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## **MEMORANDUM**

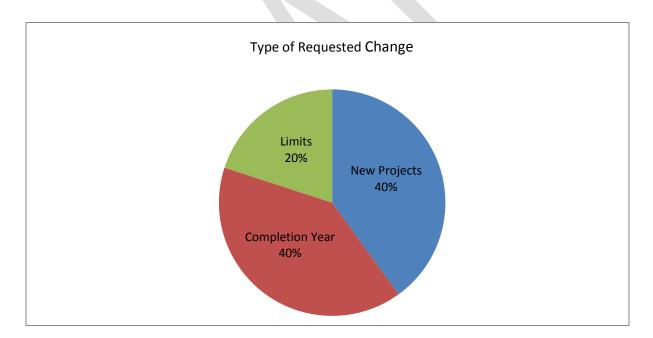
To: CMAP Transportation Committee

From: July 9, 2015

Date: CMAP Staff

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

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, five (5) projects require air quality conformity analysis. Below is a summary of the types of requested changes.



If the TIP amendments are approved, two 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 and exempt tested projects with only preliminary engineering funding are excluded from conformity analysis.

The new projects are:

- TIP ID <u>09-15-0015</u>: Adding lanes and replacing a bridge on US 30 from west of Dugan Road to Municipal Road.
- TIP ID <u>09-15-0019</u>: An intersection improvement, reconstructing the current Collins Road, and extending Collins Road from Blue Heron Drive to Minkler Road.

One project requested a reduction to the original limits of the project:

• TIP ID <u>10-03-0005</u> Adding lanes and intersection improvements on Deerfield Road, from US 45 Milwaukee Avenue to Saunders Road in Riverwoods rather than Wilmot Road in Riverwoods.

Two projects are requesting changes to their completion year. 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 2015, 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; two of those crossed an analysis year:

- TIP ID <u>03-09-0073</u>: Adding lanes, resurfacing, curb and gutter improvements, and lighting on IL 19 Irving Park Road from Schaumburg Road to Bartlett Road, the sponsor has requested changing the completion year from 2015 to 2017.
- TIP ID <u>12-07-0021</u>: Replacing a bridge, adding a continuous bi-directional turn lane, and adding lanes on Ridge Road from south of Minooka Road to McEvilly Road, the sponsor has requested changing the completion year from 2015 to 2016.

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 tested for conformity. Examples of non-exempt work types are adding lanes to a road, an 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 projects including these work types 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 can also be seen in the Conformity Amendments report which were coded in the 2015, 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	SIP Budget	Northeastern	SIP Budget
	Illinois		Illinois	
2015	2,768.10	5,100.00	61,168.33	127,951.00
2025	1,824.18	2,377.00	31,224.61	44,224.00
2030	1,752.18	2,377.00	29,028.24	44,224.00
2040	1,831.11	2,377.00	29,766.07	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
2015	76.66	117.23	162.53	373.52
2025	52.29	60.13	80.22	150.27
2030	50.70	60.13	74.10	150.27
2040	53.54	60.13	75.67	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 1,2015