

GREENSBORO COMMUNITY SUSTAINABILITY COUNCIL
greensboro-nc.gov/csc
Minutes, Regular Meeting

4pm, Monday, May 10, 2021
Virtual Meeting, using the Zoom videoconferencing tool

CSC Members Present:

Dr. Vicki Foust, Chair	Veda Howell	Nicole Gaines
Tiffany Oliva, Vice-Chair	Jacques Pierre	Dr. Susan Phillips
Sophia Dubrovsky	Dr. Marcia Hale	

Staff and Others Present:

Marikay Abuzuaiter, Greensboro City Council	Will Yearns, CSC Advisor
Lorien Deaton, Field Operations	Jeff Sovich, CoG Planning
Sergey Kobelev, CoG Engineering & Inspections	Paula Sieber, Guilford Urban Farming Initiative
Darma Satty, International Advisory Committee	Meg Jamison, Southeast Sustainability Director's Network
Bert Hill, Volvo	Jean Pudlo, Solar Power Now Coalition
Michael Gann, Volvo	Doug Bender, Human Rights Commission
Titti Herrity, Volvo	Leia Gearhart, UNCG
Carmen Honeycomb, Volvo	Kierston Deck, Resident
Mike Kalbaugh, Volvo	Nathan Lewis, Resident
Lonnie Cockerham, NC A&T	Lawrence Morse, Resident

1. Chair Greeting / Welcome Visitors

Chair Foust called the meeting to order at 4:02pm and welcomed visitors and city staff in attendance.

2. Welcome Dr. Marcia Hale (New At-Large Member)

Chair Foust welcomed Dr. Marcia Hale, who was recently appointed to serve on the CSC, and asked her to briefly introduce herself. Dr. Hale thanked Chair Foust, and stated that she was delighted to be appointed as a member of the CSC. She noted that her interest in sustainability goes back to her childhood on a farm in rural Alabama, surrounded by plants and animals. She recalled that as an adolescent in 1994, news of the Rwandan Civil War and resulting genocide gave her the first understanding of the connection between human well-being and environmental well-being. She realized at that point that those two vital conditions are deeply linked. Aware of this connection, and growing up in the rural Deep South, issues of equity and justice became central aspects of her academic and career path. In her assessment, justice and equity are necessary for human well-being.

For a time, her career took her to northern Arizona, where she served on the board of Sustainable Arizona, an environmental advocacy group. Later she lived in Los Angeles, where she studied conflict resolution, focused on Southern California's urban water system, while earning degrees in Sustainable International and Regional Development and in Urban Planning. She noted that among the most rewarding work she's done was in the Los Angeles region, collaborating with the City Council and Planning Commission to develop new citywide environmental justice policies. Three years ago, she moved to

Greensboro to accept a position at UNCG as an assistant professor, working on issues related to environmental justice and immigration.

3. Approval of CSC Meeting Minutes

Dr. Phillips moved to approve the minutes of the December 14, 2020 meeting, as amended, seconded by Nicole Gaines. The CSC voted unanimously in favor of the motion.

Dr. Phillips moved to approve the minutes of the January 11, 2021 meeting, as amended, seconded by Jacques Pierre. The CSC voted unanimously in favor of the motion.

Sophia Dubrovsky moved to approve the minutes of the March 8, 2021 meeting, seconded by Tiffany Oliva. The CSC voted unanimously in favor of the motion.

4. LEED for Cities Light Pollution Credit Discussion

Chair Foust noted that Greensboro did not receive points in its LEED for Cities certification for the Natural Systems – Light Pollution Reduction credit. As a means of attaining the gold level when Greensboro recertifies, a CSC sub-committee led by Dr. Phillips has been researching the various requirements in this credit and the steps we will need to take, in order to meet those criteria. The details of this credit are complicated and one option for scoring points requires that “A minimum of 70% of the street lighting in the city or community should meet the requirements of section on Glare and Sky-Glow requirements of ‘ANSI/IESNA RP-8-14 Roadway Lighting.’” The LEED for Cities Technical Manual does not contain the actual specifications of ‘ANSI/IESNA RP-8-14 Roadway Lighting’ and so far, neither city staff nor the CSC has been able to obtain a copy of that standard. Dr. Phillips noted that the only way to access the source document appears to be to purchase an engineering technical report for \$60 or more. We’re still working on finding a way to access this information so we can evaluate where the city’s current performance stands.

The other requirement in this credit is that the city must adopt a lighting ordinance that conforms to Section II to VI of the Model Lighting Ordinance (MLO) developed jointly by the International Dark Sky Association and Illuminating Engineering Society. That document is freely available on the internet and we’ve been comparing the requirements of the relevant sections with Greensboro’s lighting ordinances. What seemed to us to be the easiest way to meet this part of the Light Pollution Credit would be for city staff to create a new article within the city’s Land Development Ordinance (LDO), similar to the one that exists for landscaping requirements, and insert the necessary verbiage in that new article. Vicki Foust has prepared a letter to Planning Director Sue Schwartz, to get her direction on initiating the process of making the needed text amendments, which she will be sending soon.

