

SS DAC
SS Downtown and Adjacent Communities Plan
Testimony to County Council
Thursday, Feb 17, 2022

2 minutes ORAL TESTIMONY, this accompanies my longer written submittal.

Hello, I am Kathleen Samiy I live in Silver Spring.

This **Plans Environmental Appendix E states that “Extreme Heat is MoCo’s #1 climate threat”** Currently Downtown Silver Spring has an alarmingly scant 8 % tree canopy, **92% has no tree canopy - that means no shade!** This is a social justice & equity issue, a public health issue, an economic issue.

NOAA heat maps from July 2020, show street heat at 130-155 degrees in the sun! This is Killer heat. To quote the appendix, “The findings were astonishing.”

Extreme Heat is a deterrent to going outdoors to work, play, bike, shop, socialize. We need to **carve up concrete to make more space** for Canopy Trees to cool and shade downtown.

This plan does not meet the goal of creating a livable downtown. We need our leaders to actually lead, and to make scientifically informed environmental decisions. They need to set canopy goals, measures, and laws to solve our #1 problem. Even the June 2021 Climate Action Plan says to increase and protect tree canopy.

This Plan “**Encourages**” 35% green COVER, only for **more dense** development.
The Bethesda Plan **Requires** 35%.

Thrive, AHSI and ZTA plans propose development ‘by right’, not by ‘green cover’.
This is INEQUITABLE and discriminatory.

The proposed Green Cover is a hodge-podge of hot plastic grass, plastic playground equipment, green painted bike lanes and some vegetation, perhaps a small tree. **These plastic fossil fuel materials radiate 30% more heat than concrete.**

We need aggressive **plans**, not a shameful stab at 35% green cover. We need a minimum of 25- 40% tree canopy in urban areas, and 65% in residential areas. My neighborhood has lost 20% tree canopy in 10 years!

This is a Regressive Plan, made by proclaimed Progressives. It needs to be rejected. The Planning Board has failed to balance and meet the heat of this moment.

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I am Kathleen Samiy, Silver Spring. I live a few blocks down the hill from the Civic Building.

Please read the Environmental Plan Appendix. Look at the NOAA heat maps, they are alarming. FIRE alarming. It states: **“Extreme Heat is MoCo’s #1 climate threat”** This is a social justice issue, a public health and well-being issue, an equity issue, and an economic issue.

Downtown Silver Spring has a scant 8 % tree canopy, **92% has no tree canopy- 92% no shade! In July 2020, per NOAA, the street heat was 130-155 degrees in the sun! Measured over one-month. This is Killer heat. To quote the report, “The findings were astonishing.”**

Extreme Heat does not make bikeways nor sidewalks cool. Heat is a deterrent to going outdoors to work, play, bike, shop, socialize. What is cool is SHADE TREES, CANOPY TREES.

We need leaders to lead, to set tree goals, establish laws, requirements, measures, and projections over time **to meet, exceed and solve the #1 problem:** Even the June 2021 Climate Action Plan says we must increase and protect tree canopy. We need more shade from the heat.

This plan **“Encourages”** 35% green COVER -- for Optional Method -- which equals extra density for MPDU’s. Thrive, AHSI and ZTAs are allowing development ‘by right’, not by ‘green cover’. The Bethesda Plan **Requires** 35% green cover, the

Silver Spring Plan 'encourages' green cover. **This is INEQUITABLE. This is Discriminatory.**

What is Green Cover? It is an ala carte MIX of green rooftops in the sky, some vegetation, plastic grass, and perhaps a tree. It is bike paths made of plastic AstroTurf that radiates 20-30% more heat than concrete. It is playground materials made of plastic gym equipment, plastic grass, fossil fuel materials.

We need aggressive, comprehensive, sustainable tree canopy and tree maintenance laws, not a shameful stab at 35% green cover. Do Silver Spring better than Bethesda!

