

## BRIEFING ON DOWNTOWN SILVER SPRING COOL STREETS GUIDELINES



### Description

This presentation gives an overview of the *Downtown Silver Spring Cool Streets Guidelines*, prepared by Rhodeside and Harwell under a grant from the Metropolitan Washington Council of Governments. It describes average streetscape thermal temperatures and cooling strategies to reduce extreme heat stress levels in Silver Spring.

## MASTER PLAN INFORMATION

Topic

Downtown Silver Spring Cool Streets  
Guidelines

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Summary

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The presentation introduces the *Downtown Silver Spring Cool Streets Design Guidelines* funded by a 2022 Transportation Land Use Connections Program grant from the Metropolitan Washington Council of Governments and was completed in August 2022 by Rhodeside and Harwell (RHI). The Guidelines will be incorporated into the Silver Spring Design Guidelines as a tool for mitigating the effects of extreme heat on human physiology for a more resilient future.

The Guidelines are the first in the county to address the increasing impacts from climate change on the human body and urban landscape. Maryland’s Climate Forecast predicts that the state’s average summer and winter temperatures will increase by over six degrees Fahrenheit relative to pre-industrial averages. Presently, urban streetscapes, including in Silver Spring, are already showing surface temperatures well above 125 degrees in July through mid- to-late August. These temperatures are well above human comfort levels and pose health hazards. Recognizing these dangers, the Guidelines offer design strategies and materials alternatives to mitigate these negative impacts.

Part one of the Guidelines and presentation analyzes and quantifies surface temperatures for eight typical streetscape materials found within the downtown Silver Spring study area. The analysis used average summer temperatures from the years 2004-2018, noting the steady trend of rising temperatures. Part two examines the ability of various streetscape surface materials and design strategies to reduce surface temperatures, such as evaporative cooling (mistifiers and fountains), vegetation, ventilation, shading devices, and more. Part three focuses on Fenton Street as a case study and offers general recommendations for cooling the streetscape. Finally, next steps and potential implementation opportunities will be presented.