Chicago Metropolitan Agency for Planning

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

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

MEMORANDUM

To: **CMAP Transportation Committee**

Date: **December 29, 2009**

From: **CMAP Staff**

Re: **Semi-annual TIP/RTP Conformity Analysis and TIP Amendments**

In accordance with the biannual conformity analysis policy agreed to in 2007, CMAP staff asked programmers to submit changes to non-exempt and exempt tested projects within the TIP. All programmers were contacted and requested to submit any changes. CMAP staff received responses from all programmers and specific changes are listed in the attached reports. Staff received over 200 change requests but, of these changes, only 58 projects required conformity action

There were twenty-four projects that required work type changes including adding, changing, or removing worktypes. Worktypes describe the work being completed in a project. Worktypes also determine if a project is exempt, exempt tested, or non-exempt. If the existing work type was already conformed, no additional action was required.

- An exempt worktype does not require an air quality conformity analysis. Examples of exempt projects include road resurfacing and bus rehabilitation.
- Exempt tested worktypes do not require a conformity analysis, but the region has chosen to include their impacts in the travel demand model. Exempt tested projects include lane widening and new commuter parking lots.
- Non-exempt projects have an effect on air quality and must be tested for conformity. Non-exempt projects include adding lanes to a road, signal timing or extending a rail line.

Other changes include twelve new projects and nine deleted projects. Also, there were nine projects with limit changes. Limits are the cross-streets, mileposts or other boundaries which define the extent of a project.

Eighty five projects changed completion years. Completion years indicate when a project is anticipated to be in service to users and determines what analysis years the project will be considered in. The current conformity analysis includes three analysis years, 2010, 2020 and 2030. When a

project's completion year change puts it into a different analysis year, a new conformity analysis is required. Thirty percent of those projects had a completion year change affecting the analysis year.

Chart 1 shows a break-down of the type of project changes requested.

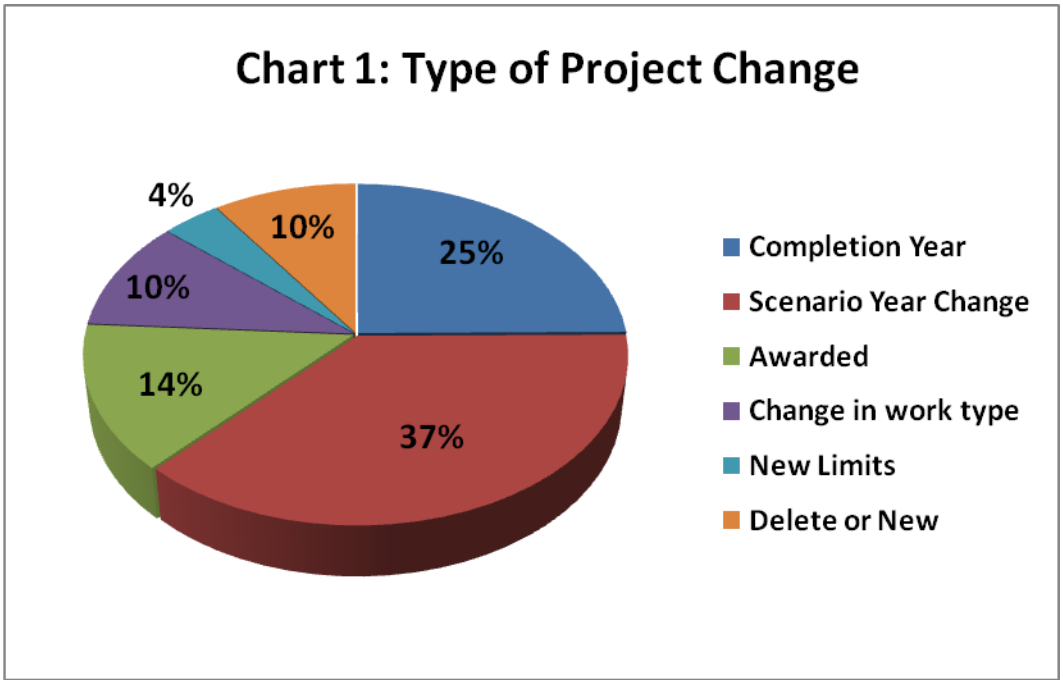
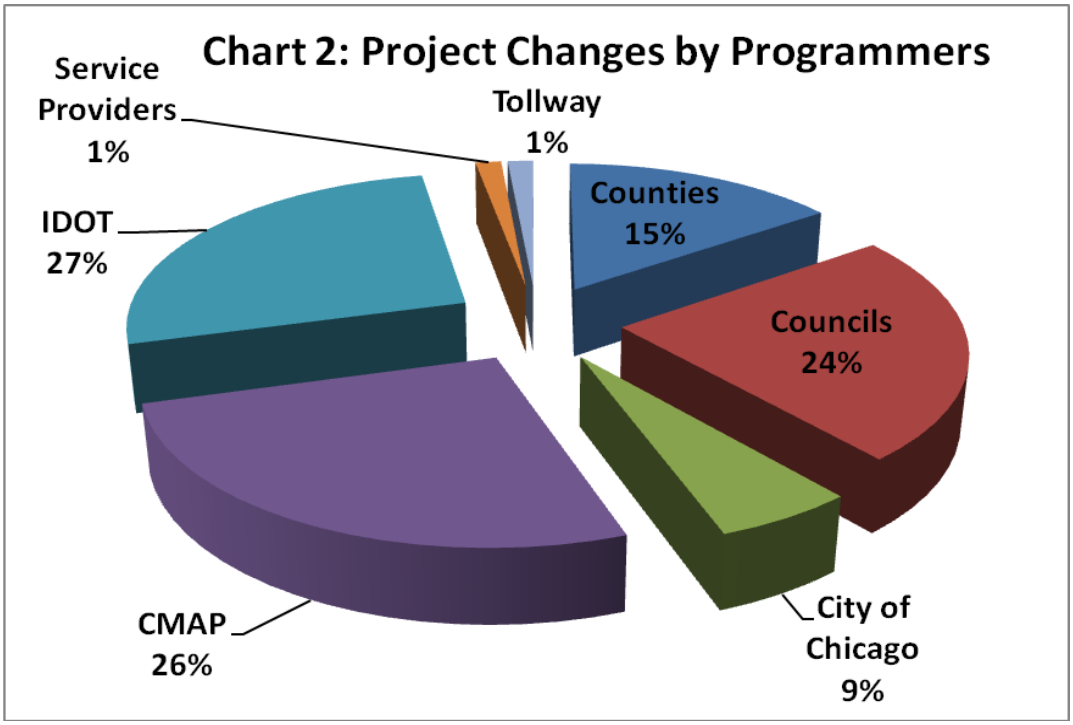


