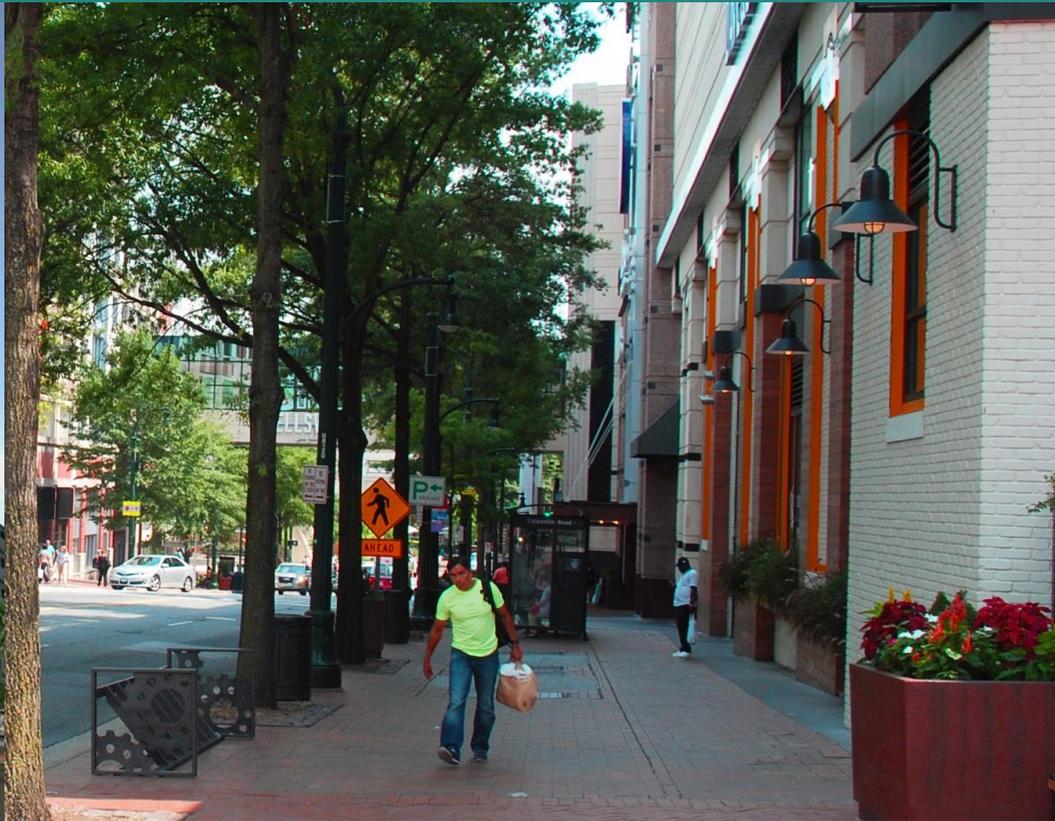


# SILVER SPRING

DOWNTOWN AND ADJACENT COMMUNITIES PLAN



## Work Session #4

# AGENDA

- TRANSPORTATION
- PARKS
- HOUSING
- ADDITIONAL REVISIONS FROM 12/23
- HEAT ISLAND EFFECT RECAP
- VOTE

# TRANSPORTATION

# 4.6 TRANSPORTATION RECOMMENDATIONS

- NEW GOALS
  - Walking, biking, and transit will be **viable and attractive travel modes** and rather than merely alternatives to driving.
  - All roadway and street crossing improvements will **prioritize safety and health for all transportation modes**, so as to reaffirm and uphold the County's commitment to reduce traffic-related deaths and severe injuries down to zero by 2030, countywide.
  - **All public pathways** including sidewalks, trails, and street crossings **will be ADA accessible** in accordance with current best practices.
  - Opportunities to **enhance active transportation networks** will be given the highest priority.



# 4.6.2 Bicycle Recommendations (Network)

- NEW RECOMMENDATIONS:
  - **New Downtown Streets** will have designated bikeways
    - Between Sligo Avenue and Silver Spring Avenue
    - Between Thayer Avenue and Bonifant Avenue<sup>1st</sup> Street Extended Bikeway
  - Implement a **road diet** to reallocate space for **separated bike lanes along E-W Highway, 13<sup>th</sup> Street,** and others in the South Silver Spring District which are necessary to improve southbound bicycle trips to destinations within Washington, D.C., especially the former Walter Reed site. Coordinate with DDOT to identify opportunities to continue safe and comfortable cycling routes beyond Eastern Avenue.
  - New cross sections will be provided to show how the bikeways will fit conceptually within the master-planned ROW width

Floating bus stop on 2<sup>nd</sup> Avenue.  
Image credit: Bethesda Magazine



- **Micromobility corrals** should be installed in underutilized parking facilities, within available right-of-way and near civic gathering spaces such as Veteran’s plaza and the forthcoming South Regional aquatic center.

## 4.6.2 Bicycle Recommendations (Parking)

- **Long-term bicycle parking at transit stations and other high-demand areas require improved surveillance** either with technological strategies or by relocating the parking in high-visibility areas that can be monitored.
- **Repair stations and air pumps** will be provided needed at all long-term parking facilities.
- **Charging stations** for electric bikes will be included with improved, public long-term bicycle parking facilities.
- Encourage creative, **artistic installations** for bicycle parking with the caveat that they must either be marked or intuitively designed as a bicycle parking facility and **meet the County's Bicycle Parking Design Standards.**



Car Bike Rack in London.  
Image credit: Cyclehoop

## 4.6.3 Pedestrian Network

- NEW recommendations:
  - **Every public right-of-way within the Sector Plan Area should be ADA accessible.** This applies to public sidewalks, trails, and street crossings.
  - **All BiPPA projects should address ADA deficiencies within the limits of the project,** even if the scope of the project is a bicycle-facility improvement.
  - Sidewalks are recommended on both sides of every street, in every district within the plan area. Street trees are a high priority but should not compromise the safety or utility for the non-motorized transportation network.



## 4.6.2 Transit

- **Extend the Silver Spring Metrorail south mezzanine to cross over the railroad tracks** to provide direct connectivity with the MARC platforms and improve connections not currently included in the Purple Line project.
- Transit reliability will be increased by **reallocating travel lanes to transit use** on Georgia Avenue and Colesville Road within the Sector Plan area.



MARC Platform adjacent to Metrorail  
Image credit: MW Transit Vids, YouTube

## 4.6.5. Roadways

- Replace all mentions of “**flexible streets**” with “**shared streets**” for consistency with Complete Streets Design Guide.
- **Improve safety on Colesville Road, north of Spring Street by removing the dynamic lane operation.**
- **New Downtown Streets** will include designated pathways for **pedestrians** and **cyclists**. Safety and utility for pedestrian and bicycle pathways and crossings will have the highest priority when determining space allocation within the right-of-way. Street trees should be allocated adequate space in which to thrive and expand the tree canopy.
- Encourage installation of **new alleys** within the sector plan area with redevelopment to reduce conflicts with freight and parking operations.
- **Utilities** should be **relocated underground**.



## 4.6.6. Parking and Loading

Fenton Street, looking north  
Image credit: Andrew Bossi

- The future **urban loading and curbside management study for Silver Spring Downtown** should **address and recommend potential locations** for public zones dedicated to ADA accessible parking, ride-share operations, non-routine loading activities, etc.



# 4.6.7 Transportation Demand Management

- Achieve a Non-auto Driver Mode share, combined average for residents and commuters, of **60%**.



Sarbanes Transit Center  
Photo Credit: Silver Spring Urban District

# PARKS & PUBLIC SPACES

## 4.5.4 Proposed Park ~~Hierarchy~~ Locations and Recommendations

### *PB Comments:*

- Mention the ongoing update for 2022 PROS plan
- Revise the use of the word ‘hierarchy’ for more general language, make the language more flexible.
- Write the overall recommendations so the language can apply throughout the life of the plan, even if PROS ends up moving away from a strict hierarchy.

## 4.5.4 Proposed Park ~~Hierarchy~~ Locations and Recommendations

*Revisions shown in the Parks Supplement document– p.5-6, 8-9:*

- Elimination of the word “hierarchy” and “park types”*
- Application of language and acknowledgment of the 2022 PROS Plan guidance on recommendations*
- Use of current 2017 PROS Plan Parks Classification terminologies limited to the description paragraph of each park classification associated alphabetically.*
- Naming of the proposed parks using only the word “park” to allow more flexibility when changes in the PROS Plan Parks Classification are adopted in the future.*

## 4.5.4 Proposed Park Locations and Recommendations

The 2017 and 2022 PROS Plans and the 2018 *EPS Plan* state that each area master plan should recommend an interconnected system of parks that achieve multiple objectives. The parks and facilities size, primary and supporting functions should be directly proportional to the projected density and land use patterns of the community.

