



Environmental Quality & Public Works Committee

May 3, 2022

Summary and Motions

Chair F. Brown called the meeting to order at 1:01 p.m. Committee Members Kay, Ellinger, Moloney, McCurn, LeGris, Sheehan, Kloiber, and Bledsoe were present. Committee Member Worley was absent. Council Members Lamb, Baxter, Reynolds, and Plomin were also present as non-voting members.

I. Approval of March 1, 2022 Committee Summary

Motion by Kay to approve the March 1, 2022 Environmental Quality & Public Works Committee Summary. Seconded by LeGris. Motion passed without dissent.

II. Pavement Management Plan

Nancy Albright, Commissioner of Environmental Quality & Public Works, reviewed the resolutions in place that allow for funding and acceptance of the Pavement Management Plan. She explored options to spend money in a timely manner without creating unnecessary work. The options developed were allocation freezing, software recommendations, and priority lists. A few changes in place for the FY23 plan include new field survey data, software cost estimate revisions, and color-coded maps and spreadsheets. She displayed a graph to illustrate that we've never actually expended up to amounts budgeted, pointing out that this year, we have done about half of what was allocated. The Mayor's Proposed Budget includes \$13M (\$3.175M city-wide) for paving. Within that, \$3.2M for arterials, \$2.5M for collectors, and \$4.1 for local roads. Future plans include completion of quality review for the 2021 data survey, establishing performance goals, planning for next data survey cycle, and reconvening the Paving Subcommittee.

McCurn and Albright discussed the process for local road budget allocation. Albright said the chart on the left is looking at all local roads below 60 OCI first, then look at the number of those roads within each Council District. The money is split based on the number of lane miles that are in each Council District. The chart on the right looks at all of the roads in each council district. She pointed out that this number wouldn't change moving forward unless the lane miles changed. McCurn would like to see the subcommittee come back together to discuss the need for paving on industrial routes.

F. Brown mentioned that the budget allocation by local lane miles below 60 OCI is the allocation model that has been used most consistently. He also noted that he plans to reconvene the subcommittee since it hasn't met in over 6 years. He pointed out we have finally caught up with spending all of our monies, but we are short of the \$15M obligation that was put in the resolution. This is something the subcommittee can look into, but he is hopeful this will be updated to bring it closer to our obligation.

Ellinger and Albright clarified that with the local road budget, this only gets about 10% of the total we would need to do get them all done at one time.

No further comment or action was taken on this item.

III. Aesthetic Crosswalks

Bledsoe spoke about the Aesthetic Crosswalks plan and shared her concerns for school safety, particularly on Clays Mill Road. She discovered a policy from 2017 that was never adopted and has worked with

Commissioner Albright to bring forward an option that allows petitioning for aesthetic crosswalks. Albright began with federal guidance that establishes driver and pedestrian expectations, safety boundaries, and federal protocols. In Lexington, crosswalks identify intersections of collectors in residential neighborhoods which includes the standard, unmarked, and enhanced crosswalks. She described a decorative path, which highlights safety while incorporating patterns and textures to embellish the crosswalk. Next, she described crosswalk art, which would be an artistic creation that could potentially stretch federal guidelines. She reviewed location requirements which include a traffic control device and speed limit of 35 mph. Crosswalk art, while specific to a place or area, may need to explore low traffic locations. She provided a matrix for maintenance, including responsible parties for repair/replacement. She pointed out that LFUCG may remove one of these for any reason at any time. The process for decorative crosswalks includes an application and compliance review by Environmental Quality & Public Works. Crosswalk Art would require the same process and would also include petition of support from neighborhoods and aesthetic review by the Public Arts Commission. If approved, LFUCG would assist the applicant with finding contractors capable of performing the work. All costs associated with application, design, installation, and maintenance of aesthetic additions would be the responsibility of the sponsor.

LeGris and Albright confirmed that the petition process would require the applicant to have a design available. LeGris asked about textured pavement and Albright explained that decorative options include the look of stones or brick, but she pointed out they would not be raised.

McCurn asked about the permit process and if 65% support from neighborhoods is necessary in a residential area if crosswalk is already in front of the school. Albright said it would depend on the surrounding areas and whether they applied for decorative versus crosswalk art. McCurn said 65% seems like a high number of people that might answer their door or respond to a letter, but he is interested to know if the process could move forward if a crosswalk is already there. Albright said they are treating it like the (Neighborhood Traffic Management Program) NTMP which also has a petition requirement.

Reynolds and Albright discussed how this would look for state roads and Albright said state's approval would be needed on a case by case basis. They have expressed openness to reviewing and considering them. She feels they would lean toward decorative crosswalks and would be more likely to consider roads in lower traffic volume areas such as subdivisions.

Bledsoe mentioned that crosswalk art requires more of an approval process, but the decorative options are what she is proposing for some of the school locations which would not need neighborhood approval.

Motion by Bledsoe to approve Aesthetic Crosswalks guidelines that were presented today, seconded by McCurn. Motion passed without dissent.

