

**ENVIRONMENT AND ENERGY CONSERVATION COMMISSION**  
c/o Department of Environmental Services  
2100 Clarendon Blvd., Suite 705  
Arlington, VA 22201

January 29, 2019

The Honorable Christian Dorsey, Chair  
Arlington County Board  
2100 Clarendon Blvd.  
Arlington, VA 22201

Re: A Plan for Our Places and Spaces: Public Spaces Master Plan Update

Dear Chair Dorsey:

The Arlington County Environment and Energy Conservation Commission (E2C2) was pleased to provide representation on the Public Spaces Master Plan Update Advisory Committee. E2C2 would like to express our general support for the Public Spaces Master Plan Update, but also raise serious concerns about the population-based Level of Service (LOS) values that we believe should be withdrawn prior to plan adoption. Our public spaces, both programmed/active and unprogrammed/passive, are an essential part of our community, and an updated Public Spaces Master Plan is therefore a critical component of the County's Comprehensive Plan.

E2C2 would first like to commend the Department of Parks and Recreation staff for their diligent work over the past three years, and for the high level of communication and engagement that they maintained with the Advisory Committee during this time. We were particularly impressed with Staff's willingness to include novel concepts like "casual use spaces" into the draft, as well as their willingness to incorporate adjustments into subsequent drafts such as changes to the land acquisition policy and innovative design elements for privately-owned public spaces. E2C2 understands the difficulties faced by County Staff in balancing the diverse interests of the community, and recognizes that these tensions will only become more difficult with a growing population.

**A. Level of Service:** E2C2 continues to have serious concerns, however, regarding the population-based LOS values and worries that the conclusions drawn from this assessment (recommended LOS values and associated incremental amenity units needed) may be inaccurate and lead to unnecessary investments that run contrary to the needs and desires of Arlington County residents. Because planning processes can often be influenced by unconscious bias and the loudest community voices, the Advisory Committee originally embraced the LOS concept as a way to integrate quantitative measures into the planning process. The statistically valid residential needs survey gathers information about community needs and desires specific to Arlington County residents, while the current, peer, and national median LOS values document the amenities Arlington County currently provides to its residents relative to the rest of the country. However, County Staff has been unable to satisfactorily describe how these quantitative inputs were used in establishing the LOS values recommended in the Master Plan

update. By establishing recommended LOS for park amenities without clearly describing the methodology underlying the resulting values, particularly the role of the Arlington-specific statistically valid needs assessment survey, subjectivity may have unduly influenced those values. We also note that the Advisory Committee, which served as a sounding board throughout the three-year development of the PSMP Update, was not consulted during the actual development and selection of recommended LOS values. In short, E2C2 is concerned that the conclusions about “incremental units needed” in the next several decades may be inaccurate and lead to poor policy choices. At the very least, the confusion and uncertainty expressed by many members of the public concerning the LOS values suggests that staff should defer finalizing those values until additional public outreach is concluded.

Accordingly, E2C2 recommends that the “recommended LOS values” and “associated incremental amenity units needed” be removed from the PSMP Update. We recommend that these values be replaced with a goal to work collaboratively with a public advisory committee to develop an appropriate methodology and ultimately set these values in a transparent and community-supported way.

If these values are not removed, an alternative is to replace them with symbols to represent future increases in LOS (+), future decreases in LOS (-), or static LOS (=), at least until numeric values can be adequately determined. E2C2 believes that the use of these general categories would better reflect the lack of precision and subjectivity in the current LOS methodology. If the numeric values are not changed, we strongly recommend adding the following disclaimers that explain the limitations of these values:

1. A disclaimer should be added to Figure 27 to explain that adding synthetic turf and lighting to fields can meet LOS goals without constructing new fields. Because adding synthetic turf and lighting will not alter service levels provided by Arlington using the current LOS calculations, it is important to clarify that these service improvements can meet LOS goals.
2. A disclaimer should be added to Figure 27 stating that achieving the LOS of other amenities will not come at the expense of casual use spaces, which are severely disadvantaged by being the only amenity without a LOS.