Will Yearn noted that his engineer and developer colleagues have explained that they are typically required to include an outdoor lighting plan when they submit plans for new development. The lighting software they use can quickly and easily design the lighting configurations for a project to meet local ordinances, once the requirements are entered. Veda Howell stated that one of the most difficult aspects of this credit will be bringing existing lighting up to standard as we go along. The sub-committee is researching the idea of amortization or “sunsetting” for non-compliant property over time.

5. Recap of May 6th Strategic Energy Plan Community Partnership Meeting

Chair Foust noted that a Community Partnership Meeting for the Strategic Energy Plan process was held on Thursday, May 6th, via Zoom. She then provided a brief summary of the presentation from that meeting.

Assessment of the City Energy Profile involved compiling and analyzing a large amount of data in two broad categories: energy used by buildings and facilities (electricity and natural gas) and energy used by vehicles and equipment (gasoline, diesel, and other fuels). The City's electricity usage is tracked by over 1,100 separate Duke Energy meters. Each meter pertains to a specific building, facility, or a component of one of these. Electricity usage is tracked in kilowatt-hours (kWh) and cost in dollars. The City also has over 70 natural gas meters supplied by Piedmont Natural Gas. Natural gas usage is tracked in therms and in dollars. In order to make valid comparisons and get a complete understanding of the City's energy usage, kilowatt hours, therms, and gallons of fuel are all converted into a consistent measure of British Thermal Units (BTUs). Chair Foust noted that she used the emissions factors that are specific to Duke Energy Carolinas, since those will produce more accurate (and lower) calculated emissions values than using the more generic factors available from the US EPA's eGRID (Emissions & Generation Resource Integrated Database).

During 2019, the City used 139,414,389 million kWh (or 139,414 megawatt hours) of electricity and 948,719 therms of natural gas, for a combined total of 570,559 million BTUs (or MBTUs). This energy usage cost the City \$12,128,876. The top 3 departments in buildings and facilities energy use were: Water Resources 41.7%, Transportation 17.1%, and Coliseum 15.6%. The City's electricity use in buildings and facilities produced a preliminary total of around 47,301 metric tons of CO₂ equivalent (MT CO₂eq) and natural gas produced around 5,164 MT CO₂eq.

Energy used in municipal buildings and facilities can also be categorized by a variety of purposes, to understand how the City uses energy. The top 3 purposes of energy use in buildings and facilities were: Buildings 42.0%, Water & Wastewater Treatment & Pumping 41%, and Street Lamps 12.0%. Energy used in buildings (for lighting, mechanical systems, wall outlets, etc.) can also be expressed in the form of kWh per square foot, which helps to give some sense of the relative energy-efficiency of individual buildings.

The other side of the City's energy usage relates to the various types of fuels used in vehicles and equipment. This data is tracked for each vehicle or piece of equipment individually, by type of fuel (including diesel, unleaded gasoline, compressed natural gas, E85 gasoline, unleaded plus gasoline, and super unleaded gasoline) and by department. There are three main categories in this data: on-road vehicles (self-explanatory), heavy equipment (like track hoes and paving machines), and light equipment (like lawn mowers and chainsaws). The analysis of this data isn't quite complete yet. Some of the data is still tabulated at sub-department levels, so we need to finish aggregating up to department level totals, in order to present a clearer picture that's consistent with the analysis for buildings and facilities.

During 2019, Greensboro's municipal operations used 1.48 million gallons of diesel fuel, 1.18 million gallons of unleaded gasoline, and 17,500 gallons of other fuels, for a total cost of \$5.55 million. In some cases the database is not entirely clear in identifying what kind of equipment each record refers to, so we're working with the Equipment Services staff to get that cleared up.

The top 3 departments in vehicle and equipment energy use, in million BTUs were: Transportation (including the Greensboro Transit Authority) 32.2%, Field Operations 29.5%, and Police 20.4%. Fuel use, in million BTUs by fuel type was distributed as follows: diesel 58.1%, regular unleaded gasoline 41.4%, all other types 0.6%. The City's use of

diesel fuel in vehicles and equipment produced a preliminary total of around 15,050 MT CO₂eq, and gasoline produced around 10,501 MT CO₂eq.

The preliminary estimate of the City's overall 2019 greenhouse gas emissions is around 78,016 MT CO₂eq. The data and analysis is still being examined to ensure complete and accurate information, so these figures are subject to refinement. Chair Foust noted that before valid comparisons can be made between this greenhouse gas inventory and previous inventories, it will be important to ensure that the datasets and analysis methods are consistent, and the corresponding years' emissions factors are used.

