
Streetscape Framework & Lighting Policy

Comments on Concept

This document lists all comments received on the Streetscape Framework & Lighting Policy during the public comment period.

- Comments are listed in the following order:
 - *Comments from Local Agencies*
 - *Comments from Interest Groups*
 - *Comments from Interested Individuals*

Comments from Local Agencies

Government of the District of Columbia

Department of Transportation



March 12, 2020

Dear Mr. Acosta:

The District of Columbia Department of Transportation (DDOT) appreciates the opportunity to formerly comment on the Streetscape and Lighting Framework developed by the National Capital Planning Commission (NCPC). NCPC has been open in inviting DDOT to working group meetings and has coordinated with DDOT to gather information and align District and federal goals. This letter discusses the distinction between these efforts in relation to the Framework and recommend changes that are necessary to better communicate the realistic outcome and manage expectations.

While DDOT has been open to coordination and sharing information, it does not seem that some of our concerns have been addressed. One of the overarching concerns is defining the two different efforts taking place, both within the monumental core and outside of the monumental core. The areas within the monumental core have NCPC oversight, and the existing Monumental Core Streetscape Guidelines provide guidance for landscape and right-of-way within this boundary. The effort taking place outside of the monumental core has District oversight, and—although it may have federal interest for visual cohesiveness—it is not currently under the Monumental Core Streetscape Guidelines and likely will not follow any updates to the Monumental Core Streetscape Guidelines. DDOT appreciates NCPC's efforts in reviewing existing guidance and gaps in policy, but outcomes from that effort will not automatically fall under the Monumental Core Streetscape Guidelines. DDOT finds that a clearer distinction between the two efforts is necessary in order to manage expectations as there will likely be a different outcome for each effort. As the framework reads now, the public may expect the Monumental Core Streetscape Guidelines be implemented both in the Monumental Core and on the streets highlighted outside of the 1992 Monumental Core Boundary.

The distinction between Federal and local oversight is not even referenced in the introduction, yet is a fundamental component of this effort. For example, page 8 of the Streetscape Framework breaks down the framework and should indicate the developed Streetscape Guidelines and Construction Manual will only apply to the area identified in the 1992 Monumental Core boundary. DDOT recommends including a line in the Streetscape Framework bullet that indicates the Streetscape Guidelines and Construction Manual will only apply to the area within the Monumental Core boundary in close harmonization with existing DDOT standards that exist outside of the boundary.

All maps should be updated to better articulate the areas that will fall under the new Streetscape Guidelines and the areas that are part of the extended working group. Since the publication of the Framework, NCPC has shared maps that highlight the 1992 boundary and filter the area outside of the 1992 boundary a lighter color. DDOT is in favor of using these maps in all documents moving forward, including the interactive map on the NCPC website.

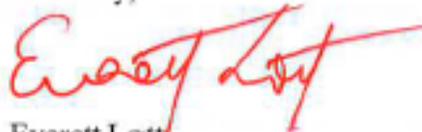
Local streets are called out in the map and in the text. It is important to distinguish that just because a street is identified as local or radiating and edging, it does not indicate jurisdiction or oversight. DDOT would recommend a paragraph in the Street Categories section on page 11 that explains the classifications are conceptual and visual and should not be confused with ownership or roadway classification in the traditional transportation context.

Page 14 describes the adjacent areas located outside the 1992 Manual Boundary and a desire for an appropriate transition between the monumental core and the greater city. Overall, DDOT finds this paragraph supports the desire to clarify the distinction between the area within the Monumental Core boundary and the areas outside of the boundary that are under District oversight. It would be useful to weave this type of distinction throughout the framework.

There has been a significant amount of discussion with the Working Group on incorporating existing District regulations, such as bio-retention, tree canopies, and other elements into the Monumental Core Streetscape guidelines. Incorporating guidance that aligns with District guidelines and standards better ensures the visual consistency outlined in the framework. For example, page 15 identifies three levels of consistency based on the identified street categories on page 11. The Framework emphasizes high consistency for Radiating and Edging Streets both in and outside of the Monumental Core boundary. The best way to ensure this consistency, is to match DDOT standards for vertical elements such as lighting and trees.

DDOT looks forward to continued coordination in the two ongoing efforts that comprise the framework. NCPC has conducted a thorough overview of the existing streetscape guidelines for City, federal, and non-profit groups and DDOT looks forward to incorporating this information into our internal systems.

