

# AMPO Air Quality Work Group Meeting June 24-25, 2014 Mid-America Regional Council Meeting Summary

AMPO's Air Quality Work Group met on June 24-25, 2014 in Kansas City, MO at the offices of the Mid-America Regional Council (MARC).

# Day 1 - June 24

#### **Welcome and Introductions**

Rich Denbow and Amanda Graor welcomed the Work Group participants. On behalf of AMPO and the Work Group, Rich thanked MARC for hosting the meeting.

### MAP-21 Update

Rich provided an update on CMAQ issues. FHWA was not able to attend the meeting. The Work Group discussed the update of FHWA's interim CMAQ interim guidance. There is no word yet on a date for finalizing the guidance.

Rich reported that he talked to Cecilia Ho at FHWA. FHWA would like to do outreach with the Work Group on the MAP-21 CMAQ performance plan requirement. There are still many questions. What will the performance plan look like? Will states or MPOs be responsible for the plan? How will states and MPOs coordinate?

# **CMAQ Analysis in the Atlanta Region**

David D'Onofrio presented on ARC's CMAQ project selection framework. The framework utilizes a call for projects, a technical evaluation of project applications received, a short-list of projects based on evaluation, a deliverability assessment, and a final list of recommended projects. ARC obligates a large amount of CMAQ funds each year. During a recent call for projects, ARC received 83 project requests totaling \$320 million. Using the framework, staff developed a final list of 28 projects with a total cost of \$113 million.

ARC developed a CMAQ calculator to help determine emission benefits and congestion relief for use in project ranking. Once projects are evaluated and ranked, ARC does an equity analysis to ensure projects are selected across jurisdictions in the region.

David discussed lessons learned from the recent (2013) solicitation. Project sponsors need more time to prepare thorough and thoughtful applications. Staff plans to create a more robust application process in future solicitations. Local sponsors have some issues working through deliverability of projects. Lastly, staff has learned to take technical results with a grain of salt. ARC will make the calculator available on their website.

Amanda Graor commented that MARC did a call for projects for CMAQ, STP, and TA at the same time. They usually do a call for projects for a two year period. This time they did it for a 3.5 year period. Shelley Whitworth said Texas suballocates CMAQ funds to the MPOs. Houston uses a portion for projects already included in the SIP. The region is getting about 2.5 tons of pollutants per day reduction from voluntary emission reduction projects (VMEP). Much of that is from accelerated fleet turnover of onroad diesel engines.

# Selecting SIP Projects - Shelley Whitworth

Shelley reported on the process used in the Houston region for selecting projects for inclusion in the SIP. Houston's van pool program results in a large reduction in VMT. Because the region is so large and congestion levels are high, the van pool program is popular. The region is also doing a transit bus expansion program, and is working on measures to reduce emissions from school bus fleets. She expressed a concern that some of the clean air projects do not reduce congestion very much, which may jeopardize funding. Shelley discussed the region's use of NuRide service for carpool incentives. It is an incentive-based program and is effective so far.

#### **MOVES Implementation**

The participants discussed MOVES implementation to date and preparation for the upcoming MOVES2014 release. Some have heard that the grace period for using MOVES2014 will be relatively short. Sara Tomlinson said BMC and Maryland are eagerly waiting for the model to be released because they are doing a SIP update next year.

Wade Kline reported that NOACA runs MOVES in emission rate mode. He also discussed available meteorology data to use.

Jenny Narvaez reported that NCTCOG recently started a conformity analysis. They are waiting for MOVES2014 to come out. She has heard there will be no grace period for conformity.

#### Air Quality Education and Outreach

The participants discussed air quality and education outreach efforts. The Cleveland region is moving away from regular outreach, such as education booths at events. They are looking to work with large employers, and are focusing on incentive-based programs.

Shelley Whitworth reported that Houston is working with large employers to hold events. One strategy they are trying is to get people to commit to action. The region held a clean fleet conference, with ride and drive opportunities. She added that TV time in the Houston market is very expensive.

Sara Tomlinson stated that BMC has a dedicated staff position for a clean air program. The agency holds an annual outreach event. They are also a member of Clean Air Partners, as is DC. This program has

corporate involvement. They are considering an eco-driving outreach program. Shelley added that Houston brought in a group that conducts eco-driving training for employees at large companies. It was very popular because of the cost savings for participants.