Now that the City Energy Profile is nearly complete, we can start moving on to the next steps in the process, including developing goals and strategies, and identifying and prioritizing specific actions. We'll be scheduling additional meetings of the Community Partnership soon, to engage with stakeholders and learn about their needs, aspirations, and preferences for this plan.

Nicole Gaines asked, with regard to public transportation, how we'll be able to reduce transportation emissions and increase transit use with the proposed Greensboro Transit Authority fare increase. Marikay Abuzuaite clarified that no change is proposed for fares on GTA's fixed route bus service. The proposed increase would raise the fare from \$1.50 to \$3 per ride for the Access GSO service, which is an on-demand door-to-door paratransit service for handicapped individuals who are unable to travel unaccompanied on standard buses.

Jeff Sovich noted that it is important representatives of social service organizations and advocacy groups in the community help spread awareness about future Community Partnership meetings and increase participation, so that the Strategic Energy Plan can include the perspectives of people of color, low and moderate income households, immigrants and refugees, and other traditionally underrepresented residents of Greensboro, and that we can reach our clean energy goals equitably. Darma Satty of the Greensboro International Advisory Committee stated that she is very happy to be in this meeting to get an understanding of what is being done to support sustainability, promote equity, and address climate change. She added that the IAC would be happy to know how they can help spread the word to smooth the development and implementation of the plan. She asked if the advertisements she's seen for home solar panel installation are being funded or supported by the government to help people reduce their energy bills. Chair Foust responded that she and Ms Gaines are researching how Greensboro can bring community solar installations into some of our lower wealth neighborhoods and they would love to have Ms Satty join the conversation.

6. Break (7 minutes)

The CSC recessed for a brief break at 4:58 pm, and reconvened at 5:05 pm.

7. Presentation on Establishing a City Sustainability Office and Budget

Chair Foust introduced guest speaker Meg Jamison of the Southeast Sustainability Directors Network (SSDN). She noted that Greensboro is the only major city in North Carolina without a sustainability office or a sustainability budget.

Ms Jamison stated that she lives in Asheville, and has been with SSDN since 2015. Her goals for the presentation are to:

- Introduce Greensboro to SSDN & its membership
- Share information about sustainability in local governments in NC and the southeast region
- Share insights on the fields of sustainability and resilience in the South
- Discuss best practices, resources, and connections to other professions

SSDN was created by sustainability practitioners in the southeast to help support each other, share news and best practices, and save local governments time, money, and effort in finding and implementing successful solutions. We aim to build trust and relationships among members to help them do their jobs better. SSDN's strategic goals include:

- Getting more local governments in the south committed to sustainability
- Building capacity among sustainability leaders to implement best practices
- Expanding use of innovative practices through shared learning, collaboration, implementation, and collective voice
- Growing SSDN's ability to effect change by maintaining the health of the organization

With the recent addition of Virginia, SSDN now spans 10 states, including Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. We now have members in over 90 local governments across the region, including 21 in North Carolina. 40% of our NC member communities have carbon reduction goals for government operations and 33% have community-wide goals. Our participating jurisdictions in NC are:

Asheville	Hillsborough	Buncombe County
Apex	Morrisville	Durham County
Boone	New Bern	Henderson County
Cary	Raleigh	Mecklenburg County
Davidson	Wilmington	Orange County
Durham	Winston-Salem	

We've observed a wide range of approaches for establishing an office of sustainability, and positioning that function within the jurisdiction's organizational structure, including within the mayor's office, city manager's office, planning department, parks & recreation department, public works department, stormwater department, and as a stand-alone office. Our advice is to establish this function where sustainability leadership already exists within the organization, but also ensuring that sustainability staff can engage directly with leadership and decision-making processes throughout the organization. About 85% of our members have been in their positions for 6 years or less, and that's fairly typical of this newly emerging field. Many cities started their sustainability offices during the American Recovery and Reinvestment Act (ARRA) stimulus around 2008 to 2009, but the number of new offices has really started to grow recently.

The vast majority (94%) of these offices are funded, at least partly, from the organization's general fund, while 40% receive some level of federal and/or state grant funding. Private foundations and enterprise accounts contribute funding to significantly fewer offices. And none of our member jurisdictions reported having a green revolving fund to fund this work. Initially most offices have had at least one full-time staff member, with budgets ranging from \$300,000 to \$1 million annually, depending on the size of the community. A

sustainability director position usually has a salary ranging from \$75,000 to \$135,000 per year, depending on the size and cost of living in a community.

The typical range of responsibilities for an office of sustainability include:

Implementation of equitable sustainability solutions

- Adoption of GHG mitigation targets for city/county operations
- Waste and recycling
- Electrification of fleets and community adoption of electric vehicles
- Adoption of bicycle and/or pedestrian master plans
- Land use planning and implementation
- Resilience planning and implementation
- Energy efficiency

Ms Jamison then asked for any questions or comments from those in attendance.

