

BOARD OF SUPERVISORS ENVIRONMENTAL COMMITTEE

April 6, 2021

11:00 A.M.
Electronic Meeting

Board of Supervisors Members Present:

Board Chair Jeffrey C. McKay
Committee Chair Daniel G. Storck, Mount Vernon District
Supervisor Walter L. Alcorn, Hunter Mill District
Supervisor John Foust, Dranesville District
Supervisor Penelope A. Gross, Mason District
Supervisor Pat Herrity, Springfield District
Supervisor Rodney L. Lusk, Lee District
Supervisor Dalia A. Palchik, Providence District
Supervisor Kathy L. Smith, Sully District
Supervisor James R. Walkinshaw, Braddock District

Others Present:

Bryan Hill, County Executive
Joe Mondoro, Chief Financial Officer
Elizabeth D. Teare, County Attorney
Kambiz Agazi, Director, Office of Environmental and Energy Coordination (OEEC)

April 6, 2021 Meeting Agenda:

[april06-environmental-agenda.pdf \(fairfaxcounty.gov\)](#)

April 6, 2021 Meeting Materials:

[Board of Supervisors Environmental Committee Meeting: April 6, 2021 | Board Of Supervisors \(fairfaxcounty.gov\)](#)

The following is a summary of the discussion from the April 6, 2021 meeting.

The meeting was called to order at 11:00 A.M.

Item I Opening Remarks

After a brief introduction from Supervisor Storck, Committee Chair, the Environmental Committee accepted the minutes of March 16, 2021. With no further changes, the meeting minutes were accepted into the record.

Item II Joint Environmental Task Force Waste Management and Recycling Recommendations

The second topic on the agenda was a presentation of the Joint Environmental Task Force Waste Management and Recycling Recommendations by Nathalie Owen, Supplier Diversity & Sustainability Project Manager, Department of Procurement and Material Management (DPMM).

Ms. Owen began her presentation by referencing the Joint Environmental Task Force (JET) recommendation that Fairfax County Government and Schools be Zero Waste by 2030 with a Zero Waste Plan due June 30, 2021. Other recommendations related to waste audits, sustainable purchasing, and composting. She showed a chart of the Zero Waste Planning Team.

The vision for the Zero Waste recommendation is a “whole-system” approach to minimize waste to close to nothing. The steps for this approach are to reach out, reduce, reuse, and recover (the four R’s). These steps involve engaging staff and community members, reducing the amount of trash that individuals throw away to create systematic change, reusing items rather than consuming single-use products, and recovering items to keep them out of landfills and incinerators.

The Zero Waste Plan is being developed and is anticipated by the end of the fiscal year. Employee surveys will be conducted, as well as consultant site visits and waste audits. The final plan will provide specific recommendations for the most impactful actions that can be taken over the next nine years. The estimated cost for this plan is approximately \$100,000, funded through Carryover or Environmental Improvement Program funds.

As for the remaining JET recommendations, conducting a waste audit will involve site visits, comparative research, and an employee survey. Sustainable purchasing

will involve policy changes, special projects, and a Supply Chain Corporate Social Responsibility (CSR) Program. Current policies are aspirational in nature. Policy changes would have to be systematic to create behavior change. Special projects could include discontinuing the use of single-use food ware and single-use packaging. The CSR program would give insights into sustainability practices of many of the county's top suppliers, including their waste reduction and waste management practices. Finally, composting will involve expanding opportunities for on-site composting and offering commercial composting at county and school facilities. This will require a cultural and operational overhaul.

She noted that the challenges for implementing these recommendations include COVID-19 safety concerns, costs and staffing needs. The opportunities that will come from this plan are restarting and rebuilding better and greener, making it easy to do the right thing, and increasing leadership among peer governments and the community.

Board Discussion:

Supervisor Gross appreciated staff's positive responses to the goals presented by the JET. She noted that it has been challenging that schools had not been in session due to the pandemic. JET recommendations will be ready to be implemented when schools go back in session. She complimented staff on their creativity. She suggests that the Board acknowledge that funds need to be reserved to support these measures, whether it be Carryover or stimulus funds.

