

MEETING SUMMARY

AIR QUALITY FORUM

November 8, 2022

10:00 – 11:30 a.m.

Members and Alternate in Attendance:

Krystal Voth, City of Leavenworth
Janee Hanzlick, Johnson County
Kelly Gilbert, MEC
Cameron Weeks, MDNR
John Neuberger, Sierra Club
Julie Peterson, USGBC

Allison Smith, KDOT
Gayle Bergman, UG Public Health
Carol Adams, KCMO EMC
Richard Rocha, Bayer
Rollin Sachs, Johnson County

Other Attendees:

Britni O'Connor, MODOT
Tiffany Le, BPU
Rumela Bhadra, EPA Region 7

Cameron Weeks, MoDNR
Sullivan Brown, Weather or Not
Allison Crowther, KSU

MARC Staff:

Karen Clawson, MARC
Kate Ludwig, MARC
Ron Achelpohl, MARC
Rachel Krause, MARC

Doug Norsby, MARC
Bridget Koan, MARC

1. Introductions and Determination of Quorum

2. October Meeting Summary*

The meeting summary was APPROVED. (A. Smith/ G. Bergman)

3. 2022 Programming of Congestion Management Air Quality – Alternative Fuel Projects*

Karen Clawson recapped the alternative fuel projects. The funding for 2025 and 2026 in Kansas is \$448, 030 and \$1,124,735 in Missouri. Both are oversubscribed by 574% because of the larger transit projects that KCATA applied for.

The first project is the Roeland Park Electric Street Sweeper Project which is not scalable because they only want to replace the one street sweeper. The next project is from Overland Park who would like to replace 42 patrol SUVs and 2 motor assist vehicles to be 75% hybrid electric and 25% battery electric and is scalable. Next is also from Overland Park and it is to add 5 electric vehicle charging stations at community centers and is scalable. Next is submitted by MARC and is a regional EV and EV infrastructure project for 16 charging stations and 6 small electric vehicles and is scalable. They currently have Unified Government as a partner either as EV car share or EV charging stations. KCATA submitted a project which replaces diesel/gas buses and vans with 12

electric buses and vans and is scalable. They also submitted a different project which also replaces buses and vans, 10, and is also scalable.

The evaluation criteria for these projects consists of emission reduction over project life, cost effectiveness, land use (creating new public infrastructure), and vehicle miles traveled reduction. Scores were sent out last meeting but there were some errors so new scores reflect the changes. The updated scores are as follows:

- Small and Flex Vehicles (KCATA, KS) – 70
- EV Charging Stations (Overland Park, KS) - 57
- Regional EV and EV Infrastructure Expansion (MARC, KS) – 50
- ICE Fleet Conversion (Overland Park, KS) – 42
- Electric Street Sweeper (Roeland Park, KS) – 21
- Transit Vehicles (KCATA, MO) – 63
- Regional EV and EV Infrastructure Expansion (MARC, MO) – 50

Emissions do not come out in the same order as the scores do. The order based on emissions are KCATA's busses, Overland Parks' vehicle projects, Overland Park's EV charging stations, MARC's regional EV projects, and then Roeland Park's street sweeper project.

The first objective today is to make decisions as to how to program funds for these projects as a conversation with all the members.

The second objective is to choose two members to serve on the CMAQ work group. This was done in 2020 as well for the remaining CMAQ funds to help with programming. Josh Wood and Kelly may have been members before, so we need a few people to be a part of that work group to provide a recommendation.

Funding Programming – Karen Clawson

The first section is looking at the Kansas projects which has \$448,030 to program. Karen Clawson is asking to which project or projects the money should go toward. She asks the group if they wish to give all the funding to the top scored project being the KCATA, KS project. Kelly Gilbert suggests to not fund KCATA because there is so little funding in Kansas. She said transit projects can be regional within scope and can be scoped within the next phase. Ron Achelpohl pointed out that the Kansas dollars cannot go to Missouri projects though KCATA has Kansas and Missouri projects. The funding is not regional but state specific, to clarify. Karen Clawson adds that KCATA did also apply for STP funding as well, but they do not have a final recommendation for that yet. Ron Achelpohl indicated that they would finalize in the upcoming days. After hearing the clarification of funding, Kelly Gilbert withdrew suggestion.