What is Tree Canopy? It is overstory trees with a trunk diameter of 24-36 inches and heights of 60-150 feet. It is not 2-4" young trees. It is not 11-18" decorative understory trees. Canopy leaves and limbs MUST touch each other to provide any effective cooling, carbon reduction and pollutant reducing affects.

We must have trees everywhere in front yards, side yards, backyards, and along public streets. BUT street trees are governed by Pepco and DOT, who cut them down for sight lines, to clear power lines; these trees have NO legal protections long term.

To the proclaimed Progressives, this is a highly REGRESSIVE Plan. Reject it.

Restructure the Commission. Hire an Environmental Science expert to be the Director of Planning or to Head a division of scientists. Make the division independent, separate, so plans are not picked apart by generalists, development reviewers, **or the smart growth coalition developer lobby.**

Legally establish UTC, Urban Tree Canopy, tree shade requirements, such as 50% over an existing parking lot.

Create tree canopy minimum laws: 25- 40% in urban commercial/residential areas, and **65% in adjacent neighborhoods.**

Create a law to stop the destruction of trees on private and public property.

Fully fund ROW stump grinding. Enact Soil volumes laws of 1,000 cubic feet for canopy trees to grow and thrive. NYC, DC, Philly have these laws, why don't we?

Carve up concrete to make space for canopy trees.

Do not relying on these Plans: 100,000 Trees, Cool Streets, Carbon Emissions, Climate Action. Many are still drafts, without fact-based evidence proving they would lower radiant street level heat. **Tree Canopy is the most cost-effective solution to combine the goals of reducing carbon AND lowering radiant street heat.**

FIRE the Planning Board Chair and Commissioners that approved this plan. They are undermining intelligent environmental science by moving this incongruous plan forward.

This Silver Spring plan is REGRESSIVE. Lead us. Create strategic, substantive solutions, reject this Plan, and adopt these solutions.

Environmental Appendix E

<https://montgomeryplanning.org/wp-content/uploads/2022/01/SSDAC-Appendix-E-Environment.pdf>

