June 28, 2021

Honorable Matt de Ferranti, Chair
Arlington County Board
Ellen M. Bozman Government Center
2100 Clarendon Blvd, Suite 300
Arlington, VA 22201

Re: FNRC budget recommendations

Dear Chair de Ferranti:

The Forestry and Natural Resources Commission appreciates the inclusion of funds
for two of the FNRC's top priorities in the proposed FY2022 budget: restoration of
funding for tree maintenance and the addition of a new urban forester position. Those
actions will greatly help in the effort to protect and enhance the County's urban forest
and natural environment, which is central to the quality of life of all Arlington citizens.

But given all the threats to the County's urban forest, the work of ensuring that the
tree canopy continues to deliver all of its manifold benefits is an ongoing challenge. To
ensure that Arlington County keeps its celebrated position as a "Tree City USA," FNRC
thus hopes that the County Board will be able to implement one more top priority
action, especially if more funding becomes available through COVID stimulus money
or unexpected savings in other parts of the budget.

That crucial action is conducting a scientifically rigorous tree canopy survey to inform
and strengthen planning now underway to update the Forestry and Natural Resources
Plan.

There is an urgent need for an updated tree canopy survey. Arlington is already
spending $391,000 to update the Forestry and Natural Resources Master Plan. But it
is virtually impossible to create a plan for the future without having detailed data on
the present. As many management experts will say, you can't manage what you can't
measure. To set goals for future canopy coverage in the County, and to make it
possible to measure progress towards those goals, we must have a comprehensive and
accurate survey of today's tree canopy coverage, along with other key data like the
percentage of the County covered with impervious surfaces.

A tree canopy survey is essential not only for preserving and improving Arlington's
vibrant urban forest and all the benefits that trees provide, from lowering energy bills
and intercepting stormwater to taming summer urban heat and enhancing biodiversity
and emotional well-being. It also is necessary for the County to tackle social
inequities: study after study shows that historically disadvantaged communities also

tend to be those with fewer trees and green spaces—and thus fewer benefits from those natural environments, including lowered air pollution and improved health. We need a new tree canopy survey to pinpoint those areas of the County with the greatest tree deficits, along with those with greatest tree losses, in order for the Master Plan to develop strategies to right past wrongs and improve the County's natural environment for all its citizens.

Yes, previous tree canopy surveys have been done—in 2008, 2011, and 2016. Those surveys showed a worrisome decline in the County's tree canopy coverage, from 43% in 2008 to 40% in 2011. And while the 2016 result (41%) seemed to be good news (and County officials even claimed an increase), the survey was inaccurate and the conclusion was not scientifically valid, explains Jarlath O'Neil-Dunne, director of the University of Vermont's Spatial Analysis Laboratory. "The only conclusion that can be drawn from this [2016] study is that the amount of change cannot be measured," O'Neil-Dunne says.

But here's the most crucial point: O'Neil-Dunne and others do agree that the 2016 survey can be used to document trends in *individual* neighborhoods (as defined by civic association boundaries) as long as the changes are large enough to be scientifically valid. And those trends are alarming. Only six of the 30 civic association areas do **not** show declines between 2008 and 2016. More important, some neighborhoods have seen their tree canopy coverage drop by double-digit percentages—up to 20%. Not surprisingly, those are the same neighborhoods that have experienced the greatest amounts of new McMansion infill development.

That's why a new survey, using the current state-of-the-art methods (aerial imagery combined with LIDAR), is so important. We need to urgently and precisely measure the current extent of the County's urban forest, and to pinpoint those areas and neighborhoods that are suffering from a lack of trees or from accelerating losses.

The FNRC has noted in its information-gathering role that several community organizations have recognized this critical need and have advocated for a new tree canopy survey. In March, the Arlington County Civic Federation passed a resolution calling for the County to "prepare an updated, comprehensive tree canopy and natural resources study that provides detailed information on relevant land cover categories including trees, vegetation, open greenspace, and impermeable surfaces. The study should include the capability for analysis of spatial imagery and be immediately applied to the development of the Forestry and Natural Resources Plan and used to monitor its effectiveness over time."

Alexandria and Fairfax Counties already do periodic high-quality tree canopy surveys. It is time for Arlington to do so as well, especially because the baseline information gained from the survey is essential for making the updated Master Plan more powerful and useful.

The FNRC is well aware that there are many demands on the County's budget and many worthy endeavors that deserve support. The FNRC also appreciates the County's attention to the needs of the tree canopy in the FY2022 budget. Yet the urban forest and natural environment is one area where relatively small additional investments

now will pay off many-fold for the County and for the quality of life for its residents, given the many benefits that the natural environment provides.

Thank you for the opportunity to share our views.

Sincerely,

Phil Klingelhofer, Chair
Forestry and Natural Resources Commission

Cc: Members, Arlington County Board
        Mark Schwartz, Arlington County Manager
        Jane Rudolph, Director, Department of Parks and Recreation