



MEMORANDUM

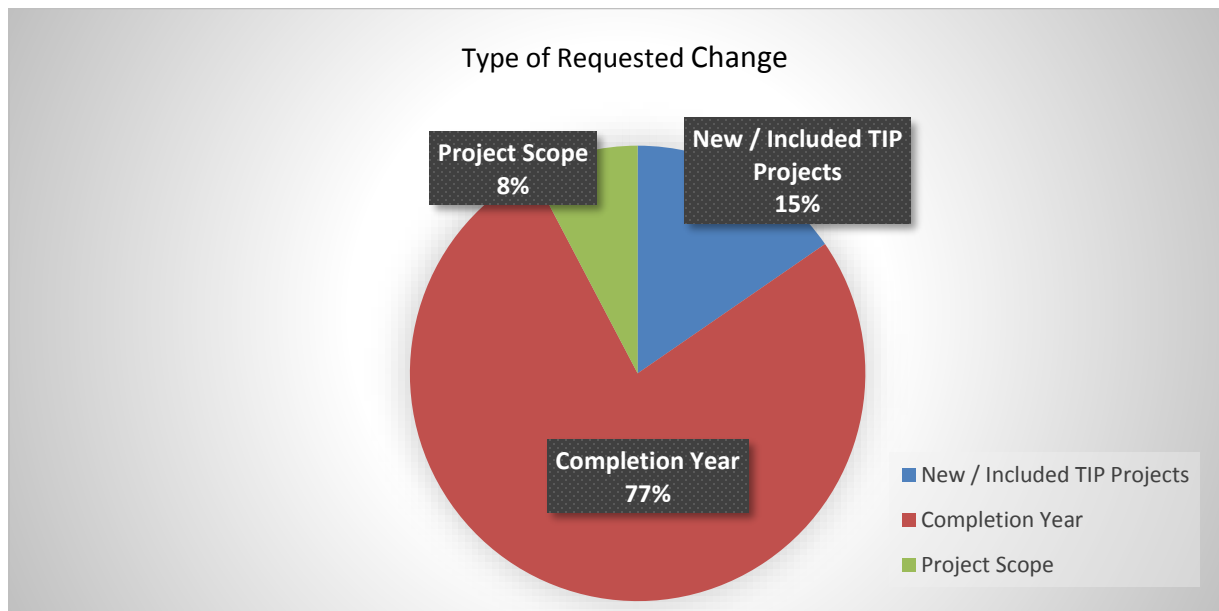
To: Programming Committee

From: CMAP Staff

Date: October 4, 2017

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



If the TIP amendment is 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 projects with only preliminary engineering funding and exempt tested projects are excluded from conformity analysis.

The new projects are:

- TIP ID **01-17-0017**: Damen/Lake Green Line Elevated CTA Station
- TIP ID **10-17-0017**: Corridor improvement along Fairfield Rd from Gilmer Rd to IL 176.

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.

Three GO TO 2040 Major Capital Projects have a revised completion year requiring a revision to the conformity analysis.

- TIP ID **01-02-9018**: Rock Island District Line from 16th St to Gresham Junction
- TIP ID **10-06-0061**: IL 53 North-South Tollway from IL 120 to Lake Cook Rd IL 53/120 Tollway
- TIP ID **10-94-0047**: IL 120 from Wilson Rd to US 41 IL 53/120 Tollway (IL 120 Bypass)

The following non-exempt group of projects crossed an analysis year and are included in the conformity analysis.

- TIP ID **08-00-0057**: 248th Ave from 95th St to 103rd St
- TIP ID **09-00-0033**: Bliss/Fabyan Rd extension to Main St
- TIP ID **09-09-0099**: U.S. 30 from IL 47 to Albright Rd
- TIP ID **10-09-0037**: US 41 Skokie Hwy from Quassey Avenue to S of IL 176
- TIP ID **10-96-0005**: Quentin Rd from IL 22 to Lake Cook Rd
- TIP ID **11-00-0001**: IL 31 Front St from S of IL 120 Belvidere Rd to N of IL 176
- TIP ID **13-16-0005**: Barrington Rd between IL 62 to Mundhank 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 (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 following GO TO 2040 Major Capital Project scope was changed to define the new station locations. Although this is not a change to the plan, for conformity purposes the project is included for analysis:

- TIP ID [18-07-0670](#): UP NW Line New Start (3870), Metra UP Northwest Improvements and Extensions. New Stations at Johnsburg, Prairie Grove and Ridgefield.

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 the 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 (NO_x), the resulting emissions inventories estimates fell below the applicable budgets for the ozone maintenance State Implementation Plan (SIP).

As of April, 2015, the region was designated as "unclassifiable" with respect to the 2012 fine particulate matter standard. Effective October, 2016, the 1997 fine particulate matter standard was revoked – this is the standard to which the region has been conforming. Thus, for regulatory purposes, the region has no conformity requirement with respect to fine particulate matter. To reflect this, the conformity inventory table shows only the inventories for ozone precursors.

Direct PM_{2.5} and NO_x Emissions in Tons per Year for PM_{2.5} Conformity

Year	Fine Particulate Matter		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	1,636.83	5,100.00	43,423.51	127,951.00
2025	1,214.10	2,377.00	29,793.79	44,224.00
2030	1,003.56	2,377.00	23,868.14	44,224.00
2040	827.79	2,377.00	16,171.75	44,224.00

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

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

Year	Volatile Organic Compounds		Nitrogen Oxides	
	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	76.29	117.23	114.21	373.52
2025	60.05	60.13	77.02	150.27
2030	47.74	60.13	60.46	150.27
2040	33.85	60.13	39.66	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 25, 2017

ACTION REQUESTED: Approval