## Memorandum

To Dr. Patrick Murphy, Superintendent, Arlington Public Schools

From Superintendent's Advisory Committee on Sustainability

Barbara Englehart, Chair and Kate Marshall, Vice Chair

Topic 2014 Recommendations to the Superintendent of Arlington County Public Schools

Date October 3, 2014

#### Introduction

In July 2013, the Superintendent's Advisory Committee on Sustainability (SACS) and its three subcommittees recommended 13 actions for enhancing sustainability in Arlington Public Schools (APS). Five of these recommendations were selected by the Superintendent for near-term action:

- 1. <u>Energy and Water Subcommittee 2013-EW-1</u>: Fund profitable energy-efficiency projects (with specific consideration of a green revolving loan fund or performance contracting).
- 2. <u>Energy and Water Subcommittee 2013-EW-4</u>: Reduce energy use related to lighting and appliances.
- 3. <u>Waste and Procurement Subcommittee 2013-WP-2</u>: Establish an approach to track waste generation at APS facilities- including all waste that is discarded (i.e., landfilled/incinerated and recycled).
- 4. <u>Curriculum and Outdoor Learning Subcommittee 2013-COL-3</u>: Establish Green Ribbon School Forum.
- 5. <u>Curriculum and Outdoor Learning Subcommittee 2013-COL-4</u>: *Correlate VA SOL goals with sustainability curriculum*.

In 2013-2014, the Superintendent's Advisory Committee on Sustainability explored approaches to support APS in pursuing these five near-term actions and identified additional emerging priorities for the Superintendent's consideration. This memorandum serves as the Committee's 2014 report to the Superintendent and is organized by subcommittee. It also elaborates on the resulting four follow-up recommendations for the Superintendent's consideration for the 2014 academic year:

- 1. <u>Energy and Water Subcommittee 2014-EW-1</u>: Use the Thomas Jefferson Middle School lighting retrofit project as the initial project in establishing a permanent Green Revolving Fund.
- 2. <u>Waste and Procurement Subcommittee 2014-WP-1:</u> Designate an APS liaison to work with Arlington County to develop and maintain its waste management contract.
- 3. Waste and Procurement Subcommittee 2014-WP-2:1) request from the County a method by which to track the amount of waste disposed of and diverted to recycling at each school facility; and 2) collaborate with the County to establish annual waste reduction targets.
- 4. <u>Curriculum and Outdoor Learning Subcommittee 2014-COL-1</u>: Create a road map for schools to be recognized as Green Ribbon schools, including the implementation of a short online survey and pilot positions of sustainability coordinators, as detailed in Appendix B.

We hope the Superintendent will pursue several of the 2014 recommendations for near-term action as well. Committee members are willing and interested to assist staff as needed to move forward on these recommendations.

Appendix A summarizes the Committee's 2014 membership. Appendix B contains additional details of recommendation 2014-COL-1 from the Curriculum and Outdoor Learning Subcommittee.

### **Energy and Water Subcommittee**

Update on Recommendation 2013-EW-1: Fund profitable energy-efficiency projects (with specific consideration of a green revolving loan fund or performance contracting).

Identifying opportunities to achieve this recommendation has been a key objective of the subcommittee this year. In support of that goal, the subcommittee engaged Steve Morgan of Clean Energy Solutions to discuss Energy Savings Performance Contracting (ESPC). Mr. Morgan's firm has been engaged by the State of Virginia to assist entities with finding innovative solutions for energy efficiency opportunities. Simultaneously, Cathy Lin and subcommittee members also conducted research and reached out to numerous parties to learn more about how APS might use ESPC as a tool to fund energy efficiency projects.

The subcommittee found that ESPC tends to be used for large, multi-million dollar projects and would require internal APS resources to manage and provide oversight to make sure APS is receiving the promised services and results. APS does not have the required internal resources for managing an ESPC project at this time given the current scope of capacity planning and expansion projects in process. As a result, the committee concluded that an ESPC solution was not currently viable for APS.

However, as recommended in our 2013 report, the committee strongly supports the idea of establishing a Green Revolving Fund (GRF) as an innovative, ongoing financing mechanism for energy/water saving projects. APS currently has an opportunity to establish such a fund using the high return, lighting retrofit project at Thomas Jefferson Middle School as the initial project for the Green Revolving Fund. APS is collaborating with Arlington County Government on this project and the County is looking at the possibility of partially funding this Green Revolving Fund seed project.

With the County's participation, the up-front financial commitment from APS is significantly reduced, providing a perfect opportunity to establish the fund and learn how to make it work on a high-impact project. Professional Green Revolving Fund guidance can be accessed via the Association for the Advancement of Sustainability in Higher Education web site at <a href="http://www.aashe.org/files/documents/resources/grf">http://www.aashe.org/files/documents/resources/grf</a> intro guide.pdf

<u>Resulting New Recommendation 2014-EW-1</u>: Use the Thomas Jefferson Middle School lighting retrofit project as the initial project in establishing a permanent Green Revolving Fund.

