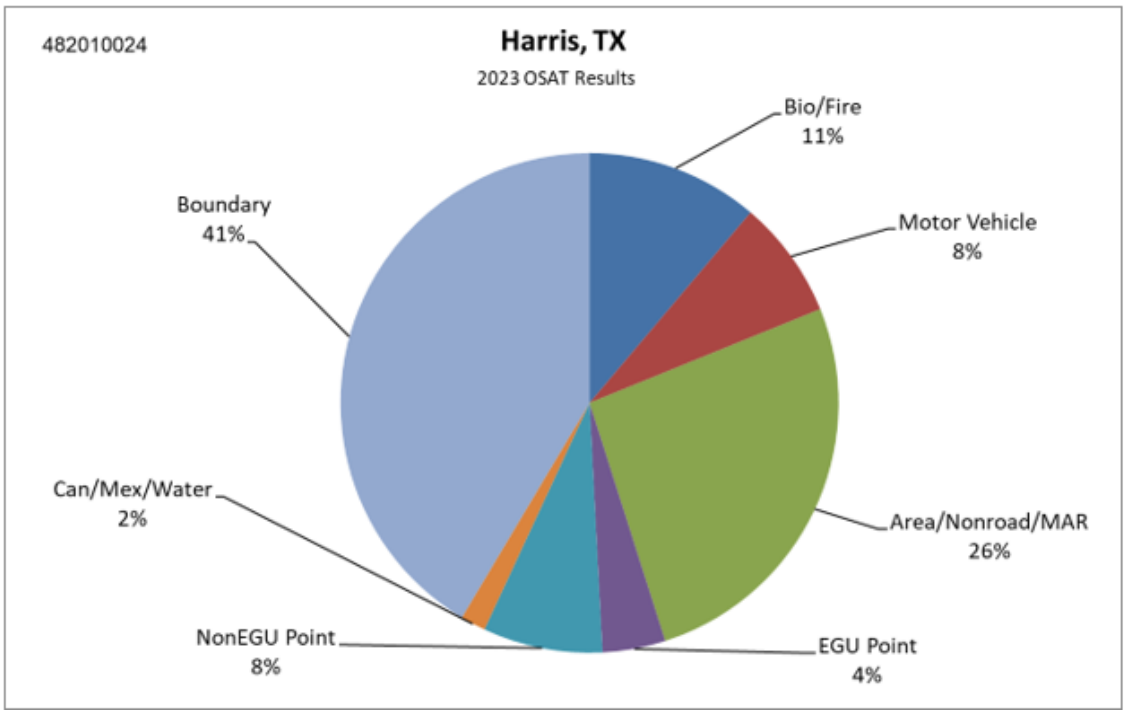

90013007
Fairfield, CT
2023 OSAT Results
Boundary
22%
Bio/Fire
16%
Can/Mex/Water
2%
NonEGU Point
5%
Motor Vehicle
15%
EGU Point
10%
Area/Nonroad/MAR
30%


90019003
Fairfield, CT
2023 OSAT Results
Boundary
23%
Bio/Fire
17%
Can/Mex/Water
2%
Motor Vehicle
15%
NonEGU Point
5%
EGU Point
9%
Area/Nonroad/MAR
29%


90099002
New Haven, CT
2023 OSAT Results
Boundary
22%
Bio/Fire
14%
Can/Mex/Water
2%
Motor Vehicle
15%
NonEGU Point
5%
EGU Point
9%
Area/Nonroad/MAR
33%


551170006
Sheboygan, WI
2023 OSAT Results
Boundary
21%
Bio/Fire
26%
Can/Mex/Water
1%
NonEGU Point
9%
Motor Vehicle
10%
EGU Point
5%
Area/Nonroad/MAR
28%


550590019
Kenosha, WI
2023 OSAT Results
Boundary
16%
Can/Mex/Water
1%
Bio/Fire
31%
NonEGU Point
8%
EGU Point
5%
Area/Nonroad/MAR
27%
Motor Vehicle
12%

