



MEMORANDUM

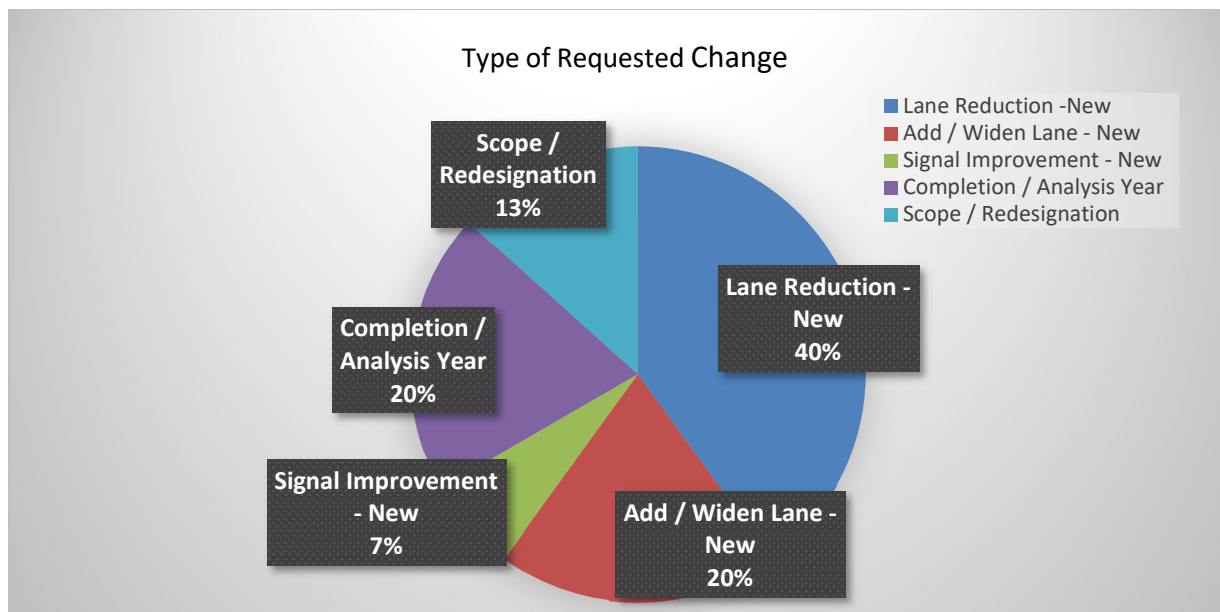
To: CMAP Transportation Committee

From: CMAP Staff

Date: January 12, 2023

Re: ON TO 2050/2023-2027 TIP Conformity Analysis & TIP Amendment 23-04 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, fourteen projects require air quality conformity analysis. Below is a summary by type of requested change.



If the 2023-27 TIP is approved, four new non-exempt projects and six lane reduction projects will be included in the conformed TIP. One additional project being redesignated, is not

included. 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 projects are:

- TIP ID [09-22-0008](#): Ridge Road reconstruction from north of Black Road to north of Holt Road.
- TIP ID [09-22-0042](#): Liberty Street reconstruction, widening and lane addition between Sartor Lane and County Line Road.
- TIP ID [09-22-0057](#): IL Route 38 & Anderson Road, road widening and intersection improvement.
- TIP ID [09-22-0071](#): US 34 signal timing and progression for a series of intersections between IL 31 and IL 25.

The new road modernization, lane reduction projects are the following:

- TIP ID [02-22-0017](#): Gross Point Rd from Church St to Main St.
- TIP ID [03-22-0034](#): Windsor Dr from Hintz Rd to Jane Ave.
- TIP ID [08-22-0034](#): Main Street Improvements from Franklin Street to south of Ogden Avenue.
- TIP ID [08-22-0038](#): Ardmore Avenue Reconstruction between IL 64, North Avenue to St. Charles Road.
- TIP ID [09-22-0027](#): Dundee Avenue Reconstruction, Villa Street Corridor Improvements.
- TIP ID [10-22-0004](#): Argonne Reconstruction from IL131 to IL 137.

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 [06-00-0042](#): 143rd Street reconstruction from Wolf Road to US 45 LaGrange Rd
- TIP ID [08-00-0057](#): 248th Ave from 95th St to 103rd St
- TIP ID [09-21-0005](#): Randall Rd at Big Timber Rd

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 to a road, interchange expansion, signal timing 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, rolling stock replacement, 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.

With the introduction of the grade separation (GS) work type the sponsor has initiated a change in scope.

- TIP ID [06-20-0028](#): Walker Road (CH W13) Extension Road Project from the northern limit at the Illinois Central Railroad continuing to the southern limit at Main Street (FAU 3587).

This change in scope initiates a work type re-designation of the proposed township road project:

- TIP ID [12-14-0020](#): Baker Road over Jackson Creek bridge replacement of a one lane structure.

Newly submitted changes are found in the [23-04 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 new MOVES3 model. Using the MOVES3 model on-road emission estimates for each precursor or direct pollutant in each analysis year were produced. 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	42.51	60.13	122.84	150.27
2030	36.87	60.13	94.94	150.27
2035	32.99	65.00	85.36	110.00
2040	29.86	65.00	84.62	110.00
2050	28.12	65.00	90.56	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 November 2022

Direct PM_{2.5} and NOx 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	1,440.38	5,100.00	40,484.08	127,951.00
2030	1,155.93	2,377.00	31,976.97	44,224.00
2035	998.51	2,377.00	28,465.97	44,224.00
2040	991.37	2,377.00	28,143.51	44,224.00
2050	1,034.74	2,377.00	29,797.33	44,224.00

Greenhouse Gas Mobile Source Emissions (Informational Only)

CO ₂ Equivalent in Tons per Year	
Year	Northeastern Illinois
2025	34,465,059.56
2030	33,031,112.59
2035	32,085,955.01
2040	32,213,817.01
2050	33,481,373.04

ACTION REQUESTED: Recommend finding of conformity and approval of TIP amendment 23-04 by the MPO Policy Committee.