Map 19 illustrates the proposed parks and public space's location within an interconnected network through the Green Loop system. The designation of active recreation destinations, Civic Green, Plaza, Neighborhood Greens, etc., is to highlight the major function emphasis but not to limit other experiences. All parks should provide social, active, and nature-based experiences to the extent possible across the various districts of this Plan.

## 4.5.4 Proposed Park Locations and Recommendations

The following proposed park locations approach should be applied to Silver Spring:

### **For the Sector Plan Area:**

- Opportunities for active, contemplative, and social gathering experiences within parks
- Central civic spaces emphasizing social gatherings
- Interconnected system of sidewalks and trails to connect parks and open spaces through the proposed Green Loop
- Wooded areas that will provide a sense of contact with nature

**For each Urban District:** walk-to recreational amenities

In addition, the park recommendations also incorporate community input, previous studies, legacy infrastructure, localized needs, location of Experience Improvement Areas (EPS Plan methodology), Equity Focus Areas (Thrive 2050) and other factors to deliver the “right parks in the right places”.



## 4.5.4 Proposed Park Locations and Recommendations

The on-going 2022 PROS Plan will be revising the Park Classification system associated with the Proposed Park Locations approach. The further subcategories of the proposed park recommendations are based on the 2017 PROS Plan Parks Classification. All urban parks should be located strategically to allow access by walking and biking to and from public transit and other complementary land uses to support the goals of encouraging physical activity, facilitating social connection, accessing nature and promoting economic prosperity.

The current naming of the proposed parks and public spaces is subject to change and will be defined during the implementation phase of the project.

## 4.5.4 Proposed Park Locations and Recommendations

PARK RENAMING EXAMPLES:

**A1 – Create: Ripley District ~~Civic Green~~ Park**

**D1 – Create: South Silver Spring ~~Community Use Urban Recreational~~ Park**

**E2 – Create: Fenton Village ~~Neighborhood Green~~ Park**

**E3 – Create: Ellsworth ~~Urban Recreational Park~~ District Park**

## 4.5.4 Proposed Park Locations and Recommendations

*A - Civic Green:* Parks and Public spaces that emphasize social gathering. They are flexible, programmable gathering spaces for informal or large special events. Depending on size, they may support open air markets, concerts, festivals, and/or special events. A large central lawn is often the focus, sometimes with a complementary plaza space, with adjacent spaces providing complementary uses such as gardens, water features and/or shade structures. Supporting functions might include opportunities for physical activity and enjoy nature.

*B - Plaza:* These spaces align with and complement the Civic Green urban parks subcategory. These spaces also emphasize social gathering. The main differences are (1) a central hardscape area surrounded by supporting facilities that should encourage physical activity and enjoying nature instead of a central lawn, and (2) the location generally near transit stops and/or commercial and higher density residential areas. They should face streets and building frontages to maximize pedestrian use and exposure and have access to sunlight. Plazas may support activities including open air markets, concerts, festivals, and special events.

## 4.5.4 Proposed Park Locations and Recommendations

*C – Countywide Urban Recreational Park:* Oriented to the recreational needs of surrounding neighborhoods and districts, this type of park provides space for many activities. Athletic fields, playing courts, picnic areas, dog parks, sitting areas and flexible grassy open spaces may all be common in this park subcategory. Programming might include farmer’s markets, outdoor exercise classes, and/or community yard sales, etc. There should be space for safe drop-offs and integrated accessible parking for those who cannot walk to the park. Physical activity is the main emphasis of this park, but social and contemplative opportunities should also be considered.

*D – Community Use Urban Recreational Park (updated from Urban Recreational Parklet) -* These parks serve the immediate neighborhood. Physical activity is the main emphasis of this park, but social and contemplative opportunities should also be considered. Typical facilities include smaller sport courts, skating spots, and may include lawns, playgrounds, or similar neighborhood recreation facilities. Sizes vary considerably depending on the land available and community size served.

## 4.5.4 Proposed Park Locations and Recommendations

*E - Neighborhood Green:* This park is very flexible and supports social connections, physical activities, and access to nature. The park provides spaces for informal gatherings, lunchtime relaxation, or small special event gatherings. A lawn, play area, shaded seating, pathways, and wooded areas are typical features.

*F - Pocket Green:* This smaller park will allow for “pauses” with a landscaped setting along the streets between larger parks within the parks and public spaces network. Research has suggested that smaller breaks during the work schedule increases productivity and health, especially mental health.

Pocket Greens are particularly important in areas where commercial activities are taking place. Due to its small scale, the space should be highly visible from the street and include protection from the wind, traffic and noise allowing workers to take a lunch or coffee break while enjoying a contemplative environment with pedestrians strolling by. They can provide seating, areas to eat or read, and small play areas or game areas. This park will serve nearby residents, workers, and visitors.



# HOUSING

# HOUSING

This Plan represents the first opportunity to implement the vision for housing laid out in Thrive Montgomery, the 2021 update to the county's General Plan that lays out a long-range policy framework that will guide future land use and growth. Thrive Montgomery's housing recommendations, found in the Housing For All chapter ~~has~~ include wide ranging policies to help make housing more attainable, including increasing housing production and preserving existing affordable and attainable housing. This vision laid out in Thrive Montgomery 2050 is consistent with the Housing Element of 2011 and builds upon a foundation of progressive housing policy laid out in several previous master plans, including the Bethesda Downtown Plan, the Veirs Mill Corridor Master Plan, and the Forest Glen Montgomery Hills Sector Plan.

# HOUSING

## 4.2.1 Goals

The housing goals for the plan are guided by policies and practices the following policies found in ~~the Planning Board draft~~ previous and ongoing plans including Thrive Montgomery 2050, the Housing Element of 2011, and previous master plans. The intent of this plan is to ensure this Plan is consistent and in sync with current best practices in planning and housing policy. The goals include:

# HOUSING

## 4.2.2. Recommendations

- The Council should take action on Attainable Housing Strategies and adopt a countywide Zoning Text Amendment to allow duplexes, triplexes, and quadplexes by-right with conformance with a pattern book in the Adjacent Communities.
- If there is no action on Attainable Housing Strategies, the relevant recommendations to allow duplexes, triplexes, and quadplexes by-right with conformance with a pattern book in the R-60 zone should be adopted in the Adjacent Communities through a Zoning Text Amendment.

# LAND USE AND ZONING

# LAND USE AND ZONING

## 5.1.4. CR, CRT, CRN Zoning

...To better respond to fluctuating market conditions, on most parcels, the C and R values have been equalized to provide as much flexibility as possible for future development.

**Note: This will require a zoning code update to allow both C and R to be 8.0. Currently the maximum allowed is 7.5 for each C and R in a CR 8.0 zone.**

# CONSTRUCTION AND INFRASTRUCTURE FUND (CIF)

- Any CR property in the Plan area may obtain additional density necessary to reach the mapped maximum building height, or additional height approved for a property in the BHIZ, by making a contribution to the Connectivity and Infrastructure Fund (CIF) of \$5 per square foot.
- CIF contributions will be made only for density above the total mapped maximum density for the site, density approved per density-averaging, and/or bonus density providing MPDUs above the required minimum, up to the approved maximum height.
- The CIF will be implemented by the Planning Department under the direction of the Planning Board and contributions will be used toward implementation of specific projects within downtown Silver Spring, including:
  - Transit Center Arrival Experience;
  - Bridge connection over Metrorail/CSX tracks;
  - Public bicycle parking facilities;
  - Green Loop improvements beyond the frontage of a redeveloped site
  - Select utility improvements;
  - Or other projects identified by the Planning Board.

