

# Memorandum

To Dr. Patrick Murphy, Superintendent, Arlington Public Schools  
From Superintendent's Advisory Committee on Sustainability  
Topic 2016 Annual Memorandum  
Date June 24, 2016

Since 2013, the Superintendent's Advisory Committee on Sustainability (SACS) has annually prepared recommendations for the Superintendent to advance sustainability in Arlington Public Schools (APS). SACS receives feedback on these recommendations and direction for additional research from the Superintendent through meetings held twice a year.

SACS operates through subcommittees. Each year, subcommittees are established based on SACS member expertise and interest and to align with the Superintendent's priorities for advancing sustainability in APS. In 2015-2016, SACS subcommittees included: 1) Awards and Recognition, 2) Sustainability Support Coordination, 3) Measurement, 4) Communication, 5) Energy and Water, and 6) Facilities and Transportation.

We present two recommendations and four issues for the Superintendent's consideration this year.

## Recommendations

- 2016-R-1: Support the Science Advisory Committee's proposal to create a Full-Time Sustainability and Outdoor Learning Coordinator
- 2016-R-2: Create Sustainability Liaison Pilot Program Stipend Positions

## Issues for Consideration

- 2016-Issue-1: Materials Management
- 2016-Issue-2: Facility Maintenance and Increased Energy Efficiency
- 2016-Issue-3: APS Sustainability in Social Media - #APSGreen
- 2016-Issue-4: School Siting and Transportation

Appendix A summarizes the Committee's 2015-2016 membership.

On April 21, 2016, SACS proudly presented the inaugural Green Champion Awards for exemplary sustainable actions around this year's theme of energy.

**Award ceremony** at the April 21, 2016, APS School Board Meeting



**Claremont Elementary**  
Stop Vehicle Idling Campaign



**Career Center**  
Student Solar Installation



**Discovery Elementary**  
Sustainable Transportation Initiative



## Recommendations

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### 2016-R-1: Support the Science Advisory Committee's proposal to create a *Full-Time Sustainability and Outdoor Learning Coordinator*

### 2016-R-2: Create *Sustainability Liaison Pilot Program Stipend Positions*

This year, with support from SACS, the Science Advisory Committee proposed the creation of a full-time Sustainability and Outdoor Learning Coordinator position.<sup>1</sup> For several years, SACS has recommended the creation of Sustainability Liaison Pilot Program Stipend Positions. We reiterated this recommendation in our December 18, 2015, memo. We were encouraged by your support for this position in our February 16, 2016, meeting and as requested by you, we provided a more detailed description of the liaison position in a March 2, 2016, memo, and a formal position description and other supporting documents in late May 2016.

Together, the Sustainability Coordinator and Stipend Positions would create a tiered and integrated approach to sustainability within our schools.

- The Coordinator position would play a critical role in supporting the commitment APS has made to sustainability in daily instruction and school operations. Some of the key activities the Coordinator would support include:
  - Designing, developing, implementing, budgeting, and evaluating APS sustainability and outdoor interdisciplinary programs
  - Enhancing volunteering and partnerships for sustainability and outdoor learning projects
  - Coordinating the work of school-based Sustainability Liaisons
  - Collaborating with the Department of Instruction and Student Services to develop opportunities for sustainability education to meet the needs of “the whole child”
  - Providing professional development for APS staff
  - Providing communication and outreach across APS and the greater Arlington community to support sustainability and outdoor science programs
  - Liaising with the Facilities and Operations Department for sustainability, energy, and outdoor classrooms
  - Providing the APS Energy Manager with support for energy and stormwater initiatives
- The Liaison position is designed to gather metrics about sustainable activities taking place within the schools. Some of the key activities the Sustainability Liaisons would be responsible for include:
  - Identifying sustainability-related activities occurring in his/her school
  - Collaborating and sharing information on sustainability activities
  - Fostering the implementation of sustainability activities
  - Supporting APS's commitment to sustainability with concentrated efforts

Metrics gathered by the liaison will help the Coordinator develop cross-curricular STEM activities and inter-school competitions at all grade levels. SACS believes this tiered approach will encourage graduates of APS to become long-term citizen scientists and will significantly enhance the understanding and implementation of sustainability activities in APS.