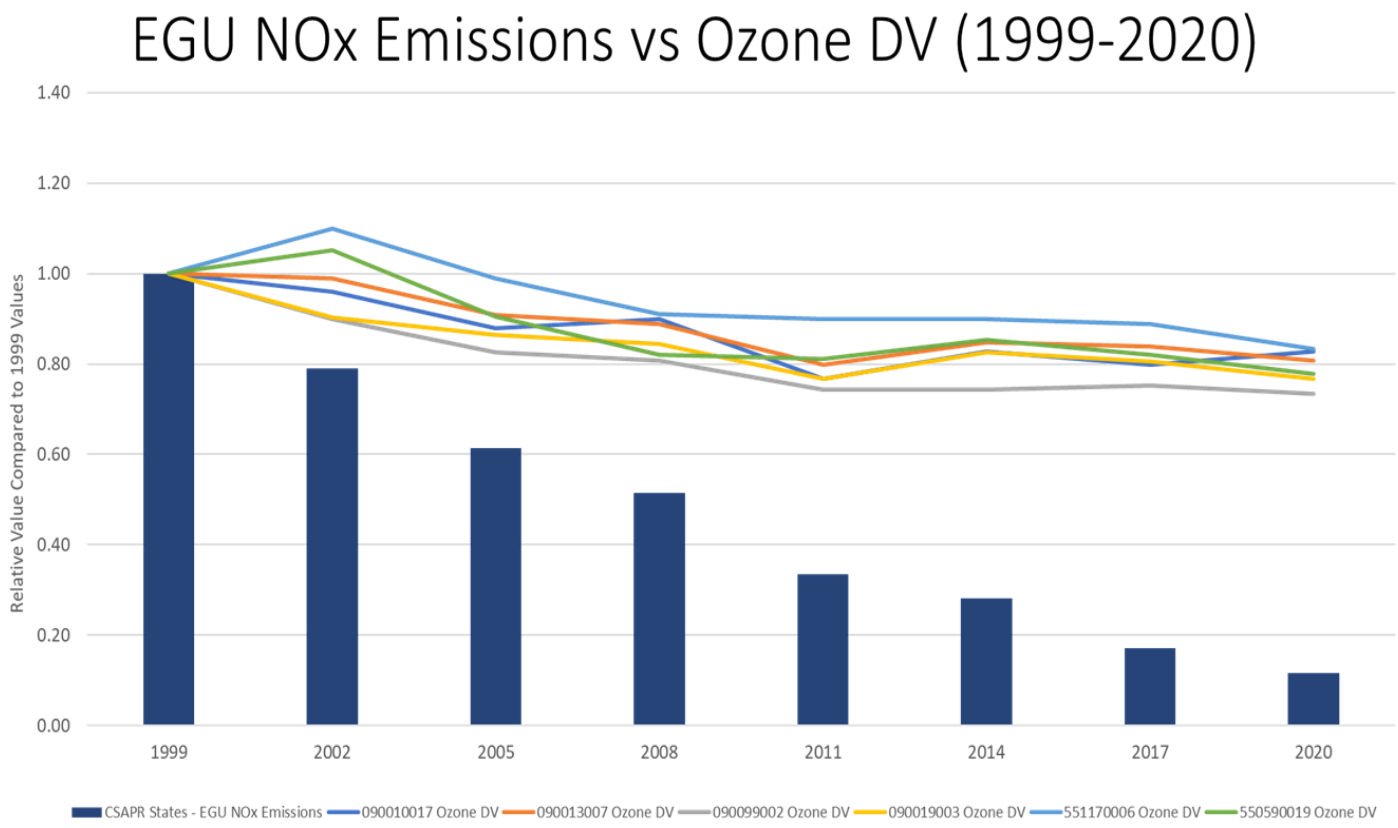


These graphs show that, for each monitor EPA predicts to be in nonattainment status in 2023, electric generating unit ("EGU") and non-EGU point sources are among the least significant contributors as the result of ongoing operational changes that illustrate tangible work by these industry sectors to manage nonattainment and/or environmental impact. Other significant contributors representing adverse air quality impact are apparent and warrant additional strategic management relative to environmental justice communities and responsibilities under the Act. Consideration of the environment justice implications of the remaining nonattainment areas related to the 2015 ozone NAAQS and related requests for comments should also focus on mobile sources as the largest contributor, by far, to this nonattainment. Assessment of impacts of other relevant non-EGU sources, including wildfires, exceptional events, and boundary (international transport, etc.) conditions, as appropriate, would also inform environmental justice impacts.

4. Experience With Prior Transport Rules Reveals That Even Though EGU's Have Been Made The Target Of Each Rule, There Has Been Little Impact On Residual Nonattainment In The NE – Demonstrating That The Wrong Sources Have Been Regulated Thus Far.

EPA requested that webinar participants "share any experience you may have, or be aware of, with respect to environmental justice issues or considerations from previous interstate ozone transport rules (e.g., NOx SIP Call (1998), CAIR (2005), CSAPR (2011), CSAPR Update (2016), and the Revised CSAPR Update (2021))," once again, inappropriately focusing on the power sector.