Sincerely,



Everett Lott
Deputy Director

Marcel Acosta, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500-N
Washington, DC 20004

cc: Kelsey Bridges, DDOT
Beth Miller, NCPC

Government of the District of Columbia

Department of Transportation



March 12, 2020

Dear Mr. Acosta:

The District of Columbia Department of Transportation (DDOT) appreciates the work of the National Capital Planning Commission (NCPC) to develop a comprehensive update to the 1992 National Mall Streetscape Manual. Specifically, DDOT's Streetlight Division is especially grateful to have participated in the discussions leading up to the drafting of the Lighting Policy and Framework, which will inform the manual's update. The Division would like to provide the following comments on that proposed policy as part of the public comment period initiated by NCPC:

- **Framework.** DDOT is in favor of referring to this document solely as a framework, not a policy. Also, the boundaries of this framework should be limited to the 1992 boundary amended to include the Kennedy Center and Banneker Park. Since the publication of the streetscape framework, NCPC has shared maps that highlight the 1992 boundary and filter the area outside of the 1992 boundary a lighter color. DDOT is in favor of using these maps in all documents moving forward, including the interactive map on the NCPC website.
- **Importance of Collaboration.** As owner and operator of over 75,000 luminaires within the public right of way, the DDOT Streetlight Division is responsible for the vast majority of streetlights within the District of Columbia. As noted in the framework, the DDOT is pursuing a performance-based contract to convert the entire network to energy-efficient LED fixtures, the details of which will be finalized once a preferred bidder is selected. These specifications will be the basis for operations and maintenance of the network over the 15-year contract. As LED are long-lasting and will be replaced infrequently, collaboration on this framework is important.
- **Color Temperature.** DDOT committed to installing LEDs with a correlated color temperature no higher than 3,000 Kelvin, known as warm white light. And in most neighborhoods, LEDs will have a CCT of 2,700 Kelvin, extra warm white light. Where each color of light will be installed is based on a new systematic approach to lighting across the entire District. The project to convert the entire network to LED will bring a level of uniformity that currently does not exist. There are few road segments within the boundaries of the framework where the proposed lighting framework differs from DDOT's approach to color temperature. When developing our specifications, DDOT has

sought to balance the perspectives of residents across the District and to avoid making exceptions, which undermines the fairness and uniformity we seek.

- **Wattage and Dimming.** Following the conversion to LED and installation of a remote monitoring and control system, DDOT's streetlighting network will be significantly smarter than it is now. With this comes the ability to dim fixtures to specific lighting levels from afar and at different time intervals. Such dimming schedules can help to evoke the contrast between roads and nationally significant structures, as long as illumination levels do not fall below standards for traffic safety. Where there are differences between the wattages proposed by the lighting policy and DDOT's new specifications, it may be possible to design a solution that meets our joint needs through the use of dimming.
- **Light Trespass.** DDOT receives passionate feedback that its luminaires emit excess light onto private property and into the night's sky. Certain fixture styles, such as the Washington Globe, are more likely to do this than others. It is important for the lighting framework to be cognizant of this concern.

DDOT looks forward to reviewing the revisions to these important documents. Should you have any questions, please continue to work with the Streetlight Division to address them.

Sincerely,



Everett Lott
Deputy Director

Marcel Acosta, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500-N
Washington, DC 20004

cc: Kathryn Roos, DDOT
Beth Miller, NCPC

Comments from Interest Groups



ANC 6B
Capitol Hill / Southeast

March 11, 2020

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SMD 08 Chander Jayaraman

SMD 09 Kasie Clark

SMD 10 Denise Krepp

Elizabeth Miller, Director
Physical Planning Division
National Capitol Planning Commission
401 9th St NW #500N
Washington DC 20004

VIA: Email to Elizabeth Miller - <https://www.ncpc.gov/about/staff/>

RE: NCPC's Lighting Policy and Framework, Monumental Core Streetscape Project

Dear Director Miller:

ANC 6B welcomes this opportunity to provide comment regarding the Monumental Core Streetscape Project and its Lighting Policy and Framework component. We commend the staff and Commissioners of the National Capitol Planning Commission for their vision and creativity in addressing – in a comprehensive fashion – preservation and enhancement of the streetscape and lighting associated with the monumental core of the city.

At a properly noticed meeting on March 10, 2020, with a quorum present, ANC 6B voted 10-0-0 to offer the following questions reflecting its concerns about the application of the proposed guidance in our community.

1. Agenda materials prepared for the NCPC identify the Eastern Market Metro Park as an open space falling under the purview of the new guidance. It is not clear from published documents and hearing testimony if NCPC planning has considered the construction of a new park at the Eastern Market Metro. We are concerned that there may be a disconnect between the planning already undertaken by DGS to address community safety concerns and the guidance being developed by NCPS.

Has the NCPC had an opportunity yet to consider the alignment of proposed lightening for the interior of the park and the guidance for the park that it is developing?