8. Q&A for Meg Jamison

Chair Foust thanked Ms Jamison for her informative presentation and noted that this is an issue that the CSC has been researching for a while, with the aim of developing recommendations to submit to the City Council. She added that as with most municipal governments, Greensboro's departments tend to operate in "silos," with collaboration and coordination among them being a rare occurrence. The CSC has been pushing for the city to take a more comprehensive approach and keep the bigger picture in mind. Also, in June, 2020, Greensboro adopted its new comprehensive plan, GSO 2040, which includes themes of sustainability, equity, and resilience throughout. Ms Jamison noted that many of the responsibilities typically handled by sustainability or resiliency offices are cross-departmental in nature, and it's critical for the office to provide that liaison function to connect the work of multiple departments where they overlap or leave gaps.

Ms Dubrovsky thanked Ms Jamison for the presentation and stated that the CSC had recently prepared a similar survey to circulate among the municipalities in North Carolina that have sustainability staff, and it included many of the same kinds of questions as the SSDN survey. Ms Jamison stated that SSDN would be happy to help by arranging for elected officials from member jurisdictions contact Greensboro City Council members to discuss the importance of elevating the priority of sustainability work.

Ms Gaines referred to the slide about funding sources and asked how often could a municipality apply for federal grants and other federal funding, and how difficult is it to pull these disparate funding sources together to make a viable budget? Ms Jamison noted that with the extensive discussion about potential federal stimulus funds, everyone is asking how they can secure some of that funding. Generally, for establishing a sustainability position, it's better if that can be funded through the general fund, since it's the most sustainable way to go. Federal funds are more typically available for and used on implementation projects or sometimes to do planning work, but rarely to support staff salaries. But SSDN is definitely monitoring the situation in Congress and the proposals from the Biden Administration and we'll be sure to keep our network partners in the loop on what we learn about federal funding opportunities. Ms Gaines speculated that the answer may lie in framing requests for federal funding around infrastructure projects.

Dr. Phillips asked whether, considering the number of cities that have gone through this process, SSDN might have some model proposal that Ms Jamison could share, which we could adjust to meet our specific circumstances. Ms Jamison responded that she would be able to share materials from the Town of Apex, which established an office of

sustainability early last year. Dr. Foust stated that Greensboro is poised to do a lot, but it is very difficult without a budget and staff specifically assigned to handle sustainability issues. Ms Jamison added that Little Rock, AR, Charleston, SC, and Birmingham, AL might also be good models. Dr. Foust pointed out that Durham and Winston-Salem, which both have sustainability offices, are close to the same population as Greensboro. Ms Oliva noted that the Winston-Salem office reports to the Operations Department, rather than to the city manager, which would be a preferable structure.

Dr. Foust asked whether any cities have a green revolving fund to support their sustainability efforts. Ms Jamison noted that Asheville has such a funding mechanism in place and St. Petersburg, FL is about to establish a revolving fund. Dr. Foust also asked how many other cities have sustainability advisory boards such as our CSC. Ms. Jamison responded that most cities (80% to 90%) that have a sustainability office also have an advisory board; these two typically occur together.

Jacques Pierre stated that although most federal grant funds are focused on project implementation instead of staff positions, with some grants, it is possible to fund a project manager position for a large multi-year project. Ms Jamison agreed, and clarified that her earlier point about funding positions with federal grants was not meant to be absolute.

Ms Jamison concluded by stating that the CSC's role, as an advisory board to the City Council, is critical in recommending establishment of a sustainability office, and that the leadership she's seen from staff shows that Greensboro is ready for the next level.

9. Acknowledgement of Absences

None.

10. Incidentals and Announcements

- **Items from Chair** – Chair Foust noted that there is currently one open position on the CSC, and that the City Clerk's office is aware of this. Any interested Greensboro resident is encouraged to submit an interest form.

She also stated that the Transportation Department requested a letter of support from her for a grant application that would fund acquisition of an additional electric bus and charging equipment for the Greensboro Transit Authority.

Greensboro received an invitation to collaborate with the NC Clean Tech Center at NCSU, in attaining the SolSmart designation from the US Department of Energy. SolSmart is intended to help communities eliminate barriers to solar business and projects. A letter of support will be needed from the City Manager's Office.

NCA&T is collaborating with 3 other universities to submit an application to the National Science Foundation for a grant to study the social equity issues related to urban heat island effect; the City Manager's Office has provided a letter of support.

- **Items from Vice-Chair** – None.
- **Items from CSC Members** – None.
- **Items from Public** –None.
- **Items from Staff** – None.

11. Adjournment - Chair Foust adjourned the meeting at 6:01 pm.