Joint Environmental Taskforce MEETING SUMMARY

8/5/2020

Committee Members in Attendance: Supervisors Dan Storck and Penny Gross, School Board Members Karl Frisch and Elaine Tholen, Rich Aiken, Karen Campblin, Richard Clayton, Ire Kim, Meg Mall, Susan Stillman, Smita Chandra Thomas and Greg Ulses.

WELCOME/UPDATES

- Supervisor Dan Storck welcomed JET members to the electronic meeting.
- The JET will first be breaking out into subcommittees to finalize goals and any suggested actions, if possible.
- Subcommittee members will also need to determine who will draft their subcommittee report.
- For the work session, each subcommittee will need to have a note taker.
- If subcommittees are unable to finalize their goals and actions, there may be an opportunity for them to meet separately in August so that final goals can be reported out at the September JET meeting.
- Draft subcommittee reports should be submitted by August 26. These will be sent to the JET to review ahead of the September meeting.

SUBCOMMITTEE WORK SESSION – Subcommittees took their own notes.

- **a.** Draft aspirational and practical targets/goals for recommendation to County/schools. i.e. All electric fleet by 2050. (July/August)
- **b.** Draft any suggested actions to recommend in support of targets/goals. i.e. Convert 10% of fleet annually. (August)
- c. Who will draft 2-3 page subcommittee report for September presentation to JET?

KEY DRAFT GOALS REPORTS FROM SUBCOMMITTEE COORDINATORS

- Energy Supervisor Storck
 - The subcommittee discussed decarbonizing and how we will set a goal for that.
 - There was a general consensus that interim goals are needed, but the subcommittee still needs to finalize what those goals should be to get us to carbon neutral no later than 2045.
 - The subcommittee will be meeting again before the September JET meeting.
 - The subcommittee has been discussing the need for both aspirational and actionable goals. We can't always predict how we're going to power the things that we are doing, but we know we have to power them differently. The electric piece is one part of it but roughly 20% of energy used by the county and FCPS comes from natural gas and, particularly for FCPS, that will be a lot more difficult to change.

- We are particularly looking at electrification and building efficiencies to reduce natural gas and emissions from that.
- Waste/Recycling Supervisor Gross
 - o The subcommittee is ready to write their report.
 - The subcommittee discussed doing a trash and recycling audit. Staff explained what would need to be done and how to do it. Things have changed with the COVID-19 pandemic, so it's not going to be as simple as we thought, but we are still going to keep it on our list of recommendations.
 - We want to set aspirational goals, such as being Zero Waste by 2030. We would like to see a staff plan for Zero Waste by the second quarter of calendar year 2021.
 - We would also like to look at purchasing what's coming in, what's going out.
 - Composting will be another recommendation.
 - Reducing single-use plastics will be part of a larger recommendation. A simple
 messaging campaign needs to be done, but we would likely need to have more data.
 Surveys and incentives for county and Fairfax County Public Schools (FCPS) staff may be
 a part of this.
 - There will be a request to look at the purchasing records of how much paper the county uses.
 - Some of these recommendations will need to be shared with different departments, because staff buy-in will be necessary.
 - E-waste was discussed, particularly with the increase in computers and laptops as staff and students have had to work from home with the ongoing COVID-19 pandemic. Since such a big effort was made to purchase these devices, the subcommittee wants to look at the other end of the system.
 - The subcommittee has four items that need to be delayed until schools reopen in a traditional manner, however, the items will be packaged as a long-term recommendation. These items include:
 - Find an advocate for recycling and waste reduction in schools.
 - Look at the Green Flag Program from the National Wildlife Federation (NWF).
 - Seek business sponsorships.
 - Find a model for sharing school supplies.
- Workforce Development School Board Member Tholen
 - Subcommittee has four goal areas:
 - Putting together a toolkit for guidance counselors and career center staff with standardized information on the range of green careers available and the background needed for those. This also includes ensuring the presence of green career professionals and green career days at student interview days.
 - Working with local solar installers to discuss the possibility of hiring FCPS high school graduates or job program graduates. Discussion would include what training is needed for job entry and how the jobs can be advertised.
 - Developing a comprehensive plan to offer one or more green career/ economy-related programs for high school students to encourage participation in this emerging job market. Opportunities could include specialized training, job shadowing, internships and real-world workforce experience in a variety of fields, including electric vehicle maintenance, solar panel installation, LEED green associate certification and sustainable landscaping.