2. New technology provides opportunities to improve lighting that should benefit pedestrian safety.

Will the NCPC have an opportunity to develop a specific section within its new guidance document to highlight concerns for pedestrian safety?

3. ANC 6B is concerned that the current conceptual plan for streetscape guidance is moving forward in advance of resolving issues about the architecture and placement of the small cell transmitters that are envisioned in the 5G movement. As was noted in the NCPC small cell information briefing hearing on March 7, 2019, there remains much uncertainty about what the units will look like (e.g., is hoteling possible), how they will be attached to the various existing light fixtures, or how they will be spaced. The draft streetscape document intelligently addresses such issues as verticality and massing as central features of urban design, but currently does not include guidance for the small cell transmitters as a component of the streetscape.

Will NCPC reserve final guidance until the issues regarding the architecture, placement, and number of placements for small cell transmitters has been resolved?

4. The hierarchy contemplated for streets within and approaching the monumental core, and the lighting proposed for each category, will be helpful in achieving the objective of a cohesive “light scape” and in calling attention to the monument area. However, a problem for residents of Capitol Hill, as well as a few other communities adjacent to the monument core is that, in the nomenclature of the draft document designated ‘arterial streets’ such as North Carolina are also residential streets. In the current draft, these two types of areas are proposed to receive different types of lighting (e.g., warmth, color, intensity), but many residents live on streets providing approaches to the monument area. This category definition problem will be heightened with the advent of LED lighting, as noted immediately below.

Will the NCPC guidance assure lightening that is appropriate for both busy streets such as North Carolina, SE and for the residents residing on those streets?

5. The draft document provides welcome attention to changing technology, especially with regard to the planned introduction of LED lights. However, during the information briefing on May 3, 2018, the NCPC Commissioners grappled with concerns about potential health issues associated with the conversion – often in terms of associated Kelvin ratings. ANC6B has also struggled with the issue of the determining the correct, and acceptable, Kelvin ratings of various light intensities within residential areas. NCPC has established Kelvin rating cut points in its draft document based on a recent AMA advisory. However, testimony at the NCPC meetings about the rapidity of change in LED technology leads us to question the wisdom of establishing fixed cut points at this time.

Does NCPC plan to undertake further investigation of the potential health consequences of various Kelvin scores for different categories of individuals and of different physical situations (e.g., distance from light, shielding)?

6. Finally, our ANC was surprised to find reference to areas such as Seward Square or the Eastern Market Metro Park included in a document designated “monument area.” If these areas, along with East Capitol Street, Lincoln Park, and Pennsylvania Avenue, SE, are included in the streetscape or lighting guidance of the NCPC, we believe there should be robust involvement of the relevant ANCs.

Will there be additional opportunities for the ANCs to be engaged in development of the guidelines and standards relative to lighting and streetscape design impacting on their areas as the process proceeds?

Thank you for your attention to these comments and concerns. Please address any questions or comments to Commissioner Kirsten Oldenburg, chair of the ANC 6B Transportation Committee at 6b04@anc.dc.gov.

Sincerely,



Brian Ready
Chair, ANC 6B

cc:

To: National Capital Planning Commission (NCPC)
Re: Urban Design Streetscape Framework and Lighting Policy
Date: March 14, 2020

From:
Anne Lewis, FAIA, President
City Wildlife, Inc.
www.citywildlife.org
anne.lewis@citywildlife.org

Recommendations

City Wildlife supports NCPC's project to revise the 1992 Streetscape Framework and Lighting Policy and appreciates the thoughtful planning and collaboration among stakeholders that has gone into the analysis. At the same time, however, we believe the environmental effects of street lighting on the ecology and wildlife have not been as fully explored as other aspects of the project -- and merit more attention. For environmental reasons, we recommend the following:

- Lowest possible streetlight levels throughout the District. One presentation by DDOT recently revealed that some of the District's existing street lighting exceeds minimum levels recommended by national authorities. Redesign of the lighting system should reduce all lighting to the lowest recommended levels throughout the city, including the areas under study by NCPC.
- Mandated dark-sky compliant fixtures, including those in historic areas. Dark-sky lighting reduces light trespass and sky glow. Fixtures now exist that replicate the Washington Globe streetlights but eliminate uplight and horizontal light. Uplighting of civic buildings, monuments, memorials and bridges should be eliminated.
- Implementation of innovative light reduction measures. Motion-activated controls, light curfews, and computerized dimming are all ways to reduce light emissions and energy usage. If used strategically, these can meet human requirements and support environmental goals for all areas of the study (Structures, Landscape, and Streetscapes).
- Maximum color temperature of LED fixtures of 2700 K for all areas, especially parks and landscape. Medical and scientific authorities recommend the lowest emission of blue light possible in exterior lighting to reduce glare and minimize human and environmental effects. Artificial light of all kinds has been shown to have serious adverse effects on natural behavior, breeding and development in wildlife, and light in the cool range disrupts circadian rhythms in both humans and wildlife. In LED lighting, 2700 K is also the most pleasing to humans and, as far as scientists know to date, the least disruptive to wildlife.

