

Air Quality Conformity Report for **Amendment #2** to the OKI FY 2024-2027 TIP –
Reliance on Previous Regional Emissions Analysis: **June 2023**

This report documents that the [OKI FY 2024-2027 Transportation Improvement Program \(TIP\)](#), as amended, and the [OKI 2050 Regional Metropolitan Transportation Plan \(OKI MTP\)](#), as amended on January 13, 2022 (USDOT conformity approval 2/16/22) are in conformance with the State Implementation Plans (SIPs) of Indiana, Kentucky and Ohio and complies with the Clean Air Act. The amended TIP, comprised of only Ohio projects, is relying on a previous regional emissions analysis per 40 CFR 93.122.

On June 9, 2022, the U.S. Environmental Protection Agency (EPA) found that the Cincinnati, Ohio area had attained the 2015 ozone National Ambient Air Quality Standard (NAAQS) and redesignated the Ohio portion of the area to attainment. This area includes the Ohio counties of Butler, Clermont, Hamilton, and Warren. EPA also approved Ohio’s motor vehicle emission budgets and maintenance plan. Counties in the Cincinnati area designated in the 2015 ozone NAAQS are shown in Figure 1. On November 7, 2022, EPA reclassified the Kentucky portion of the area to moderate nonattainment. The most recently approved motor vehicle emission budgets for the Kentucky portion were ones used to demonstrate maintenance of the 2008 ozone standard. Nonattainment and maintenance areas must demonstrate transportation conformity. Transportation conformity is a mechanism to ensure that federal funding and approval are given to those transportation activities that are consistent with air quality goals as contained in the State Implementation Plans (SIPs). OKI is responsible for the air quality conformity determination for the region’s Transportation Plan and Transportation Improvement Program.

In February 2018, the U.S. Court of Appeals for the D.C. Circuit issued a decision in *South Coast Air Quality Management District v. EPA*. The decision impacts the Kentucky portion of the Cincinnati area that was formerly nonattainment under the 1997 ozone standard but is now in attainment for all other standards (Figure 3). This “orphan area” includes the more rural southern tier of Boone, Campbell, and Kenton counties. This area has not been subject to conformity since the 1997 ozone standard was vacated. In June 2018, OKI redemonstrated conformity with the 1997 ozone standard. U.S. DOT approval of the conformity determination occurred on September 6, 2018. Per recent guidance, OKI will continue to qualitatively demonstrate Kentucky’s conformity with the 1997 standards for future MTP and TIP amendments.

The amended *OKI FY 2024-2027 TIP* is a direct subset of the OKI 2050 Plan. The OKI 2050 Plan and TIP contain all projects which must be started in OKI’s Plan and TIP’s timeframes to achieve the highway and transit system envisioned by the OKI 2050 Plan. For the Ohio portion of the region, OKI is relying previous regional emissions analyses to support the new TIP. The previous regional emissions analysis was developed to support a November 2022 amendment for the OKI FY2021-2024 TIP. U.S. DOT approval of occurred on December 23, 2022. The demonstration of conformity is utilizing approved regional budgets for volatile organic compounds (VOC’s) and oxides of nitrogen (NOx). VOC and

NO_x, along with oxygen, are the primary components of ozone. The budgets for the Ohio portion of the region are for years 2026 and 2035.

As a newly reclassified moderate nonattainment area, the Kentucky portion of the region must demonstrate conformity for year 2023. The new attainment date is August 3, 2024, meaning that attainment must be made by December 31, 2023. OKI developed a new regional emissions analysis and demonstrated conformity for the Kentucky portion of the region as part of the new OKI FY 2024-2027 TIP. The regional emissions analysis utilized the existing Northern Kentucky budgets for years 2020 and 2030. Per EPA guidance, the analysis also evaluated the year 2023. OKI’s travel demand model and the MOVES3 emissions model were used to generate emissions. OKI adopted the FY2024-2027 TIP on April 13, 2023. As of May 2023, U.S. DOT approval is pending.

