



MEMORANDUM

To: CMAP Board

From: CMAP Staff

Date: June 4, 2020

Re: ON TO 2050/2019-2024 TIP Conformity Analysis and TIP Amendment 20-03.1

In accordance with the definition of Regionally Significant Projects in ON TO 2050, the Illinois Department of Transportation (IDOT) has submitted two new non-exempt projects that are anticipated to be carried forward into the FFY 2020-24 TIP and the ON TO 2050 Regionally Significant Projects (RSPs) for inclusion in the regional air quality analysis. CMAP has prepared a conformity analysis for public comment and consideration by the CMAP Board.

The US DOT requires regional planning agencies to demonstrate fiscal constraint by determining that sufficient resources will be available to construct projects recommended in the plan. Careful selection of these projects must meet the federal standard of fiscal constraint, while also helping to achieve regional goals. These types of projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP or within the planning horizon of ON TO 2050.

The new RSPs are:

- TIP ID [12-06-0041](#): I-55 from Weber Road to US 30; I-55 At Airport/Lockport Rd & At Ill 126 – RSP A3
- TIP ID [12-18-0019](#): I-55 - I-80 to US 52 (Jefferson St) and @ ILL 59; US 52 Jefferson St - River Rd to Houbolt Rd – RSP A4

Newly submitted change details for these two projects are found in the [20-03.1 Conformity Amendment report](#).

The conformity analysis is conducted for selected analysis years between now and 2050. The analysis years are currently 2020, 2025, 2030, 2040 and 2050. 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. A more detailed description regarding the modeling process

used for conformity analysis can be seen in the ON TO 2050/TIP Conformity Analysis & TIP Amendment 20-06 memo. It should be noted that the conformity amendments included in the TIP Amendment were also included in this analysis.

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 (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 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	2,036.63	5,100.00	55,547.87	127,951.00
2025	1,293.80	2,377.00	32,609.53	44,224.00
2030	953.67	2,377.00	23,751.36	44,224.00
2040	849.79	2,377.00	20,648.49	44,224.00
2050	902.16	2,377.00	21,709.89	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	71.34	117.23	146.33	373.52
2025	53.20	60.13	85.05	150.27
2030	43.44	60.13	60.89	150.27
2040	33.92	60.13	51.50	150.27
2050	34.26	60.13	54.19	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 8, 2020

ACTION REQUESTED: Approval

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