- Developing a plan to utilize our buildings as learning tools as we install solar panels, begin to move toward our net zero building practices and install sustainable architecture in our buildings.
- Transportation School Board Member Frisch
 - There are essentially two pots within transportation county and FCPS vehicle usage (buses and fleet vehicles), and bike/pedestrian trails, etc.
 - o In the bus/vehicle pot, the subcommittee is zeroing in on very aggressive goals to electrify buses by 2030 for both the county and FCPS.
 - o Data is being gathered to finish up recommendations on fleet vehicle electrification.
 - The subcommittee is also looking at ways to encourage better vehicle choices for staff and students.
 - A recommendation will be put forward to share resources whenever possible, such as charging infrastructure for county and FCPS buses/vehicles. This will require coordination on the procurement side.
 - There will be some components related to legislative action to make the transition to electric buses easier to swallow from a financial perspective.
 - o For bike/pedestrian trails, etc., we have several recommendations, including improving bike lanes and trail connections to each other and to public transit hubs, improving onstreet safety, collecting data so we know where to make investments, improving and encouraging safe biking and walking to schools, improving access to bike share systems, ensuring universal accessibility and organizing a countywide biking event to bring notice to the biking resources the county has.

JET NEXT STEPS

Will meet again on September 2, 2020.

OTHER NOTES

Meeting Dates: First Wednesday of each month Next Meeting: Wednesday, September 2, 2020

Subcommittee Meeting Notes

WORKFORCE DEVELOPMENT

Subcommittee members in attendance: School Board Member Elaine Tholen, Greg Ulses and Ire Kim.

Others in attendance included Flint Webb.

- Members reviewed their draft goals and to-do list. The following goals are listed in order of implementation. With schools closed due to COVID-19, goals 3 and 4 will be harder to implement.
- Goal one is to equip FCPS guidance counselors and career center staff with a standardized tool
 kit for talking with students about the range of green careers and the background necessary to
 enter those careers. Ensure the presence of green career professionals in career days and
 student interview days.
 - Task: Determine which staff will be the main points of contact for the updates to the tool kit and distribution to guidance staff.

- Actionable tasks (Ire Kim, lead):
 - View the NWF career tool kit materials.
 - Use information that Ire Kim collected re: what is available now in the high school. Elaine will check with FCPS on best central office staff to contact for this. Elaine to email Fairfax County Park Authority (FCPA) and the Department of Public Works and Environmental Services (DPWES)--what county materials may be available? County staff to participate in career days?
 - Ire--listened to the NWF webinar--can download info. Will review the tool kit and see what can be used.
 - Add info from Clint Webb.
- Goal two is to work with local solar installers to discuss the possibility of them hiring high school
 graduates, Fairfax County job program graduates, etc. Determine what training is needed for job
 entry and how jobs can be advertised to the potential employees.
 - Tasks:
 - Keep abreast of local solar providers that may have internships and jobs available.
 - Determine the possibility of student learning and observation as solar panels are being installed in schools and county buildings.
 - Actionable tasks (Greg Ulses, lead):
 - Need to coordinate with the Energy group and solar installation members for contacts at the solar installation companies.
 - Research other renewable energy career possibilities and contacts.
 - Clint Webb recommended a series of webinars conducted by the Sierra Club with the Virginia Beach School District on career development in the wind energy field.
 - Elaine will check with Jim Ahlgrimm at the Department of Energy.
 - What about Northern Virginia Community College?
 - Energy efficiency and energy audits.
- Goal three is to develop a comprehensive plan to offer one or more green career/economyrelated programs for high school students to encourage participation in this emerging job
 market. Opportunities could include specialized training, job shadowing, internships, and realworld workforce experience in fields such as electric vehicle maintenance, solar panel
 installation, LEED Green Associate Certification, sustainable landscaping, and more. This could
 be done as a module to an existing course, an afterschool program, curriculum substituted as
 appropriate in an existing course or program, a new course, etc.
 - Actionable tasks (Elaine Tholen, lead):
 - Coordinate with Rachael Domer, FCPS CTE.
 - Discuss with DPWES and FCPA sent email July 28, 2020.
 - What certifications can be offered? Must be okayed by Virginia Department of Education.
 - Flint Webb mentioned the HAZWOPER 40 hour certification course for sampling training, MSDS,
 - (https://www.osha.com/courses/hazwoper.html?gclid=EAlalQobChMl1fD7sv-E6wlV7vzjBx2wqAw3EAAYASAAEgKrnPD BwE).

