

AQAC MINUTES
February 4, 2014

Members/alternates present: Bert Chessin, Jan Hoem, Sue Spanke, George Hart, Tom Roberts, Kim Davitt, Phil Perszyk, Kathy Tonnessen

Members/alternates absent: Bill Flanery, Mainul Hossain, Ryan Leach, Guy Hanson, John Garberson

Staff: Sarah Coefield

Public: none

- 1. Jan Hoem called the meeting to order**
- 2. Excused absences recognized** – Bill Flanery, Mainul Hossain, Ryan Leach, Guy Hanson, John Garberson were excused.
- 3. New member introductions**
- 4. Agenda amended:** The agenda was amended to add an item to ask the Air Pollution Control Board to send a letter of support for CO2 rules to the EPA.
- 5. January minutes were approved with one correction:** Tom Roberts is serving as the Air Pollution Control Board liaison and was moved to the Members/Alternates roll call.
- 6. Public comment on non-agenda items**
None

7. Article presentation:

George Hart presented two articles. The first article, “Any decrease in air pollution leads to longer lives, study finds” by David Gutierrez was published on Natural News Dec. 8, 2012. Researchers from Harvard University published a study in the journal *Epidemiology* that focused on PM2.5 levels and life expectancy statistics in 545 counties across the United States between 2000 and 2007. Controlling for smoking prevalence, socioeconomic status and other demographic statistics, the researchers found that every reduction of 10 ug/m³ of PM2.5 increased the average life expectancy in a county by 0.35 years.

The second article, “At least twice as much DNA of pathogens and allergens in air on Beijing’s smoggiest days” by Mark Peplow was published by *Nature* on January 31, 2014. According to the article, researchers used genome sequencing to identify microbial species in Beijing smog. The most abundant species identified was *Geodermatophilus obscurus*, a common soil bacterium. However, they also identified potentially harmful bacteria such as *Streptococcus pneumoniae* and bacteria typically found in feces. There was more DNA from bacteria on smoggy days than clearer days. However, there is no way to know if the DNA came from viable organisms. The fine particulate pollution is still by far the greater health threat in Beijing’s air pollution mix.

John Garberson will present in March.

8. Missoula transit system discussion.

Phil Perszyk presented the December 8, 2013 version of the University of Montana Bus Study: Scope of Work. The Missoula Urban Transportation District (MUTD), with support from the Associated Students of the University of Montana (ASUM), the City of Missoula and the University of Montana (UM) has hired Nelson\Nygaard to review the bus service in and adjacent to the university with an aim at improving mobility and minimizing congestion in a cost-effective manner. According to the scope of work, Nelson\Nygaard staff will conduct an evaluation of existing ASUM services and facilities, ridership data, and travel patterns in and around the university district. They will also look at potential transit options for the new Missoula College campus on East Broadway. Nelson\Nygaard will determine if future facilities will be necessary to accommodate recommended transit enhancements and they will develop a fleet plan for ASUM to obtain new vehicles. They will also examine existing parking conditions, transportation modes and travel demands around the university.

Phil said that while this is a significant study because it hasn't been done before and it takes the new Missoula College campus into account, he's not completely satisfied with what they're proposing to include in the study's scope of work.

Phil provided an outline that addresses the primary purposes of public transit systems, problems with the Missoula transit systems and potential solutions. Phil said transit systems provide a convenient and inexpensive means of transportation, although the fare box can be problematic for lower income residents who have no other option for transportation. Transit systems also reduce car traffic, which can help reduce congestion and carbon emissions, if used effectively. They also reduce impact on infrastructure by consolidating passenger travel.

Despite its benefits, the Missoula transit system has some problems. Phil said there are too many buses on the same route – for example, buses make daily runs on Arthur Avenue at least 412 times in one day. Phil said a lot of these buses are running empty. If they were full, then there would not be too many buses. He said Missoula also has oversized buses. Smaller, more fuel-efficient buses could possibly serve much of Missoula's transit needs and require less fuel and be cheaper to replace. Phil said Bozeman has 11 buses, and nine of them carry 23 passengers. He suggested to MUTD that Missoula incorporate more small buses into the fleet. Sarah Coefield asked Michael Tree (Mountain Line general manager) in a Transportation Technical Advisory Committee meeting why Mountain Line hasn't considered using smaller buses on less-used routes. Michael said the Federal Transit Administration (FTA) doesn't support having multiple fleets, but he later told Phil that he'd have to ask Nelson\Nygaard to look into why the FTA might have said that. An interesting note is that part of the referendum that passed last November included a provision for Mountain Line to start running small night buses, so it seems like a mixed fleet is already part of transit strategy.

Phil said all Missoula transit buses are currently powered by diesel instead of using newer technologies such as compressed natural gas or hybrid or electric options. He said he met with the new ASUM transportation director (Jordan Hess), and Hess said ASUM is closing in on securing a hybrid bus. If they are successful, it will be the first

hybrid bus in Missoula.