Amendment #2 includes cost adjustments to three non-exempt projects in Ohio and one non-exempt project in Kentucky. The three Ohio projects are all part of the I-75 Brent Spence Companion Bridge Project that spans into Kentucky. The amendment does not alter the design concept, scope, or significantly alter the timing of the non-exempt projects as previously evaluated. The results of the previous emission analysis are shown in the table below. The emissions of ozone precursors, VOC and NO_x, do not exceed the established VOC or NO_x budgets for the Ohio portion of the region.

Previous Regional Emissions Analysis - Quantitative Conformity Findings of Ozone-forming Emissions (tons per day) for the Ohio Portion* of the 2015 Ozone NAAQS Maintenance Area

	<u>2026</u>	<u>2035</u>	<u>2040</u>	<u>2050</u>
Ohio VOC Budget	14.15	10.58	10.58	10.58
Ohio VOC Emissions	12.58	9.35	6.60	6.35
Ohio NO _x Budget	25.30	18.98	18.98	18.98
Ohio NO _x Emissions	21.06	15.28	14.24	14.20
<i>*Includes the Counties of Butler, Clermont, Hamilton, and Warren in Ohio.</i>				

Amendment #2 also makes funding changes to one non-exempt project in Kentucky, the I-275/AA Highway Connector project in Campbell County. The amendment does not alter the design concept, scope, or significantly alter the timing of the project. The results of the previous emission analysis of April 2023 is shown in the table below. The emissions of ozone precursors, VOC and NO_x, do not exceed the established VOC or NO_x budgets for the Kentucky portion of the region.

Previous Regional Emissions Analysis - 2008 and 2015 Ozone Standards - Ozone-forming Emissions (tons per day) for the Kentucky Portion of the Nonattainment Area (partial counties)

	<u>2023</u>	<u>2030</u>	<u>2040</u>	<u>2050</u>
N. Kentucky VOC Budget	4.36	2.86	2.86	2.86
N. Kentucky VOC Emissions	3.04	1.52	1.23	1.25
N. Kentucky NO _x Budget	9.03	5.19	5.19	5.19
N. Kentucky NO _x Emissions	7.73	2.24	1.64	1.75
<i>*Includes portions of Boone, Campbell, and Kenton Counties in Kentucky.</i>				

Previous Regional Emissions Analysis – Ozone-forming Emissions (tons per day) for the Indiana Portion of the 2008 Ozone NAAQS Maintenance Area (partial county)

	<u>2023</u>	<u>2030</u>	<u>2040</u>	<u>2050</u>
Ohio/Indiana VOC Budget	30.00	18.22	18.22	18.22
Ohio/Indiana VOC Emissions	14.52	9.44	6.68	6.43
Ohio/Indiana NO _x Budget	30.79	16.22	16.22	16.22
Ohio/Indiana NO _x Emissions	25.46	15.49	14.43	14.41
<i>*Includes the Counties of Butler, Clermont, Hamilton, and Warren in Ohio, and a portion of Dearborn County in Indiana.</i>				

In addition to the above quantitative evaluation. OKI qualitatively finds that no goals, directives, recommendations, or projects identified in the amended *OKI FY 2024-2027 TIP* contradict in a negative manner with any specific requirements or commitments of the applicable state implementation plans. The applicable implementation plans do not contain any transportation control measures (TCM’s), therefore nothing in the amended TIP can interfere with their timely implementation. Furthermore, the Kentucky “orphan area” subject to the South Coast AQMD decision continues to meet conformity requirements. The *OKI FY 2024-2027 TIP*, as amended, and the *OKI 2050 Metropolitan Transportation Plan* continue to meet all requirements regarding fiscal constraint. Details on the proposed actions and fiscal constraint can be found in the amendment resolution. In accordance with OKI’s Public Participation Plan, the amendment documentation, as well as instructions on how to provide public comments, was posted on OKI’s website for a period of at least 14 days prior to the adoption by the OKI Board of Directors on June 8, 2023. OKI initiated interagency consultation (IAC) on May 24, 2023.