The primary source sector regulated by any transport rule promulgated by EPA since 1998 has been the power sector. Significantly, after 22 years of continuing to ratchet down power sector controls (coincident with other state-implemented emissions reductions from other stationary sources) on upwind state EGUs, the result is that the remaining nonattainment monitors do not appear to be responsive to emission reductions from the power sector. This is illustrated by the following graphic, which demonstrates that even though EGU emissions have steadily decreased over many years in response to transport rules (and other regulatory requirements), there has not been any similar change in ozone concentration at the subject monitors. These data raise questions about controls on other local sources of NOx and VOCs.



5. Relative Contribution Analysis Related To Transport Rules Should Focus Upon Adverse Impact By Mobile, Area And Other Local Source Emissions.

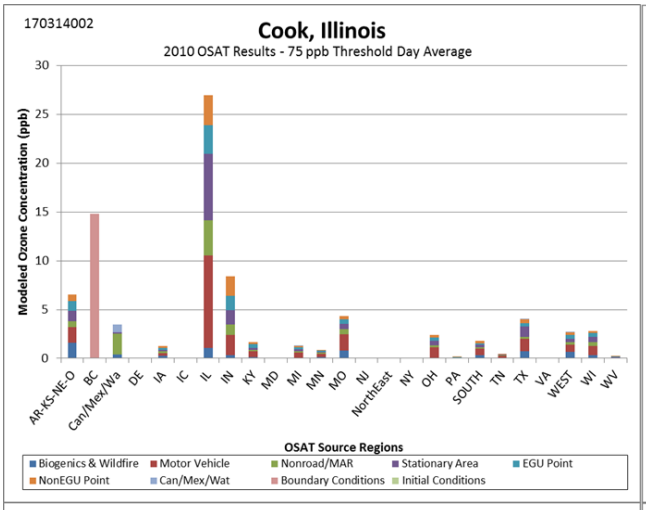
Low-income, environmental justice areas, like residual nonattainment areas, are primarily impacted by the categories that are not regulated under the transport rules.

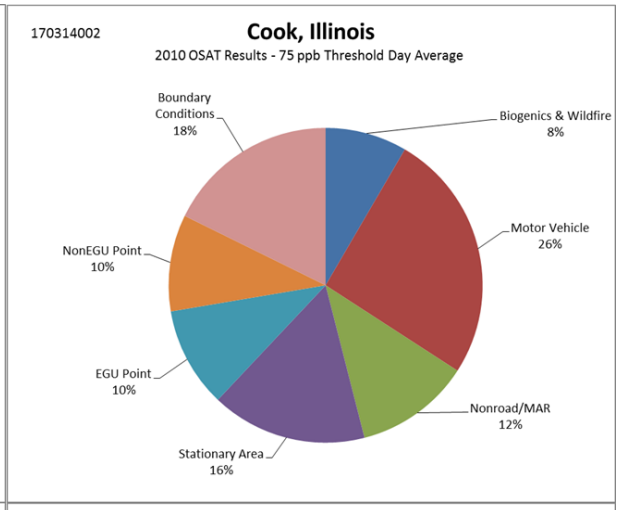
In a study performed in 2014, which examined the effectiveness of the transport rules at that time,[5] air quality trend data were analyzed for thirteen monitors in eight eastern states, located in urban areas. The median household incomes of the areas surrounding the monitors averaged $32,000 in 2012, one-third below the national median income of $51,000. Monitors in low-income urban areas were selected due to claims that economically disadvantaged populations are subject to disproportionately high levels of air pollution. The monitors included in the study were not prescreened for demographic characteristics other than median household income.