- Tasks:
 - Expand existing collaborations between FCPS and the county to expand intern possibilities for students (Juan Reyes).
 - Look into certification programs that can be accomplished within courses already offered or during after-school programs.
- Goal four is to develop a plan to utilize our buildings as learning tools as we install solar panels
 and begin to utilize Net Zero building practices and continue our use of sustainable building and
 architecture.
 - Actionable tasks (Elaine Tholen, lead):
 - Talk to Eric Brunner, Ali Culhane and Rachael Domer about this to begin next step definition.
 - Tasks:
 - Utilize the next new school.
 - Determine the possibility of working with neighboring middle and high school students as this school is being built.
 - Cooper Middle School renovation.
 - Establish partnerships with companies during the construction to engage students in the design phase.
- Other possible resources:
 - Sustainability Leadership NWF implement a project and submit report to get certification.
 - Landscaping Chesapeake Bay Land Professional.
 - Sun Tribe partnership-internship, apprenticeship.

ENERGY

Subcommittee members in attendance: Supervisor Dan Storck, Rich Aiken, Smita Chandra Thomas.

Others in attendance included Camela Speer (Director of Communications, Board of Supervisors, Mount Vernon District), Kambiz Agazi (Director, Office of Environmental and Energy Coordination), John Lord (Energy Management Coordinator, FCPS), Robert Jordan and Susan Beffel.

- Members reviewed the draft JET Energy Subcommittee goals from last meeting:
 - Carbon neutral goal (two different opinions)
 - 50% in 5 years or 10 years.
 - 100% by 2031 or 2045.
 - 100% clean in-county energy generation by _____
 - 100% Net Zero Energy (NZE) for new construction and major renovations of buildings.
 - County: consider more aggressive goal than 2031.
 - Schools: FY 2026.
 - Recommendation: Use ESCO contracts to renovate existing buildings sooner than renovation schedule.
- Member discussion:
 - It was noted that we need to emphasize energy efficiency. If we want an aggressive carbon neutral goal, this is key.

- Suggested that county has mechanisms in place to advance carbon neutral goal to get to 50% carbon neutral in 5 years. Would have to be coupled with renewables, but may require energy credits to get to this goal. 100% clean energy goal by 2022 may be too aggressive.
- If investments are made in energy efficiency, we may be able to achieve aggressive goals. Suggested buying credits and going clean next year, but may not be possible budget-wise. We cannot be later than 2045 for carbon neutral. Cleaning the electrical grid is the most viable source, then energy efficiency.
- NZE by 2031 is only a small amount of the buildings we have. Need to focus on all buildings. Need to change policy to do this. Suggested any new buildings or major renovations going forward be framed as NZE-ready pilot, at least we tried and got practice. Suggests we start trying now and not wait until 2031.
- Fairfax County needs to be a leader. Need to understand why we can't be more aggressive. Neighboring jurisdictions are relying heavily on renewable credits and all agree that we do not want to take this approach. Some credits are good, but not heavy investing.

County staff:

- Will need to rely on greening of the electrical grid to get to carbon neutral. Cannot do it ourselves without that, not enough space for renewable energy. Suggested we can get to 9-12% renewable energy potential for county government operations. Suggested we could invest in a solar farm outside the county.
- County reports 10-15% carbon neutrality in the next 10 years and 8-9% over the next 15 years. Schools felt they could go quicker.

• Member discussion:

That is too slow, last 50% will be hardest.

County staff:

 Think last 50% will be easier since Virginia is doing a better job now and momentum will grow.

Member discussion:

Still suggest we have the tools in place to be aggressive.

School staff:

 We have a 30% reduction in greenhouse gasses in 2019 as compared to 2008, with more buildings and students. Solar power purchase agreements (PPAs) are moving forward and schools probably have more ability for renewable energy. Suggest JET set goals as aggressively as it wants and let Boards ask staff how we get there.

• Member discussion:

- o Carbon Neutral by 2045 or sooner.
- Set 50% goal − 10 − 15 years.

School staff:

 Carbon-free electrification will be fairly easy, it is natural gas that will be the real challenge. Schools are heated by natural gas and we are not set to retool those.