Jenny reported that NCTCOG has staff dedicated to education and outreach. They use Twitter and other social media.

David reported that ARC uses CMAQ to fund an education and outreach program. They also operate a rideshare program, a guaranteed ride home program, and have TDM staff.

Amanda Graor reported that MARC uses CMAQ funds as well as other sources for an education and outreach program. They do media buys (TV and radio) and do announcements at home baseball games. They also have a Twitter account and use Facebook to broadcast air quality forecasts, and use Rideshark for a rideshare matching service. Amanda worked on a children's book last year, which provided air quality education.

#### **Emission Inventory Trends**

The participants discussed efforts to evaluate trends in various emission sources. BMC reported on a study that showed that HDDV idling emissions are high compared to running emissions. Shelley reported that Houston has a program that uses GPS devices installed on HDDVs. The program showed that HDDVs are idling much more than expected, sometimes as much as 50% of a vehicle's operating time. They have used this information to educate truck operators and show them how much money they could save on diesel fuel by cutting idling time. Studies have also shown that some of the idling emissions are going into the truck cabs. Sara Tomlinson stated that point source emissions in Maryland have decreased due to state laws. As a result, the share of emissions from onroad and nonroad emissions are increasing.

#### Air Quality and Transportation Research

Ed Carr discussed an NCHRP project on CO hot spot analysis he worked on. The project developed an approach to screen transportation projects by size for further analysis.

Amanda Graor reported that MARC worked on a project with EPA and ICF using USDOT's TEAM tool to examine GHG emissions from transportation policies. The final report is available on EPA's website.

H-GAC is working with EPA to monitor drayage activities at ports and determine emissions from vehicles. This allows them to determine where trucks are operating, truck speeds, and other operating characteristics. Ed Carr mentioned a new study at UC Berkeley that looked at results from a diesel retrofit program.

Sara Tomlinson reported that BMC and partners are working on a new project called "How Far Can We Get?" It looks at GHG emissions and NOx emission reductions. The MPO is heavily involved and getting ready to use a GHG model that estimates emission reductions from various policies. They are currently developing scenarios for the model.

#### **Climate Change**

David D'Onofrio discussed Atlanta's climate change activities. He is working on a project that looks at neighborhood GHG levels using ARC's travel demand model. ARC can develop maps that profile a community's GHG emissions. The work was finished recently. The next step is to present the information to the MPO Board. ARC is forming a subcommittee to look at the data and develop a paper. David showed maps of GHG emissions by jurisdiction. The maps show that the center core produces lower CO2 emissions per household. The agency developed neighborhood housing design factors that are correlated to CO2 emissions.

Rich Denbow presented results of MPO survey of GHG analysis types and capabilities. The survey identified MPOs that are working on climate change activities and the types of activities they are working on. A total of 83 MPOs responded to the survey. Of these, 37% have undertaken a GHG analysis of some sort. Respondents documented the analytical tools used and technical challenges. The survey showed that a great deal of GHG analysis activity is underway at MPOs, some MPOs are making climate change a key part of the planning process, and there is a desire for resources such as best practices, case studies, and peer exchanges.

# Current and Future Year Emission Impacts on Air Quality, Health Risk, and Environmental Justice in Southeast Los Angeles County

Ed Carr reported on a study funded by Gateway Cities, a COG in Southern California. Transportation and air quality are primary concerns of residents in the area. The study team developed a 2009 and 2035 spatial emission inventory for stationary, nonroad, area, and onroad sources, and used a dispersion model. Several health risk assessment metrics we examined, including potential lifetime cancer risk and PM2.5 mortality risk. Pollutants of greatest concern were PM2.5, diesel particulate matter, and NOx. Among the key findings are: with only a 21% reduction in PM2.5, mortality risk decreased by 59%. Transportation is still responsible for 92% of direct PM in 2036.

#### **Dispersion Modeling in Atlanta**

David D'Onofrio discussed dispersion modeling underway in Atlanta. Dispersion modeling is typically done by the state air agency or DOT. ARC is working to bridge the gap between transportation planning, regional air quality modeling, and dispersion modeling. The agency began a project in 2012 to model project improvements in the region, research health impacts, and expand this to the entire region. David will provide an update and results at a future meeting.

The meeting was adjourned.