Supervisor Palchik was also excited to see where the JET recommendations were going. She echoed that we need to look for "low hanging fruit" to commit budget needs in support. She pointed out the pyramid model of the four R's and how useful it is to reduce waste. Also, education of children and their parents will make us leaders in change. She asked if the composting program in the schools was done "in-house" or with outside vendors.

Ms. Owen replied that it was done in-house, with the exception of one school that had a pilot program with a private hauler.

Scott Larson, Fairfax County Public Schools (FCPS), noted that the composting program involved the students.

Supervisor Palchik directed staff to provide more information on the list of schools and the pilot program.

Supervisor Herrity stated that a lot of things from the presentation made a lot of sense. He cautioned against prohibiting items that were needed for safety during the pandemic. He also noted the financial burden to the taxpayers for these recommendations and the need for a plan that is fiscally constrained. He echoed Supervisor Palchik's comment that there are some actions we could implement quickly and inexpensively that have a significant impact.

Chairman McKay agreed with Supervisor Herrity about moving forward rapidly and acknowledged the cost of doing nothing. He would like the consultant to come back to the Board with a financial analysis and a COVID-19 related analysis. He anticipates a transition period in behaviors after the impact of safety precautions used during the pandemic.

Item III

Joint Environmental Task Force Transportation Recommendations

The third item on the agenda was the Joint Environmental Task Force Transportation Recommendations, presented by Tom Biesiadny, Director, Fairfax County Department of Transportation (FCDOT).

Mr. Biesiadny began his presentation with an overview of the JET recommendations related to transportation. Recommendation areas include replacement of the transit bus fleet and non-bus fleet, installation of charging infrastructure, and bike and pedestrian improvements.

The first recommendation related to the transit bus fleet is to transition the entire Fairfax Connector fleet from diesel to alternative fuels, specifically electric vehicles by 2030. Two grant applications have been submitted to accomplish this. The cost of four buses will be \$4.2 million plus the cost of the charging infrastructure. Currently, the Connector fleet has 329 buses, with a life cycle of 15 to 16 years; the oldest of the fleet was purchased in 2007. The cost of conversion of new buses would cost an additional \$95 million between FY 2022 and FY 2037. Staff does not recommend implementing the 2030 timeline as the useful life of the vehicles will extend out to 2037, which would result in retiring buses before the end of their useful life. Ranges for the current battery electric buses may not meet

all of the Connector's service demands. Due to the duty cycle of the vehicles, electric buses may not meet the demands that a diesel bus can perform, resulting in needing more electric buses to perform the same duty as a diesel bus. FCDOT will use the pilot program to produce additional recommendations for the Board and will look for additional grant opportunities to pay the difference between a diesel bus and an electric bus. In addition to considering costs for electric buses, the department is considering the cost to the community in harmful pollutants. FCDOT will coordinate with schools, particularly on charging infrastructure.

Mark Moffatt, Director, Department of Vehicle Services (DVS), presented the recommendations regarding the non-bus fleet vehicles and related charging infrastructure.

Mr. Moffatt first noted that several vehicle manufacturers have pledged to produce electric vehicles in the future. He gave examples of General Motors, Ford, Volkswagen, Volvo, and Hyundai.

Fairfax County's fleet is comprised of approximately 6,200 vehicles. FCPS has approximately 2,500 vehicles and county government has approximately 3,700 vehicles. He showed a pie chart of the different types of vehicles that make up the fleet. He highlighted the 282 vehicles, or four percent, that are eligible for electrification. There are many types of vehicles that do not have electric options available from the manufacturers, including pick-up trucks, vans, and heavy-duty vehicles like dump trucks.

DVS pledges to electrify as many vehicles as it can as soon as it can. The top four vehicle types that it purchases for replacement, based on age and mileage, are mid-size sedans, police package utilities, mini pickups and vans, and one half to one ton pickup trucks, vans and four-by-fours. Vehicles such as ambulances, dump trucks, tractors, trailers and school buses have a different replacement schedule. For these vehicles, a 15-year useful life is appropriate. In FY 2021, 14 Nissan Leaf electric vehicles were purchased to replace administrative sedans. Next year, eight Nissan Leafs will be purchased; the pandemic impacted the number of vehicles that needed to be replaced.