Member discussion:

 Passive energy efficiency can really help – air sealing (this is key), insulation, windows, etc.

- Should be focused on lower carbon energy efficiency, not LEED Gold.
- Suggest we ramp up energy efficiency projects.
- 80% is electrical carbon, 20% is natural gas, roughly. 80% will be the easiest target and the Virginia Clean Economy Act will significantly help this.
- School and county staff:
 - o Suggest not being overly prescriptive in goals. Just set and let staff figure out.
- Member discussion:
 - Interim carbon neutral goals:
 - **30% 2025**;
 - **50% 2030**;
 - **80% 2035**;
 - 100% 2045 or earlier.
 - Want to set building energy efficiency goals as well.

RECYCLING/WASTE REDUCTION

Subcommittee members in attendance: Supervisor Penny Gross, Meg Mall.

Others in attendance included Eric Forbes (County Director of Engineering and Environmental Compliance), Ali Culhane (FCPS Get2Green Program Specialist), Elizabeth Ende and Barbara Bacon.

- Members discussed their draft recommendations and the need to delay implementation for these until teachers and students physically return to the classroom.
- The first recommendation is that Fairfax County government and schools should set an aspirational goal to be zero waste by 2030.
- The second recommendation is that a plan for achieving zero waste by 2030 must be prepared by the end of the second quarter of calendar year 2021. The plan would be prepared by staff, and should include staff ideas (possibly via a preliminary survey) about how to reduce the amount of waste in their offices/classrooms. Incentives should be considered for best ideas.
- The third recommendation is that a trash and recycling audit should be planned and implemented to get a better idea as to what residents and businesses are throwing away and/or recycling. An audit would examine representative samples (e.g. 200 pounds) of trash and recycling with several staff dedicated to sorting and examining over a period of several days.
- The fourth recommendation is that county government and schools should undertake a review of purchasing: what is being ordered and used, especially paper supplies and other items that could be recycled, and develop a sustainable purchasing program, to include recycled content paper and plastics, elimination of single use plastics, etc. Of particular concern now is the number of expensive devices (laptops, cell phones, and other electronic peripherals) that are needed for teleworking, and how these items are handled when broken or obsolete. Although many devices still have value in the current market after the hard drive is wiped, E-waste must be considered and addressed.
- The fifth recommendation is that county government and schools should encourage expanded composting in both public and private venues, and should undertake a strong education program, in multiple languages, about waste and recycling for the general public.
- The sixth recommendation includes four sub-recommendations for schools:

- Find an advocate for recycling/ reduction in each school.
- o Explore the Green Flag Program of the NWF.
- Seek business sponsorships.
- Find a model for sharing school supplies.

TRANSPORTATION

Subcommittee members in attendance: School Board Member Karl Frisch, Karen Campblin, Richard Clayton, Susan Stillman.

Others in attendance included Francine Furby (Director, FCPS Department of Transportation), Tom Biesiadny (Director, Fairfax County Department of Transportation), Marguerite Guarino (Deputy Director of Administration, Fairfax County Department of Vehicle Services), Cindy Speas, John Cartmill, Eleanor Reynolds, Eric Brunner, Bobby Monacella, and John Craig.

- School Board Member Karl Frisch has gathered what he needs for school buses, staff and school fleet vehicles. He has questions into Francine Furby.
- Karen Camblin presented a document, bullets from which are pasted below. She and Rick Clayton have been working together because she is tasked with bike and pedestrian goals. Rick has been working on trails and there is a lot of overlap.
- The objective is to reduce greenhouse gas (GHG) emissions by providing the infrastructure that will allow people to feel safe on bikes, foot and other non-motorized vehicles.
- Supporting a comprehensive countywide transportation system can prove to be an effective tool
 to not only combat climate change but to support health, equity and economic sustainability for
 all Fairfax County residents. It is possible with a little strategic planning to integrate travel via
 roadways with parks, trails, and continuous sidewalks as well as improving connections to
 transit stations by foot, bike, and bus.
- "Research demonstrates that people will adopt new ways of getting around town when they are
 confident that an entire route, including intersections and parking lots, is safe for travel. Some
 COVID-19-induced street changes that have emerged recently, such as reducing the number of
 traffic lanes and closing streets to traffic, are a good first step. But they lack the network
 component."
- Intentional Coordination with the Virginia Department of Transportation (VDOT) must be conducted for transformative changes to the bike and pedestrian amenities along VDOT roads, painted crosswalks, bike lanes etc.
- All completed with One Fairfax lens.
- Karen Campblin shared several bike and pedestrian recommendations:
 - o Improve bike lanes/trail connections.
 - Increase access at bus and metro centers.
 - Increase access across and along roadways, support complete streets.
 - Improve on-street safety.
 - o Improve bike/pedestrian safety with Vision Zero program.
 - Stormwater management
 - Collect pedestrian/bike trip data to guide increased investments in supportive infrastructure and programs.