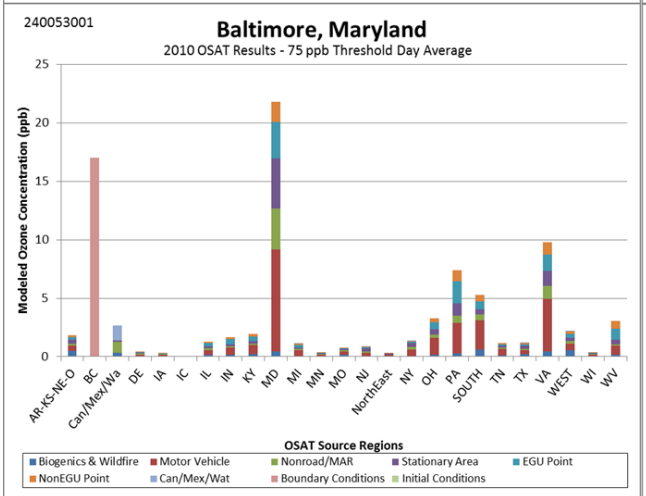
The source apportionment modeling of the sources of urban smog indicate that mobile source emissions (onroad and offroad) are the largest cause of anthropogenic pollution at all monitors analyzed based on 2010 data (33% to 50%). For comparison, emissions from all electric generation contributed 5% to 13% of urban smog at the monitors analyzed, significantly smaller than amounts attributed to vehicle emissions. Current emissions data and ambient air quality trends reflect significant emissions reductions achieved by the EGU source sector.

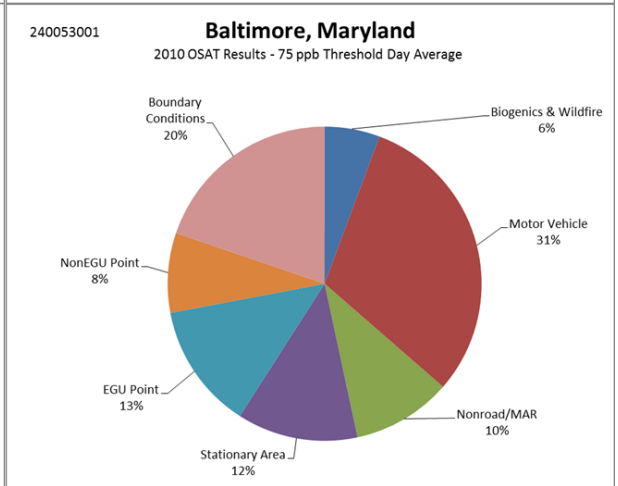
The figures below represent relative contribution of source regions and major source categories in three of the several low-income areas assessed in that study, including Chicago (Cook County), Baltimore, and Houston (Harris County) from this modeling.

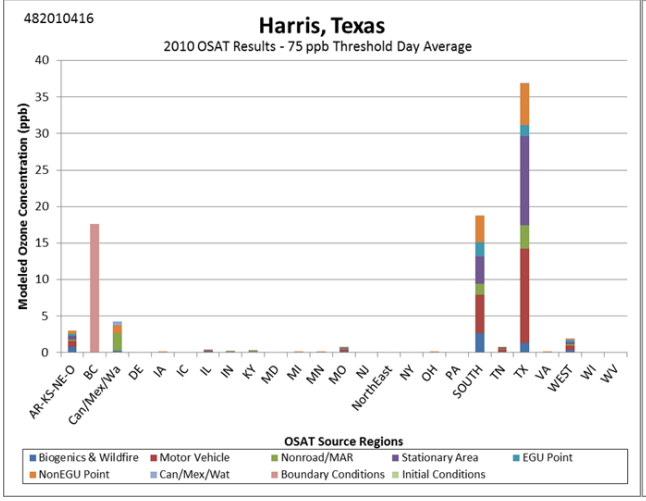
[5] https://www.midwestozonegroup.com/wp-content/themes/MidwestOzoneGroup/files/Assessment_of_Air_Quality_Trends_in_Low_Income_Urban_Areas_Final_-_April.pdf

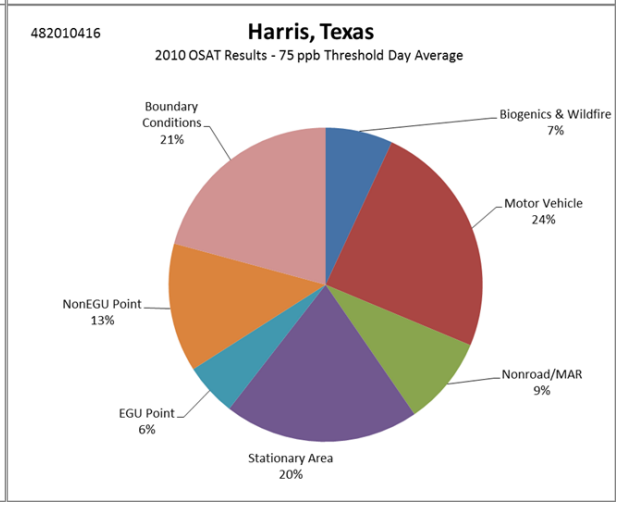












As presented earlier, these values are consistent with the 2023 projections of source category contributions to monitors in noted nonattainment areas, regardless of demographic indicators.