IV. Sevierville Waste Digesters

Nancy Albright, Commissioner of Environmental Quality & Public Works, presented an overview of the Sevier Composting System which is a non-profit joint venture between Sevier County and the cities of Sevierville, Pigeon Forge, and Gatlinburg. She pointed out that partners pay \$34.50 per ton to dump while others pay \$44.50 per ton. The facility is 188,000 sq. ft. and cost \$25M to construct. The operation has 25 employees with annual operating costs of \$5.4M. Sevierville receives 100,000 tons of waste and sludge per year which is less than half of Lexington's volume. The municipal solid waste is mixed with sludge and pushed into five large waste digesters (185 feet long rotating drums) where it sits for 3 days. It takes approximately 4 weeks for the screening process to turn the waste into compost and then it is available to the public free of charge. She explained that Lexington's waste management system includes green

bins, dumpsters, and wastewater sludge to the landfill. Disposal costs are \$27.70/ton for waste and \$28.70/ton for sludge (which increased by \$9.95/ton in December 2021) and this cost may increase again due to fuel prices. The blue and yellow bins go to (Material Recovery Facility) MRF for sorting and re-sale to recyclers and about 25% of material received is sent to the landfill. Yard waste and grey bins are taken to a composting facility where a private contractor processes to mulch and compost for sale to their customers. She pointed out that a Waste Characterization Study for 2022 has just been completed. Through this study, it was discovered that 30.7% could be composted and 32% could be recycled. She spoke about a recent Council field trip to Sevierville where several council members and Environmental Quality & Public Works staff toured the Sevier Solid Waste facility. She pointed out that food waste, specifically sugar, helps the process and this has the potential to take waste from certain food manufacturers for feedstock for the digesters. She mentioned that people travel from out of town to deliver these ingredients and in high volume seasons, they do have to revert to the landfill. Financial considerations include increased costs for landfill waste, infrastructure and construction costs have also increased, an increase in capital construction costs as well as supply chain issues. She closed by reviewing next steps which include enlisting a consultant to consider the hurdles to implementing this project.

Sheehan and Albright discussed the cost and timeline of a consultant's review. Albright estimated \$150,000-250,000 and she expects it to take about a year once they are under contract.

Reynolds praised Lexington's recycling efforts and she expressed support for the idea as it could have a big impact on our environment for years to come.

F. Brown recognized the efforts Moloney has put into this effort. Moloney noted that there would be benefits to people seeing the mulch produced from yard waste. Having a waste digester will allow us to save money by diverting yard waste from the landfill and turning it into mulch for public use. He referenced California which uses a process similar to Sevierville, but they recycle first so they don't need as many waste digesters. He would like a consultant to look at these two options and see if we can have a similar process here.

LeGris commended Moloney's efforts. She spoke about how the Sevierville facility manages less than half of Lexington's volume and asked if there are other cities with volumes that are more parallel to Lexington. Brad Stone, Administrative Officer with Environmental Quality & Public Works, feels Marietta, GA is comparable, but he has not confirmed that. LeGris said there is an opportunity for exploration with a consultant to think about what is possible for Lexington.

Baxter said the facility is amazing and to hire a consultant would be a good step forward to see the potential for the city. She feels it could mean big things for us and our carbon footprint. She also noted funding the consultant to collect information would be very beneficial so we could potentially apply for infrastructure funding at the federal level.

McCurn pointed out the cost-savings for the future as well as the environmental benefits. It would be a large initial investment, but we would save \$1M / year just in yard waste. He noted we could consolidate the locations, keeping it the Old Frankfort Pike location or moving it to Haley Pike.

Motion by McCurn to request the administration to issue an RFP to hire a consultant to study Lexington's waste stream and opportunities to develop a digester program at a cost not to exceed \$250,000 (Note: to be paid with landfill or urban services funding, not general fund). Seconded by Moloney. Motion passed without dissent.

F. Brown was impressed with how they handle their waste and because we recycle, we won't have the issue of plastic and glass mixed in with the mulch. Even having one digester would help us to enhance our waste efforts and over time we can purchase additional ones.

Lamb asked where we would search for this type of consultant. Albright mentioned that the consultant we use for recycling and other issues is based out of Michigan, but she is unsure if any consultants are located in Kentucky.

[At this time a vote was taken on the motion.]

Lamb asked about the acreage and size requirement and asked about the size of the facility in Sevierville. Albright said she did not recall, but she believes they have estimated that there is potential to locate this at Haley Pike Landfill, but this is something the study would address. McCurn clarified that the Sevierville location was 200 acres with 5 digesters.

V. CNG Conversion and Use Update

Kloiber spoke about alternative fuel sources for our fleet which led to purchase of CNG fleet. Jamshid Baradaran, Director of Facilities & Fleet Management, provided a presentation on CNG Conversion & Use. He said the data collected in past 36 months provides good insight and advantages to having CNG units. Our database shows 136 compactors used for waste management with 82 of them being CNG Compactors (60%) and the goal is to be fully CNG in 3-4 years. He mentioned that the replacement value of compactors is \$54M and he provided a breakdown of types of units. He showed the number of units at different ages and said less than 30% of units are older than 10 years. Three performance indicators are fuel cost, maintenance and repairs cost, and operational costs. In every category, CNG out-performs diesel on unit-cost. Since examination of key performance indicators show CNG to be the most viable option, it is highly recommended to continue the current policy of purchasing CNG units for the foreseeable future while examining other alternative fuel technologies for fleet. He also recommended considering a more sustainable financing model and long term financial commitment for replacing future fleet units.

Moloney commented on the savings per unit and he thanked Division of Waste Management and Baradaran for their work on this.

Kloiber said they were pleasantly surprised by results of this evaluation and he would like to have this reviewed again in two years to make sure we are on top of it.

No further comment or action was taken on this item.

VI. Items Referred to Committee

Motion by McCurn to remove *Environmental Services Policy Regarding an Encroachment Agreement and Pavement Rating / Cost System* from the referral list. Seconded by Sheehan. Motion passed without dissent.

Motion by McCurn to remove *Aesthetic Crosswalks* from the referral list. Seconded by McCurn. Motion passed without dissent.

Motion by Kloiber to remove *Abandoned Shopping Carts* from the referral list. Seconded by Bledsoe. Motion passed without dissent.

Motion by Bledsoe to adjourn at 2:30 p.m. Seconded by McCurn. Motion passed without dissent.