Agenda Item No. 7.0



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MEMORANDUM

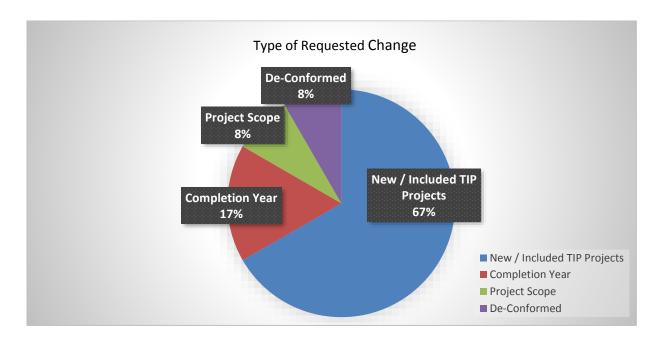
To: CMAP Board

From: CMAP Staff

Date: March 7, 2018

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, twelve projects require air quality conformity analysis. Below is a summary of requested changes by type.



If the TIP amendment is approved, eight 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 06-15-0012: I-294 NB at 88th Ave, and Archer Rd (Entrance Ramp)
- TIP ID 08-17-0020: Westmore-Meyers Road Diet Bike Lanes
- TIP ID 09-18-0003: Randall Road at Weld Road/US 20
- TIP ID 10-17-0027: IL 83 from IL 120 to IL 137, and the Atkinson Road Extension
- TIP ID 10-18-0005: Hook Drive Extension
- TIP ID 12-14-0020: TH 181 Baker Road at Jackson Creek
- TIP ID 12-18-0006: Houbolt Road (I-80 to US Route 6)
- TIP ID 12-18-0007: Houbolt Road extension (Des Plaines River Bridge)

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 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.

A CREATE project updated its completion year requiring a revision to the conformity analysis:

• TIP ID 01-06-0058: 71st St at B&OCT (CSX) Blue Island Subdivision, a Rail-Highway Grade Separation (GS-19) linked to the 75th Street Corridor Improvement Project

The following non-exempt project crossed an analysis year and is included in the conformity analysis:

• TIP ID 12-13-0004: Corridor improvement along Laraway Road from US 52 to IL 43 Harlem Ave

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.

This GO TO 2040 Major Capital Project revision is now defined by two Express Toll Lanes (ETL) in each direction east of I-294 and keeps the designed one ETL west of I-294 to I-355 for the conformity analysis.

 TIP ID 12-10-9001: I-55 Managed Lane from I-355 to I-90 I-94 (I-55 Stevenson Express Toll Lanes)

A status change to de-conformed, after the sponsor indicated the following project is delayed:

• TIP ID 12-07-0021: Ridge Road from South of Minooka Rd to McEvilly Road

The public website of the eTIP database is available through the hyperlink for current project information. Newly submitted changes are found in the 18-04 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 the US Environmental Protection Agency's MOVES 2014a 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 ozone maintenance State Implementation Plan (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	1,645.14	5,100.00	43,455.25	127,951.00
2025	1,212.52	2,377.00	29,788.75	44,224.00
2030	1,003.17	2,377.00	23,902.09	44,224.00
2040	908.81	2,377.00	20,682.66	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	76.33	117.23	114.29	373.52
2025	60.04	60.13	77.01	150.27
2030	47.74	60.13	60.54	150.27
2040	37.55	60.13	50.73	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 December 21, 2017

ACTION REQUESTED: Approval