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<sup>1</sup> See memo from SACS on November 19, 2015.

## Issues for Consideration

### 2016-Issue-1: Materials Management

Everything that is discarded has value. Throwing materials in the trash is equivalent to throwing money in the trash. If we reduce the amount of waste generated and encourage recycling to recover value from discarded materials, we can save money, reduce pollution, reduce natural resource use, reduce water and energy consumption, mitigate climate change, and create green jobs.

Following up on related materials management recommendations from previous years (including Waste and Procurement Subcommittee 2013-WP-2, Waste and Procurement Subcommittee 2014-WP-1 and 2014-WP-1, and 2015-PMM-2), SACS recommends that APS, in parallel with Arlington County, pursue a goal of zero waste by 2038, by taking these actions:

1. Join the County in committing to a Zero Waste goal, then publish, advertise and reinforce the commitment. Designate APS staff to be involved in the upcoming public planning process for Zero Waste.
2. Weigh trash and recycling to establish progress toward a zero waste goal. During the re-compete of the current waste management contract (currently in process), ensure that the next contractor has the ability to, and is required to weigh trash and recycling before disposing of it.
3. Improve recycling in compliance with the new requirements in the County's Recycling Code:
  - a. Co-locate trash and recycling containers
  - b. Provide funding for consistent receptacles and signage at all APS facilities
  - c. Separate recyclable materials from trash
  - d. Educate students, employees and system users about recycling
  - e. Update and maintain the submitted Trash & Recycling Plan
4. Consider other best practices highlighted in the Community Zero Waste Roadmap (2015 EcoCycle, Inc.)

Washington Lee students and staff helped eliminate waste from 36,000 disposable plastic bottles in the first year of the new WL water bottle fillers.

By Door 5: Helped eliminate waste from 9,294 disposable plastic water bottles



2nd floor: Helped eliminate waste from 12,804 disposable plastic water bottles



Gym: Helped eliminate waste from 13,633 disposable plastic water bottles



## 2016-Issue-2: Facility Maintenance and Increased Energy Efficiency

Facility maintenance is crucial to existing APS facilities and will become more significant as APS continues to expand its square footage. The following recent and current projects will add an additional 178,000 square feet (SF) for which APS will be responsible for maintaining and operating:

- Discovery Elementary (9/2015 – 97,000 SF)<sup>i</sup>
- Ashlawn Elementary (12/2014 – 27,000 SF)<sup>ii</sup>
- McKinley Elementary (12/2016 – 27,000 SF)<sup>iii</sup>
- Abingdon Elementary (9/2017 – 27,000 SF)<sup>iv</sup>
- Stratford Site (9/2019 – 40,000 SF)<sup>v</sup>

Additionally, many other new buildings are in the planning stages, including: HB-Woodlawn Program at the Wilson Site (greater than 100,000 SF); a new elementary school at the Jefferson Site (120,000 SF proposed)<sup>vi</sup>; and 300 potential additional seats at an existing middle school<sup>vii</sup>. These facilities are investments and will need to be properly cared for. As a result, we reiterate our 2015 recommendation to maintain or increase the budget allocated to APS facility maintenance (Recommendation 2015-FT-1).

We recognize and support the Superintendent and School Board’s addition of two preventive maintenance HVAC technicians to the FY2017 budget to increase maintenance resources as the APS square footage grows.

We also support the addition of a HVAC maintenance contract for Discovery Elementary and Yorktown High<sup>viii</sup>, allowing APS employees to maintain current facilities and keep them operating efficiently. Facilities that are well maintained with regular preventative maintenance will save APS money in the long run as HVAC systems will last longer.

We suggest that the energy savings from these contracts be used to purchase additional preventative maintenance contracts for other facilities. An example of this comes from April 2016, when Discovery Elementary produced 10,000 kilowatt-hours of energy more than it used, which is similar to the amount of energy used by an average household in a year.<sup>ix</sup> The utility money APS saved because of Discovery’s net-zero energy usage could be used to fund other maintenance contracts or other sustainability related projects in the school system.