Doug Norsby asks a question for Roeland Park, because their project is not scalable, would they consider taking less money than requested. Karen Clawson would assume they would take the funding because they would like to replace the street sweeper at some point. Allison Smith asks if there is a Buy America compliant sweeper. That is a concern at KDOT because they have not had the ability to have Buy America waivers after several years and would not want that to prevent funding for Roeland Park. May need to proceed with caution on this project.

Rollin Sachs said that with the high scoring applicant, and the amount of funding available is maybe 12% of what they are asking for, will they not do the project with such little funding, for Roeland Park and all projects. Karen Clawson brings up those other projects are scalable, so they have more flexibility with the amount of funding they receive. Ron Achelpohl asks if they were funded the total amount, how would that reflect their score? It might be fair to note that if they bought fewer vehicles, they would see less emissions reduction. Karen agrees and notes we would have to re-score them. Allison Smith also agrees that the benefit of the project as is right now but there are three other projects that can be fully funded, and the effectiveness would remain unchanged. Karen Clawson says we could re-score it, but it would take additional conversation with KCATA about the vehicles they could get with the limited funding.

Allison Smith also notes that there are a few projects that can be fully funded with the current amount of funds available. Those projects being the Overland Park charging stations the MARC regional EV and infrastructure expansion. She notes that the MARC partner on the project, Unified Government, which has not had funding to install charging stations before now, she is highly in favor of awarding that project to be fully funded. Gayle Bergman is also in favor but notes her bias being a UG employee.

Richard Rocha comments that in inflation reduction act that was signed has billions of dollars in funding for green and sustainable entities. He is wondering if projects came up short on funding, there are other funding opportunities for these projects. Karen Clawson also agrees and backs the comment and adds that MARC will also have funding available if these projects do not get fully funded though CMAQ.

Karen Clawson takes the suggestion of awarding the MARC project to be fully funded for \$150,000. The next suggestion would be to fully fund the Overland Park charging stations with \$298,020 which get seconded by Kelly Gilbert because it can be fully funded. Julie Peterson is good with the current recommendations. Carol Adams is also good with the current recommendations.

Karen Clawson asks if there are any other recommendations for the Kansas side. John Neuberger also agreed on the funding allocation. Karen Clawson moved to Missouri funding.

Missouri has two projects and \$986,464 available in funding. One project the MARC EV charging stations can be fully funded. The KCATA vehicle project cannot being that they are asking for \$4 million. Karen Clawson suggests splitting the funding giving partial funding to KCATA and could compete in the CMAQ workgroup of this project. She notes that MARC has no partner on the Missouri side for this project. Kelly Gilbert brings up scoring again if not fully funded, but she is in favor of funding transit or basing it off of previous scores. Rollin Sachs suggests giving 90% to KCATA and 10% to MARC. This does not fully fund either project but is trying to put more funding into the transit project. No other additional comments which leave the funding recommendation as:

- \$150,000 to MARC, KS EV Charging Stations (fully funded)
- \$298,030 to Overland Park, KS Charging Stations (21,870 left to be funded)
- \$851,464 to KCATA, MO Transit Vehicles (3,148,536 left to be funded)
- \$135,000 to MARC, MO Charging Stations (\$15,000 left to be funded)

Angela Marley asks for a motion to approve recommended funding allocations. Rollin Sachs motions to approve recommendations as presented. Carol Adams seconds the motions. No one opposed the motion.

Karen Clawson asks for volunteers for the CMAQ work group now or she may be reaching out to members. Kelly Gilbert will volunteer. Allison Crowther volunteers but has concerns with the volunteers being the locals. Karen Clawson states they will include her one way or another and asks for other volunteers. Rollin Sachs asks when volunteers will be needed. Ron Achelpohl states that it will be some time in December. Rollin Sachs volunteers as a back up if needed.

4. Ozone Season Summary

2022 season statistics included 6 exceedances all in July, July 13th, 14th, 18th, 21st, and 22nd. There were 57 yellow or moderate days and there was an accuracy of 91.4% with 3ppb, 83.3% total. March through October was the 7th warmest and 9th direst ozone season with all months near to above normal temperature except for May. March and May were the most active months for participation. The notable monthly rankings (since 1995) are as follows:

- March – wettest on record
- April – 8th driest on record
- May – 8th warmest and 6th wettest on record
- June – 7th warmest
- July – 9th warmest and 8th driest on record
- August – 7th warmest and 9th driest on record
- September – driest on record
- October – 5th warmest and 10th driest on record

From March to October 33.9% were rain days or 83 of 245 days.