Regarding charging infrastructure, last year a vendor was selected to provide charging stations at up to 20 major government facilities by 2025. The Facilities Management Department (FMD) is leading construction of Level II charging stations at five sites, scheduled for summer of 2021. The Department of Public

Works and Environmental Services (DPWES) has also identified charging stations needed in new and retrofitted construction projects.

Mr. Moffat turned the presentation back over to Mr. Biesiadny to present additional information about the charging infrastructure regarding reserved parking. Reserved parking at each county building for staff driving hybrid and electric vehicles is in the process of being addressed.

Mr. Biesiadny then introduced the recommendations on bike and pedestrian improvements. The first part of the recommendation involves improving options for safe biking and walking. He referred to the ActiveFairfax Transportation Plan that will incorporate JET recommendations nine through 14 and reduce emissions from single occupancy vehicles. This plan incorporates the existing Bicycle Master Plan, Countywide Trails Plan and Area Plans. The ActiveFairfax Transportation Plan will address missing links to improve safety and access to activity centers, schools, parks, and transit stations. It will include updated design standards, guidance on pedestrian and bicycle safety and comfort, and provide implementation, policy, and program recommendations and guidance. Phase I is currently underway. Phase II, which will set priorities and identify specific projects, is currently unfunded; the estimated cost is \$450,000. Phase II is expected to take 12 months to implement.

He also discussed recommendation 10, developing a safe, continuous, and interconnected system. There are many sub-pieces to this recommendation, one of which is lighting. The county does not currently have a comprehensive lighting policy. The Board has agreed to fund lighting as a part of access to multiple Metrorail stations. As new trails are being built, new lighting is being installed. This also includes retrofitting old trails. A multi-agency task force is meeting to prepare recommendations for lighting policies and report to the Board in summer 2021. Wayfinding signs are also being considered in new capital projects and the retrofitting of existing projects, as funding becomes available.

As part of the VDOT repaving program, bike lanes have been implemented over the last six years, at a very low cost to Fairfax County. This has resulted in the addition of 116 miles of new bike lanes. To reduce speed on roadways, the county has identified funding for a survey to reduce the speed on Richmond Highway from 45 to 35 mph. Bikeshare systems are now up to 35 stations countywide. A grant of four million dollars will allow for the expansion of stations, with bikeshares in Reston, Merrifield, and Vienna, as well as other areas of the county.

FCDOT will continue to secure grants to expand the bikeshare program. Regarding outreach, FCDOT manages Bike to Work Day, Walk to School Day and Bike to School Day. It is working to increase bike parking at county facilities and install bike racks at bus stops, future rail stations and park and ride lots.

JET recommendation 13 is to improve the user experience including by adding porta-potties alongside trails. Staff does not recommend adding porta-potties, noting that it could result in a maintenance issue and generate community concerns. The Bike Map will be updated, and will include bike routes, and information on traffic laws and etiquette. Coordination of biking, walking, and running with neighboring jurisdictions resulted in the Capital Trails Network, an overall map of the region with major bike and pedestrian facilities.

Funding applications for the state's Smart Scale program and programs under the Northern Virginia Transportation Authority will be submitted for standalone bike and pedestrian projects. The challenge of these programs is that they are focused on congestion relief. As such, standalone bike and pedestrian projects do not compete well. Therefore, FCDOT is looking at any new transportation projects to include multi-modal. Other grant opportunities are also available that are more appropriate for standalone bike and pedestrian projects, such as the Transportation Alternatives Program.

Lastly, related to legislative changes, the ActiveFairfax Transportation Plan will identify any legislative changes necessary for enhanced bike and pedestrian options and will be brought to the Board for consideration at future Legislative Committee meetings.

Board Discussion:

Chairman Storck noted that 40 percent of greenhouse gas (GHG) emissions are a result of transportation within Fairfax County and are a key element of what schools and county government generate in terms of GHG emissions. It is imperative that we make a difference in this area. He suggested that the county not buy additional GHG emitters without the Board's engagement.