Chart 2 is a break-down of changes submitted by programmer



The 2010, 2020 and 2030 highway 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
March 9, 2010 Amendment
Conformity Analysis Summary Results

$PM_{2.5}$

		Fine Particulate Matter				Nitrogen Oxides			
Year	Annual VMT	Global rate (gm/mi)	Tons	Northwest Indiana	Nonattain-ment area Total	Global rate (gm/mi)	Tons	Northwest Indiana	Nonattain-ment area Total
2002	58,696,684,998	0.0475	**3,070.78**	**562.64**	**3,633.42**	2.5908	**167,630.81**	**30,397.97**	**198,028.78**
2010	62,631,712,211	0.0240	**1,660.16**	**158.90**	**1,819.06**	1.1760	**81,188.47**	**8,442.66**	**89,631.13**
2020	66,983,178,888	0.0138	**1,020.09**	**114.32**	**1,134.41**	0.3580	**26,430.17**	**3,004.68**	**29,434.85**
2030	71,705,929,333	0.0126	**999.29**	**116.46**	**1,115.75**	0.2346	**18,539.79**	**2,065.23**	**20,605.02**

Ozone

		VOC			NOx		
Year	Summer Day VMT	Global rate (gm/mi)	Tons	SIP	Global rate (gm/mi)	Tons	SIP
2007	176,951,339	0.6238862	**121.69**	127.42	1.4346931	**279.84**	280.40
2010	181,942,965	0.4646997	**93.20**	127.42	1.0871627	**218.04**	280.40
2020	194,586,055	0.2393749	**51.34**	127.42	0.3297646	**70.73**	280.40
2030	208,314,189	0.2266075	**52.03**	127.42	0.2116283	**48.60**	280.40

Notes

Off-model benefits are not included in the total emissions estimates
NIRPC values from analysis of December, 2008
2007 ozone values from conformity analysis approved in October, 2006