# BUILDING HEIGHT INCENTIVE ZONE (BHIZ )

- This plan recommends the establishment of a Silver Spring Downtown Building Height Incentive Zone (BHIZ) as shown in Map XX to allow CR-zoned properties pursuing Optional Method Development to increase building heights by up to 150 percent of the mapped height to a maximum of 300 feet. Approved height will be subject to the Design Review process through the Design Advisory Panel.
- The Planning Board may approve certain properties identified in the Metro Center District to realize an increased building height in excess of 300 feet, consistent with the recommendations of the Sector Plan and Design Guidelines, subject to the Design Review process through the Design Advisory Panel.
- To qualify for the additional height under the BHIZ, projects must:
  - Provide a minimum of 17.5 percent MPDUs or, for a purely non-residential development, make a contribution to the Montgomery County Housing Initiative Fund (HIF(residential mixed-use projects with a significant non-residential component must provide both 17.5 percent MPDUs and a pro-rata HIF contribution)); and
  - Provide for an activating ground-floor Neighborhood Service including, but not limited to, small business, art gallery/venue, community meeting space, educational or medical use, historic preservation, or non-ground-floor area dedicated to Design for Life residences.

# ACTIVE GROUND FLOOR USE

Recommendation revised in Economic Growth:

- Promote new ground-floor retail where there are established retail nodes or corridors where there is already existing retail and significant pedestrian activity. For those locations that are not adjacent to or on a block with existing retail consider alternative strategies for activating the ground floor, such as an art gallery/venue, community meeting space, educational or medical use.

# VISION TEXT REVISIONS

The revitalization of Silver Spring was spurred by the 2000 *Silver Spring Central Business District Sector Plan*. That plan rejected a proposed megamall concept in favor of growing the downtown more organically, with a strong focus on arts, encouraging the public and private investment that set the downtown on the path to becoming a thriving urban area. In the last decade, numerous high-rise apartment buildings have been completed, adding over 5,000 housing units, 20 percent of which are affordable, to the downtown Silver Spring area, bringing many new residents to this growing urban center.

# VISION TEXT REVISIONS

This Sector Plan incorporates these and other lessons learned from the last 20 years of redevelopment and reflects current planning approaches to the continued growth of successful urban areas. The Plan recognizes that economic growth is promoted by a compact form of development that emphasizes the importance of placemaking and a strong public realm. It celebrates the uniqueness of Silver Spring by highlighting the cultural diversity that has contributed to the downtown community. The recommendations promote flexibility for new and sustainable economic development and enhance transit, bicycle, pedestrian and micro-mobility throughout the Plan Area, while reducing dependence on the automobile. This Sector Plan builds upon the previous plan by strengthening the existing successful components of Silver Spring, while setting forth a vision and recommendations for the emerging areas of the downtown that will help Silver Spring continue to be a regional destination for the next 20 years.

# SCHOOLS

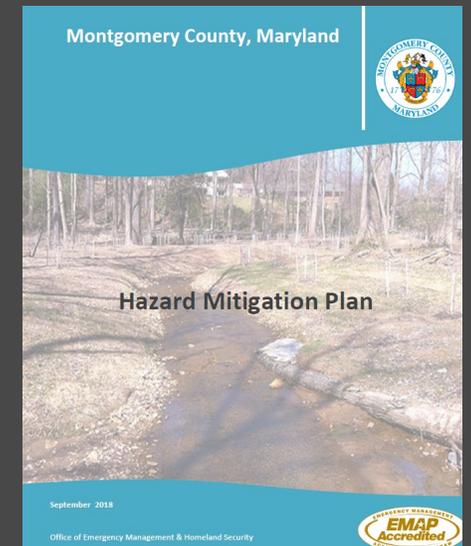
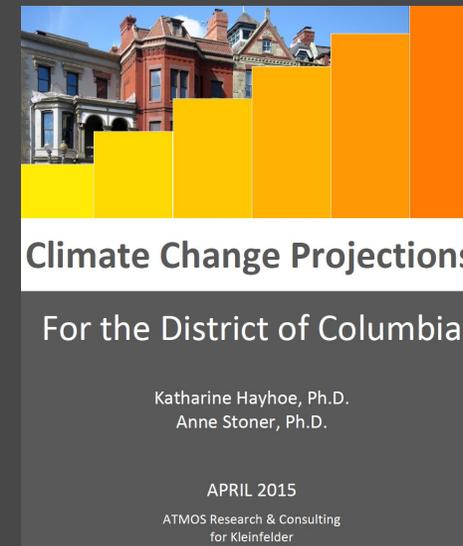
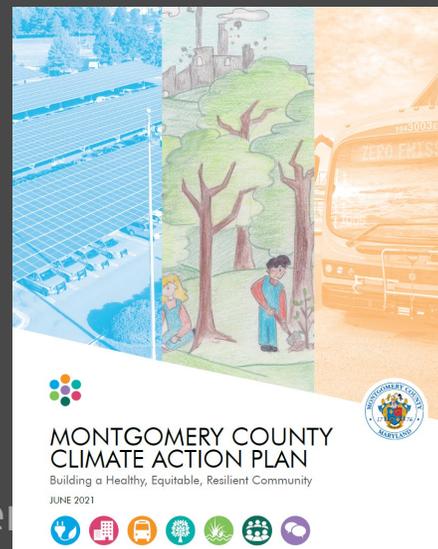
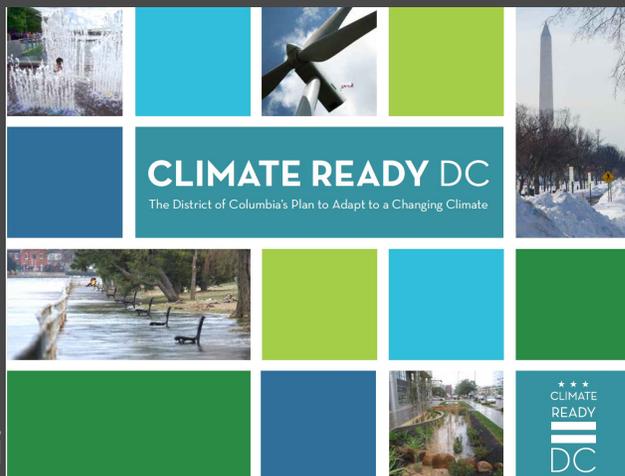
As many school districts continue to seek additional space to serve their growing communities, some are turning to converting non-educational properties into innovative school environments. This type of adaptive re-use strategy can be a viable option in the Plan area, where there is a short supply of available land otherwise, to efficiently utilize available properties while also activating vacant office space. Through careful planning and implementation, even unconventional spaces that may not conform to MCPS' traditional facility standards can be successfully retrofitted into educational spaces, and should be included when considering potential sites for school facilities. Collaborative efforts between MCPS and other appropriate agencies should also continue in order to maximize opportunities to provide off-site fields for such facilities as needed.

# HEAT ISLAND EFFECT

# Top Regional Climate Hazards

As identified by the Metropolitan Washington Council of Governments  
& Montgomery County Department of Environmental Protection

