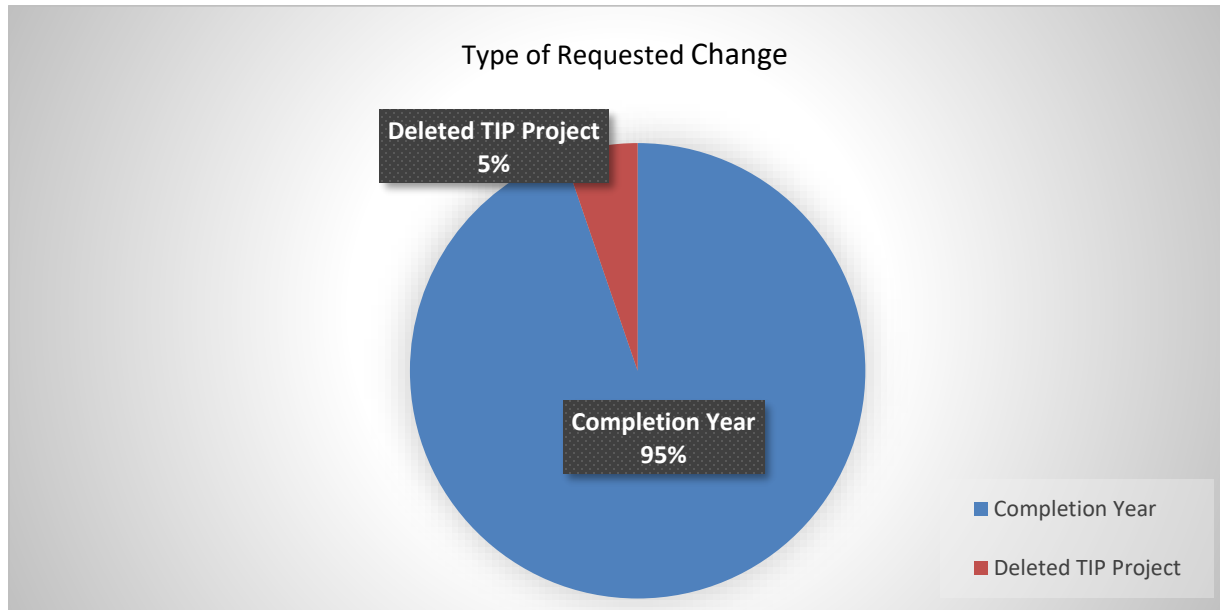




MEMORANDUM

To: CMAP Transportation Committee
From: CMAP Staff
Date: September 13, 2019
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 2019-24 Transportation Improvement Program (TIP) and ON TO 2050. Of the changes requested, nineteen 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 and eighteen existing non-exempt projects will be updated. 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. 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.

The below project sponsors indicated a focus on different segments of their projects, providing a clarification of location with no physical change and noting a later completion year, therefore requiring a revision to the conformity analysis:

- TIP ID [07-94-0027](#): Torrence Ave to Burnham Ave; FAU 1631 Joe Orr Road Realignment/Extension from Stony Island Avenue to Burnham Ave
- TIP ID [09-03-0002](#): Huntley Rd from Randall Rd to Elm Ave
- TIP ID [09-16-0013](#): Wolfs Crossing Road from US 34 Chicago Road to Eola Road

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

- TIP ID [03-03-0101](#): Meacham Rd from Kirchoff Rd to IL 62 Algonquin Rd
- TIP ID [06-00-0042](#): 143rd Street from Wolf Road to US 45 LaGrange Rd
- TIP ID [06-03-0005](#): 143rd St from Will-Cook Rd to IL 7 Wolf Rd
- TIP ID [07-96-0013](#): FAU 1631 Joe Orr Rd Main St Extension from FAU 2943 Burnham Ave to IL/IN State Line (Joe Orr Road project)
- TIP ID [09-16-0032](#): IL 71 Reconstruction and Add Lanes from IL 47 to E. of IL 126
- TIP ID [09-99-0102](#): La Fox Rd Bypass to Bunker Rd at Campton Twp (3783)
- TIP ID [12-06-0013](#): 143rd St from IL 59 to IL 126
- TIP ID [12-18-0006](#): Houbolt Road (I-80 to US ROUTE 6)
- TIP ID [12-18-0007](#): Houbolt Road ext (Des Plaines Bridge)

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

- TIP ID [01-06-0051](#): CREATE - Central Av at BRC RR (GS-02) - RSP 151
- TIP ID [09-12-0036](#): I-80 Reconstruction and Managed Lanes from Ridge Rd to US 30 Lincoln Hwy - RSP 36
- TIP ID [13-16-0009](#): I-294 Central Tri-State Reconstruction and Mobility Improvements - RSP 23
- TIP ID [13-18-0005](#): I-290/I-88/I-294 Interchange Improvement - RSP 24

Due to the completeness of the vast majority of this Major Capital project, the sponsor requested for this segment to become a new stand-alone not exempt project, in doing so it crossed an analysis year:

- TIP ID [01-19-0031](#): Jane Addams Tollway (I-90) Eastbound Exit to Lee Street

The addition of the proposed bridge widening of this tollway improvement affects the project completion year and crosses an analysis year:

- TIP ID [08-16-0033](#): I-88 Recon -York Rd to I-290, and the Windsor Bridge over I-88

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

- TIP ID [10-10-0022](#): Lewis Avenue from Grand Avenue to Belvidere Road

Current project information is available through the [eTIP database](#) public website. Details of the project changes summarized in this memo are found in the [19-09 Conformity Amendment](#) 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 results from the MOVES model show emissions for each modeled year remain below the Motor Vehicle Emissions Budget (MVEB) set forth by the US EPA for the 8-Hour Ozone standard for the Chicago Non-Attainment area. Therefore, with the proposed changes, ON TO 2050 and the FFY 2019 – 2024 TIP conform to the 2008 and 2015 8-Hour Ozone NAAQs and the 1997 8-Hour Ozone Maintenance Plan. Although conformity to the PM_{2.5} MVEB is no longer required for the Chicago region by the US EPA, CMAP continues to model PM_{2.5} emissions and document the comparison of those emissions to the last applicable PM_{2.5} MVEB.

The model generated on-road emission estimates for each precursor or direct pollutant in each analysis year are shown in the table below. Ozone precursors, volatile organic compounds (VOC) and nitrogen oxides (NO_x), were modeled with the resulting emissions inventories estimates below the MVEB for ozone.

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	2,041.41	5,100.00	55,368.26	127,951.00
2025	1,235.34	2,377.00	31,530.70	44,224.00
2030	952.89	2,377.00	23,775.31	44,224.00
2040	850.07	2,377.00	20,664.61	44,224.00
2050	898.98	2,377.00	21,691.69	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	71.39	117.23	146.15	373.52
2025	53.12	60.13	85.11	150.27
2030	43.41	60.13	60.95	150.27
2040	33.91	60.13	51.54	150.27
2050	34.15	60.13	54.13	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 11, 2019

No comments were received during the comment period from August 2 through September 3, 2019. Staff requests that the Transportation Committee recommend a finding of conformity and approval of TIP Amendment 19-09 to the CMAP Board and MPO Policy Committee.

ACTION REQUESTED: Approval

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