Phil is a proponent of removing fare boxes from Missoula buses. He said national studies suggest significant growth of ridership with fare-free buses. He said despite evidence that removing fare boxes would fill the buses, he has been told that removing fare boxes in Missoula is currently not encouraged because it would increase bus popularity and devalue its service. However, Phil said Mayor Engen has hinted at removing the fare boxes. The Mountain Line budget is increasing from \$4 million to \$6 million, and fares only provide 12 percent of that budget. Phil said Mountain Line could cut the cost of its operation by running smaller buses, which would make it easier for the transit system to run fare free.

There is currently no monitoring of emissions from Missoula's buses – no one is checking what's coming out of the bus tailpipes. Phil said he's not concerned about Mountain Line emissions, because they have newer buses. However, ASUM has some buses that date back to the '90s, when emission standards were considerably more lenient than they are now. He's concerned about the amount of pollution the older buses may be producing.

There is also a lack of data about ridership numbers. Phil said Mountain Line currently aggregates ridership numbers by route, but does not track ridership by run. ASUM has instituted a new laser counting system, but not all buses are equipped with the new counters. Currently, there is no way of knowing when buses are empty or mostly empty. This is important information if a transit system was to create an efficient fleet. Phil said he asked Michael Tree for ridership numbers about three years ago, and Michael said he'd ask drivers for the numbers of a one week period. Phil said that based on those data, Mountain Line could probably get by with 23 passenger buses about 75 percent of the time. This would reduce air pollution from bus emissions and reduce costs for Mountain Line.

Phil proposed eight solutions for the problems he's identified with the Missoula transit system: commence a study of both Mountain Line and ASUM, coordinate services between the transit systems to reduce redundancy, remove all old buses from services (e.g. anything that predates 2006 emission standards), begin a plan to replace all diesel buses over the next 5-7 years, evaluate the need for only larger buses, institute a policy of reliably counting and reviewing all ridership numbers, remove fare boxes from Mountain Line buses, and verify emissions from all buses in the transit system. Phil said these are very straightforward means to continue providing a very valuable service without having that service harm the community.

Kim Davitt asked Phil how he saw the Council's role in this discussion. What could the Council do? Phil said the Council could take this issue to the Air Pollution Control Board. The Council could sort through the materials and take it to the next level, where the authority is.

Beth Berlin pointed out that the Council doesn't have all the information yet – there is a lack of data so far. Bert Chessin said that while all the transportation pieces are

important, the Council's strongest pushes are those that are related to air pollution. He said the Council could advise size and age of buses be looked at. If fares are removed and there was a doubling or tripling of ridership, then there could be a push for more buses, but it would need to be efficient buses. He said it's also important to keep in mind that more buses mean more noise.

Sue Spanke said that she thinks the Council needs to look at the UM bus study scope of work and see if there are air pollution points that aren't being covered. The Council could generate a statement about the health effects associated with diesel emissions. She said it's the group should not just talk about valley-wide pollution – it is important to take into account travel corridors and buses idling outside residential and dorm bedroom windows.

Phil said the scope of work is really tied to the UM area. Sue said that if the Council came up with a relevant point, the study might be extended to look at other residential areas. She said transit systems should be able to reduce emissions in town without making unhealthy conditions along bus routes.

Phil said he's delighted the study has come as far as it has. The bus study was originally going to be a \$12,000 study, but has been ramped up to ~ \$100,000.

Kathy Tonnessen asked if the bond money has already been doled out, and Beth said the Mountain Line budget has already been set.

Sue asked if ASUM buses and Mountain Line buses used the same stops, and Phil said yes, particularly along Arthur, where there can be huge lines of buses. He said the two organizations also share some stops elsewhere.

Phil said there is a fairly solid set of research projects to work with. He said a lot of citizens want to see the bus study happen and talk to its researchers. He asked the group to look at the scope of work, and let him know if they have input.

Bert asked what other studies are there with a similar focus. He said there has to be a foundation Missoula can build on. Phil said Nelson\Nygaard will be looking at studies from other areas.

Sue said that looking at the heading in the scope, there is no analysis of air pollution or health. She said there is probably room for the group to suggest something there.

Jan Hoem asked about the schedule for the study. Phil said they haven't started the study yet, but expect to do so soon.

Jan said local air quality is a relevant study point. A train study in Spokane identified significantly greater air pollution and elevated health effects for residents exposed to diesel emissions from a nearby railyard.

Dr. Tom Roberts said the study looks to be primarily focused on transportation issues

around the university and does not look at city wide transportation issues or health issues.

Phil said he's hoping city-wide information can be extrapolated from this more narrow study.

Dr. Roberts said from his standpoint, the people doing the study could address these issues. He said the Board would be interested in the health implications of Missoula's transit system. He said if a recommendation came from the Council to the Board about the lack of health studies in the scope of work, those are legitimate questions the Board would be interested in having answers to.

Beth said the original request for proposals (RFP) would have had a set of criteria, and there are tweaks that could be made, but to expand the scope and change it from what was in the RFP would be difficult. The study's budget is already laid out and specific.

Phil said the things he's looking for would have to be in this kind of study. Sue asked if the study could add the health component even if it can't go city wide.