1. Extreme Heat/Temperatures
2. Extreme Weather:  
Precipitation & Drought
3. Habitat & Species loss
4. Food Security



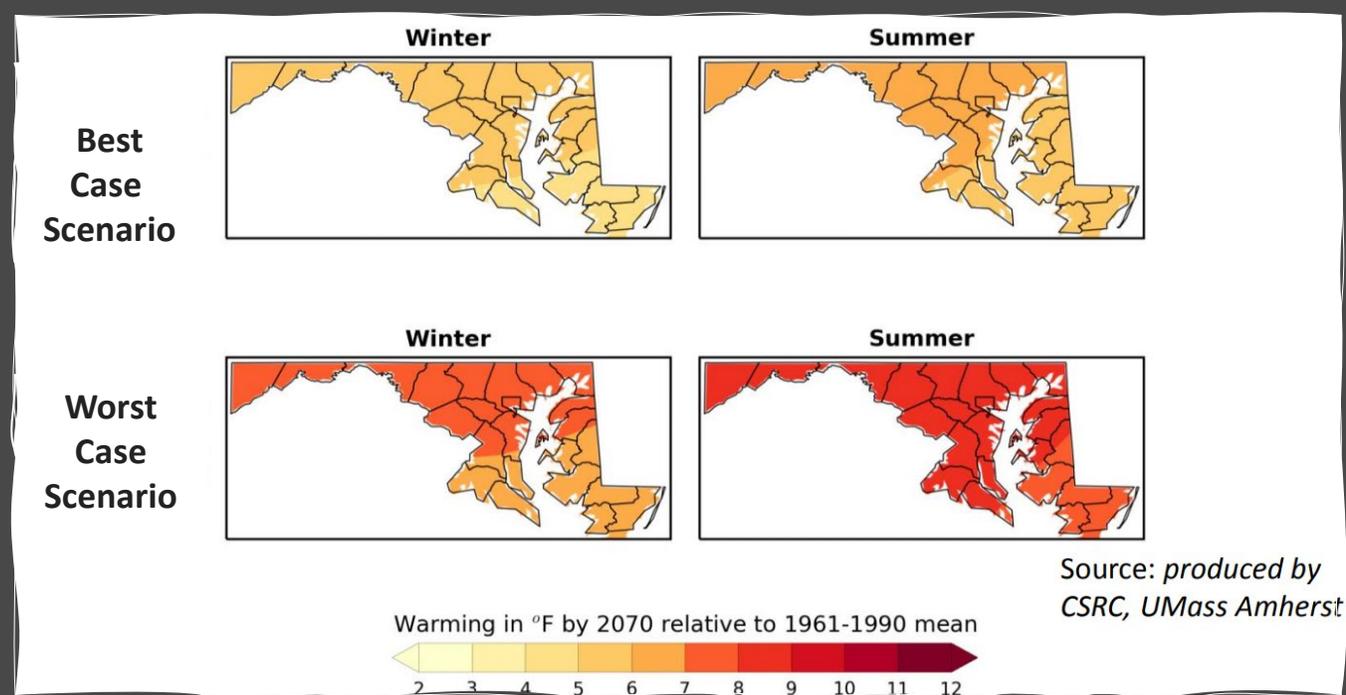
# Extreme Heat

## Facts:

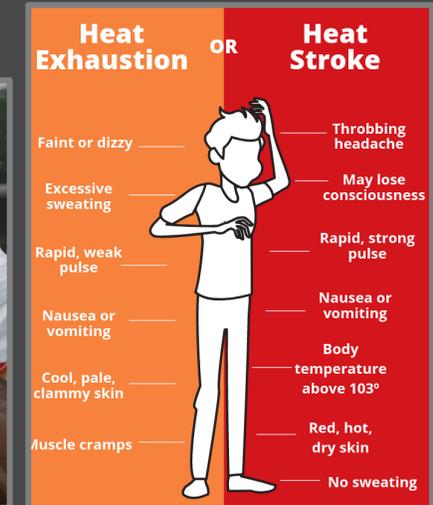
- \* July 2020: 28 consecutive days over 90° F
- \* Temperatures increased by 2.1°F since 1895
- \* Minimum Increases expected 6°F

## Extreme Heat Impacts:

- Human health
- Outdoor commerce & activity
- Pedestrian & bike use
- Infrastructure
- Energy demands
- Vegetation & wildlife mortality
- Increased stream temperatures
- Increased pestilence & insects



**Heatstroke and Heat Exhaustion can occur if body temperature rises to 104 F or higher.**



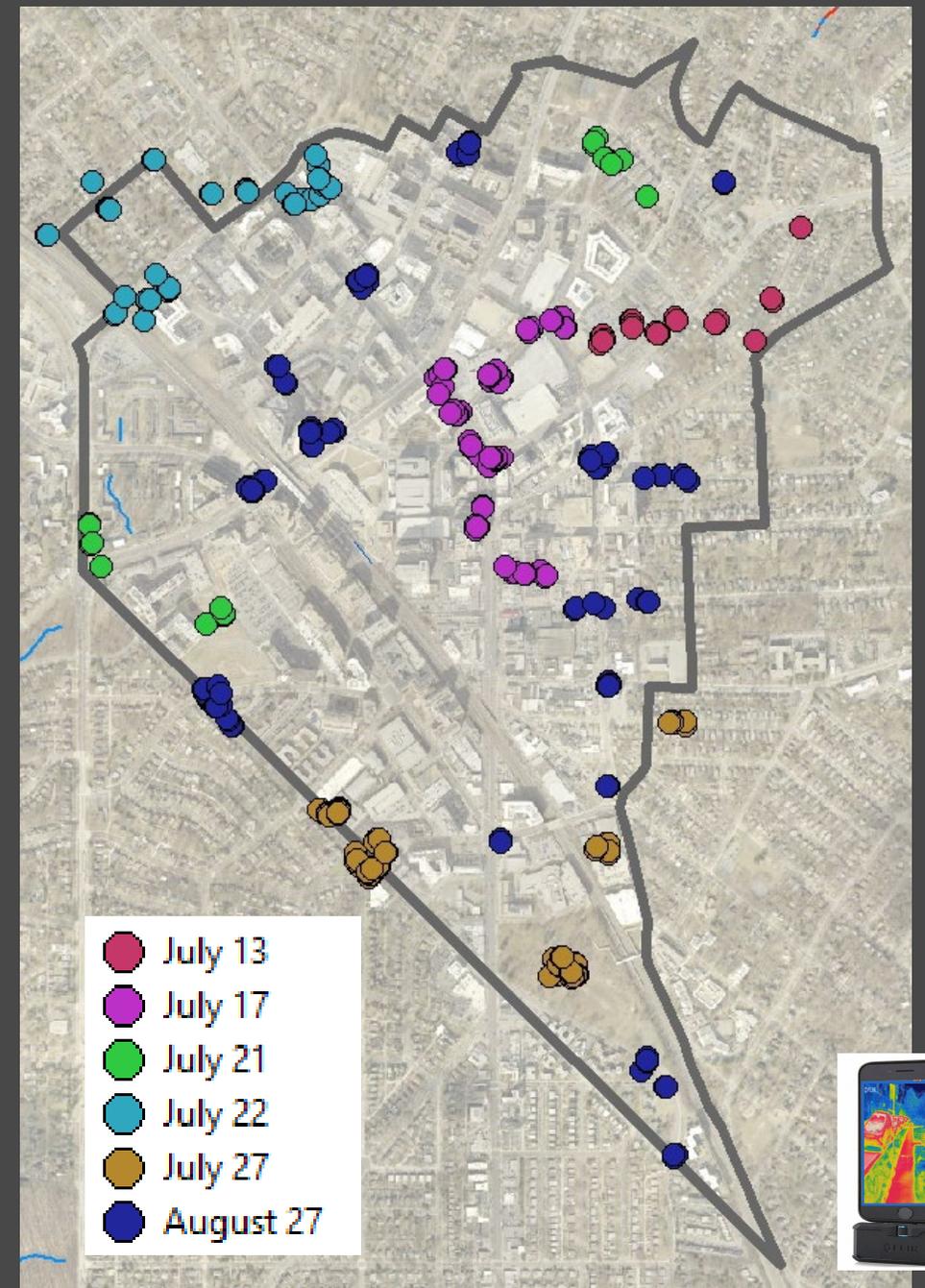
# Surface Temperature Assessment

## Our Study

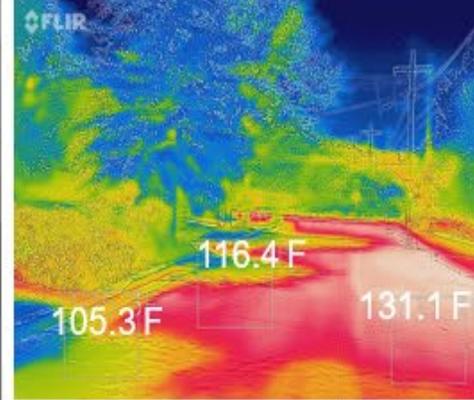
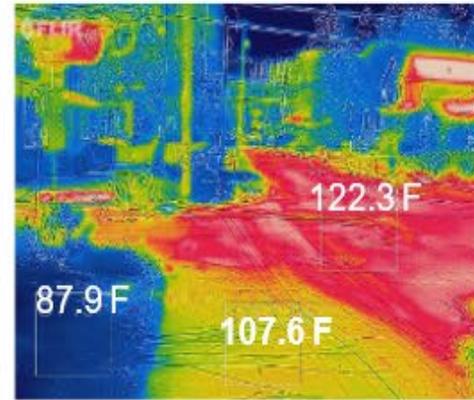
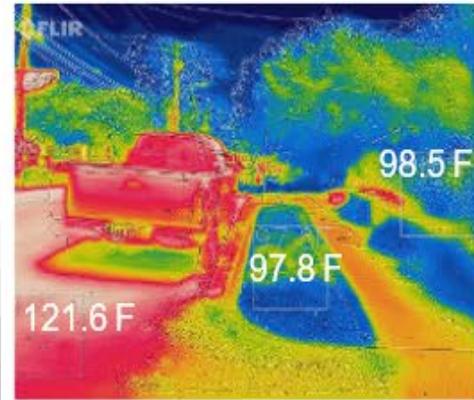
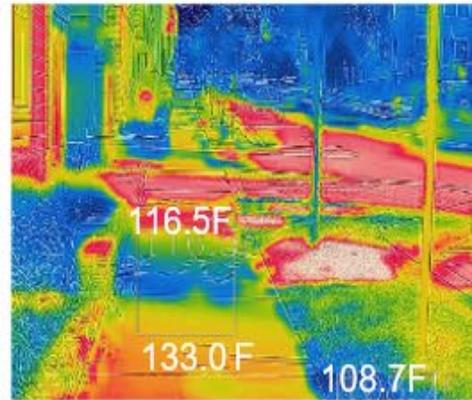
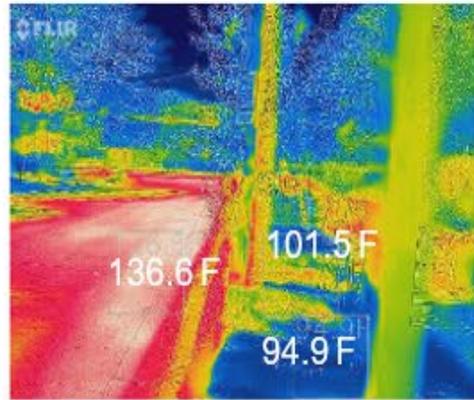
- \* Infrared thermal imaging
- \* Measured surface temperatures
- \* All zones in Silver Spring
- \* July-August 2020