- Implement countywide connectivity study with Safe Routes to School program lens for all schools - elementary, middle and high schools.
- Improve and encourage safe biking and walking to schools.
- Perform walkability audits around schools.
- o Prioritize needed safety improvements and connections to school.
- Utilize crossing guards at key intersections.
- o Reexamine FCPS busing policy and role in discouraging bike/walk to school.
- o Make permanent and full-time the FCPS Safe Routes to School coordinator position.
- Collect and track data to measure progress and guide increased investments in improved pedestrian/bike infrastructure.
- Increase funding for crossing guards.
 - Improve access to bike-share systems.
 - Increase equitable access to dock station/dockless.
- Ensure Universal accessibility.
 - Curb ramps
 - Tactile surfaces
- Identify high risk factors and areas for bike/pedestrian.
 - Implement street/intersection design to improve safety.
 - Signal phasing to support slow walkers/bikers
 - Protected bike lanes
 - Review speed limits/consider lowering limits.
 - Incorporate traffic calming measures as warranted.
 - Unique Painted/design crosswalks in high traffic areas
 - Corner refuge islands
 - Protected curb extensions
 - Setback crossings
 - Mid-block crossing where warranted (trail)
- Sidewalks
 - Widen sidewalks particularly in traditional neighborhoods.
 - Continuous
 - Consistent maintenance of sidewalks/vegetation
- Develop countywide Wayfinding plan.
 - Informative maps/signs
 - Ped signals
- Increase bus amenities.
 - Shelter
 - Seating
 - Front load for shorter riders
- o Proper drainage
- Proper lighting
- o Resources: Walkability webinar -

 $\frac{https://register.gotowebinar.com/register/1112466482072615182?emci=a8d021a2-b0d5-ea11-9b05-00155d03bda0\&emdi=5e2249ee-23d7-ea11-9b05-00155d03bda0\&ceid=1383301$

- Susan Stillman presented information related to transit electrification:
 - We need to determine what our GHG's are for county and FCPS vehicles so that we know when we are making progress or not.

- The county has 350 buses, 94 of which are 12 years old and will be replaced in next few years. FCDOT refurbished the buses and gets 15 years out of them.
- o There are grants available federal low or no emissions program and Volkswagen funds.
- o FCDOT has not, as of Aug 1, 2020, applied for any grants for electric buses.
- Recommend stretch the goal to replacement by 2030.
- Susan and School Board Member Karl Frisch have both compiled reasons why this is necessary.
- Recommendations:
 - Apply for grants now. Alexandria and DC have both already started. It's time for us to join the party.
 - Disadvantaged areas first
 - Leasing programs to help with financing
 - Electric buses will save county money after 6 years.
 - Technology is mature today.
 - Synergies:
 - Share charging infrastructure.
 - Make sure FCPS negotiates their electric bus deal in such a way that the Connector electric buses can use the charging infrastructure too.
 - Board of Supervisors should lobby for funding state level grant fund.
 - Tom Biesiadny Grant fund already exists within the Dept. of Rail and Transp. to pay the delta but needs to be adequately funded.
 - Susan asked Tom to calculate the amount needed for at least the first seven years until the buses start to save money.
 - Susan still needs information from the Dept. of Vehicle Services. Will talk with Marguerite Guarino to clarify previous request.
- School Board Member Karl Frisch presented information related to school buses:
 - Scope is buses, school vehicles and behavior around staff and student vehicles. Goals and recommendations are in line with what Susan shared – full electric by 2030.
 - Need to address what can be done at school and administrative level to encourage people to drive EVs. Need charging infrastructure to encourage this. This is a giant chunk of the equation and we need to talk about vehicles not owned by FCPS. There will be another subcommittee meeting in two weeks, one final conversation before Karl compiles the information. Then there will be a follow up before the September JET meeting.