



## MEMORANDUM

**To:** CMAP Transportation Committee

**From:** CMAP Staff

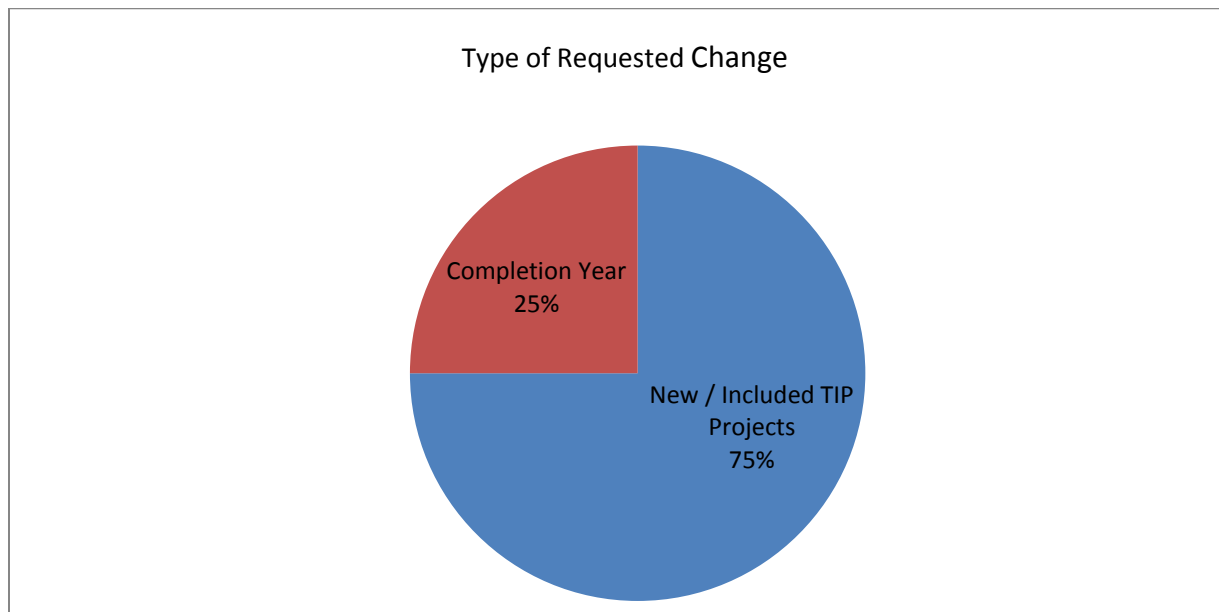
**Date:** July 15, 2016, revised July 19, 2016

**Re:** GO TO 2040/TIP Conformity Analysis & TIP Amendment

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In accordance with the semi-annual conformity analysis policy, CMAP staff asked programmers to submit changes, additions, or deletions to non-exempt projects for inclusion in the regional air quality analysis of the Transportation Improvement Program (TIP) and GO TO 2040. Of the changes requested, eight projects require air quality conformity analysis. Below is a summary by type of requested changes.



If the TIP amendment is approved, six new non-exempt projects will be included in the TIP. These types of projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP. Non-exempt projects with only preliminary engineering funding and exempt tested projects are excluded from conformity analysis.

The new projects are:

- TIP ID [03-03-0102](#): Adding a through lane and intersection improvement on IL 62 Algonquin Road from Meacham Road to Thoreau Drive.

- TIP ID [08-16-0024](#): IL 56 Butterfield Road, add lanes, reconstruct road and intersection improvement from IL 53 to I-355.
- TIP ID [08-16-0033](#): I-88 an add lane and reconstruction between York Road and I-290.
- TIP ID [10-11-0061](#): IL 120 Belvidere Road intersection improvements centered at Gilmer Road and US Route 12. The project is part of the first stage improvement of the IL 120 corridor.

The following two projects were included in the TIP through consultation, allowing work to proceed while they are being conformed:

- TIP ID [08-08-0012](#): I-355 Veterans Memorial Tollway widening on the initial project submittal of a one-mile section to reduce congestion from 71st to beyond 75<sup>th</sup> Street.
- TIP ID [08-16-0032](#): The reconstructing of the Farnsworth Avenue Bridge over I-88 in Aurora for improving traffic flow at the interchange.

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 2040. The analysis years are currently 2020, 2025, 2030 and 2040. If a change in completion year results in moving a project across an analysis year, the project must be revised in the conformity analysis. Sponsors indicated that several projects have updated completion years, but two portions of the Illiana Major Capital Project have revised completion years and require a revision to the conformity analysis.

- [TIP ID 12-02-9024](#): New road, new interchanges, the Illiana Expressway between I-55 and I-65 in Indiana. The sponsor has requested changing the completion year from 2018 to 2040.
- [TIP ID 12-16-0027](#): Interchange reconstruction, bridge replacement, lane widening and additional lanes are designated improvements along the I-55 corridor from Kavanaugh Rd to Lorenzo Rd. The sponsor has requested changing the completion year from 2018 to 2022.

At this time, no projects are requesting a scope change. The scope of a project is determined by the [work types](#) associated with the project.

- Non-exempt work types may 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 (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 public website of the [TIP database](#) is available through the hyperlink for current project information. Newly submitted changes are found in the [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 US Environmental Protection Agency's MOVES model. The model generated on-road emission estimates for each precursor or direct pollutant in each analysis year.

For ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NOx), the resulting emissions inventories estimates fell below the applicable budgets for the maintenance State Implementation Plan (SIP).

Both the annual direct fine particulate (PM<sub>2.5</sub>) and NOx emissions inventories are below the applicable budgets from the attainment SIP.

### Direct PM<sub>2.5</sub> and NO<sub>x</sub> Emissions in Tons per Year for PM<sub>2.5</sub> Conformity

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	1,578.13	5,100.00	38,864.30	127,951.00
2025	1,193.33	2,377.00	25,890.55	44,224.00
2030	979.98	2,377.00	20,033.66	44,224.00
2040	905.62	2,377.00	17,561.09	44,224.00

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

### VOC and NO<sub>x</sub> Emissions in Tons per Summer Day for Ozone Conformity

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	76.11	117.23	104.95	373.52
2025	59.73	60.13	68.77	150.27
2030	47.01	60.13	51.81	150.27
2040	37.12	60.13	43.89	150.27

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 July 14, 2016

**ACTION REQUESTED:** Recommend for finding of conformity and approval of TIP amendment