Chicago Metropolitan Agency for Planning

Attachment 6
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MEMORANDUM

To: **File**

Date: **April 17, 2008**

From: **Craig Heither, Ross Patronsky**

Re: **Results for conformity analysis of June 12, 2008 TIP Amendment**

The attached tables summarize the analysis done for the 2030 RTP Update and FY 07-12 TIP, which included the following amendments:

- I-55 add-lanes (New River Road to Coal City Road), TIP ID 12-07-0020.
- 119th Avenue add-lanes (Kedzie Avenue to Western Avenue), TIP ID 06-00-0016 – add-lanes deleted.
- Naperville Park-N-Ride (91st Street to 250th Avenue), TIP ID 08-06-0018 – deleted.
- Revised completion years for the following projects:
    - IL53 add-lanes (IL64 to IL56), TIP ID 08-00-0008: *2013*.
    - Eola Road add-lanes (Montgomery Road to 87th Street), TIP ID 08-00-0020: *2011*.
    - Fabyan Parkway extension (Main Street to Bliss Road), TIP ID 09-00-0033: *2012*.
    - Anderson Road extension (IL38 to Keslinger Road), TIP ID 09-00-0035: *2012*.
    - Indian Trail reconstruction (Mitchell Road to Farnsworth Avenue), TIP ID 09-06-0014: *2012*.
    - Cross and Joy Street reconstruction (IL47 to Joy Street), TIP ID 09-06-0017: *2010*.
    - Orchard Road add-lanes (Jericho Road to Montgomery Road), TIP ID 09-95-0011: *2013*.
    - Kirk Road reconstruction (at IL38), TIP ID 09-95-0019: *2008*.
    - Kirk Road reconstruction (at IL56), TIP ID 09-95-0020: *2008*.
    - Bolz Road extension (Huntley Road to IL62), TIP ID 09-96-0017: *2012*.
    - Stearns road extension (Randall Road to Dunham Road), TIP ID 09-96-0018: *2011*.
    - IL43 signal timing (Half Day Road to Deerfield Road), TIP ID 10-06-0004: *2009*.
    - Randall Road add-lanes (McHenry Avenue to County Line Road), TIP ID 11-03-0018: *2017*.
- Previously analyzed amendments:
    - I-355 add-lanes (I-88 to 75th Street), TIP ID 08-08-0012.
    - Prairie Parkway (IL 71 to US 34, in the 2020 analysis network), TIP ID 09-02-9033.

- I-355 South Extension add-lanes (127th Street to I-80) and associated improvements TIP IDs 12-94-0016 and 12-07-0004.

The 2010, 2020 and 2030 highway networks were coded to include the changes listed above and the regional travel demand models were re-run using the new networks. The resultant VMT by speed and facility type for eight vehicle classes (including urban bus) was expanded to twenty-eight MOBILE vehicle types for multiplication by regional emission rates developed using the MOBILE model. The highway emission estimates are the sum of those calculations 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, analysis horizon years 2010, 2020 and 2030 were evaluated using the current CMAP conformity model and the approved regional MOBILE6.2.03 emission rates. The results fell below SIP emission budgets for the attainment year and were very similar to emission estimates from the conformity analysis documentation for the 2030 RTP Update and FY 07-12 TIP approved in October, 2006.

$PM_{2.5}$ emissions were calculated based on the project changes listed previously. $PM_{2.5}$ and NOx emissions remain below the baseline year numbers.

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June 12, 2008 Northeastern Illinois Transportation Improvement Program 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	65,013,858,402	0.0224	**1,604.92**	**159.16**	**1,764.08**	1.0961	**78,549.63**	**8,459.90**	**87,009.53**
2020	70,476,890,326	0.0134	**1,044.44**	**114.31**	**1,158.75**	0.3359	**26,093.59**	**3,002.86**	**29,096.45**
2030	75,070,587,756	0.0124	**1,030.07**	**116.47**	**1,146.54**	0.2280	**18,870.91**	**2,065.35**	**20,936.26**

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	184,944,733	0.4508137	**91.90**	127.42	1.0079411	**205.48**	280.40
2020	199,972,869	0.2327997	**51.32**	127.42	0.3076814	**67.82**	280.40
2030	213,554,267	0.2208468	**51.99**	127.42	0.2048102	**48.21**	280.40

Notes

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