- A plan that anticipates change. Just as the 1992 plan is now obsolete, so will any current plan require adaptation. Environmental issues such as flooding, climate change, or natural resource protection; policy and social changes such as changes in work/home routines; technical changes such as LED fixture evolution and more advanced centralized controls; and scientific research on the effects of LED lighting -- all are likely to require reevaluation of policies and equipment specified today. The plan -- and the light fixtures themselves -- should be flexible enough to adapt to these changes on a systematic level, rather than on an ad hoc basis.
- Greater involvement of environmental authorities. The environmental component is a critical aspect of this study. Consultation with park experts, biologists, dark-sky advocates, wildlife experts, and District Department of Energy and Environment scientists can enhance the limited environmental analysis presented in the current Streetscape Framework and Lighting Policy proposal.

Birds and Lighting

Since 2010, City Wildlife has run a citizen science project called *Lights Out DC*. Our volunteers monitor downtown buildings in the early morning hours during spring and fall migration seasons to collect dead and injured birds that have collided with glass. The goals of the project are to reduce these fatal collisions by reducing nighttime lighting and encouraging bird-safe design of buildings. With the data we generate, we provide problem buildings with information on remediation techniques and advocate for reduced nighttime lighting throughout the city.

Since 2010, *Lights Out DC* volunteers have documented 3,067 bird collisions in just a small area of the District, from Union Station to the Convention Center along the Massachusetts Avenue corridor. 84% of these collisions have been fatal. Nationally, scientists estimate that up to one billion birds are killed in the US annually by colliding with glass. The vast majority of these birds are neo-tropical migrants, many of whose species are in serious decline.



Lights Out DC bird/glass collision victims, 2016

Urban lighting is what attracts these migrating birds to cities. Birds migrate at night and are attracted to cities by the urban glow of streetlights and other visible urban lighting. After migrating some 200 miles a night, they come down to rest in the early morning hours, but they are unfamiliar with cities, have poor depth perception, and do not see glass, resulting in billions of fatal collisions. For this reason, reducing nighttime lighting throughout cities is the cornerstone of all national *Lights Out* programs. Recent initiatives in cities such as San Francisco, Toronto, Oakland, and New York City all support light reduction as part of their bird-safe efforts.

At a minimum, all lighting should be reduced from 11 pm to 6 am during the spring and fall migration seasons. Voluntary controls in cities such as Chicago show what a difference this can make in reducing the urban glow.



Photo: Eric Fogelman

Chicago before and after voluntary Lights Out program

Certain types of urban lighting are particularly hazardous to birds: constant red lights have been found to be most disruptive to bird navigation. Flashing lights, and blue and green lights seem to be less harmful. Thus constant red lights should be avoided throughout the city, including as warning lights on towers. (FCC and FAA guidelines for towers have been amended to address this problem and reduce the use of steady-burning red lights.)

Lighting of monuments and memorials is of special concern. In 1932, floodlights were installed at the Washington Monument, and afterwards, every fall, hundreds of birds would collide with the building: in 1937, 945 birds were found dead at its base. And in New York, in the early 1900s when the torch of the Statue of Liberty was lit, up to 700 birds were killed there every month. These effects still occur: the light beams of New York's 9/11 memorial "Tribute to Light" trap so many birds that the lights have to be turned off periodically to free the birds. And a resident who used to work high up in the Capitol building told of many birds she would see dead at the base of the dome.

It should be possible, with modern technology, to dim lights at these monuments at strategic times, accommodating tourists who want to see the monuments at night as well as birds who fly into our city in the early morning hours. Many cities are studying timed dimming of lights to accommodate local conditions, to reduce lighting, and to save money -- as well as birds' lives. We encourage NCPC and the District agencies to follow suit.

Effects of Lighting on other Species

DC agencies and developers are currently building or exploring projects involving several areas near the Potomac and Anacostia rivers: Poplar Point, the RFK Stadium complex, the 11th Street Bridge, the new Wharf project, and the Rock Creek confluence. All these projects involve lighting that will likely trespass into the waterways and negatively affect the fish, reptile, amphibian, and invertebrate species that inhabit and support these important ecosystems. Artificial night lighting has been shown to affect breeding and feeding habits, predator/prey relationships, and even sexual determination in these species, all of which can contribute to their dwindling populations. To preserve the health of our rivers and our wildlife, there should be no light spill onto the water from bridge or development lighting.

