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MEMORANDUM

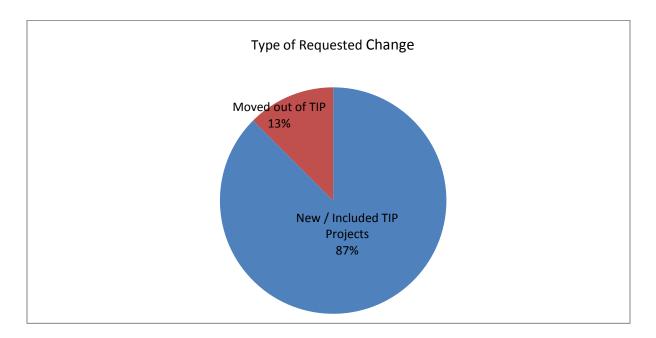
To: CMAP Transportation Committee

From: CMAP Staff

Date: January 15, 2016, Revised January 21, 2016

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

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, seven 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 <u>03-16-0010</u>: Removal of lane to the State / National Pkwy from Plum Grove Road to IL 58 Golf Road.

- TIP ID <u>09-16-0013</u>: Adding lanes on Wolfs Crossing Road from US 34 Chicago Road to Eola Road. Initial corridor work will focus on Segment One, between Harvey Road and Eola Road.
- TIP ID <u>09-16-0016</u>: An intersection improvement and new road, as Anderson Road is extended from Keslinger Road to Freedom Road.
- TIP ID <u>09-99-0101</u>: Dauberman Road extension from north of US 30 to Granart Road. The sponsor revised the expected opening from 2017 to 2022.
- TIP ID <u>10-09-0024</u>: IL 131 Green Bay Road from Russell Road to Sunset Avenue. Besides the
 inclusion of anticipated funds, the sponsor has moved its estimated completion to 2021 from
 2030.
- TIP ID <u>12-16-0004</u>: A road extension of Enterprise Drive toward the west, then reconnection to Division Street.
- TIP ID 12-13-0004: Laraway Road corridor project from US 52 to IL 43 Harlem Avenue.

One non-exempt project moved out of the current years of the TIP and is not anticipated to use federal funds within the next four years:

• TIP ID 11-00-0016: Algonquin Road from Brier Hill Road to IL 47.

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 included in a new conformity analysis. Sponsors indicated that several projects have updated completion years.

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.

TIP projects are also viewable in a map format.

Each TIP ID includes a hyperlink to the TIP database for current project information. Changes are also seen in the Conformity Amendments report that is coded in the 2020, 2025, 2030, and 2040 highway and transit networks. 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 ($PM_{2.5}$) and NOx emissions inventories are below the applicable budgets from the attainment SIP.

Direct PM2.5 and NOx Emissions in Tons per Year for PM2.5 Conformity

	Fine Particulate Matter		Nitrogen Oxides	
Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	2,079.02	5,100.00	39,594.26	127,951.00
2025	1,803.54	2,377.00	31,202.77	44,224.00
2030	1,729.54	2,377.00	28,997.49	44,224.00
2040	1,803.56	2,377.00	29,687.32	44,224.00

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

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

	Volatile Organic Compounds		Nitrogen Oxides	
Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	60.77	117.23	107.88	373.52
2025	55.66	60.13	84.47	150.27
2030	54.13	60.13	78.23	150.27
2040	57.11	60.13	79.65	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 January 21, 2016

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