## Agenda Item No. 8.0



233 South Wacker Drive Suite 800 Chicago, Illinois 60606

312 454 0400 www.cmap.illinois.gov

## **MEMORANDUM**

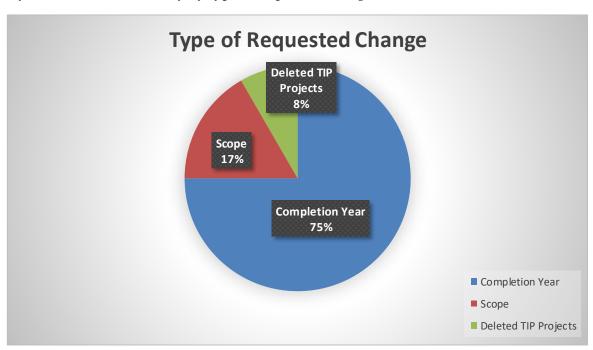
To: CMAP Board

From: CMAP Staff

**Date:** June 4, 2020

Re: ON TO 2050/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 FFY 2020-24 Transportation Improvement Program (TIP) and ON TO 2050. Of the changes requested, twelve projects require air quality conformity analysis. Below is a summary by type of requested changes.



If the TIP amendment is approved, one non-exempt project will be removed from the TIP eleven existing 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. This

former exempt tested project, indicated a change in scope and became a new not exempt addition:

• TIP ID 04-17-0009: Franklin Avenue Reconstruction.

Limits are the cross-streets, mileposts or other boundaries which define the extent of a project. There are no projects with significant limit changes.

Other changes to existing projects are described below.

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 2050. The analysis years are currently 2020, 2025, 2030, 2040 and 2050. If a change in completion year results in moving a project across an analysis year, the project must be revised in the conformity analysis.

These non-exempt projects crossed an analysis year and are included in the conformity analysis:

- TIP ID 01-03-0017: Taylor Street over the Chicago River
- TIP ID 01-17-0003: Chicago Avenue from Latrobe Ave to Kedzie Avenue.
- TIP ID 03-11-0020: CH A50 Lake Cook Road from Raup Boulevard to Hastings Lane
- TIP ID 03-12-0034: CH A62 Shoe Factory Road from Essex Drive to Beverly Road
- TIP ID 11-03-0018: Randall Road from Polaris Drive / Acorn Lane to Harnish Drive
- TIP ID 12-07-0005: Weber Road from 119th Street (Rodeo Rd) to 135th St (Romeo Rd)
- TIP ID 12-07-0021: Ridge Road from (1/4 mi. South of) Minooka Road to McEvilly Road
- TIP ID 18-11-0046: Peterson / Ridge New Station Union Pacific North Line

The following not exempt Regionally Significant Projects (RSP) crossed an analysis year:

• TIP ID 01-02-9009: The near term phase of the renamed Chicago Union Station Master Plan Implementation. RSP 85

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, new bridge, 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.

The project sponsor indicated a new roadway and highway extension to the individual project for conformity analysis:

• TIP ID 01-02-0020: Burley Avenue from 106<sup>th</sup> Street to 126<sup>th</sup> Place (Burley Avenue Extension)

The following project is now being deleted and will be removed from the travel demand model:

TIP ID 09-02-9033: Prairie Parkway from US 34 to US 47

The public website of the eTIP database is available through the hyperlink for current project information. Newly submitted changes are found in the 20-06 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 were produced using the new vehicle population file.

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) and the 2008 and 2015 Ozone NAAQS as shown in the table below.

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 | 2,036.63                | 5,100.00   | 55,547.87             | 127,951.00 |
| 2025 | 1,286.01                | 2,377.00   | 32,186.40             | 44,224.00  |
| 2030 | 953.98                  | 2,377.00   | 23,709.28             | 44,224.00  |
| 2040 | 850.58                  | 2,377.00   | 20,525.09             | 44,224.00  |
| 2050 | 899.31                  | 2,377.00   | 21,658.68             | 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 | 71.34                      | 117.23     | 146.33                | 373.52     |
| 2025 | 53.20                      | 60.13      | 85.02                 | 150.27     |
| 2030 | 43.42                      | 60.13      | 60.79                 | 150.27     |
| 2040 | 33.90                      | 60.13      | 51.37                 | 150.27     |
| 2050 | 34.12                      | 60.13      | 53.85                 | 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 April 6, 2020

**ACTION REQUESTED: Approval**