The Future

We support the Streetscape Framework and Lighting Policy and especially the goal of consistency within federal and non-federal areas of the city. We only ask that more attention be paid to the environmental concerns we have outlined. Please contact us if we can be of any assistance. We would be glad to help.

The Committee of 100

on the Federal City



National Capital Planning Commission

ATTN: Elizabeth Miller, Director, Physical Planning Division
401 9th Street, Suite 500
Washington, DC, 20004

February 26, 2020

Subject: Monumental Core Streetscape Framework & Lighting Policy

<https://www.ncpc.gov/initiatives/moncore/>

Dear Ms. Miller:

Thank you for the opportunity to comment on the Monumental Core Streetscape Framework & Lighting Policy, updating the National Mall Streetscape Manual (1992).

I. Comments on Lighting Policy

Uplighting, correlated color temperature, intensity

The draft Lighting Policy and Framework defines a lighting hierarchy for structures, landscapes, and streetscapes, and provides general guidance on light characteristics in the National Mall and vicinity. Structures are classified as Tier 1 (e.g., White House, Capitol), Tier 2 (e.g., Union Station) and Tier 3 (e.g., Smithsonian Castle). The draft policy calls for uplighting all three tiers, increasing light pollution. For the same reason, uplighting also increases the danger to migrating birds.

<https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/>.

Uplighting should be limited to the maximum extent possible. While we appreciate the drive to uplift and emphasize Tier 1 buildings in particular, we urge the Commission to reconsider this policy. We urge the Commission to follow dark-sky principles for all lighting in the Monumental Core, and to specify fixtures approved by the International Dark-Sky Association. At a minimum, lights on federal buildings should be dimmed during bird migration season. See

<https://abcbirds.org/program/glass-collisions/bird-friendly-design>.

In addition:

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety standards. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
- Washington Globe street lights should be replaced with fixtures that have a historic appearance but eliminate uplight and horizontal light. If the

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Washington Globes are retained, they should be retrofitted with internal optical components that direct light downward to a confined distribution pattern on streets and sidewalks.

■ The staff report, p. 49, advocates "white light" to illuminate certain federal buildings. While clarification on this specification is needed, we fear it refers to a high correlated color temperature (CCT). All lighting should have a no greater CCT than warm-white 2700 Kelvin.

We agree that colored light and projected images on federal buildings should be limited in frequency and duration.

II. Comments on Key streets in the Monumental Core

Key streets in the Monumental Core: The "Street Categories" map on page 10 in the "Urban Design Streetscape Framework" draft report prepared by NCPC shows three street categories. The key "radiating & edging" streets are shown in red. The "connecting & traversing" streets are shown in pink and the local L'Enfant City streets are shown in white. The "Urban Design Streetscape Framework" draft report by NCPC indicates the locations and policies of key streets in overall terms. Eventually, there will need to be more detailed plans for these streets.

The Committee of 100 suggests four key streets that might be described in more detail in the final NCPC report. If NCPC includes discussion of key streets in the final report, other streets also might be selected for discussion.

Tenth Street, SW: Tenth Street, SW extends south from Independence Avenue to Banneker Park. There have been various studies by NCPC on ways to improve Tenth Street and these might be summarized in the report. Banneker Park is one of two areas to be added to the 1992 National Mall Streetscape Manual Boundary. Plans to improve Banneker Park should be noted. It is also important to note that Banneker Park provides the link from Tenth Street to The Wharf, the new mixed use development on the south side of Maine Avenue, SW. The Wharf has added new activity and recognition to the Southwest Waterfront. Phase 2 of The Wharf complex is now under construction.

Kennedy Center Area Streets: The Kennedy Center Area is the second of the two additions which are proposed to be added to the 1992 National Mall Streetscape Manual Boundary. The Kennedy Center is a great cultural center for the Washington area and for the nation. It is also a living memorial to President Kennedy. Unfortunately, the Kennedy Center is somewhat cut off from the rest of the city by topography and by streets and freeways which limit access. Various solutions have been suggested over the years to better connect the Kennedy Center to the adjacent city, but these have not been very successful. By adding the Kennedy Center to the 1992 National Mall Streetscape Manual Boundary, NCPC has focused attention on this area. The report should summarize the problem and the status of solutions.

Pennsylvania Avenue, NW: The section of Pennsylvania Avenue between the Treasury Building at 15th Street, NW on the west and the United States Capitol to the east is the most famous street section in Washington, DC, and certainly one of the most famous streets in the United States. It is also the most planned street in Washington. NCPC, in coordination with other federal and District agencies, is now undertaking the Pennsylvania Avenue Initiative. This report should provide some summary information on the current condition of this section of Pennsylvania Avenue, and the improvements which are being discussed.