E2C2 also recommends the following refinements and improvements to the population-based LOS section, prior to the determination and publication of recommended LOS values and associated incremental amenity units needed. These LOS improvements will better reflect both the amenities provided by the County, as well as the needs of the community.

1. Develop LOS for casual use spaces.
2. Adjust LOS units to reflect the ways in which amenities are used. Specifically, the relevant units for community gardens should be garden plots (not number of gardens), and the relevant units for fields should be available use-hours (not number of fields). Using the current system, expansions of existing gardens to include more plots and adding turf/lighting to fields will not be reflected as LOS improvements. Adjusting the units as suggested will enable Arlington to receive credit for service improvements within the LOS system, and reduce the risk of prioritizing investing in new amenities that are no longer needed due to prior service improvements.

3. Staff should consider including private amenities into LOS values. If amenities are public, they should be reflected in the LOS inventory. If the amenities are only open to residents, the number of residents can be removed from the amenity population in need because they are already served. For example, if residents of a private development have access to a private pool or dog run, they do not need to be serviced by a public version (in terms of calculating community need through LOS).
4. Provide a clear discussion of the methodology used in developing the recommended LOS values that clearly ties back to the various inputs. The methodology should be repeatable for future plan updates and/or in the case that any inputs change over time.
5. Include a full discussion of the Arlington County 2016 Parks and Recreation Needs Assessment Survey within the Final POPS Report. One of the principal goals of the POPS effort was to identify Arlington County residents' views concerning the park system, and their needs and desires for park amenities. Ultimately, the survey team collected data from nearly 1500 households in Arlington, from every section of the County, and with a 95% level of confidence that it represented an accurate view of County residents' opinions and desires regarding the park system. Although the "priority investment rating" derived from the survey is included as a factor in the LOS analysis, the survey results and rating system are not described in any detail and the categories selected by the staff — Low, Medium, and High — are not described, have changed markedly over time for various amenities, and appear to be unrelated to overall residents' opinions regarding park investment priorities.

The residential survey demonstrated very strong support for hiking trails, natural areas, and wildlife habitats and considerably less enthusiasm for amenities requiring extensive infrastructure and maintenance, such as athletic fields. Nearly 90% of households indicated a need for additional hiking trails and a similarly high percentage identified a pressing need for additional wildlife habitat and natural areas. Improvements to and investments in park natural areas and hiking were identified as priorities for a majority of respondents, while less than 15% of residents expressed a need to improve diamond or rectangular athletic fields and only 8% supported the construction of new athletic fields. These findings are not set forth even in summary fashion in the current draft, nor is the survey itself included even as an appendix, despite their relevance to how the County chooses among competing user groups and allocates tax revenues to fund our park improvements. In the absence of a thorough description and summary of the survey, the draft might be misconstrued to elevate investments in hardscape and active recreation facilities and de-emphasize the strong views of Arlington residents to prioritize natural areas and natural resource goals.

E2C2 has three additional significant concerns from the PSMP Update, not related to LOS:

**B. Casual Use Space:** Given the positive community and County Board response to "casual use spaces," the PSMP should include goals to: (1) continue to develop LOS for casual use spaces, and (2) include casual use spaces in park master plans. Existing PSMP goals related to these spaces should use stronger language to convey a commitment to protect and enhance these spaces. In addition, casual use spaces should be included in the next statistically valid survey.

**C. Green Space:** The current PSMP draft does not remedy E2C2's ongoing concerns about the continued loss of green spaces within the County that are available for impromptu uses. The green space/open space terms (which represent "land cover") have been replaced by a focus on specific terms that represent "land use." Although we appreciate incorporation of the novel

“casual use space” term, the inclusion of hardscaped plazas within the definition means that protection and expansion of casual use spaces within the County will not necessarily address our concerns. E2C2 therefore recommends a “land cover” designation to complement the casual use space “land use” designation. Specifically, we recommend either:

- separating hardscaped plazas and esplanades from the casual use space designation (giving them their own LOS),
- having separate terms and associated values for “casual use hardscapes” and “casual use green spaces,” or
- developing completely separate LOS and goals for land cover to complement the existing LOS and goals for land use (i.e., X% of public spaces will be green spaces as opposed to hardscaped).