screen shots of several pages

Urban Heat Island Maps



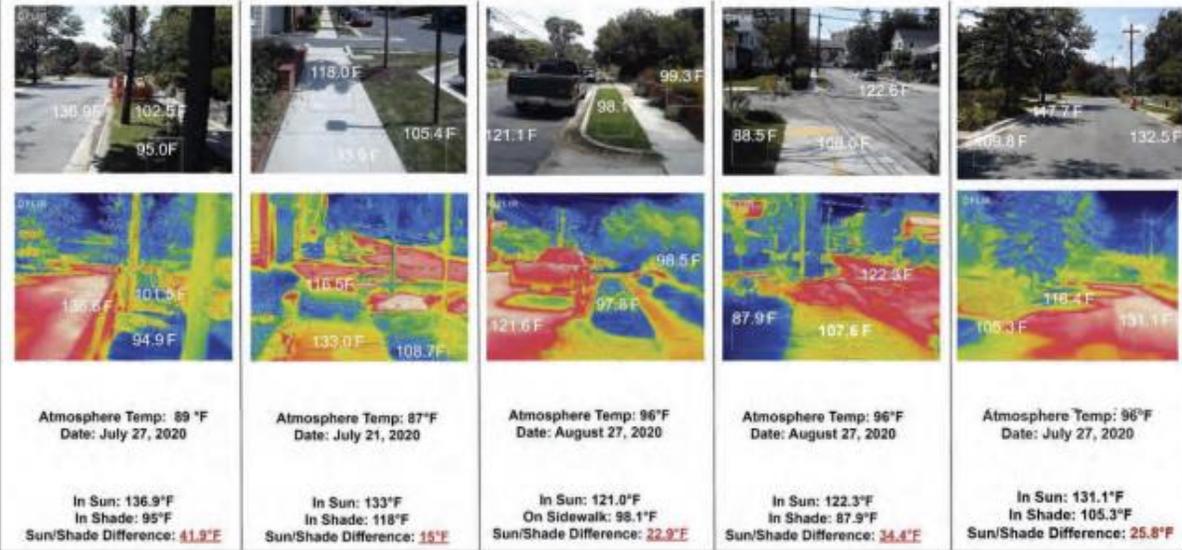
Surface Temperature Analysis

Impervious surfaces, buildings with low-albedo materials, and a lack of vegetated areas are the major causes of extreme pedestrian thermal temperatures during the summer months. In the summer of 2020, Environmental Planning staff used high resolution, Forward Looking Infrared (FLIR) thermal imaging cameras (Model T430sc) to identify the surface temperatures of various microclimates within downtown Silver Spring. FLIR camera works by receiving radiation from the target object (sidewalks, streets, play surfaces, parking lots, etc.), plus radiation from its surroundings that has been reflected onto the objects surface. The findings were astonishing.

Conventional, unshaded paving materials found throughout Silver Spring averaged between 109 to 155 degrees Fahrenheit. These temperatures are unbearable for extended periods of time and dangerous for humans and wildlife alike. Temperature variations differed due to the various kinds of surface pavement materials, colors, coatings, porosity, reflectivity, orientation, building and vegetative shade. In general, lighter colored surfaces were cooler than darker surfaces.

