Air Quality Subcommittee (AQS) Meeting Notes

August 13, 2015

Attendees (via teleconference)

Deanna Cuccinello, DNREC Gene Donaldson, DelDOT Heather Dunigan, WILMAPCO Lyn Erickson, MDOT (teleconference) Jay Gerner, DelDOT (teleconference) Tamika Graham, WILMAPCO Alex Krempasanka, MDE (teleconference) Jolyon Shelton, DNREC Bill Swiatek, WILMAPCO Colleen Turner, Baker (teleconference) Rachel Yocum, DNREC Tigist Zegeye, WILMAPCO

Acceptance of the Notes from the July 23 Meeting

- See packet, pages 3 9: <u>www.wilmapco.org/aqs</u>
- The notes were accepted without corrections or clarifications.

Proposed FY 2016 CMAQ Spending

- See packet, pages 10 13: <u>www.wilmapco.org/aqs</u>
- Mr. Swiatek noted that \$7.01 million is proposed for the CMAQ program in Delaware. The breakdown is as follows:
 - Bike and pedestrian improvements \$2.25 million
 - o Rideshare \$360,000
 - o Industrial Track Greenway Phase III \$80,000
 - Myrtle Avenue Sidewalk Improvements \$320,000
 - Statewide Transportation Management Improvements \$4 million
- Mr. Donaldson reviewed the Transportation Management Improvements. He noted that this is a statewide program. The descriptive material in the packet has been reviewed by FHWA and they concur that it is CMAQ eligible. The program includes engineering support and hard infrastructure to expand the system.

- Ms. Yocum asked if the emissions benefits estimates were available for these projects. Mr. Donaldson said that further discussion would be necessary to obtain those figures.
- Ms. Dunigan said that much of the bike and pedestrian spending is outside of New Castle County. In New Castle County, the design of the Wilmington to Newark bikeway is funded for design.
- The group recommended approval of the FY 2016 CMAQ spending in Delaware, with one abstention. Ms. Yocum abstained due to the unavailability of the projected emissions benefits of the ITMS program.

Project Prioritization: Air Quality Scoring

- See packet, pages 14 17: <u>www.wilmapco.org/aqs</u>
- Mr. Swiatek reviewed a proposed tweak to the CMAQ project prioritization process. As shown below, the current process is driven by data from the FHWA CMAQ database.

Interim CMAQ Project Priortization Process - Methodology
1. Rank projects by type, based on emissions reporting within FHWA's
National CMAQ database and federal guidance. Priority by type is: 1.
Diesel Retrofits and Replacements, 2. Transit, 3. Shared Ride, 4. I/M and
other TCMS, 5. Traffic Flow, 6. Pedestrian/Bicycle
Within project types, sort by quantitative emission benefits for diesel projects and qualitative benefits for others. Quantitative benefits can be
determined from EPA calculators. An index determining the qualitative
benefit follows.
*Qualitative Index
Reduce VMT - negligible (0); moderate (3); significant (6)
Cost - >2 million (0); \$500,000 - \$2 million (3); <\$500,000 (6)
Life expectancy - <5 years (0); 5-10 years (3); >10 years (6)

- The data used to generate this analysis spans the years 1992 2008. Mr. Swiatek proposed updating this data through 2013, and only reaching back 10 years. It appears that projected emissions benefits have become tighter for projects in more recent years, which is probably reflective of better modeling.
- The graphic on the next page shows the current system and the proposed adjustment.

proposed adjustment

NATIONAL CIVIAU PROJECT EMISSIONS BENEFITS, 1992-2008								
Rank	Project Type	VOC Projects	VOC Reduction (kg/day)*	NOx Projects	Median NOx (kg/day)*			
1	Transit	2,192	4.5	1,944	7			
2	Shared Ride	1,051	5.5	912	5.5			
3	I/M and other TCMs	501	3	455	3.5			
4	Traffic Flow Improvements	5,357	4	4,096	1			
5	Pedestrian/Bicycle	<mark>1,463</mark>	1	1,233	1			

NATIONAL CMAQ PROJECT EMISSIONS BENEFITS, 1992-2008

*VOC and NOx reductions represent the median of each year's reported median emission reduction for each project type. Years where emissions reductions were calculated for fewer than ten projects for a given project type were not included.

Rank	Project Type	VOC Projects	VOC Reduction (kg/day)*	NOx Projects	Median NOx (kg/day)*
1	Shared Ride	687	4	668	3
2	Transit	1,448	2	1,477	3
3	Traffic Flow Improvements	4,195	3	3,628	1
4	I/M and other TCMs	429	1	483	2
5	Pedestrian/Bicycle	1,832	0	1,611	1

NATIONAL CMAQ PROJECT EMISSIONS BENEFITS, 2003-2013

*VOC and NOx reductions represent the median of each year's reported median emission reduction for each project type. Years where emissions reductions were calculated for fewer than ten projects for a given project type were not included.

- With the proposed adjustment, the project type rankings would flip-flop in a couple areas. Diesel retrofits and replacements would remain the number one preferred project type (not shown) for CMAQ spending, based on FHWA guidance. Shared ride projects would be ranked higher than transit projects, which would slide into the third place lot. Traffic flow improvements would rank next, leapfrogging I/M and other TCMs. Pedestrian/bicycle projects would rank last based on having the lowest projected emissions benefits.
- The AQS was comfortable with the adjustment to the CMAQ project prioritization process, and approved it.
- Next, Mr. Swiatek reviewed a proposed adjustment to the air quality portion of the overall project prioritization process. He noted that the AQS has long struggled with the current prioritization guidance. It is subjective and has led to confusion and disagreement amongst subcommittee members in the past.
- Under the new system, projects would be given scores based on specific project types. Mr. Swiatek noted that, in practice, this is how the AQS has scored projects over the past couple of years.
- AQS members felt that new system, available on the next page, is an improvement. They approved using it moving forward.

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PROPOSED PRIORITIZATION SYSTEM

Project expected to moderately or significantly improve air quality. Project types include:

- a. fixed-route bus and train service expansions
- b. public transit technology improvements
- c. major non-recreational nonmotorized system expansion (not tied to a roadway
- project which would increase vehicle capacity)
- d. diesel engine replacements
- e. alternative fueling stations
- f. park-and-ride lot expansions
- g. carpooling schemes

Project expected to slightly improve air quality. Project types include:

- a. fixed-route bus and train service replacements
- b. minor non-recreational nonmotorized system expansions (not tied to a roadway project which would increase vehicle capacity)
- c. major non-recreational nonmotorized system maintenance (not tied to a roadway project which would increase vehicle capacity)

Project not expected to impact air quality. Project types include:

- a. roadway projects which do not add capacity
- b. park-and-ride lot maintenance
- c. rail preservation
 - d. paratransit expansion and maintenance
 - e. recreational nonmotorized system expansion/maintenance
 - f. minor non-recreational nonmotorized system maintenance (not tied to a roadway project which would increase vehicle capacity)

Project expected to slightly worsen air quality. Project types include:

a. roadway projects which add capacity but are non-regionally significant, including those with a non-recreational nonmotorized system expansion component

Project expected to moderately or significantly worsen air quality. Project types include:

a. roadway projects which add capacity and are regionally significant, including those with a non-recreational nonmotorized system expansion component

Presentation: School Anti-idling Campaign

- Mr. Swiatek provided the presentation.
- http://www.wilmapco.org/Aq/files/2015/Other/WILMAPCO_School_campaign_ Aug15.pdf

Other

- None