## 2016-Issue-3: APS Sustainability in Social Media - #APSGreen

We believe that APS could do more to educate its students, staff, faculty, and the community on the benefits of advancing sustainability in APS, and make more visible the many sustainable activities happening in APS. Sharing best practices across APS can catalyze more widespread adoption of those activities; educate students, staff and faculty to spur behavior change; and more strongly position APS as a sustainability leader.

A simple way to accomplish this is to implement an APS-wide sustainability social media campaign. Consistently using [#APSGreen](#) will allow APS staff, students, parents, and community members to easily share photos, stories, and thoughts about how Arlington is a leader among sustainable schools nationwide. The Public Relations Liaisons and proposed Sustainability Liaisons could help promote the campaigns, and use content for stories that boost Arlington’s reputation as a sustainable school leader.



We ask for your help to: 1) champion the campaign; 2) allow [#APSGreen](#) to be clearly posted on school signage, on websites, in emails, and in printed materials; 3) tweet and make Facebook posts at key junctures and activities throughout the year using the hashtag. Examples include: energy and cost saving measures in schools, PTA-sponsored garden days, walk and bike to school days, healthy lifestyles and eating, environmental education programs and curricula, and recycling.

We created a [SACS Twitter account \(@APS\\_Sustainable\)](#) and have started to use [#APSGreen](#) so that by Fall 2016, someone searching for the hashtag on Twitter or Facebook will see a collection of content. We will identify key dates, activities, and events, for formal campaigns, and identify specific events for which we hope you will participate.

#### **2016-Issue-4: School Siting and Transportation**

The location and size of our facilities—as well as the transportation systems used to bring students, faculty, and staff to our schools—has a major influence on community development patterns, traffic congestion, and how our students view transportation issues. In turn, these factors impact the quality of neighborhood air, water, land, and quality of life. These factors also impact the cost and time dedicated to moving people across the county to and from APS facilities.



Recognizing the importance of this issue, SACS introduced a subcommittee to consider APS facility and transportation issues in 2014-2015. Our June 26, 2015, memo summarized sustainability principles that should be considered in the planning process. We believe those principles remain critically important. In Spring 2016, SACS was asked to explore how APS moves people from place to place and areas for potential improvement. SACS has begun to explore this issue including:

- County, APS or school-specific policies, incentives, and initiatives affecting transportation. Potential topics include: accessibility of iRide; availability and cost of student parking at high schools; busing policy (i.e., service radius); and transportation impact of choice versus neighborhood schools.
- The use of events, partnerships, and recognition programs to enhance biking, walking, carpooling, and bus use.
- Consistency and content of outreach promoting the use of transit, biking, and walking. The ability to partner with Arlington County Commuter Services to take advantage of existing programs.



## Appendix A: SACS Membership

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SACS meets on the third Tuesday of each month, except for July and August. All meetings are open to the public. Members are appointed to two year terms and participate on a volunteer basis.

### Appointed Members

Alison Kinn Bennett	MUEP, Senior Advisor for Sustainable Products and Purchasing, U.S. Environmental Protection Agency
Stephanie Burns	Researcher, American Institutes for Research
Gregory D’Addario	First Grade Teacher, <a href="#">Long Branch Elementary School</a> , APS
Barbara Englehart	MBA, CPA, Business Sustainability and Management Consultant, <a href="#">Englehart Consulting</a>
Elenor Hodges	M.Ed., Executive Director, <a href="#">Arlingtonians for a Clean Environment</a>
Darin Liston	CDR USN (ret), MNR, MA National Security, Environmental Consultant, Marstel-Day, LLC
Gregory Lloyd	CCM, LEED AP BD+C
Kate Marshall	MURP, Corporate Sustainability Director, Director of Land & Sustainability Programs, <a href="#">CSRA</a>
Pam Nagurka	MNR, Teacher, Arlington Public Schools
Levi Novey	MS, Outreach & Education Specialist, International Affairs, U.S. Fish and Wildlife Service
Steve Offutt	LEED AP, MBA, Vice President - Sustainability, Green Diamond, LLC
Cynthia Palmer	JD, MPH (environmental and occupational health), Director, Pesticides Science and Regulation, <a href="#">American Bird Conservancy</a>
Dann Sklarew	Ph.D., Provost’s Coordinator of Sustainability Initiatives, George Mason University
Mary Van Dyke	Ph.D., DipArch