**D. Synthetic Turf and Lighting:** In light of the County Board’s charge to the County Manager on September 16, 2017 and the repeated recommendations of E2C2 (see letter dated August 30, 2017) and others to take advantage of the hard work of the Williamsburg Lights Working Group, E2C2 is surprised that Appendix III dealing with field lighting shows no review or consideration of the “Key Considerations for Evaluating Potential Field Lighting” contained in the Williamsburg Lights Working Group’s Final Report. The consensus factors agreed to by all members of the Williamsburg Lights Working Group (including sports advocates) were identified by national and international lighting authorities as important when considering whether a specific site is appropriate for field lighting, and include the area’s overall state of development, existing levels of ambient light, topography, physical features to mitigate lighting effects, proximity of homes, transportation availability, and overall environmental impacts. The sole environmental factor mentioned in the draft — potential effects of field light construction activities on native trees larger than 12 inches of diameter — is only one of many potential adverse environmental effects of field lighting.

E2C2 recommends that the POPS draft be revised to incorporate the Williamsburg Lights Working Group consensus factors into its analysis of the “environmental context” for field lighting. In addition, E2C2 recommends that the draft be revised to require preparation of an environmental assessment (EA) for field lighting proposals. Such an EA would, as required by Arlington’s Regulation 4.4, evaluate the range of potential adverse effects from field lighting (not currently included in the POPS draft) including additional night-time noise, effects on wildlife, energy consumption, visual impacts, and effects on vehicular traffic and parking.

E2C2 also believes that Appendix III requires additional work to better explain and justify the chosen lighting standards. Currently, the draft provides a single light spill standard — 0.5 foot candles in “residential areas” — and contains no standard for glare. The current draft does not contain any source, explanation, or reference for the single proposed 0.5-foot candle standard. Moreover, it is not clear whether the standard is meant to apply to horizontal or vertical light spill, or both. It is also unclear what the draft means by “residential area,” since that is not a specific zoning classification and is undefined in the draft, and whether any light spill standard will be applied in “non-residential” areas, even though athletic field lighting can add very significantly to the setting’s activity level and affect overall quality of life.

In E2C2’s 2017 letter on the Williamsburg Lights, it recommended that sports lighting designs and standards for both light spill and glare at Arlington’s fields comply with those recommended

by professional engineering standards such as the Illuminating Engineering Society of North America's Standards for Sports and Recreational Area Lighting. In its letter dated September 13, 2017 to the County Board, the Planning Commission endorsed E2C2's recommendation that the POPS athletic field lighting guidelines incorporate standards and guidelines established by professional lighting authorities. Modern athletic field lighting standards typically establish different light spill and glare standards depending on many of the factors identified above — levels of ambient light, the overall statement of development of the area, proximity of homes, mitigating topological features etc.

E2C2 recommends that the POPS draft be revised to explain the source of and rationale for the light spill standard selected, its applicability to various settings in the County, and the absence of any standard for glare. E2C2 notes that previous iterations of the draft had proposed to comply with standards and guidelines established by professional lighting groups for both light spill and glare — the Illuminating Engineers, the International Dark Sky Association, and the LEED Sustainable Sites Credit for Light Pollution Reduction — and is unclear why that approach has been abandoned.

**Conclusion:** We thank you and County Staff for giving us the opportunity to express our thoughts on the PSMP Update. E2C2 asks the County Board to approve the Plan, subject to the removal of the “recommended LOS values” and “associated incremental amenity units needed,” and consideration of our additional concerns. We ask that the Board support Staff in both implementation and continued improvements post-adoption.

Sincerely,

A handwritten signature in black ink that reads "K. Michael Hanna". The signature is written in a cursive, flowing style.

Mike Hanna, Chair  
Environment and Energy Conservation Commission