## MEMORANDUM

## To: MPO Policy Committee

## Date: $\quad$ December 1, 2011

From:
CMAP Staff

## Re: $\quad 09-11-0034$ GO TO 2040/TIP Conformity Analysis \& TIP Amendment

IDOT has requested a special GO TO 2040/TIP Conformity Analysis \& TIP Amendment for 09-11-
0034, IL 47 from Caton Farm Rd to I-80 in Kendall and Grundy Counties. The amendment was released for public comment from November 3, 2011 to December 2, 2011. At this time, no comments have been received. If any comments are received before the end of the comment period, the committee will be informed.

The project consists of adding lanes, adding signals and improving intersections along the highway.

The 2020, 2030 and 2040 highway networks were coded to include the project. 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, Clean Fuel Fleet Program or activities that can't be included in the travel demand model 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 $\mathrm{PM}_{2.5}$ (fine particulates) and NOx (nitrogen oxide) emissions, these estimates were combined with estimates from northwest Indiana, which is also part of the nonattainment area. The combined direct $\mathrm{PM}_{2.5}$ and NOx emissions remain below emissions estimates for 2002, the baseline year.

## Northeastern Illinois Transportation Improvement Program TIP Amendment 09-11-0034 IL 47 from Caton Farm Rd to l-80 Conformity Analysis Summary Results

Direct PM2.5 and NOX Emissions in Tons per Year for PM2.5 Conformity

|  | Fine Particulate Matter |  |  | Nitrogen Oxide |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Northeastern Illinois | $\begin{aligned} & \text { Northwest } \\ & \text { Indiana } \end{aligned}$ | Nonattainment area Total | Northeastern Illinois | $\begin{aligned} & \text { Northwest } \\ & \text { Indiana } \end{aligned}$ | Nonattainment area Total |
| 2002 | 3,070.78 | 562.64 | 3,633.42 | 167,630.81 | 30,397.97 | 198,028.78 |
| 2016 | 1,073.93 | 112.28 | 1,186.21 | 40,800.91 | 3,931.12 | 44,732.03 |
| 2020 | 969.63 | 104.73 | 1,074.36 | 27,729.34 | 2,733.80 | 30,463.14 |
| 2030 | 957.11 | 109.53 | 1,066.64 | 19,098.53 | 1,964.01 | 21,062.54 |
| 2040 | 1,004.53 | 122.52 | 1,127.05 | 19,324.23 | 2,111.42 | 21,435.65 |

VOC and NOx Emissions in Tons per Summer Day for Ozone Conformity

|  | Volatile Organic Compounds |  | Nitrogen Oxides |  |
| :---: | :---: | :---: | :---: | ---: |
| Year | Northeastern <br> Illinois | SIP Budget | Northeastern <br> Illinois | SIP Budget |
| 2016 | 61.31 | 133.78 | 110.13 | 284.65 |
| 2020 | 52.50 | 73.68 | 74.08 | 88.17 |
| 2030 | 51.97 | 73.68 | 49.47 | 88.17 |
| 2040 | 55.67 | 73.68 | 49.67 | 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 (pending) December 8, 2011 conformity analysis, assuming construction of Cline Avenue Bridge