6. The Ozone Season Trading Program Is A Very Effective Mechanism To Address Ozone Transport Necessary To Attainment Making It Consistent With The Principals Of Environmental Justice.

Transport rules involving trading programs are part of the CAA and are a valuable tool in implementing controls necessary for areas to comply with the ozone NAAQS.

In the absence of application of new and innovative control technologies, trading programs involving existing technologies have proven to demonstrate emissions reductions and regional air quality improvements. These programs have been cost-effective and, more importantly, have *not* resulted in nonattainment near the sources involved in the trading programs. EPA's historical use of trading programs in transport analyses demonstrates the value in the application of this type of system. In addition, with planned and anticipated closures, changes, and modifications to multiple industries in the coming years, such a program may prove to be one of the best near-term methods to attain environmental outcomes in the shortest timelines.

EPA has repeatedly concluded that trading programs are very effective in achieving air quality goals even on high ozone days. NOx budget trading began in 2003 as a cap-and-trade program "to reduce the regional transport of NOx emissions from power plants and other large combustion sources in the eastern United States."[6] EPA credits the NOx budget trading program for "dramatically reduced NOx emissions from power plants and industrial sources during the summer months, contributing significantly to improvements in ozone air quality in the eastern United States," adding that, "[b]eginning in 2009, the [original program] was effectively replaced by the ozone season NOx program under the Clean Air Interstate Rule, which required further summertime NOx reductions from the power sector."[7]

As a result of these programs, annual NOx emissions from CSAPR and acid rain program sources have been reduced from 6,400,000 tons in 1990 to 390,000

[6] https://www.epa.gov/airmarkets/nox-budget-trading-program
[7] *Id.*

tons in 2020,[8] a reduction of 94%, yet EPA continues its inappropriate focus on the power sector for transport rules.

EPA specifically addressed the effects of trading and efficacy of short-term limits on high ozone and concomitant high demand days in its response to comments regarding the Revised CSAPR Update Rule (86 Fed Reg 23054) as follows:

> Response: EPA is finalizing the implementation of required emission reductions through the same ozone season trading program structure successfully used in prior CSAPR rules, CAIR, and the NOX Budget Trading Program associated with the 1998 NOX SIP Call. These trading programs have been demonstrated to be highly effective at achieving emission reductions….
>
> In the Maryland/Delaware CAA section 126(b) action, EPA… did not find evidence of sources regularly idling controls on high ozone days when subject to a sufficiently stringent budget…
>
> Consequently, EPA found that on average, SCR-controlled units were operating their SCRs throughout the season and that the petitioner's assertion of the likelihood of trading programs leading to widespread idling of controls was not borne out in the most recently available data….
>
> In other words, EPA compared NOX rates for EGUs for hours with high energy demand and compared them with seasonal average NOX rates and found very little difference, just as it had observed in the 2017 data. Thus, the data do not support the notion of widespread reduction of SCR operation on high demand days…
>
> [I]n this specific instance, where the Agency is addressing regional air quality issues with regionally uniform levels of control through the flexibilities afforded by a mass-based trading program, specific unit-level control requirements, particularly

[8] https://www3.epa.gov/airmarkets/progress/reports/emissions_reductions_nox.html#figure1

> short-term emissions limits, are not necessary, so long as the mass-based budget is sufficiently stringent...
>
> Further, EPA finds there to be environmental benefits associated with a mass-based trading program that controls units' total amounts of emissions....
>
> Thus, the trading program encourages controls to not only operate on high electric demand days, but it could provide a unit additional incentive (through its allowance price) to outperform an equivalent emission rate assumption implemented through a unit-specific rate requirement.

86 Fed. Reg. 23,054, 23,117 (Apr. 30, 2021) (emphasis added).

Conclusion.

MOG welcomes the environmental justice assessment of the Act and the state implementation plan processes. We urge EPA to continue the equitable assessment of its proposals relative to the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, or with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In order to properly obtain input from affected individuals, communities, and organizations, EPA must accurately provide to the public the relevant information for the program on which it seeks comment. MOG respectfully suggests that, with regard to the 2015 ozone NAAQS transport rule, this information includes an accurate description of the sources that contribute most significantly to ozone non-attainment, and a thorough description of the emissions reductions programs relevant to those sectors that are delivering current and ongoing improvements. EPA must also educate the public about the actions that downwind states are required to take before upwind states are brought into the discussion.