Supervisor Alcorn congratulated Chairman Storck on his leadership in this area. He referred to the ActiveFairfax Transportation Plan and to the unfunded study mentioned earlier, thanking him for bringing attention to it. He would like to see if we can find an opportunity to fund that study and other small studies for bike and

pedestrian improvements. He asked Mr. Biesiadny if there is a date that has been identified to stop buying diesel buses.

Mr. Biesiadny responded that there has not been a date identified, but FCDOT plans to return to the Board after the pilot program with a recommendation of a transition date.

Supervisor Alcorn agreed that it would be extremely helpful to set that date for the county. He also recommended that the county set other dates for a transition to electric vehicles for other types of vehicles. He suggested a matrix that will go beyond FCDOT to incorporate transition dates for all county vehicles. His last question regarded the vehicle replacement schedule and how that compares to other jurisdictions. He asked if it is possible to maintain vehicles another few years, or a few more miles, and to transition to electric alternatives when we know there will be vehicles available to replace them.

Mr. Moffatt responded that yes, that is possible. He works with the Metropolitan Washington Council of Governments (MWCOG), other jurisdictions, and the broader fleet community across the United States. With the current fleet, we could stretch the replacement as the manufacturers improve their platform. DVS will provide the Board with additional information.

Supervisor Alcorn also commented that the county may consider in the budget procuring fewer vehicles, due to lessons learned from the pandemic.

Supervisor Palchik thanked Supervisor Storck and staff for bringing this forward. She referred to Health in All Policies, which is connected to these trails. She asked Mr. Biesiadny when the Board will receive the results from the VDOT study on the Mosaic District Relay electric vehicle pilot program.

Mr. Biesiadny responded that a couple of studies are ongoing. VDOT is studying the implementation pieces and safety issues. There is also a public opinion survey being conducted by George Mason University. The challenge was that it was implemented at the beginning of the pandemic, so it did not produce good data. We are proposing to extend the survey another year to get more consistent usage beyond the pandemic.

Supervisor Palchik supports the survey being extended for this purpose. Her other question regarded walking and biking trails and safety, especially rapid flashing

beacons and their success in stopping cars at trails. She asked if we have any data around using the rapid flashing beacons and which funding sources we are able to use specifically for safety.

Mr. Biesiadny responded that there is data that supports the safety of using rapid flashing beacons and show that they are very effective in reducing pedestrian fatalities and accidents. There are 20 locations in use, and they are being included in new projects. Grant money will also be used to install these as individual improvements. To address funding, there is a program called Transportation Alternatives that is dedicated to bike and pedestrian safety. VDOT also has a small safety program that offers funding for these improvements and is more suitable for county projects.

Supervisor Walkinshaw commented that we have come a long way in the last year to make this transition. Related to buses, he hopes that when we look at the location of routes, that we look at the childhood asthma rates, setting the precedent of electrified buses and vehicles in these areas to reduce pollution. He asked if the \$95 million cost for electric buses is upfront because electric buses are more expensive to purchase, or if this is an “all in” cost that takes into account fuel and maintenance costs.

Mr. Biesiadny responded that is only the cost difference between the purchase of a diesel bus and an electric bus.

Supervisor Walkinshaw commented that, in the future, we should consider the lifecycle cost of electric vehicles. He referred to a study from Austin, Texas where the 12-year lifecycle cost came out cheaper than a diesel once you get over the initial costs of infrastructure and purchase price.

Mr. Biesiadny added that the pilot program should be helpful to identify that information.

Supervisor Smith asked about the timeframe for the electric bus pilot.

Mr. Biesiadny answered that once FCDOT receives the buses, it is about a two-year program. Some recommendations may be made sooner than two years, if possible.

Supervisor Smith noted that we want to change buildings and all the other pieces for the Board to get the biggest “bang for the buck.” She thinks the bus replacement cycle is where we want to focus that “bang for the buck.” Regarding charging stations, she asked if infrastructure for that is stable or if it will advance over time.

Mr. Biesiadny anticipates that electric bus and charging technology will change rapidly.

Supervisor Smith supports getting information from the pilot program and then moving forward, balancing the costs.

