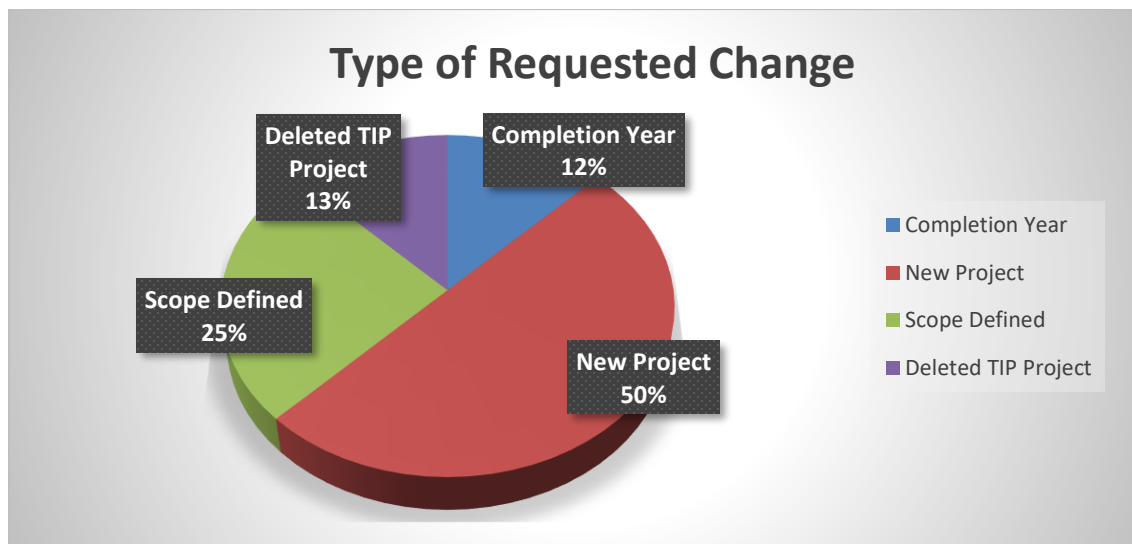




MEMORANDUM

To: CMAP Transportation Committee
 From: CMAP Staff
 Date: April 9, 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 not exempt projects for inclusion in the regional air quality analysis of the FFY 2021-25 Transportation Improvement Program (TIP) and ON TO 2050. Of the changes requested, eight projects require air quality conformity analysis. Below is a summary by type of requested changes.



If the TIP amendment is approved, one not exempt project will be removed from the TIP and seven not exempt projects will either be added to the TIP or have the analysis associated with the project revised due to project changes or delays. These projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the fiscally constrained TIP. Not exempt projects with only preliminary engineering funding and exempt tested projects are excluded from conformity analysis.

The new projects are:

- [TIP ID 09-21-0005](#): Randall Rd at Big Timber Rd
- [TIP ID 09-21-0019](#): Randall Rd at IL 72
- [TIP ID 12-21-0026](#): Theodore Street
- [TIP ID 12-21-0028](#): Olympic Boulevard

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.

One not exempt project crossed an analysis year and is included in the conformity analysis:

- [TIP ID 12-12-0033](#): Weber Road (CH 88) from 135th Street (Romeo Road) to Airport Road (Lockport Road)

The scope of a project is determined by the [work types](#) associated with the project.

- Not exempt work types are expected to affect air quality and must be included in the conformity analysis. Examples of not 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.

Two prior exempt now re-established as not exempt projects are presented here, the first through a change of scope of an associated road diet as it approaches the priority bridge structure, the second as a roadway and an intersection expansion:

- [TIP ID 01-11-0004](#): 39th St/Pershing Rd at Racine Ave to CR RR (1.3 mi W of I-94)
- [TIP ID 09-02-0007](#): Randall Rd at Hopps Road

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

- [TIP ID 03-03-0101](#): Meacham Rd from Kirchoff Rd to IL 62 Algonquin Rd

The public website of the [eTIP database](#) is available through the hyperlink for current project information. Newly submitted changes are found in the [21-06 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 (NO_x), the resulting emissions inventories estimates fell below the applicable budgets for the 1997 ozone maintenance State Implementation Plan (SIP) and the 2008 and 2015 Ozone NAAQS as shown in the table below.

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 |
| 2025 | 53.42 | 60.13 | 85.17 | 150.27 |
| 2030 | 43.62 | 60.13 | 60.81 | 150.27 |
| 2040 | 34.10 | 60.13 | 51.31 | 150.27 |
| 2050 | 34.32 | 60.13 | 53.79 | 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 March 29, 2021

Direct PM_{2.5} and NO_x 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 | 1,310.65 | 2,377.00 | 32,660.45 | 44,224.00 |
| 2030 | 967.20 | 2,377.00 | 23,721.84 | 44,224.00 |
| 2040 | 866.48 | 2,377.00 | 20,586.88 | 44,224.00 |
| 2050 | 920.36 | 2,377.00 | 21,553.24 | 44,224.00 |

Greenhouse Gas (GHG) Mobile Source Emissions (Informational Only)

| CO ₂ Equivalent in Tons per Year | |
|---|-----------------------|
| Year | Northeastern Illinois |
| 2025 | 28,169,868.67 |
| 2030 | 26,070,488.03 |
| 2040 | 25,371,871.45 |
| 2050 | 26,727,742.58 |

Note: GHG mobile source targets have not been established for the region.

ACTION REQUESTED: Recommend finding of conformity and approval of TIP Amendment 21-06 to the MPO Policy Committee.