#### Update on Recommendation 2013-EW-4: Reduce energy use related to lighting and appliances.

Over the past year, APS made strides in reducing energy usage related to lighting and appliances. The IT department successfully rolled out automated software to shut school computers down at night. APS staff were instructed and reminded of procedures for turning off lights when areas are not in use. Committee members provided Cathy Lin sample staff appliance policies which will be used to craft an APS policy in the coming year.

#### Other EW Updates and Plans for 2015:

- SACS members worked with Arlingtonians for a Clean Environment to include 4 high schools students in the Arlington Energy Master volunteer program and will continue to enlarge the program during the 2014-2015 school year.
- 2. SACS supports the Superintendent's plan to expand Operation Rain Barrel to include all APS schools in 2015.
- 3. At the Superintendent's discretion, the subcommittee will support APS staff leads by advising and reviewing progress towards implementing the above recommendations.

#### **Waste and Procurement Subcommittee**

Update on Recommendation 2013-WP-2: Establish an approach to track waste generation at APS facilities- including waste that is discarded (i.e., landfilled/incinerated and recycled).

Given that Arlington County oversees the waste management contracts for the County and APS; the County has a leadership role on waste issues. In late 2013 and early 2014, Arlington County engaged in negotiations with its vendors to modify its waste and recycling contracts. The resulting contracts will directly influence the ability of APS to track its waste generation and to set and meet targets for waste reduction.

**Resulting New Recommendation 2014-WP-1:** Designate a liaison to work with Arlington County to develop and maintain its waste management contract.

Resulting New Recommendation 2014-WP-2: 1) request from the County a method by which to track the amount of waste disposed of and diverted to recycling at each school facility; and 2) collaborate with the County to establish annual waste reduction targets.

Update on Recommendation 2013-WP-3: Develop best practices for more sustainable procurement based on national standards.

In 2014-2015, the Committee will explore ways to work with Arlington County and the Student Health Advisory Board Subcommittee on Environmental Health and Asthma to improve the consideration of health and sustainability in APS procurement. The County expects to finalize an Environmentally Preferable Purchasing Policy and Plan by the end of the year. This will help identify specific opportunities for APS and the County to work together to support mutual health, environmental, and financial goals via purchasing.

#### Other WP Updates and Plans for 2015:

- 1. Given the County's leadership role on waste management, in 2015, the Committee will revisit the utility of the Waste and Procurement Subcommittee in its current form. If the Waste and Procurement Subcommittee continues, we reiterate our 2013 recommendation for APS to designate a representative on waste and/or procurement issues to work with SACS.
- 2. At the Superintendent's discretion, the subcommittee will support APS staff leads by advising and reviewing progress towards implementing the above recommendations.

### **Curriculum and Outdoor Learning Subcommittee**

#### Update on Recommendation 2013-COL-3: Establish Green Ribbon School Forum

The U.S. Department of Education Green Ribbon Schools is a national program with different award levels to recognize schools for their environmental and sustainability efforts (http://www2.ed.gov/programs/green-ribbon-schools/index.html).

To drive the transformation of APS toward sustainable, healthy school environments, we recommend APS develop a phased approach that builds toward a process through which APS can nominate its schools on a regular, iterative basis for the U.S. Green Ribbon Schools program. The approach aims to collect and disseminate information about school sustainability achievements and school-level sustainability champions among staff, students and parents. This will allow schools to learn from and support each other and SACS to support this community of practice. These efforts should enable APS to cultivate a successful "team" of green schools and their champions to promote learning, growing, and excellence in sustainability.

With the goal of helping APS schools attain U.S. Department of Education's Green Ribbon School status:

<u>Resulting New Recommendation 2014-COL-1</u>: Create a road map for APS schools to be recognized as Green Ribbon schools, including the implementation of a short online survey and pilot positions of sustainability coordinators, as detailed in Appendix B.

#### Update on Recommendation 2013-COL-4: Correlate VA SOL goals with sustainability curriculum.

The committee is working with Dat Le, Science Supervisor, who will be assisting K-12 teachers in identifying sustainability curriculum activities to correlate with the Virginia Science SOLs. Components related to sustainability education have already been identified. Teachers will collaborate and share sustainability lessons and activities during the Elementary Lead Science Teacher meetings and work on the alignment of these lessons to the Virginia Science SOLs. At the secondary level, teachers will meet during monthly countywide meetings by grade level and subject to collaborate and share exemplary lessons.

The subcommittee members met with several curriculum supervisors to learn more about how sustainability fits into their standards of learning and to explore possible areas for collaboration.

The Curriculum and Outdoor Learning subcommittee met with Cathy Hix, Social Studies Supervisor, to discuss Social Studies SOLs that are relevant to sustainability and ways we could collaborate. As a result, Cathy Hix had a teacher create one elementary and one secondary lesson plan applicable to the Social Studies SOLs the committee identified as being relevant to sustainability.

#### Other Curriculum and Outdoor Learning Updates and Plans for 2015:

1. At the Superintendent's discretion, the subcommittee will support APS staff lead(s) by advising and reviewing progress towards implementing the above recommendations.