National Mall Streets: There are a number of "radiating & edging streets" within the National Mall. These are very important in the use and perception of the National Mall and adjacent areas. There is a National Mall Master Plan. Does this new overall plan anticipate any changes to the National Mall Plan in terms of road alignment, lighting, landscape treatment or longer hours for the Smithsonian museums?

Graphic Question: The overall "Street Categories" map on page 9 shows, in solid black, the original National Gallery of Art building, the National Museum of Natural History, and the Smithsonian Castle. Why are the other Smithsonian museums and the East Building of the National Gallery of Art not shown? These are important "framing" buildings for the east section of the National Mall and are one of the main attractions of the National Mall.

Conclusion: The NCPC "Monumental Core Streetscape Framework & Lighting Policy" report is an important report. The Committee of 100 on the Federal City believes that adding some additional information and examples to the report, as indicated above, will make it more understandable and useful and that significant modifications are needed in the lighting policy

Thank you for considering our comments.

Sincerely,



Kirby Wining, Chair

cc:

National Capital Planning Commission

ATTN: Meghan Spigle Dowker

401 9th Street, Suite 500

Washington, DC, 20004

Comments from Interested Individuals

Name: Bernard H. Berne

Location: Arlington County, Virginia

The landscaping on and near streets in the Monumental Core should maximize plantings of native trees and meadow/pollinator habitats, especially those that will support disappearing populations of honeybees and monarch butterflies. The landscaping should minimize areas containing mowed grass and pavement. This will soften the overly urbanized appearance of much of the Monumental Core, will reduce stormwater runoff and have many other environmental benefits. Sidewalks should be narrowed except where studies show that wide sidewalks are needed. Native meadow/pollinator plants should replace pavement and mowed grass in street medians and utility strips, regardless of whether these are near paved plazas or parks containing mowed grass. It is more desirable to introduce and enhance natural features than it is to attain consistency with nearby parks and plazas that already contain expanses of mowed grass and/or pavement. These parks and plazas are environmentally un-sound.

All lighting should be directed downward, with shielding to prevent light pollution of surrounding buildings and the night sky. Lighting should be energy efficient, using LED and other new technologies that will replace less efficient ones.

The types, heights and appearances of streetlights should be diverse, rather than consistent. This would be similar to federal buildings and monuments within the monumental core. These buildings and monuments do not contain a uniform architectural style.

Name: Ali Carter

Location: Washington, DC

Thank you for opening your considerations on the monumental core streetscape framework and lighting policy to the public. As a proud DC resident, I am excited the NCPC is moving forward with updating its urban planning documents to reflect the history and dynamism of this beautiful area.

I support a plan that balances the desire for enough light for safety and decoration with public health, economic and environmental concerns over wasted energy and light. This is an opportunity to make an investment to slow and mitigate climate change. Above all, I recognize the need to minimize up light and indirect glare, while retaining the historical feel of the Washington Globe fixtures.

I urge the NCPC to favor lighting options that are dimmable and/or motion activated to reduce wasted lighting at night. All lighting should have a correlated color temperature of 2700 Kelvin maximum. That the NCPC is updating its plans at the same time as the District provides a unique opportunity to innovate on a grand scale. This provides a strong incentive for a design

challenge - driving innovation through the "carrot" of a large-scale contract. The lighting contract should be awarded to a firm that can meet the design criteria of 1) retaining the Washington Globe fixtures, while 2) directing light downwards to minimize up light and reduce indirect glare, and 3) incorporating dimmers, timers, or motion-sensors to reduce unnecessary light-hours.

Name: Joe Curtin

Location: Washington, DC

Hi there. I have comments all in the vein of reducing light pollution as part of this project:

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.

- Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that have a historic appearance but eliminate up-light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.

-All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength and a major factor in skyglow.

-Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.

-Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

Name: Daniela

Location: Washington

Please do not add MORE lighting to the city!

Our bedroom is right in front of a public light on 38R ST NW DC 20001.

Since we move to this home, I have suffered insomnia problems. I've tried melatonin, and a dark mask, but the light is SO strong that it just makes me awake no matter what.

Could you please change city lighting to motion-activated controls?

Please minimize emission of blue-wavelength light, it's so disturbing to all creatures, and it's just fake.

Thanks for your reply

Name: Andrew Erwin

Location: Denver, CO

Dear NCPC,

I am submitting comments in support of outdoor lighting that is climate-friendly and has minimal impact on the environment

Reduced light levels, consistent with traffic and pedestrian safety, would help capture the full benefit of new energy-efficient LED lights, avoiding unnecessary light that wastes energy and contributes to climate change.