Beth said the study can't go city wide, but it might be able to add the health stuff in. It would require an addendum.

Sue said the Council would have to say "This is not adequate to make a transportation plan. This is only half the study you need."

Jan said she looked over the scope of work and was trying to figure out a place health concerns might be fit in. She said she doesn't think this study will do what the Council wants it to do unless it has a health component.

Kim Davitt said that maybe instead of adding a health study, the group could recommend using health as a lens for evaluating the data Nelson\Nygaard gathers.

Jan agreed, and said they could maybe examine the health implications of existing conditions, etc. She said it's a \$100,000 study, and it's missing the most important thing.

Dr. Roberts said he would focus more on pollution than health. He also said comments about the study would have more heft if they come from the Board. He said the Board's interest in seeing health included in the study should be sent to UM, ASUM and the city.

Beth said the study is really in a box. It is totally university focused. What about the rest of the community?

Sue said you have this huge campus without housing, but you run all the buses by the houses on residential streets. Couldn't the buses be rerouted?

Phil said the disability community has already protested any route changes. He also said that time is of the essence for getting any changes in the study. He suggested inviting

Michael Tree and Jordan Hess to a Council meeting. He said that for the Council, this is about air – not noise or infrastructure. But no one is checking emissions. He said the study a hugely positive thing, but it takes time to address all the issues.

Jan said she was trying to figure out what the group should do. She said they can see clearly that this is a health and air pollution issue. She said that if the group sends a letter to the Board, it will need to get a draft put together, which usually involves a subcommittee. But we're looking at something that will happen fairly soon. If the group goes the subcommittee route, the earliest they can have a letter is March.

George Hart said there is a very specific need in this study: what is the diesel pollution impact from buses. This includes how much diesel pollution is from idling or accelerating buses over a period of time. He said the group could take the number of buses in the university area, assume exhaust pollutants aren't being dispersed and extrapolate local pollution levels and then say "Aren't you going to study this?"

Jan asked if Mainul Hossain is already working on this project. Phil said Garon Smith was trying to pull a study together, but it's taking a very long time.

Kim Davitt suggested the Council write a simple, focused note that says "This issue has been brought to our attention, and we don't see how air pollution is being addressed in the bus study scope of work. We invite the study leaders to meet with us."

Kathy pointed out that Nelson\Nygaard could say, 'Sure, we can do that, for \$25,000 more.'

Phil pointed out that the cost of the study is not the Council's problem.

Jan asked how soon the group should get a letter out. They could possibly use Kim's statement instead of forming a subcommittee.

Sue suggested adding in local and city-wide pollution concerns. She said buses aren't a guaranteed good thing, because sometimes they're empty.

George said the letter for the Board needs to be specific. He made a motion to approve the draft Kim presented and have it written up as a formal letter to be forwarded to the Air Pollution Control Board. Beth seconded the motion with a comment that the Board should send the letter to ASUM, UM, MUTD and the City of Missoula. Jan said she could present the letter to the Board. Dr. Robert suggested having Kim and Jan write the letter. The motion passed as amended by unanimous voice vote.

9. Letter of support for CO2 rules for new and existing power plants.

Kim Davitt asked the group to send a letter to the Board that they could send to the Environmental Protection Agency (EPA) and copy the Montana Department of Environmental Quality suggesting their support for EPA's propose CO2 rule for power plants. She said the letter could be specifically for the rule currently under review, which is for new power plants, or it could be more general and also address upcoming rules to

address existing power plants. She said the letter could talk about carbon's link to global warming and the associated impacts on air quality. The EPA's public comment deadline is March 10th.

Beth asked when the letter would need to get out. Jan said the letter would have to go to the Board's February 20th meeting. She said that the group could approve the idea of a letter, its general concepts and the idea of sending it to the Board, and then send the letter around the group for comments before presenting it to the Board.

Bert Chessin made a motion to approve having Kim Davit draft a letter to the Air Pollution Control Board that will be circulated to AQAC for comments and then presented to the Board.

Jan asked if he wanted to include both new and existing power plants. Bert said he would suggest having the letter address both new and existing power plants and also suggest that the EPA be as strong as they can in controlling CO2 emissions.

Sue asked for examples of how global warming causes air pollution. Kathy said increased temperatures leads to increased ozone. Kim said that increased temperatures lead to increased wildfire smoke, and Jan said increased temperatures lead to increased pollen. Kim said the Lung Association usually focuses on wildfires and ozone.

George Hart seconded Bert's motion, and it passed by unanimous voice vote.

10. Staff report

Sarah Coefield gave the staff report. She said staff are continuing to work on the LMP for PM10. She and Ben Schmidt recently attended a webinar about the proposed New Source Performance Standards for woodstoves, masonry heaters, etc. Outdoor burning season will start March 1st. The department is sending reminder post cards to outdoor burners to help them renew their permits. Those postcards should arrive in the week before burning opens.

11. Public Comment

None.

12. Select AQAC representative for next Air Board meeting update - Jan Hoem will provide the AQAC update at the Board meeting.

13. Announcements and other business

14. Adjourn