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

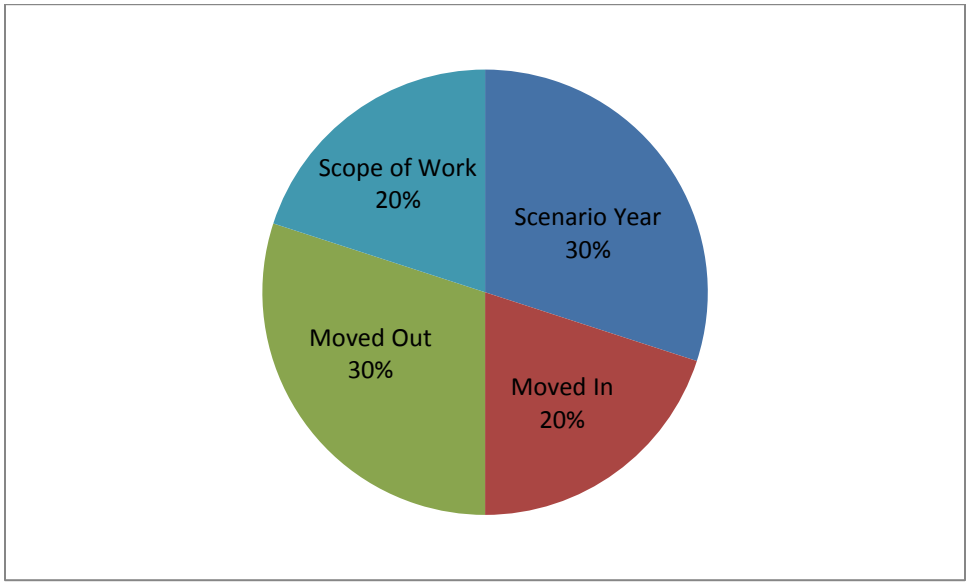
To: **Transportation Committee**

Date: **January 11, 2013**

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 most programmers and specific TIP changes are listed in the attached report. Of the numerous changes requested, ten projects require air quality conformity analysis. Below is a summary of the requested changes.



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.

Two existing projects are requesting a change in scope. One of these is proposed to be added to GO TO 2040 as a Major Capital Project. The proposed major capital project requesting to expand capacity and improve traffic flow between I-90, I- 94 onto the I- 290 from both directions by adding a new non-exempt work type, add lanes, is:

- TIP ID 01-12-0019 I- 90 I- 94 @ Congress Parkway (Circle Interchange)

The other significant project requesting a scope change of a new facility for Elston Avenue which will divert traffic away from the Damen and Fullerton Avenue intersection is:

- TIP ID 01-06-0008 Damen @ Fullerton & Elston.

Two projects move into the current years of the TIP:

- TIP ID 09-06-0021 Ridge Road from Plainfield/Stewart to I- 80 in Kendall County, begin the initial construction stage of facility expansion between Wheeler and IL126,
- TIP ID 11-03-0012 Kreutzer Road from Main Street to IL 47 in McHenry County.

Three projects move out of the current years of the TIP:

- TIP ID 06-00-0042 143rd Street from Wolf Road to US 45, LaGrange Road,
- TIP ID 06-03-0005 143rd Street from Will-Cook Road to IL 7 Wolf Road,
- TIP ID 07-06-0014 Industrial Park Road (Logisticenter Dr) from Cottage Grove Avenue to Mark Collins Drive,

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 – 2015, 2025, 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, as two crossed analysis years.

Three projects moved from the 2015 analysis year to the 2025 analysis year:

- TIP ID 07-99-0114 191st Street from IL 43 Harlem Avenue to Ridgeland Avenue
- TIP ID 08-06-0028 North Aurora Road from the EJ&E to Weston Ridge Road in Naperville.
- TIP ID 12-00-0040 I-57 @ Stuenkel Road in Will County.

Due to changes to the analysis years, not all completion year changes that have occurred since July 2012 are reflected in the report, however they are accurately represented in the model.

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 2015, 2025, 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 vehicle class, speed and facility type were entered into USEPA's MOVES model. The model generated on-road emission estimates 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 maintenance SIP budgets.

Since there are no SIP budgets for annual direct $PM_{2.5}$ and NOx emissions, these estimates were compared to emissions estimates for 2002, the baseline year. Both the annual direct $PM_{2.5}$ and NOx emissions are below the baseline.

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

Year	Fine Particulate Matter	Nitrogen Oxide
2002	**3,070.78**	**167,630.81**
2015	**2,475.72**	**52,940.86**
2025	**1,666.20**	**30,172.81**
2030	**1,603.34**	**28,588.54**
2040	**1,690.46**	**29,894.27**

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
2015	**59.57**	117.23	**139.46**	373.52
2025	**43.76**	48.13	**76.98**	125.27
2030	**42.66**	48.13	**72.51**	125.27
2040	**45.43**	48.13	**75.91**	125.27

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