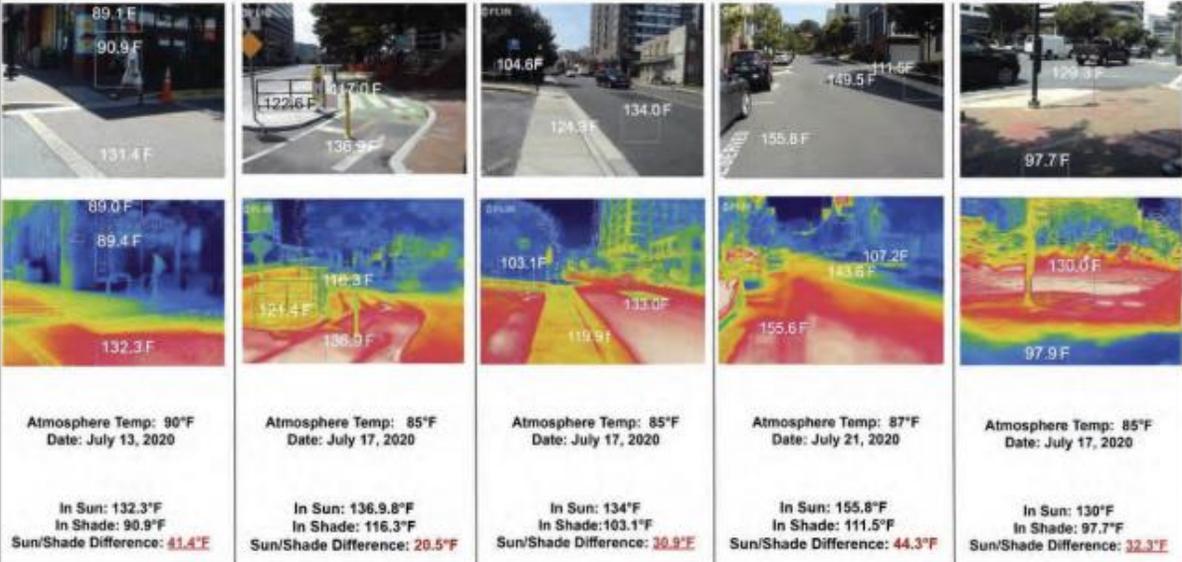
Silver Spring: Summer 2020

Residential Zone: Infrared Surface Temperature Readings

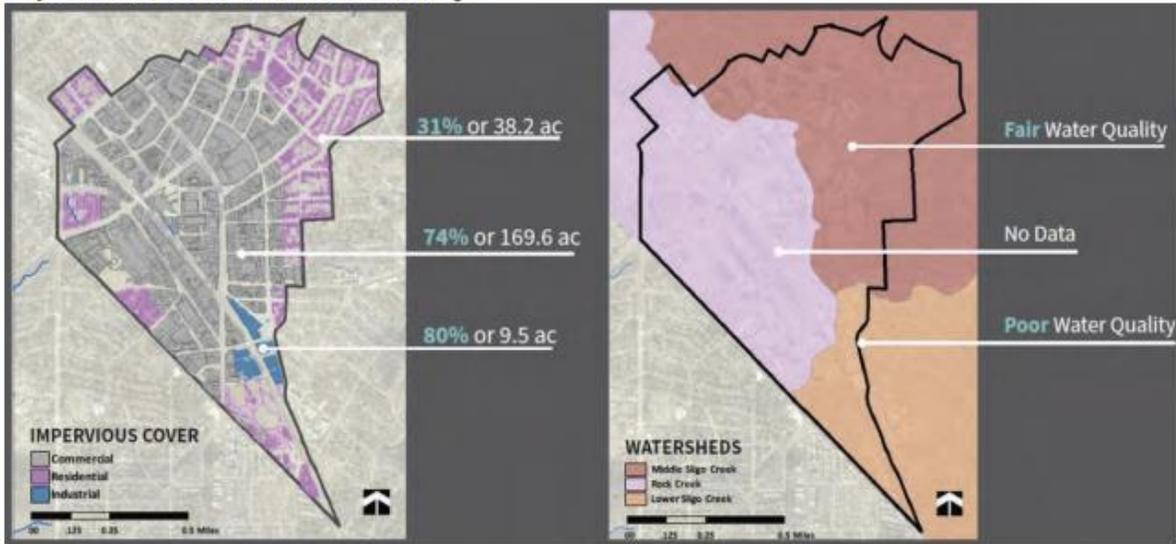


Silver Spring: 2020

Commercial Zone: Infrared Surface Temperature Readings



Impervious Cover and Water Quality



- Encourage a minimum of 35% green cover on Optional Method Development projects. A project may achieve the 35% green cover requirement by:
 - Providing an intensive green roof (6 inches or deeper) on the rooftop of the buildings.
 - Providing native canopy tree cover on the landscape of the project site area at ground level; and/or
 - Providing a combination of tree canopy cover and intensive green roof for a total of 35% or greater on the total site.
- *May be reduced for on-site energy generation or occupiable rooftop amenities.

Recommendations

There are many strategies to combat heat island temperatures and build a resilient community. The most effective and proven methods are installing Nature Based Solutions (NbS) on every parcel of land including the right-of-way. NbS will have countless benefits and they will address the escalating temperatures, heat island effect, tree loss, water quality, habitat loss, and human health and desirability.

- Implement the principles of the Cool Streets Recommendations that will be included in the Design Guidelines into new site development and street renovations on public and private property.
 - Plant diverse, stratified, and climate- and region-appropriate native tree species to reduce vulnerabilities, diseases, and improve their ability to thrive in a changing climate. Update Silver Spring Streetscape Standards, Forest Conservation, and other environmental guidelines as necessary.
 - Prioritize urban tree canopy and green infrastructure in targeting the hottest streets and where tree canopy is deficient (see Map 25).
 - Encourage a minimum of 35% green cover on Optional Method Development projects. A project may achieve the 35% green cover requirement by:
 - Providing an intensive green roof (6 inches or deeper) on the rooftop of the buildings.
 - Providing native canopy tree cover on the landscape of the project site area at ground level; and/or
 - Providing a combination of tree canopy cover and intensive green roof for a total of 35% or greater on the total site.
- *May be reduced for on-site energy generation or occupiable rooftop amenities.
- All new rooftops not covered in green roofs or alternative energy generation should be cool roofs with low-albedo surfaces.