Sullivan Brown showed maps of the United States showing surface air temperature and participation rates. Overall, Kansas has mild temperature and was dry for much of Ozone Season. He also shows maps upwind air patterns from March to May and June to October. He indicates the blue shows more dropping and an active pattern. The peak of summer, June through October shows warmer temperature and ridging becomes more prominent and put Kansas on the edge of that ridge which meant more sun and wind and may have had impact on the exceedances.

He talked about the exceedance history. 2012 had the most exceedances with 29 compared to 7 in 2021 and 6 in 2022. He then goes into the individual exceedance days highlighting the patterns in each and where the exceedance occurred and the weather from each day.

- July 13 Orange miss: Forecast yellow. Orange to red from 12:00 to 16:00. Temperature in the low 90s, sunny skies, light NW wind of 3-5 mph. Clean upwind air from E Nebraska and good vertical mixing to offset ideal ozone production. KCK only area to spike orange.
- July 14 Orange miss within 3: Forecast yellow. Similar temperature to July 13 with steady S wind of 7-11 mph and clean up wind. The ozone levels from the previous day did not dissipate which lead to a quicker climb leading to an orange day.

- July 18 Alert day: Forecast orange. Ideal conditions with light and variable winds. Temperatures in the low 90s and sunny skies. Good historical precedence for an orange alert. Heritage Park sensor went off.
- July 19th Alert miss within 3: Forecast orange. Many similarities to July 14th. Occurring the day after an orange day. Even some dirty upwind air from Springfield, MO. Resulted in a near miss, 70 ppb.
- July 21 Orange miss within 3: Forecast yellow. Sunny and near 100 but with shifting wind SW-NW at 6-11 mph. Clean upwind air from near Omaha, and deep vertical mixing with 15-20 mph gusts. Orange alert considered and some hours expected. Wind speeds lighter than expected. KCK was the only sensor that went to Orange.
- July 22 Orange miss within 3: Forecast yellow. Similar day to July 21, basically the same. Orange alert was also considered, and some hours were expected. Not just one sensor but two because of the previous day one in Liberty and one in Watkins Mill.
- August 1 Orange miss within 3: Forecast yellow. Mid 90s with SW winds 5-10 mph and clean upwind from Tulsa/Oklahoma City. Slight concern for afternoon cumulus and pop-up thunderstorms. Outcome of similar days in the past. Yellow issues due to the historical precedent and concern for afternoon clouds. Afternoon clouds never materialize, deep mixing not enough to offset local production. Rocky Creek sensor to orange.

Sullivan Brown asks for questions. Rollin Sachs asked about comparisons historically, if he seems them matching well with historical events or if we are missing anything with our network, we need be aware of especially with EJ considerations. Sullivan Brown said that this year there was not many oddities or strange days that occurred even with COVID days and people working from home but were predicted pretty well. If anything, there difference in some of wind predictions.

Rollin Sachs also asks about any patterns we need to be aware of. Sullivan Brown again showed the exceedance history stating that we are more concerned with patterns within the season than year to year. Example of being in a La Nina season versus and El Nino season. He also states there is more NW flow and how much smoke from fire effects our air quality. He notes that is the drought does not improve this winter then we will probably see more ridging which is what we see with local drought and may lead to a higher alert season next year.

Richard asked a question in the chat about the exceedance history slide and wants to know if they take into account when the standards change and the answer is yes, it is updated when the ozone standards change. Taking into account the change of standards, the numbers look better now than they did historically.

Question on the trends discussion. There is a clarification on the season which is March to October. The other question is the data is monitored over time to identify specific monitors that might show more exceedances than others. Sullivan Brown states that they do not look at certain monitors but rather making predictions of which sensors might see exceedances based on wind patterns. Doug Norsby also adds that for the region the determining monitors tend to be Liberty, Watkins Mill, and Rocky Creek, all in the Northeast. On a three-year rolling average, those sensors tend to be the ones that are elevated.