## Facts:

- \* Radiant heat varies with
  - Impervious surfaces
  - Shade/vegetation
  - Surface material
  - Surface color
  - Building orientation
- \* Surfaces effect ambient temperatures
- \* It's **HOT**. It's going to get hotter



# Residential Zone: Infrared Surface Temperature Readings



Atmosphere Temp: 89 °F  
Date: July 27, 2020

Atmosphere Temp: 87°F  
Date: July 21, 2020

Atmosphere Temp: 96°F  
Date: August 27, 2020

Atmosphere Temp: 96°F  
Date: August 27, 2020

Atmosphere Temp: 96°F  
Date: July 27, 2020

In Sun: 136.9°F  
In Shade: 95°F  
Sun/Shade Difference: **41.9°F**

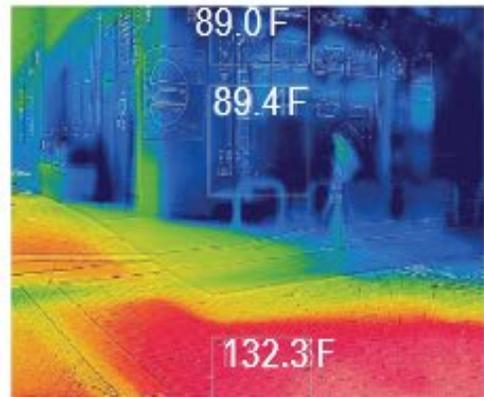
In Sun: 133°F  
In Shade: 118°F  
Sun/Shade Difference: **15°F**

In Sun: 121.0°F  
On Sidewalk: 98.1°F  
Sun/Shade Difference: **22.9°F**

In Sun: 122.3°F  
In Shade: 87.9°F  
Sun/Shade Difference: **34.4°F**

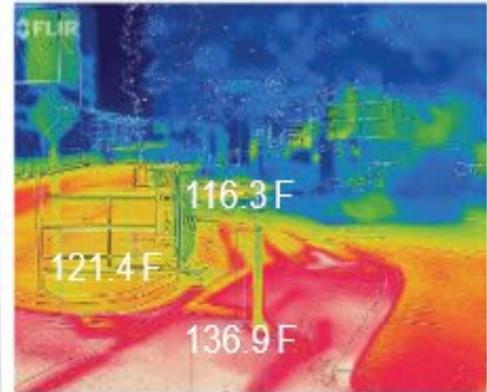
In Sun: 131.1°F  
In Shade: 105.3°F  
Sun/Shade Difference: **25.8°F**

# Commercial Zone: Infrared Surface Temperature Readings



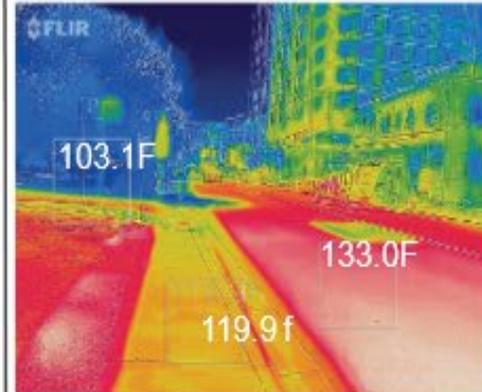
Atmosphere Temp: 90°F  
Date: July 13, 2020

In Sun: 132.3°F  
In Shade: 90.9°F  
Sun/Shade Difference: **41.4°F**



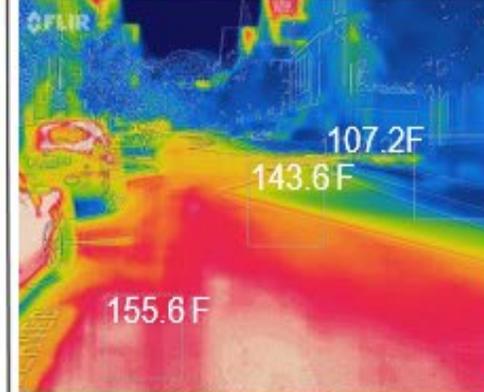
Atmosphere Temp: 85°F  
Date: July 17, 2020

In Sun: 136.9°F  
In Shade: 116.3°F  
Sun/Shade Difference: **20.5°F**



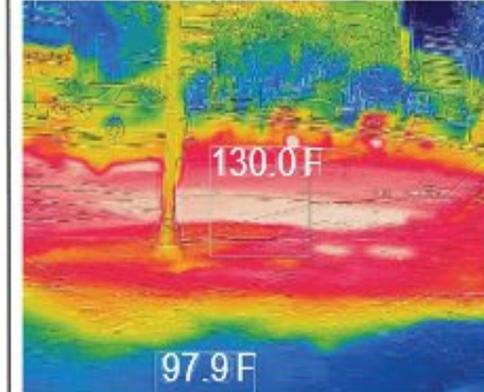
Atmosphere Temp: 85°F  
Date: July 17, 2020

