

Statement of James R. Lyons Executive Director Casey Trees Endowment Fund Regarding The "School Modernization Financing Act of 2005", Bill 16-250 Before the Committee on Finance and Revenue Jack Evans, Chair and Committee on Education, Libraries and Recreation

July 7, 2005

Kathy Patterson, Chair

Chairperson Evans and Chairperson Patterson and members of the Committees, thank you for the opportunity to testify before you today on Bill 16-250, the School Modernization Financing Act of 2005. I am Jim Lyons, Executive Director of the Casey Trees Endowment Fund.

We applaud your recognition of the need to reinvest in the DC public schools and, in so doing, the education of District youth. We especially thank the support of the eight Councilmembers who introduced and co-sponsored this legislation (i.e., Councilman Fenty, Gray, Brown, Mendelson, Schwartz, Graham, Catania and Barry).

Much as Casey Trees is committed to the future of the Nation's Capital through our tree planting and regreening efforts, the projects and improvements that can be made possible with the funding provided by this legislation are an important investment in the future well-being of our children.

My brief remarks today will focus on one aspect of the investments that we believe must be made in the city's school system. It is one of the capital improvements that is often overlooked or given only token consideration during design and construction. And, as such, it is also the first part of the budget that is cut when times are tight and resources are limited.



I am referring to the investment that we make in schoolyard greening – in planting trees, maintaining open space and recreation facilities, and in incorporating some elements of nature into the redesign and redevelopment of our education facilities. Often viewed as a luxury, I encourage you today to see the essential nature of this investment and to require that multi-year facilities plans provided for in Section 14 of the bill include schoolyard landscapes, trees, and associated resources as an essential element of these plans.

Why would I say this when so many schools are in need of improvements in their physical plant and infrastructure? It is because research demonstrates that the benefits that accrue to students, teachers and employees, as well as to the surrounding property owners and community are substantial.

Schoolyards account for a significant amount of the green space in many neighborhoods. These areas are important for recreation as well as for outdoor learning and can have a direct effect on the health and well being of all who work, learn and play there.

Research has shown that green schoolyards and outdoor learning can provide substantial academic, developmental and social benefits to children. A study conducted in 2000 by the National Environmental Education & Training Foundation found that integrating environment-based education into academic programs has the following effects:

- Reading scores improve, sometimes spectacularly.
- Math scores also improve.
- Students perform better in science and social studies.
- Students develop the ability to make connections and transfer their knowledge from familiar to unfamiliar contexts.
- Students learn to "do science" rather than just "learn about science."
- Classroom discipline problems decline.
- Every child has the opportunity to learn at a high level.¹

These findings are consistent with the 1998 State Education and Environment Roundtable (SEER) study – *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning*, by Dr. Gerald Lieberman and Linda Hoody. This study described the remarkable academic and behavioral results of environment-based education at 40 schools across 12 states.

In addition to bolstering students' performance on standardized measures of academic achievement across all disciplines – reading, writing, math, science, and social studies - environment-based education programs were demonstrated to reduce discipline and

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¹ Environment-based Education: Creating Higher Performance Schools and Students, The National Environmental Education & Training Foundation, 2000.

classroom management problems, increase engagement and enthusiasm for learning, and increase students' pride in and ownership of their accomplishments.²

Casey Trees Endowment Fund and many of our partners are playing an important role in greening school grounds and supporting outdoor learning in the District. The DC Schoolyard Greening Consortium (SGC), a partnership of teachers, non-profits, and city agencies has supported local greening efforts for school grounds though providing teacher trainings and linking teachers interested in utilizing their schoolyards to appropriate resources. Another local Consortium, the DC Environmental Education Consortium (DCEEC), is working to unify many of the organizations working on greening efforts and environmental education in the city in order to better serve students and teachers in the District.

Casey Trees is presently engaged in a number of programs and activities intended to help students and faculty understand the value of trees in their schoolyards and communities while learning important technology skills. This past school year we pioneered a program that we call *GreenTech*TM, that is designed to work with students in DC public high schools to help them understand the value of trees and their role in reducing harmful air pollutants and mitigating storm water runoff.

Casey Trees developed the high-tech, high-touch $GreenTech^{TM}$ program with American Forests to engage students in District public and charter schools in meaningful, career-oriented, hands-on science learning.

Using computer software, professional development for teachers and field exercises, $GreenTech^{TM}$ students map their schoolyard and analyze the economic, ecological and public health benefits of trees. Students and teachers alike gain experience with advanced technologies involved in the collection and analysis of the data and in modeling alternative ways to regreen their schoolyards to achieve added environmental benefits. That's the *high-tech* part.

The *high-touch* component comes when students apply their findings by developing and implementing a planting plan for their schoolyard or neighborhood site. Here they learn new skills that include tree identification and measurement, landscape design, tree planting and tree maintenance.

Five DC public schools were involved in *GreenTech*TM this past year. They include Banneker Senior High, Bell Multicultural High, and Cardozo Senior High in Ward 1; McKinley Technology High in Ward 5; and Wilson Senior High in Ward 3. Next year, we intend to add five new schools to the program.

A second program that we are initiating this week involves an inventory of trees on 51 DC public schools (DCPS) to assess the opportunity for planting, to identify maintenance

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² Closing the Achievement Gap, Executive Summary, Gerald Lieberman and Linda Hoody, State Education and Environment Roundtable, 1998.

issues and to facilitate maintenance planning and budgeting.

Working with the DC Public Schools' (DCPS) Office of Facilities Management (OFM) Casey Trees' college interns, 12 DC high school interns, and community volunteers will inventory trees on the grounds of 51 DCPS high and junior high schools, middle schools, and charter schools. Data collection will take place this month. The findings, which will be sent to the OFM and made available to each of the participating schools, will provide DCPS with information to maintain the existing tree canopy, remove dead trees, and identify opportunities to plant new ones. The tree inventory will also provide information to expand *Greentech*TM to other schools this fall.

We believe that it is important that students understand and appreciate the value of trees and a healthy and sustainable environment and that the places that they learn and play serve as models for this kind of redevelopment. We are delighted to work with the DC public schools and look forward to expanding our partnership in the future. A copy of the letter that I recently sent to DCPS Superintendent Dr. Janey regarding this inventory partnership is attached to my testimony.

To summarize, Casey Trees applauds the investment in public schools that the Council is considering in the context of the School Modernization Financing Act of 2005. We hope that the Council will see the wisdom in planning for and investing in schoolyards and in greening school grounds as a part of the school modernization effort. We believe that the benefits to students, faculty, employees and the surrounding community are substantial. But, most importantly, as research has shown, this is not simply an investment in beautification, but an investment that will improve learning, test scores, and student self-esteem.

As we know from our experiences in our own communities and neighborhoods, a greener streetscape, open spaces, and places to escape the anxiety of everyday life are important aspects of what we consider a quality life. Well, these same attributes are important in creating quality places to learn. Please don't permit these investments to be viewed as a luxury and treated as an afterthought in planning for our school's future. Instead, recognize that they are an essential part of every school's infrastructure and should be treated as such as we plan for and invest in DC schools and the children they serve.

Thank you for the opportunity to testify before you today.