Karen Clawson shared a chart of the Greater Kansas City Ozone Design Values that is produced every year that shows the annual three-year rolling average, and we are back to 68 ppb, and this is likely where we will end up.

5. Climate View Presentation

Doug Norsby demonstrated a new tool MARC is using, call ClimateView, which looks at the many questions of how we reduce greenhouse gas emissions. Also, what happens if we do nothing, what happens if we do somethings? Regional GHG emissions baseline, Doug shows that the tool starts with the 2015 as the baseline for emissions which is then concentrated into four sectors: transportation, power generation, buildings, and waste.

He then shows the scenario of what happens if we do nothing the model shows we will be adding about 7 million metric tons of GHG emissions in 2050. He then shows the scenario of doing something which is based on projects we have going on or strategies we have. If we incorporate some of those things the model shows that still have about one third of the emissions that we would generate in 2050 would still occur. Doug then talks about the strategies ClimateView has for showing how different strategies which are based on mathematical equations can affect the trends and what future emissions look like.

He focuses on transportation and then shows the overall transportation trend to show where we would be in 2050 which shows a reduction. He further explains that the reduction is coming from the reduction of individual travel by way of battery electric vehicles. He says he was able to set the model to adjust the adoption or modify which modifies the equation. This is something you can adjust based on the goal, like adding more battery electric vehicles. He then goes into what if we don't add batter electric vehicles but something else by way of a chart which in the tool you can adjust and change to what your goal is. He changes the target goals and flips back and forth showing what the emissions would be based on the varying strategies and changing goals.

He ends with showing the emissions trajectory from 2015 to 2050. Based on this, we can then begin to determine what needs to be invested in or prioritized in order to hit the goals. He says all the variables and everything in the model is interconnected. The goal is to create a pallet of strategies that the region can support and how we want to invest the modeling and time. There is work underway for a financial module to give an idea on return on investment.

He asks for questions. There is a question from Kelly Gilbert if there will be access for others to play with the model. Doug Norsby states that the subscription is with MARC, and it is a proprietary tool. However, there will be a public facing dashboard for others to look strategies and emissions over time. Changing the goals and targets would be then on the forum and public to determine what we can do and should do based on the findings of the model.

Kelly Gilbert also asks if it would be difficult for different parties to individually play with and would there be an ability from MARC to take requests for a fee to input certain scenarios and show the model outputs. Karen Clawson also suggest we can set up time for her and her team to get more familiar with ClimateView. She also puts a link in the chat so people can look more at what ClimateView does.

6. State Rules in Progress

None.

7. Transportation Updates

Rachel Krause wants to highlight some of what happened in the Green Commute Challenge this fall. This is the 14th year MARC has organized the Green Commute Challenge and there were 23 teams involved and 300 participants. About half of the participants were new to the challenge. The winners were HNTB and City of Kansas City, Missouri. Rachel Krause says that she partnered with the Midtown Cone Guy to help promote the program. They also have pop-up give aways and snack bags to those who were taking greener modes of transportation. Spin Scooters was a sponsor and was also there to table and educate people of scooter. They also used story telling to highlight green commuter stories which are available to watch on the MARC YouTube. There was also an educational component such as an Instagram live and a sharing of news with Josh Powers of Johnson County Transportation. There were also some in person events such as a kick-off social hour and a finale party. Rachel Krause tells about the weekly prize drawings. There were 19 prizes throughout the challenge. She then shows the sponsors of the Green Commute Challenge. She asks people to let her know about questions or suggestions for the Green Commute Challenge

8. Partner Updates

None.

9. Other Business

a. [MARC Conflict of Interest](#) and [Whistle Blower](#) Policies

Karen Clawson shares the Conflict-of-Interest Policy and Whistle Blower Policy. The Conflict-of-Interest Policy focuses on ensuring participants on MARC board and committees have clear guidance on when participants are in a decision-making process and could have a conflict of interest. There are a set of definitions related to interested persons and how to declare any conflict of interest. The Whistle Blower Policy encourages people to bring any ethical and legal violations to the attention of internal and external authorities. She encourages people to review the documents sent in the link.

10. Next Meeting – Tuesday, December 13, 2022 at 10:00 a.m.

The next meeting will be on December 13 where there will be discussion regarding the AQF bylaws as well as other agenda items.

11. Adjourn

With no further business, the meeting was adjourned.