



MEMORANDUM

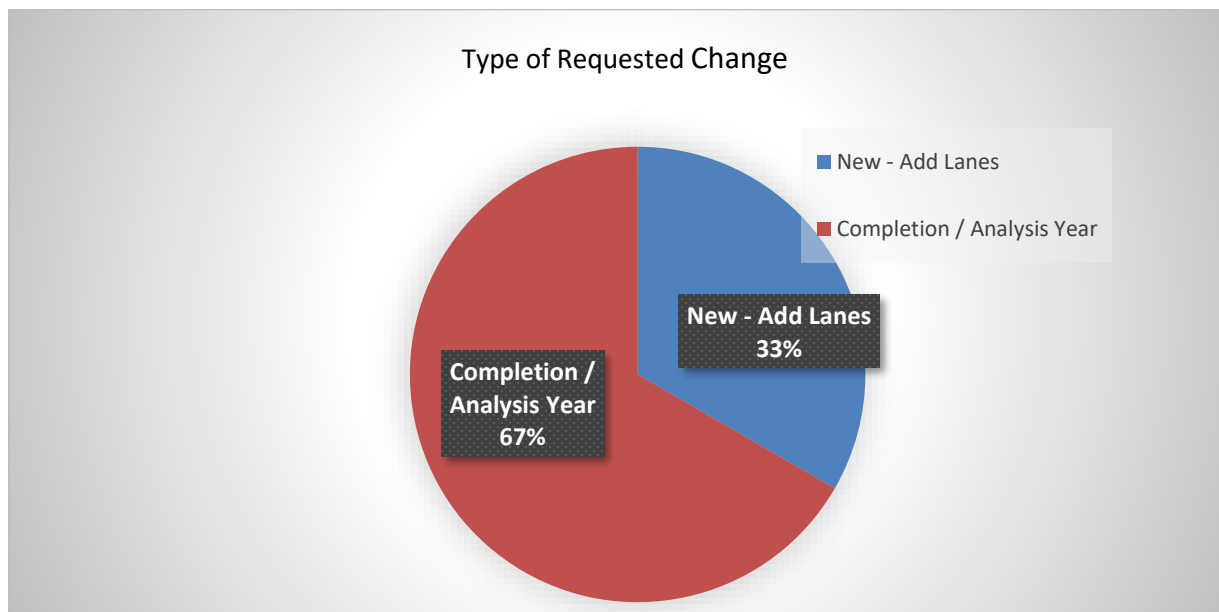
To: CMAP Transportation Committee

From: CMAP Staff

Date: June 8, 2023

Re: ON TO 2050/2023-2027 TIP Conformity Analysis & TIP Amendment 23-08 release for public comment

In accordance with the required plan update conformity analysis policy, CMAP staff asked programmers to submit changes, additions, or deletions to non-exempt projects included in the FFY 2023-28 TIP that are anticipated to be carried forward into the FFY 2023-27 TIP and ON TO 2050 for inclusion in the regional air quality analysis. Of the changes requested, three projects require air quality conformity analysis. Below is a summary by type of requested change.



If the 2023-27 TIP is approved, a new non-exempt project, and two long established projects crossed a scenario year. The federal government requires regional planning agencies to demonstrate fiscal constraint by determining that sufficient resources will be available to

construct projects recommended in the plan. Careful selection of these projects must meet the federal standard of fiscal constraint, while also helping to achieve regional goals. These types of projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP or within the planning horizon of ON TO 2050. Non-exempt projects with only preliminary engineering funding and exempt tested projects are excluded from conformity analysis.

The new non-exempt project is:

- [09-23-0024](#): Galligan Road from Freeman Road to Binnie Road.

Other changes to existing projects are described below.

Limits are the cross-streets, mileposts or other boundaries which define the extent of a project. There are no projects with significant limit changes.

The completion year indicates when a project is anticipated to be in service to users. The conformity analysis is conducted for selected analysis years between now and 2050. The analysis years are currently 2025, 2030, 2035, 2040 and 2050. If a change in completion year results in moving a project across an analysis year, the project must be revised in the conformity analysis.

The following non-exempt projects crossed an analysis year:

- TIP ID [06-03-0005](#): 143rd St from Will-Cook Rd to IL 7 Wolf Rd.;
- TIP ID [10-01-0022](#): IL 22 Lake Zurich Rd from Quentin Rd to W of IL 83.

The scope of a project is determined by the [work types](#) associated with the project.

- Non-exempt work types are expected to affect air quality and must be included in the conformity analysis. Examples of non-exempt work types are adding lanes or to remove lanes to a roadway, interchange expansion, and the major expansion of bus route service.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of these types of projects in the travel demand model. Exempt tested projects include new commuter parking lots, road (diet) reconfiguration of lanes to improve safety, and road reconstruction with lane widening to standard widths (e.g., 10 feet to 12 feet).
- Exempt work types do not require an air quality conformity analysis. Examples of exempt work types are intersection improvements and rail station modernization.

The conformity status of [12-22-0006](#), Theodore Street from Drauden Road to Wesmere Parkway was predetermined by its inclusion within the initial Theodore Street corridor improvement project [12-21-0026](#), submitted for the June 10, 2021 conformity. The scope of the parcel being split focuses on the road widening which requires storm sewer installation, sidewalk replacement, tree replacement, street lighting, with new traffic signals and modifications.

Newly submitted changes are found in the [23-08 Conformity Amendments](#) report.

The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by vehicle class, speed, time of day, and facility type were entered into U.S. Environmental Protection Agency's MOVES3 model.

Using the MOVES3 model on-road emission estimates for each precursor or direct pollutant in each analysis year were produced. The MVEB for the NEIL nonattainment area for 2035 and beyond was revised in a federal register notice on May 20, 2022 (87 FR 30828) to correspond to the 2008 ozone maintenance SIP that was approved in that noticed by U.S. EPA. The result is that the MVEB changes to 65 tons/day of VOCs and 110 tons/day of NOx in 2035. Prior year MVEB remain unchanged. In addition to a revised MVEB the analysis year of 2035 is now being modeled as that corresponds to the last year of the 2008 ozone maintenance plan and demonstrates conformity for the 2008 ozone maintenance SIP. For ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NOx), the resulting mobile source emissions estimates fell below the applicable motor vehicle emissions budgets for ozone as shown in the table below.

VOC and NOx Emissions in Tons per Summer Day for Ozone Conformity

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2025	42.31	60.13	122.17	150.27
2030	36.73	60.13	94.48	150.27
2035	32.89	65.00	84.82	110.00
2040	29.79	65.00	84.09	110.00
2050	27.89	65.00	90.06	110.00

Conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates

Results updated as of April
2023

Direct PM_{2.5} and NO_x Emissions in Tons per Year for PM_{2.5} (Informational Only)

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	Historical SIP Budget	Northeastern Illinois	Historical SIP Budget
2025	1,433.01	5,100.00	40,253.89	127,951.00
2030	1,151.12	2,377.00	31,844.80	44,224.00
2035	993.38	2,377.00	28,319.94	44,224.00
2040	986.85	2,377.00	27,999.78	44,224.00
2050	1,026.73	2,377.00	29,610.63	44,224.00

Greenhouse Gas Mobile Source Emissions (Informational Only)

CO ₂ Equivalent in Tons per Year	
Year	Northeastern Illinois
2025	34,323,851.35
2030	32,903,307.41
2035	31,954,711.04
2040	32,109,251.47
2050	33,318,041.83

ACTION REQUESTED: Recommend finding of conformity and approval of TIP amendment 23-08 by the MPO Policy Committee.