



MEMORANDUM

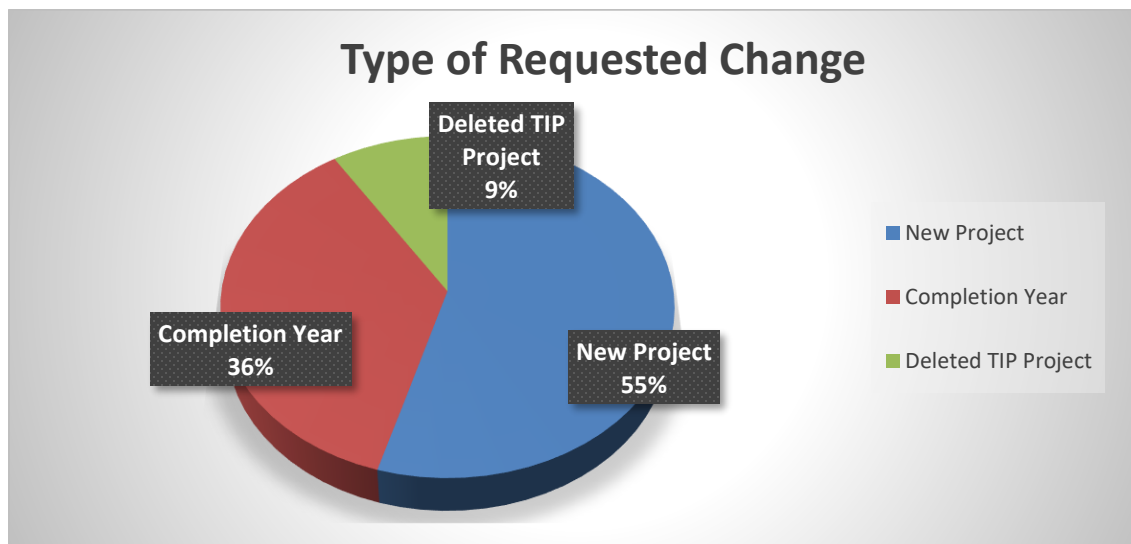
To: CMAP Transportation Committee

From: CMAP Staff

Date: November 5, 2021

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 2022-26 Transportation Improvement Program (TIP) and ON TO 2050. Of the changes requested, eleven 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 as the ten 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 include:

- Rail-Highway Grade Separations
 - [TIP ID 04-16-0008](#), Elmwood Park Grand Avenue Grade Separation
 - [TIP ID 10-22-0001](#), Old McHenry Road-Quentin Road
 - [TIP ID 12-22-0001](#), Gougar Road Grade Separation
- Road Alignment
 - [TIP ID 10-21-0017](#), Cedar Lake Rd Realignment
- Road Extension
 - [TIP ID 06-20-0028](#), Walker Road (CH W13) Extension Project
 - [TIP ID 12-20-0026](#), Eastern Avenue Reconstruction & New Construction

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 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.

Four non-exempt projects crossed an analysis year and is included in the conformity analysis. From the near term to those experiencing long term delays:

- [TIP ID 06-04-0008](#), IL 7 Wolf Rd from 143rd St to 167th St.;
- [TIP ID 01-19-0031](#), Jane Addams Tollway (I-90) Eastbound Exit to Lee Street;
- [TIP ID 07-14-0003](#), Vollmer Road from Kedzie Avenue to Western Avenue - RSP 145
- [TIP ID 01-06-0051](#), CREATE - Central Av at BRC RR (GS-02) - RSP 151

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 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 following project is no longer being pursued by the sponsor. As a result, the project is being deleted and will be removed from the travel demand model:

- [TIP ID 10-11-0061](#), IL 120 Belvidere Road at CH V76 Gilmer Road.

The public website of the [eTIP database](#) is available through the hyperlink for current project information. Newly submitted changes are found in the [22-03 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.

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

| Year | Volatile Organic Compounds | | Nitrogen Oxides | |
|------|----------------------------|------------|-----------------------|------------|
| | Northeastern Illinois | SIP Budget | Northeastern Illinois | SIP Budget |
| 2025 | 52.99 | 60.13 | 86.26 | 150.27 |
| 2030 | 43.27 | 60.13 | 62.00 | 150.27 |
| 2040 | 33.94 | 60.13 | 52.65 | 150.27 |
| 2050 | 34.08 | 60.13 | 54.82 | 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 October 29, 2021

Direct PM_{2.5} and NOx Emissions in Tons per Year for PM_{2.5} (Informational Only)

| Year | Fine Particulate Matter | | Nitrogen Oxides | |
|------|-------------------------|-----------------------|-----------------------|-----------------------|
| | Northeastern Illinois | Historical SIP Budget | Northeastern Illinois | Historical SIP Budget |
| 2025 | 1,310.91 | 2,377.00 | 33,049.24 | 44,224.00 |
| 2030 | 972.45 | 2,377.00 | 24,165.47 | 44,224.00 |
| 2040 | 878.02 | 2,377.00 | 21,101.15 | 44,224.00 |
| 2050 | 928.41 | 2,377.00 | 21,942.50 | 44,224.00 |

Greenhouse Gas Mobile Source Emissions (Informational Only)

| Year | CO ₂ Equivalent in Tons per Year | | |
|------|---|--|---|
| | Northeastern Illinois | % change from Previous Conformity Modeling | % change from the start of ONTO 2050 (10-10-2018) |
| 2025 | 28,537,257.51 | 1.30% | 3.07% |
| 2030 | 26,419,067.45 | 1.34% | 3.46% |
| 2040 | 25,766,626.58 | 1.56% | 3.75% |
| 2050 | 27,083,273.04 | 1.33% | 3.18% |

ACTION REQUESTED: Recommend finding of conformity and approval of TIP amendment 22-03 by the MPO Policy Committee.