In Sun: 134°F  
In Shade: 103.1°F  
Sun/Shade Difference: **30.9°F**



Atmosphere Temp: 87°F  
Date: July 21, 2020

In Sun: 155.8°F  
In Shade: 111.5°F  
Sun/Shade Difference: **44.3°F**



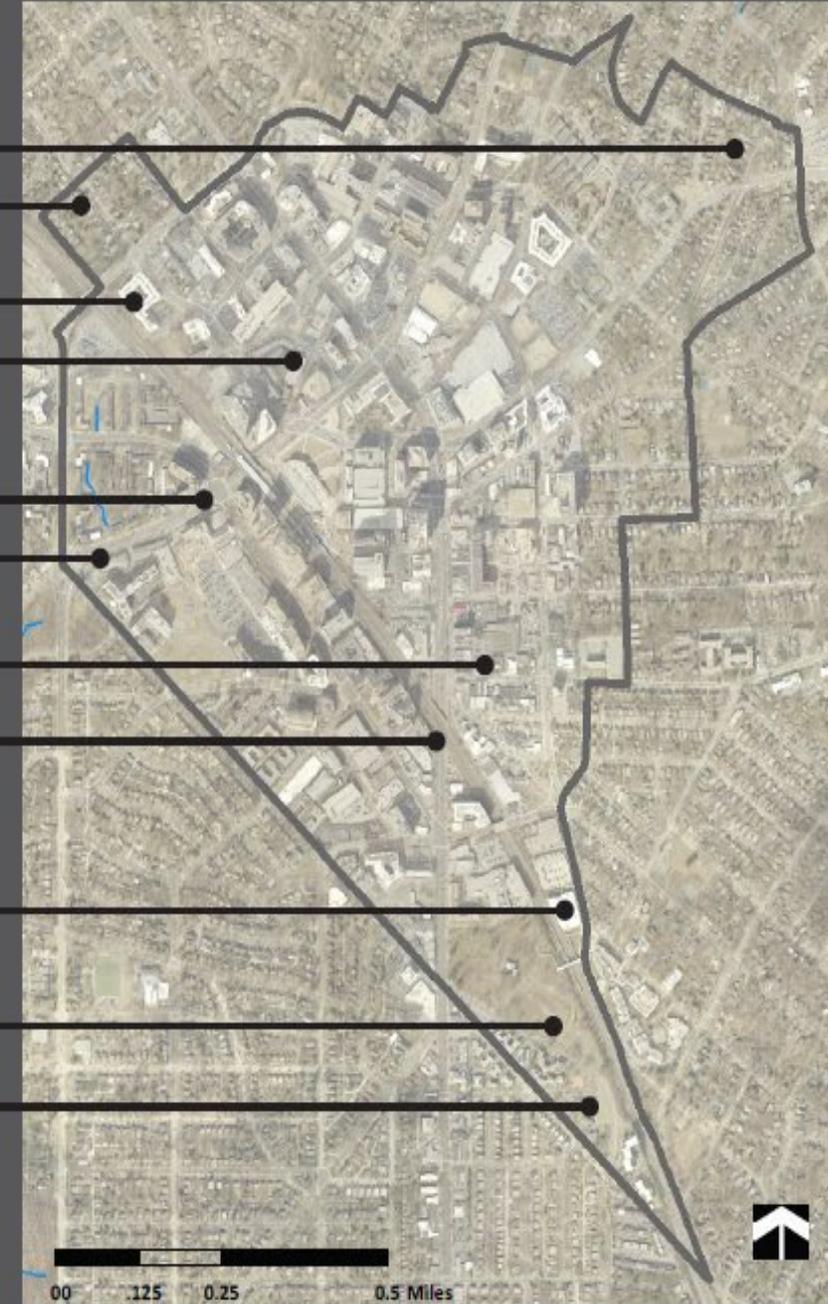
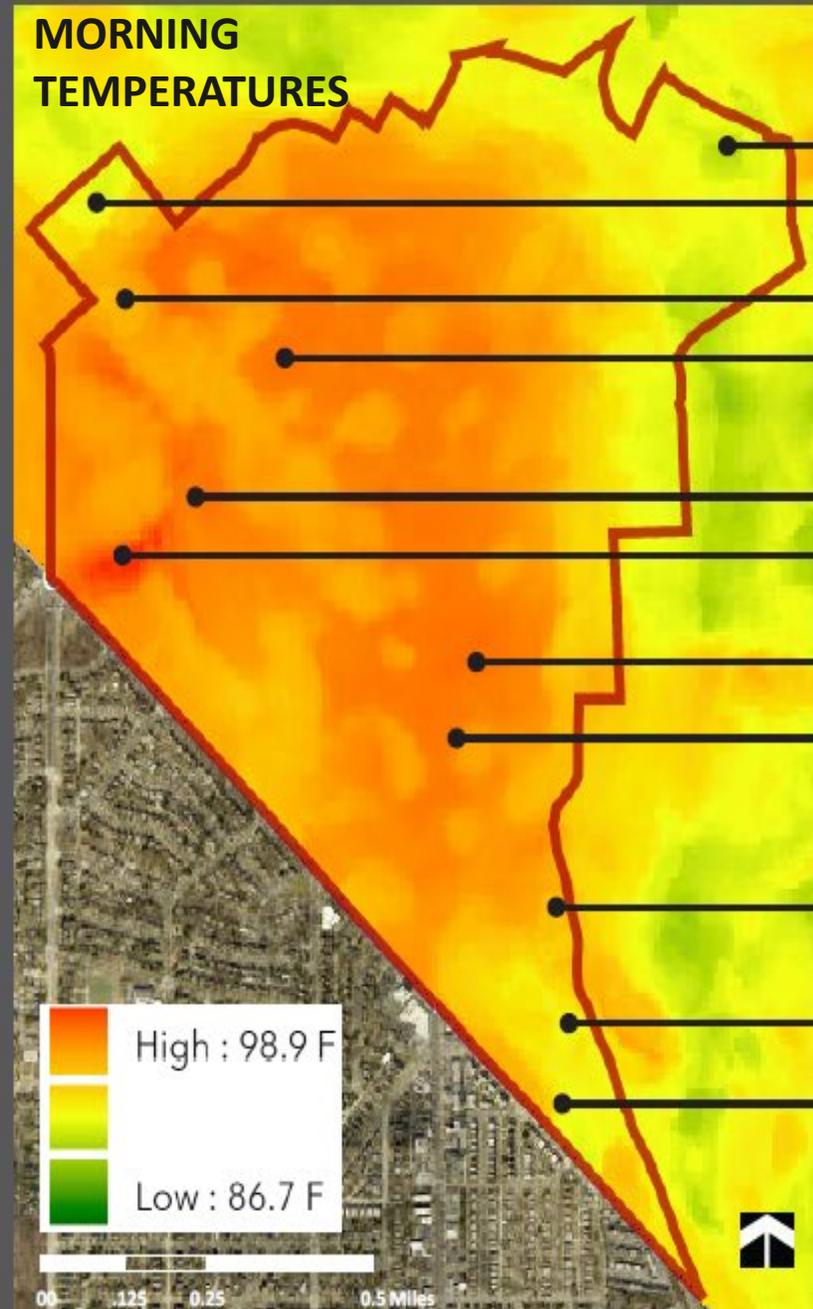
Atmosphere Temp: 85°F  
Date: July 17, 2020

