Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800, Willis Tower
Chicago, IL 60606

312-454-0400 (voice)
312-454-0411 (fax)
www.cmap.illinois.gov

MEMORANDUM

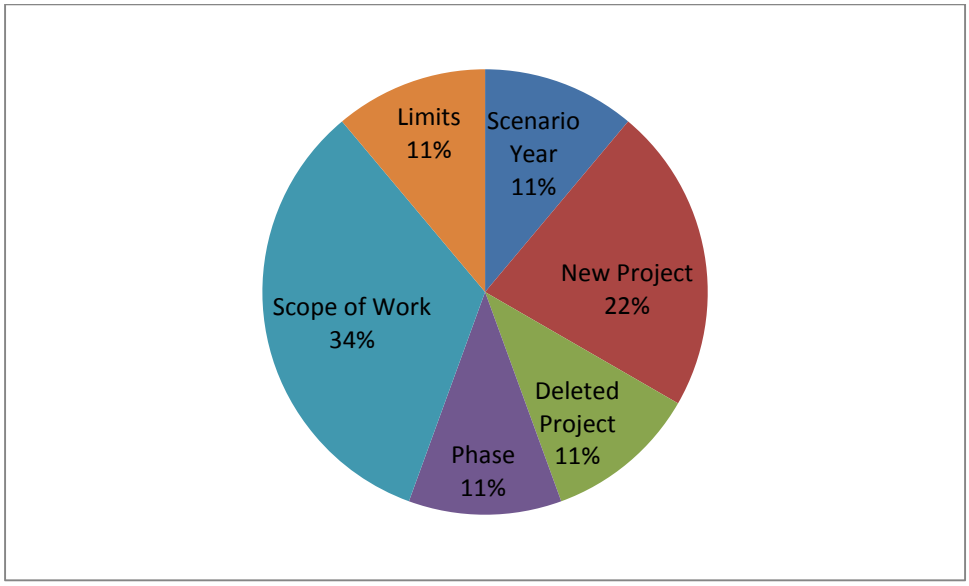
To: **Transportation Committee**

Date: **July 26, 2012**

From: **CMAP Staff**

Re: **Semi-annual GO TO 2040/TIP Conformity Analysis & TIP Amendments**

In accordance with the biannual conformity analysis policy, CMAP staff asked programmers to submit changes to projects included in the regional air quality analysis of the Transportation Improvement Program (TIP) and GO TO 2040. We received responses from all programmers and specific TIP changes are listed in the attached report. Of the numerous changes requested, nine projects require air quality conformity analysis. Below is a summary of the changes requested.



Two new projects were included in the TIP and conformity analysis:

- TIP ID 03-12-0034 is adding capacity on Shoe Factory Road from Essex Drive to Beverly Road in Hoffman Estates.

- TIP ID 09-12-0033 is an extension of Bowes Road from Schneider Drive to IL 31 LaFox Road in South Elgin.

Three existing projects are requesting a scope change. The scope of a project is determined by the work type included in the project.

- Non-exempt work types may affect air quality and must be tested for conformity. Examples of non-exempt work types are adding lanes to a road, signal timing and extending a rail line.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of the work types in the travel demand model. Exempt tested projects include lane widening to standard (e.g., 10 ft to 12 ft) and new commuter parking lots.
- Exempt work types do not require an air quality conformity analysis. Examples of exempt work types are road resurfacing and bus rehabilitation.

One project is requesting a new non-exempt work type:

- TIP ID 02-12-0020 Central Avenue from Pratt Avenue to Sauganash Road.

The two projects have removed not exempt work types:

- TIP ID 01-10-0002 I-190 from Bessie Coleman Drive to I-90.
- TIP ID 10-08-0037 IL 120 from Knight Avenue to IL 131 Green Bay Road.

One project is being deleted from the TIP:

- TIP ID 04-10-0015 Ruby Street.

One project requested an extension to the original limits of the project:

- TIP ID 09-09-0028 US 34 Veteran's Parkway, will now extend from Eldamain Road to Center Parkway in Yorkville.

Completion years indicate when a project is anticipated to be in service to users and determines in which analysis year(s) the project will be included. The current conformity analysis includes four analysis years – 2016, 2020, 2030 & 2040. When a project's completion year moves across analysis years, a new conformity analysis for the project is required. Several projects changed completion years, but only one crossed an analysis year.

One project moved from the 2016 analysis year to the 2020 analysis year:

- TIP ID 12-06-0005 CH 83 80th Avenue from 183rd Street to 191st Street in Will County.

Each TIP ID includes a hyperlink to the TIP database for further project information, and the changes are also included in the report attached.
TIP projects are also viewable in a map format. The TIP map is available at http://www.cmap.illinois.gov/tip/tip-map.

The 2016, 2020, 2030 and 2040 highway and transit networks were coded to include the project changes listed in the "Non-Exempt Projects Requiring Conformity Determination" report. The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by speed and facility type for eight vehicle classes was expanded to the twenty-eight vehicle types needed for use with USEPA's MOBILE model. The on-road emission estimates are the sum of those emissions for each precursor or direct pollutant in each scenario year. Reductions from the National Energy Policy Act Credit and Clean Fuel Fleet Program have not been claimed.

For ozone precursors, the resulting emissions estimates fell below the applicable attainment demonstration SIP budgets.

Since there are no SIP budgets for annual direct $PM_{2.5}$ and NOx emissions, these estimates were combined with estimates from northwest Indiana, which is also part of the nonattainment area. The combined direct $PM_{2.5}$ and NOx emissions remain below emissions estimates for 2002, the baseline year.

Northeastern Illinois Transportation Improvement Program
TIP Amendment October 10, 2012
Conformity Analysis Summary Results

Direct $PM_{2.5}$ and NOx Emissions in Tons per Year for $PM_{2.5}$ Conformity

	Fine Particulate Matter			Nitrogen Oxide		
Year	Northeastern Illinois	Northwest Indiana	Nonattainment area Total	Northeastern Illinois	Northwest Indiana	Nonattainment area Total
2002	3,070.78	562.64	3,633.42	167,630.81	30,397.97	198,028.78
2016	1,050.26	112.30	1,162.56	40,354.45	3,931.12	44,285.57
2020	951.41	104.74	1,056.15	27,319.57	2,733.80	30,053.37
2030	943.93	109.60	1,053.53	18,859.38	1,964.01	20,823.39
2040	1,006.36	122.55	1,128.91	19,369.72	2,111.42	21,481.14

conformity is demonstrated by comparison of analysis year emissions to the baseline year (2002)

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
2016	59.23	133.78	109.11	284.65
2020	51.08	73.68	73.07	88.17
2030	50.99	73.68	48.86	88.17
2040	55.79	73.68	49.80	88.17

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
NIRPC emissions from December 8, 2011 conformity analysis, assuming construction of Cline Avenue Bridge