# Appendix A: Superintendent's Advisory Committee on Sustainability Membership

#### **Appointed Members**

Diane Allard

Alison Kinn Bennett

Gabriel Calvo

Gregory D'Addario

Barbara Englehart

**Elenor Hodges** 

Paul Holland\*

**Gregory Lloyd** 

Kate Marshall

Kathy Molina

Stephen Offutt

Cynthia Palmer

Dan Redmond\*

Amy Sharp

Dann Sklarew\*\*

Debbie Spiliotopoulos\*\*

Mary Van Dyke

#### Liaisons

Jessie Lee Bauder,\* Student Liaison, HB Woodlawn Anna Kashmanian,\*\* Student Liaison, HB Woodlawn Joan Kelsch, County Liaison

#### Staff

Cathy Lin, Energy Manager Dat Le, Science Supervisor

#### **Committee Liaisons to Other Committees**

Advisory Council on School Facilities and Capital Programs: Gregory Lloyd
Building Level Planning Committee for new elementary school at Williamsburg Campus\*: Kate Marshall
Environment and Energy Conservation Commission (E2C2)\*\*: Kate Marshall

<sup>\*</sup> Term ended over summer 2014

<sup>\*\*</sup> Term began September 2014

# Appendix B: Proposed Schedule to Implement Recommendation 2014-COL-1 to Pursue Green Ribbon Schools Recognition

#### In 2014-2015:

- 1. Identify existing champions (or groups of champions) for sustainability among teachers, staff, students and parents at each APS school.
- 2. Identify exemplary sustainability lessons currently taught by teachers in Arlington Public Schools and reward the teachers and school communities in an annual public recognition ceremony before the School Board.
- 3. Work with sustainability champions to implement a short online survey of schools to collect contact information for individuals working on sustainability efforts in each school. The survey would request information from informal and formal organized groups (such as green or sustainability committees, student environmental clubs, garden committees) or individual staff that are taking actions relevant to sustainability (such as recycling coordinators, and teachers coordinating environmental volunteer activities).

Requested information would include contact information (point of contact, email), checked boxes of the type of sustainability actions the group or individual is involved with, and an optional brief description of the actions. The survey would provide a better understanding of the sustainability initiatives ongoing in each school, and provide contact information to SACS, which will be critical for implementing our recommendations (e.g., related to Green Ribbon schools, correlating SOLs to sustainability, and implementing outreach campaigns and behavior change related to water, energy, and waste).

- a. Note: The Healthy Community Action Team, an initiative of FIT Arlington through the Arlington County Parks and Recreation Department, has a goal of implementing a similar survey to focus on gardening activities. By combining these efforts, a simple survey can yield information that will be extremely beneficial for SACS, the Healthy Community Action Team, and the greater Arlington community.
- b. Outcomes and follow-on activities:
  - i. Create and share a database catalogue of these exemplary lessons on sustainability and post them on the APS website.
  - ii. Develop an APS Sustainability Contact List.
- 4. Create a public recognition program of exemplary sustainability lessons and of schools that make progress toward sustainability. (For instance, this could build upon Arlington Green Patriots Award program that has previously recognized two APS schools for their sustainability.)
  - a. Note: On May 13, the Curriculum and Outdoor Learning subcommittee met with Debbie DeFranco, Health and Physical Education Supervisor. Debbie shared that she has seen a great model in promoting recycling in the cafeteria at Glebe Elementary that she will explore getting more information about so that other schools might learn from it. Debbie also supported the creation of an annual recognition program for sustainability lessons. Since there are no lead teachers for health in the elementary grades, she would have challenging time collecting information about how teachers are incorporating

sustainability into their health lessons. However, she does know there are great lessons happening and her office could help promote the recognition program.

#### In 2015 and beyond:

- 5. Create the position of Sustainability Coordinator at one elementary, middle, and high school whose role would be to support Arlington Public Schools' stated sustainability goals. Arlington Public Schools already has Recycling Coordinators at each school, generally the head custodian. This new position would take the recycling responsibilities from the Recycling Coordinator would be paid at stipend and would report to the APS Energy Manager quarterly.
  - a. Note: APS currently provides athletic, academic and public relations stipends for a variety of different positions. We believe that a Sustainability Coordinator's work would be appropriately compensated at \$1,000, \$2,000, and \$3,000 annually for elementary, middle, and high school coordinators, respectively. This compensation is based on the Public Relations Liaison Stipend Pilot Program included in the FY15 budget and varies at the different school levels to reflect the size and complexity of the roles.
- 6. Develop a toolkit for school leaders to enable them to make progress toward becoming a certified Green Ribbon school.
  - a. Identify specific actions that schools can take to become certified Green Ribbon schools. These would include forums, training, workshops (such as the Green Schools National Network Conference), financial incentives, guidance, lessons and tools that will reward a school's progress toward becoming sustainable.
  - b. Provide explicit guidance and tools for school staff and community to enable them to make progress toward becoming Green Ribbon School "Charismatic Champions."