In Sun: 130°F  
In Shade: 97.7°F  
Sun/Shade Difference: **32.3°F**

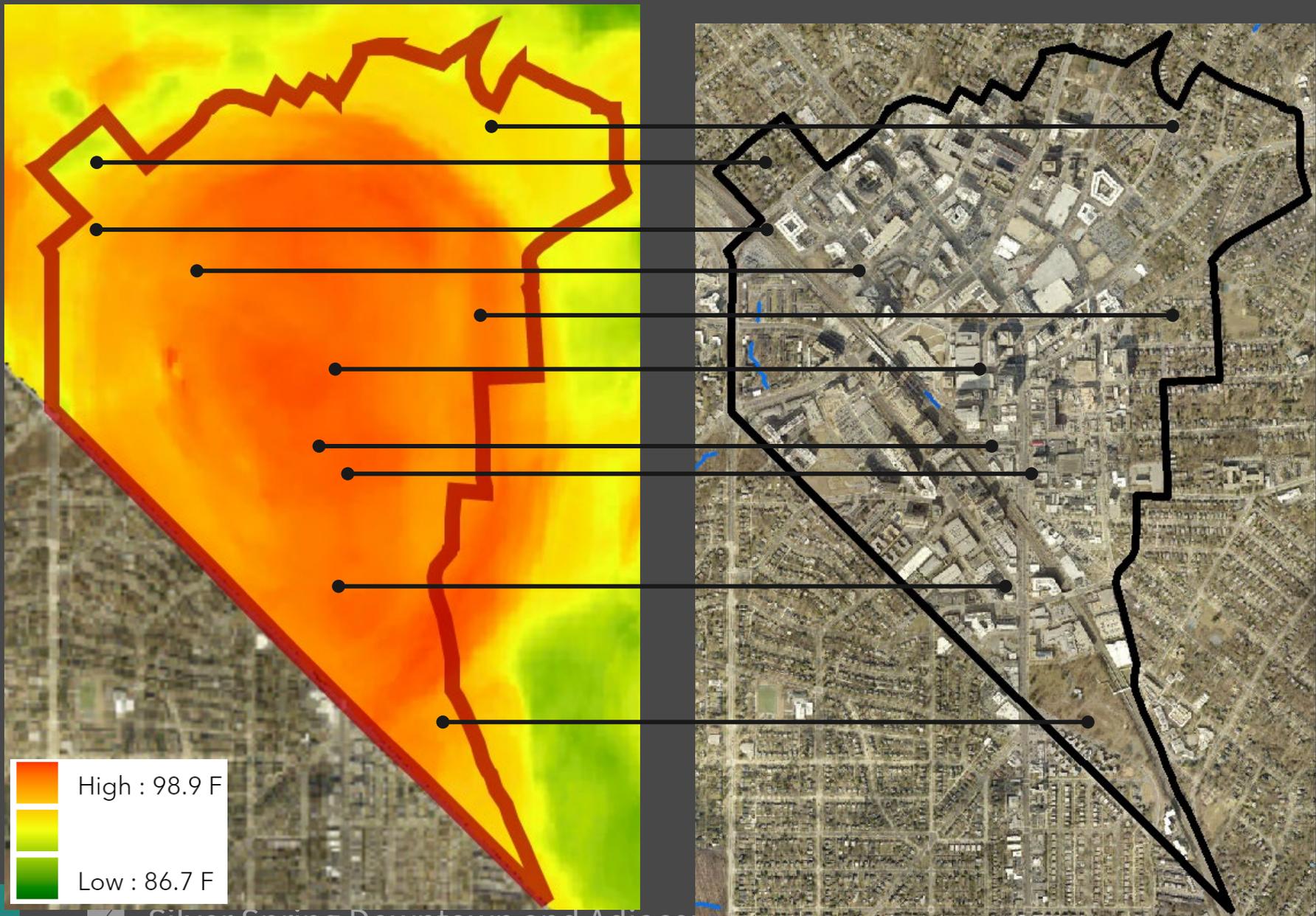
# HEAT & HEAT ISLAND EFFECT

## FACTORS:

- Impervious Cover
- Tree Cover
- Vegetation Cover
- Temperature
- Surface Color
- Surface Type
- Surface Material
- Wind
- Building Orientation



# EVENING TEMPERATURES



Heat is the #1 Cause of weather-related fatalities in MD

# Some Recommendations Intended to:

- Reduce surface & heat island temperatures
- Increase green cover throughout Silver Spring
- Improve air & water quality, and mental & physical health.



# NEXT STEPS

The staff requests that the Planning Board approve the changes to the Public Hearing Draft as the Planning Board Draft and vote to transmit the draft to the County Council.

# EXTRA SLIDES



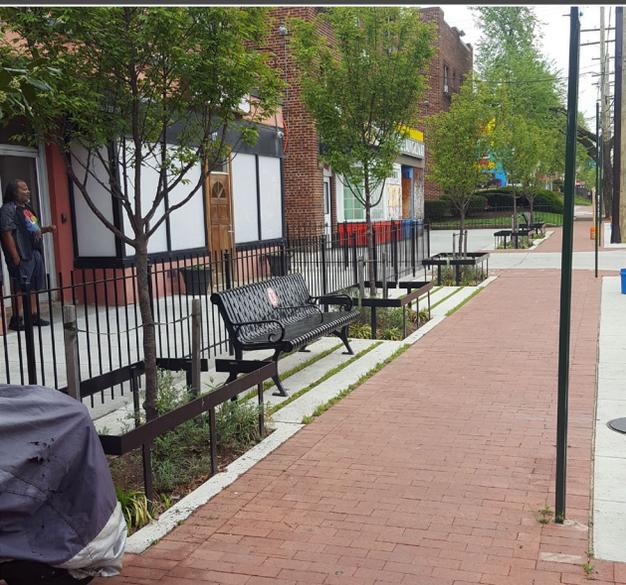
## Climate Resilient & Equitable: GreenLoop Street Elements:

- Pedestrian friendly (walking, biking, ADA)
- Street trees and deep tree panels
- Stormwater management (raingardens, Silva cells, bioswales, permeable pavement, etc.)
- Cool surfaces