### Arlington County Liaison

Joan B. Kelsch	LEED AP BD+C, Green Building Program Manager, Arlington Initiative to Rethink Energy (AIRE), Arlington County Department of Environmental Services
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### Staff

Cathy Lin	CEM, APS Energy Manager
Dat Le	Ph.D., APS Science Supervisor

### Student Liaisons

Casey Donovan	Washington-Lee High School Class of 2017
Johanna Klein	Washington-Lee High School Class of 2017

### Liaisons to Other Committees

Gregory Lloyd	Advisory Council on School Facilities and Capital Programs
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Monthly APS School Garden Meet-Ups are hosted by Mary Van Dyke and Elenor Hodges



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- <sup>i</sup> Arlington Public Schools. (2015, January 5). New Elementary School on the Williamsburg Middle School Campus. Retrieved March 15, 2015, from Design and Construction: <http://apsva.us/Page/18930>
- <sup>ii</sup> Arlington Public Schools. (2015, February 26). Ashlawn Addition/Renovation. Retrieved March 15, 2015, from Design and Construction: <http://apsva.us/Page/18904>
- <sup>iii</sup> Arlington Public Schools. (2015, February 4). McKinley Addition/Renovation. Retrieved March 15, 2015, from Design and Construction: <http://apsva.us/Page/21234>
- <sup>iv</sup> Hord Coplan Macht. (2015, March 10). Concept Design Presentation to the Arlington School Board. Retrieved March 15, 2015, from March 19, 2015 School Board Meeting: [https://www.boarddocs.com/vsba/arlington/Board.nsf/files/9UMFQB7D8BE2/\\$file/G-2%20Abingdon%20Presentation.pdf](https://www.boarddocs.com/vsba/arlington/Board.nsf/files/9UMFQB7D8BE2/$file/G-2%20Abingdon%20Presentation.pdf) (Pages 6-7)
- <sup>v</sup> Arlington Public Schools. (2016, March 16). April 1, 2016 April 16, 2016 Presentation to PFRC, from Design and Construction: Stratford Middle School Project: <http://www.apsva.us/cms/lib2/VA01000586/Centricity/Domain/105/160316-PFRC%20presentation.pdf> (Page 18)
- <sup>vi</sup> Arlington Public Schools. (2014, October). October 2014 Proposed Building Schemes. Retrieved March 15, 2015, from Thomas Jefferson Working Group Updates: [http://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2014/10/TJSiteEval\\_Building-Schemes-from-VMDO-Architects-presented-on-101814.pdf](http://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2014/10/TJSiteEval_Building-Schemes-from-VMDO-Architects-presented-on-101814.pdf)
- <sup>vii</sup> Arlington Public Schools. (2015, January 29). January 29, 2015 H-B Woodlawn Townhall. Retrieved March 15, 2015, from New Construction for a School at the Wilson Site: [http://apsva.us/cms/lib2/VA01000586/Centricity/Domain/105/150129\\_WILS-TownMeeting\\_ForDistribution.pdf](http://apsva.us/cms/lib2/VA01000586/Centricity/Domain/105/150129_WILS-TownMeeting_ForDistribution.pdf) (Page 2)
- <sup>viii</sup> Arlington Public Schools. (2016, April 1). Superintendent's Proposed FY17 Budget. Retrieved from Budget and Finance: [http://www.apsva.us/cms/lib2/VA01000586/Centricity/Domain/99/Budget\\_FY2017\\_Proposed\\_Final\\_For\\_Web\\_rev.pdf](http://www.apsva.us/cms/lib2/VA01000586/Centricity/Domain/99/Budget_FY2017_Proposed_Final_For_Web_rev.pdf)
- <sup>ix</sup> Discovery Elementary School. (2016, May 13). Arlington Public Schools. <http://www.apsva.us/Domain/4352>