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
- Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that have a historic appearance but eliminate up-light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.
- All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength.
- Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.
- Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

Please pursue an outdoor lighting plan that saves energy and limits environmental impacts.

Name: Frederick

Location: DC

I support these suggestions from our local dark sky organization and recommend they be considered in the future plans for our federal city.

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
 - Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that have a historic appearance but eliminate up light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.
 - All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength and a major factor in skyglow.
 - Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.
 - Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.
-

Name: Matthew Gravatt

Location: Washington, DC

The National Capital Planning Commission (NCPC) must ensure that any and all outdoor lighting subject to its policy is climate-friendly and has minimal impact on the environment, public health, and biological and ecological systems:

- Street lighting should, as a minimum, be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
- Washington Globe streetlights, which emit light in all directions, should be replaced with fixtures that have a historic appearance but eliminate up light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.

- All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength. This is a human and environmental health issue.
 - Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.
 - Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.
-

Name: Daniel Heflin

Location: Washington, DC

Please take the impact of light pollution seriously and limit light pointed upward as much as possible.

Thank you.

Name: Lawrence Martin

Location: Washington

I am writing to advocate for outdoor lighting in the streetscape and monumental core lighting that minimizes energy use and reduces upward lighting with resulting light pollution. Lighting objectives for the monumental core can be achieved that reduce environmental impacts.

Please adopt the following policies:

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
- Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that preserve the historic appearance but eliminate up light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.
- All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength.
- Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.
- Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

Name: Manuel T Ochoa, AICP

Location: Chevy Chase, MD

To Whom It May Concern,

Thank you for your thoughtful work to update the Streetscape Plan and Lighting Policy.

Overall, other than the Mall and select monuments lighting is comparatively poor compared to other capitals such as London, Paris, and Madrid. I appreciate the careful consideration to buildings along the National Mall, the Supreme Court, Union Station and other buildings that are considered Tier 1 but buildings or monuments in Tier 2 and Tier 3 often receive short shrift in the execution.

For example, the plan reinforces the 8th Street axis, but the actual lighting of the Archives, Market Square, and Portrait Gallery are weak and faint in comparison to how buildings are lit in other national capitals.

Another example is Freedom Plaza, a key public square along Pennsylvania Avenue. The buildings along the edges of the plaza such as National Theater and the Warner Theater are also relatively poorly lit and do not indicate the importance of Freedom Plaza to the Pennsylvania Avenue corridor. Lighting could also help revive this area as originally intended as part of the now defunct Pennsylvania Avenue Development Corporation and should be part of a greater plan to redesign Freedom Plaza which is sorely needed.

Other poorly lit buildings with architectural significance include the Post Office Building Tower, Smithsonian Castle, and Treasury. Although these buildings may not be in the First Tier, the lighting plan should consider the importance of buildings that help create a continuous rhythm of the street.

In the same vein, the National Park Service does a poor job lighting the large array of monumental sculptures throughout the city. Many of these sculptures are prominently located in circle and squares and are often poorly lit. These sculptures, such as the Dupont Circle Fountain, Scott Circle, Logan Circle should have better lighting to reinforce the vistas created by the L'Enfant Plan. Although mentioned in the plan, lighting is not well executed. I would invite Commission members to compare lumens along other monumental thoroughfares such as the Paseo de la Castellana in Madrid and along the Ring in Vienna.

I would also suggest that Commission staff reconsider some of the sculptures that are currently unlit altogether such as Sheridan Circle. The equestrian statue of General Sheridan is one of the finest sculptures in the city and yet it remains almost dark. I would recommend ensuring that the vista between Sheridan Circle and Dupont Circle should also be reinforced.

If you have questions regarding my comments, please contact me at mochoa@ochoaurbancollaborative.com.

Thank your consideration.

Manuel T. Ochoa, AICP
Principal & Founder
Ochoa Urban Collaborative

Name: Duilio Passariello
Location: Washington, DC

Good morning. Thanks for the presentation, the illumination of the Mall is a fascinating opportunity to create a magnificent nocturnal image of the capital. As I commented yesterday, here are the documents published by the IES your division should have. Additionally, I am sending a diagram taken from the IES handbook, a brochure that illustrates the different types of white LEDs already available, and in the topic of collimation as a way to address the Washington Globe - to turn this 20th-century design into a functional device in the 21st - a website page of a design company specialized in the matter. As you can see, it's possible to create a set of lighting solutions tailored to the area, to provide a more elegant solution for the most important, symbolic, historical, and political space in the nation.

This is the IES list, with recommendations for the US.