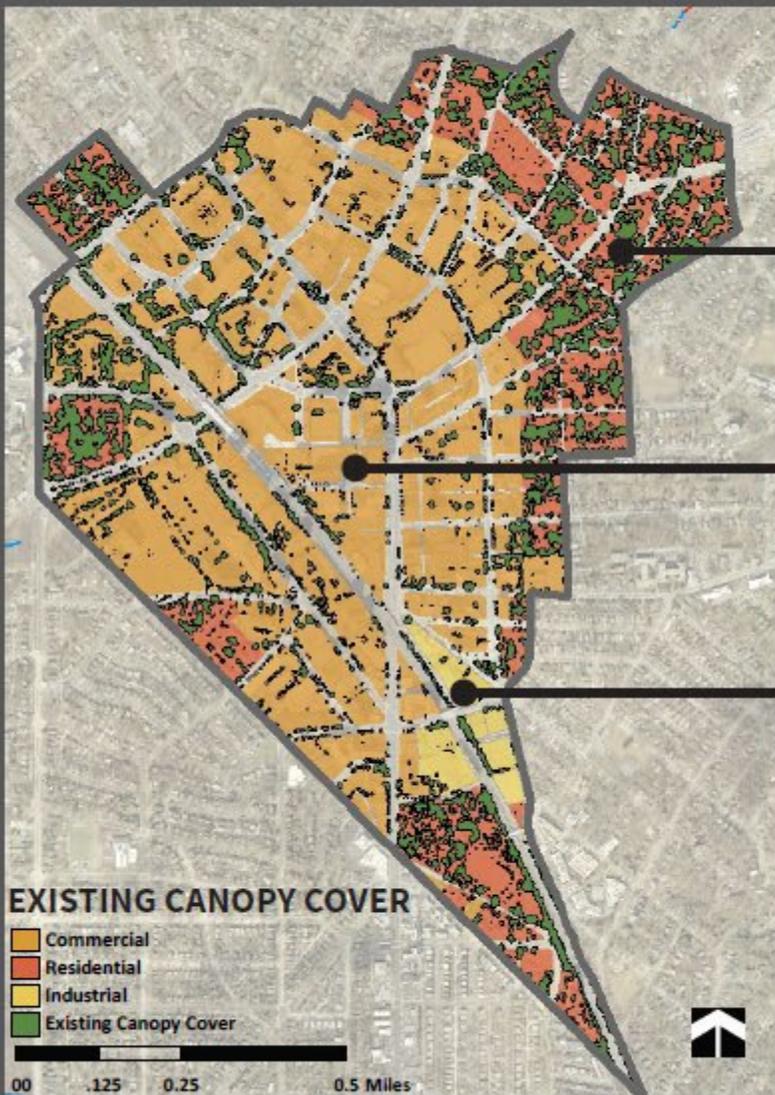
### \*May include

- Electric vehicle charging stations
- Solar parking meters
- Solar lighting



Plan

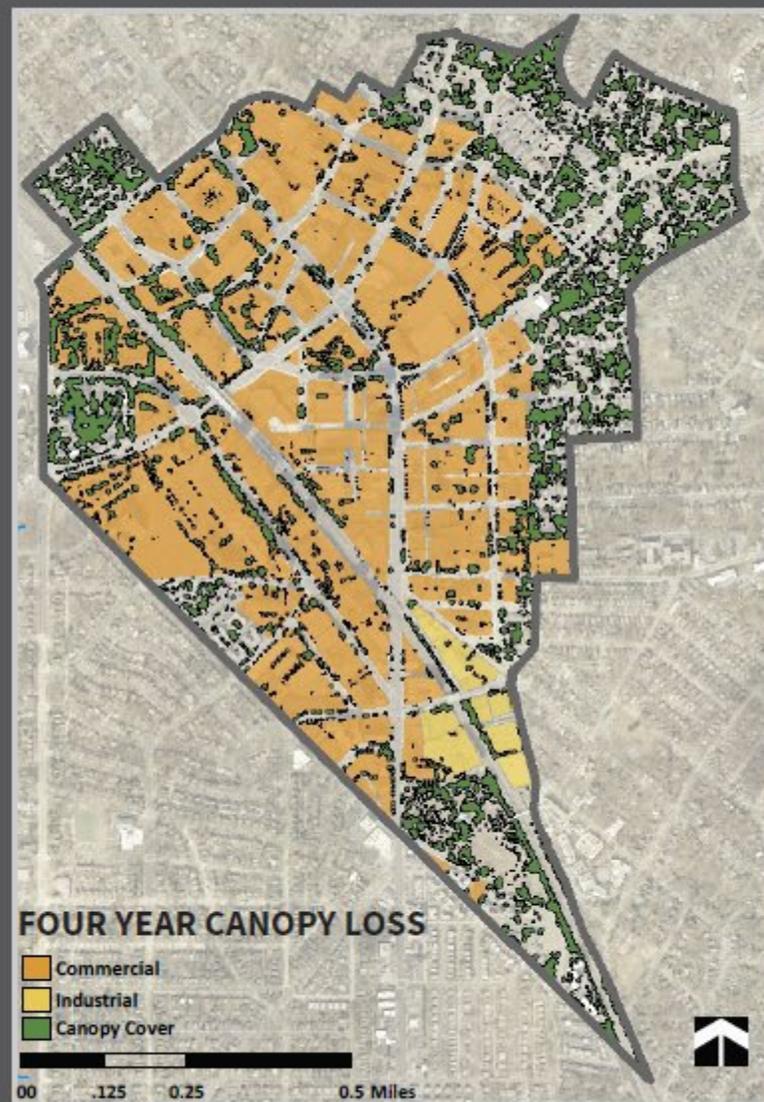
# TREE CANOPY COVER & LOSS



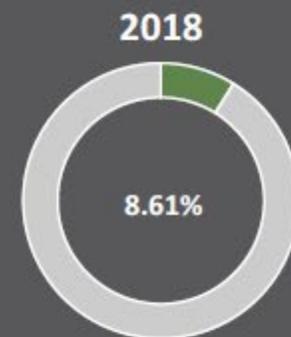
35.42%  
Residential

8.85%  
Commercial

8.38%  
Industrial



1.82%  
Canopy Loss in 4 years  
Commercial/Industrial  
zones

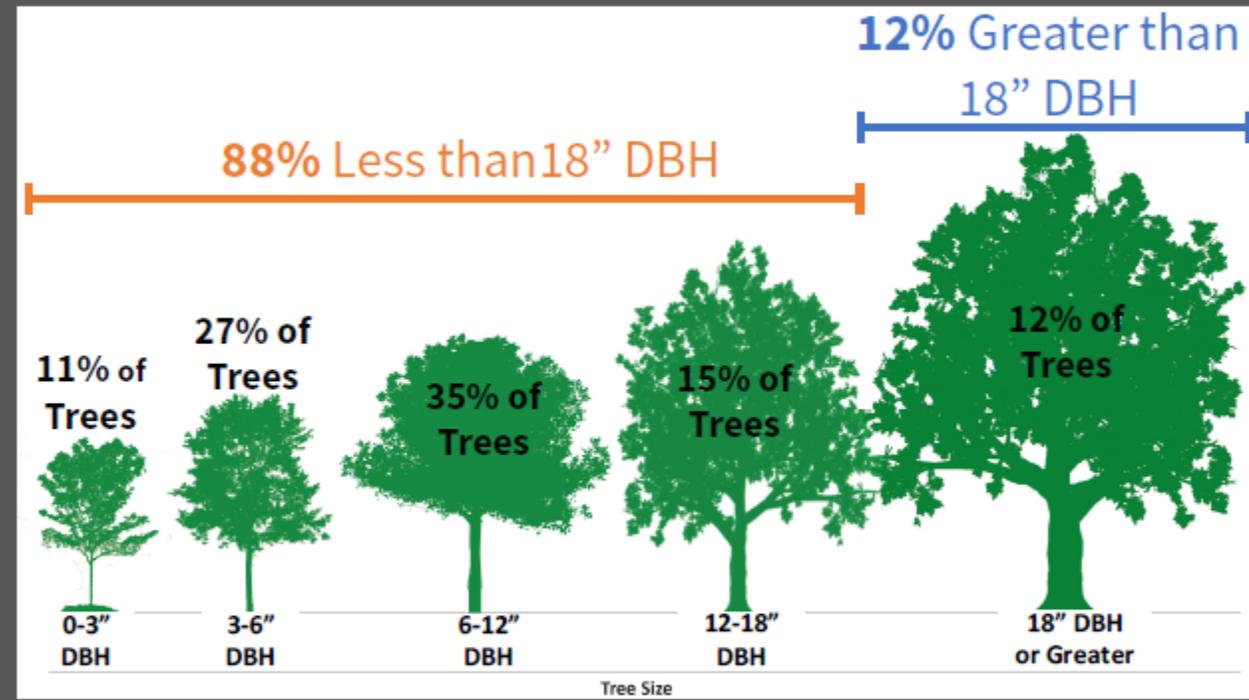


# LARGER TREES OUTPERFORM SMALLER TREES

iTree demonstrated larger trees significantly provide greater benefits:

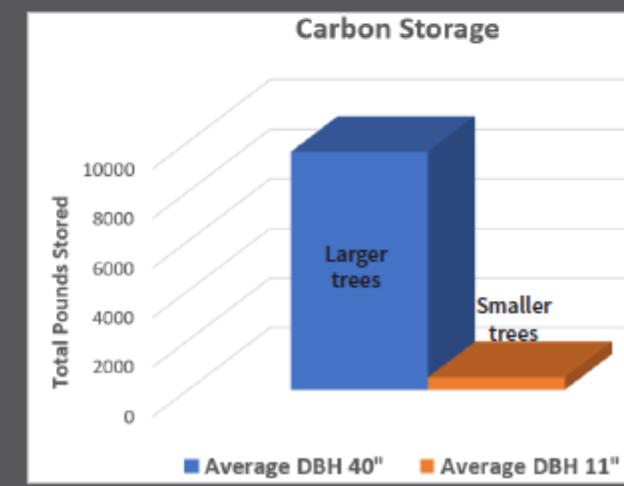
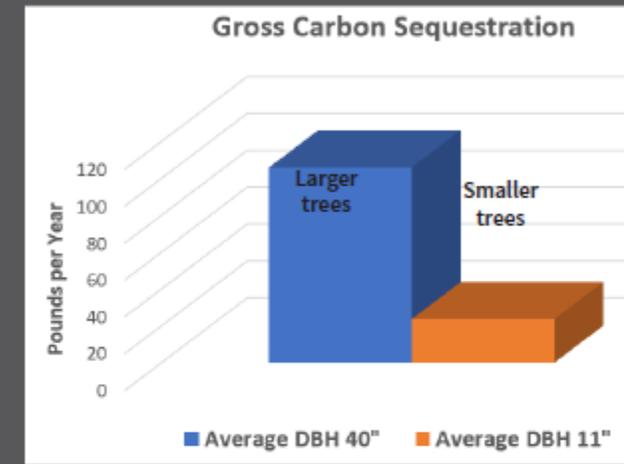
## Large Trees:

- Sequester more carbon
- Store more carbon
- Remove more pollutants
- Enhanced cooling/shade
- Reduce heat island
- Increase wildlife



*DBH = Diameter at Breast Height*  
*A standard method of measuring tree diameter at 4.5' above the ground.*

## Tree Performance

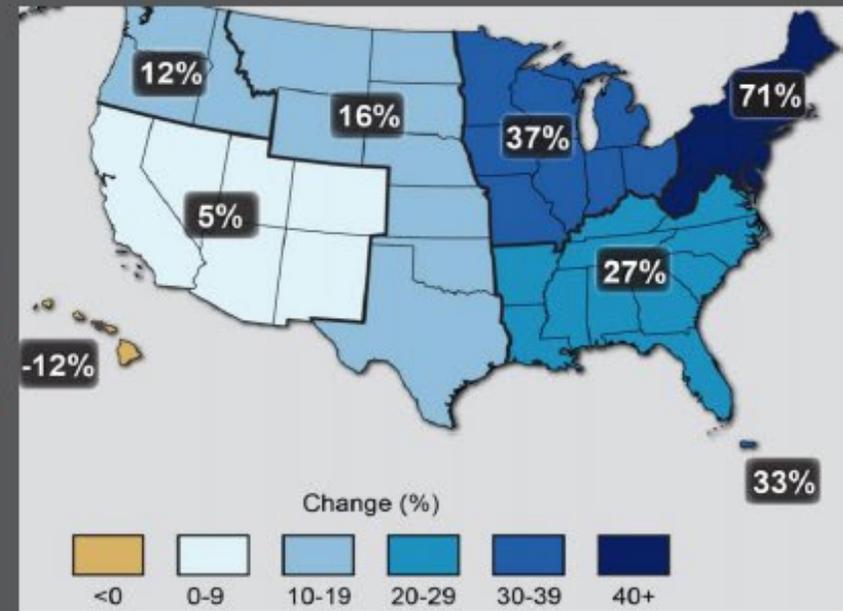


# EXTREME PRECIPITATION

## Facts:

- \* 71% Increase in Heavy Precipitation
- \* Precipitation will Continue to Increase

71% increase in heavy precipitation from 1958-2012



## Extreme Precipitation:

- \* Increased Flooding
- \* Infrastructure Impacts
- \* Increased stress on vegetation & wildlife
- \* Increased disease and insect risks

Extreme Precipitation Forecasts