Supervisor Foust reminded staff that there is a climate crisis. We are setting an example for the community at-large. We cannot do everything all at once, but we have to do something. Four buses in the pilot program are not enough. He asked how many buses are replaced on average each year.

Mr. Biesiadny answered that about 22 buses on average are replaced each year.

Supervisor Foust does not feel that this is acceptable. Waiting three years to implement recommendations would result in the purchase of about 60 diesel buses in that timeframe. He feels that we can start more aggressively. Charging stations are a cost we will have to incur. Timing is important. We need to do more than what has been presented in the pilot.

Chairman McKay emphasized the timing of the electric bus pilot; four years is a long time to address the unknown. He hopes that we do not wait until the pilot is over to make decisions. He would like to consider the payment challenges that others have experienced. We need to set goals and establish dates, within reason. We are ahead compared to other jurisdictions. We should be sending a strong message that we will be purchasing electric buses and make sure that we are ahead of the curve. We need to hold ourselves accountable. For non-bus fleet replacement, flexibility is key. There are certain vehicle types that are not available and we cannot have that work against our goal. We have to be reasonable about what the marketplace has to offer, what makes sense to do, and what the best technology is. To Supervisor Foust’s point, the county is replacing vehicles constantly, and similar to buildings, we have to establish a policy and have staff come to the Board with reasons why it cannot be achieved.

Supervisor Lusk voiced excitement about the Richmond Highway project and use of electric buses there. Regarding charging infrastructure, the Lee District-Franconia Governmental Center and Police Station is being considered for affordable housing. He would like to suggest planned charging stations at this site be relocated to the Lee District Community Center. The other issue he would like to address is the lighting policy. He asked if he could be provided with what agencies are a part of the task force and would like to know if roads that need lighting would also be identified as part of their study.

Mr. Biesiadny noted that the agencies are primarily FCDOT and DPWES as well as others. Roadway lighting is included in the analysis.

Tiya Raju, DPWES, spoke to the Lee District Community Center. Charging stations had not been identified at this site as it is just in the preliminary planning stages. DPWES will include them, going forward.

Supervisor Lusk commented that he appreciates the VDOT survey to reduce the speed on Richmond Highway and is looking forward to that recommendation.

Supervisor Herrity appreciated Mr. Biesiadny's comments about changing technology and running a pilot. He asked if we have looked at reducing our vehicle fleet, based on the pandemic and miles driven in the county. Lastly, we need to update our continuity of operations plan and emergency procedures as we transition to electric vehicles.

Bryan Hill, County Executive, responded that staff will provide a memo regarding Supervisor Herrity's budget questions.

Item IV

Joint Environmental Task Force Workforce Development Recommendations

The fourth item on the agenda was the Joint Environmental Task Force Workforce Development Recommendations, presented by Randy Bartlett, Director, DPWES.

Mr. Bartlett provided a brief overview of the JET recommendation to develop green career programs. Several county agencies have ongoing efforts in this area. DPWES has hired recent graduates for wastewater plant operator positions. The Noman Cole Lab provides volunteer opportunities to high school and college

students. DPWES was also a founding member of the National Green Infrastructure Certification Program (NGICP). DVS has had 25 student interns over four years, resulting in seven permanent positions. LDS has recruited five inspectors from schools, with one permanent position.

Mr. Bartlett then addressed the JET recommendation to utilize buildings as learning tools. He highlighted two recent examples of related projects the county has undertaken, including the Park Authority's Sully Woodlands Stewardship Education Center and the Pohick Regional Library.

Implementing the JET recommendations will involve providing informational resources on the county's green career opportunities to FCPS as they develop a green career toolkit, continuing to attend career days and other informational sessions, discussing workforce development opportunities with solar vendors, and identifying ways to expand educational features in buildings as solar panels, green roofs and other sustainable design elements are installed or adopted.

Board Discussion:

None.

Item V Carbon Neutral Counties Declaration

The fifth item on the agenda, the Carbon Neutral Counties Declaration, was not presented in this meeting due to time constraints. Supervisor Storck asked that the Board review it and provide recommendations.

The meeting adjourned at 12:37 P.M.