ANSI/IES RP-16-05

Technical memorandum on LEDs

ANSI/IES RP- 8-18

Recommended practice for design and maintenance

ANSI/IES DG - 21-15

Design Guide for Residential Street Lighting

IESNA TM-10-00

Obtrusive lighting (Urban Sky Glow and Light Trespass) in conjunction with Roadway Lighting

ANSI/IES DG - 28-15

Guide for selection, installation operation and maintenance of Roadway Lighting Control Systems

Name: Laura Porter

Location: Washington

Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.

■ Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that have a historic appearance but eliminate up light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.

■ All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength.

■ Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.

■ Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

Name: Ruth Robbins

Location: Chevy Chase, MD

Thank you for the presentation!

As a gateway to the city with a Federal property, we look forward to more specifications!

Ruth Robbins

Friends of Chevy Chase Circle

Name: Wayne Savage

Location: Washington, DC

Thank you for the opportunity to submit comments on a revised lighting policy for Washington, D.C.'s, iconic monumental core and surrounding streets.

As a starting point, it must be recognized that artificial light at night, especially its blue-wavelength component, is a pollutant with significant impacts on the environment. These impacts include:

- Harm to human health by altering our natural circadian rhythms.
- Interruption of wildlife behavior, including reproduction, foraging, and migration.
- Skyglow that obscures a view of the stars, which have enriched human cultural heritage for millennia and provide critical directional clues for some nocturnal animal species.

Reduced light levels in the monumental core and on surrounding streets, consistent with traffic and pedestrian safety, would help capture the full benefit of new energy-efficient LED lights while avoiding unnecessary and poorly directed light that wastes energy, harms human health, impacts wildlife, and exacerbates skyglow.

A large percentage of skyglow is caused by light reflected from the ground, so street lighting should be no brighter than the minimum levels recommended by the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved by dimming streetlights during off-peak hours (“light curfews”) and motion-activated controls.

All light fixtures should be full cutoff to eliminate up light and minimize horizontal light, which paradoxically contributes more to skyglow than light shining directly overhead.

While Washington Globe fixtures have “stood the test of time,” that is true only regarding their aesthetic design, not their optical properties. Much has been learned about light pollution since the Washington Globes were designed in the early years of the 20th Century. We now know that globe fixtures, emitting light promiscuously in all directions, are a major contributor to glare, light trespass, and skyglow. To mitigate these problems, Washington Globes should be eliminated in favor of a different design or retrofitted as full-cutoff fixtures to direct their light downward.

All LED lighting should have a correlated color temperature no greater than warm-white 2700 Kelvin to minimize emission of blue light, the most biologically active wavelength and a major factor in skyglow.

Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

The Potomac and Anacostia rivers are environmentally sensitive areas that need special attention. Bridges and adjacent streets should have the lowest ambient light levels consistent with traffic and pedestrian safety and be lit with warm-white LEDs in the 2200-Kelvin range (available by special order from several manufacturers) or phosphor-converted amber LEDs.

Thank you for considering these comments. The revised lighting policy for the monumental core and surrounding streets represents a once-in-a-generation opportunity to adopt best practices in lighting design that mitigate the harmful impacts of light pollution.

Wayne Savage
Washington, D.C.
March 13, 2020

Name: Alin Tolea
Location: Washington, DC

Hi,

I welcome the upcoming revision of outdoor lighting for DC's Monumental Core and surrounding areas. Please consider the following suggestions to deploy outdoor lighting with an eye on minimal impact on the environment and animal and human health:

- Street lighting should be no brighter than the minimum levels recommended by national traffic-safety authorities, such as the Illuminating Engineering Society. Further reductions in nighttime lighting should be achieved with light curfews and motion-activated controls.
- Washington Globe streetlights, which emit light promiscuously in all directions, should be replaced with fixtures that have a historic appearance but eliminate up light and horizontal light. If the Washington Globes are retained, they should be retrofitted to direct light downward or repurposed as street sculpture emitting a token amount of light.
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- Bridges across the Potomac and Anacostia rivers should have low ambient light levels, as both rivers are environmentally sensitive sites.
- Up-lighting of buildings, memorials, and other structures should be eliminated in favor of down-lighting.

Thank you for your consideration,

Name: Drake Wauters
Location: McLean, VA

Dear NCPD, Please do everything possible to support best night lighting methods championed by dark skies advocates and those knowledgeable about using 2,700K lighting or the like to help

wildlife thrive and to give our places at night a consistent and wonderful yet minimal illumination addressing way finding and safety. Fairfax County and Arlington County have learned much and are implementing better lighting policies and most actions are dramatically better than anything seen in the last 50 years. Please also advocate for the urgent replacement of high glare poor color fixtures such as what one finds today along M Street in Georgetown. Saving energy and wildlife and restoring the wondrous beauty of modest power warm lighting from the incandescent era will do wonders for our urban environs. Please encourage all agencies to do the same including the NPS. Thank You
