Memorandum

To Dr. Patrick Murphy, Superintendent, Arlington Public Schools From Superintendent's Advisory Committee on Sustainability

Topic 2019 Annual Memorandum

Date June 2019

Since 2013, the Superintendent's Advisory Committee on Sustainability (SACS) has prepared an annual memorandum with highlights and recommendations for the Superintendent to advance sustainability in Arlington Public Schools (APS). SACS receives feedback on these recommendations and direction from the Superintendent through meetings held twice each year. This year we focused on four areas of work that resulted in numerous recommendations for the Superintendent's consideration. Appendices to this document also include additional detailed information of interest.

Work Areas	Summary	Recommendations to Superintendent
2018-Work Area-1: Management of the APS Sustainability Liaison Program	APS provided stipends for Sustainability Liaisons in more than half of the county's schools (18 of 33). Liaisons led students in implementing projects that promoted a culture of sustainability across APS. This year they were required to complete at least one project focused on waste reduction / recycling in addition to completing a site waste assessment and school sustainability inventory.	2019-R-1: Continue to support and expand the Sustainability Liaison Program to provide a liaison in every school and additional APS staff support for sustainability efforts throughout the school system.
2018-Work Area-2: Strengthening the Liaison Program	SACS agreed to an action plan with six key priorities that would leverage visible opportunities and our skill sets to continue improving the impact and visibility of the liaison program.	 2019-R-2a: Provide deeper support to liaisons through training and certification opportunities, peer group exchanges, and access to tools and resources. 2019-R-2b: Find additional opportunities to spotlight the impact of the liaison program in media and in meetings, in collaboration with SACS.
2018-Work Area-3: Improving Recycling and Waste Reduction Efforts in APS	In addition to working with the liaisons to conduct their school site waste assessments, SACS hosted several meetings focused on improving waste reduction efforts at APS, and invited local school and community experts to participate.	2019-R-3a: Support the creation of a week in October to honor APS custodians for their important roles, and in particular as conservation champions. 2019-R-3b: Support the creation of detailed written guidelines and / or a toolkit about waste and recycling

		practices so all schools have information about best practices.
2019-Work Area-4: Publishing Reports on the Data We Collected	Even though SACS has previously collected data from the Sustainability Liaisons, this year with 18 schools participating and refined data collection tools, we had findings we wished to share with a broader audience in service of changing perceptions and providing ideas for actions that will galvanize sustainability in APS. Two reports were produced and will be made publically available to share the data and provide basic interpretation of their meaning.	2019-R-4: Help to make sure that APS staff, partners, and stakeholders are aware of these reports and the trends and realities that the data reflect.

2019-Work Area-1

Management of the APS Sustainability Liaison Program

2019-R-1: Continue to support and expand the Sustainability Liaison Program, with the goal of eventually having a liaison in each school and additional APS staff support for sustainability efforts throughout the school system.

We were encouraged that the Sustainability Liaison program continued to expand to more schools in its third year. Stipends were provided to support Sustainability Liaisons in eighteen schools, three more than the previous year. Participating schools included four secondary schools (Arlington Career Center, Arlington Community HS, Wakefield HS, Yorktown HS), one middle school (Jefferson), and thirteen elementary schools (Arlington Traditional, Ashlawn, Barrett, Claremont, Campbell, Discovery, Glebe, Jamestown, Long Branch, Nottingham, Oakridge, Patrick Henry, Tuckahoe). APS now supports Sustainability Liaisons in more than half of the county's 33 schools.

In the 2018-19 school year, Sustainability Liaisons were required to complete three primary projects: inventory the sustainability practices in their school, conduct a waste assessment, and implement at least one waste-related project. In addition, most Sustainability Liaisons completed several additional sustainability-related projects.

Arlington Career Center Rosemary Donaldson Millie Rosario

Composting

Aquaponics system Bird boxes Field Trip to Recycling Center



Arlington **Community High** School Sharon Ruggieri Elizabeth Minihan

Worm Bin / Composting Aquaponics Composting Research Project



Ashlawn Alison Sheahan

Recycling Raiders Club **Custodian Training** Class Presentations on Recycling **Food Bus Donation** to AFAC



Arlington **Traditional** Monica Hirschberg

Food Waste Reduction at Breakfast Student Council Help to Improve Recycling



Barrett Cara Doherty

Milk Carton Recycling Recycling Club



Campbell Jessica Berg

Composting Lessons on Value of Mass Transit 5th Grade Upcycled Sculptures



Claremont **Aracely Vance**

Launched Crayola **Recycling Program** Upcycled Plastic into Art and Mural Display Honoring Custodians as Recycling Champions



Discovery Maria Burke

Arlington Art Truck Collaboration + Action Art Environmental Education *Initiatives* Improving Schoolyard Habitat



Glebe Toni Wexler

Student Green Team Led Recycling and Environmental **Education Initiatives**



Jamestown Sheri Sharwarko

STEAM Recycled Catapult Contest Garden Cleanup Native Plant Propagation Earth Day Recycled Fashion Show Student Environmental Tweeting



Jefferson Kaila Bell

Schoolyard Habitat Improvements Compost

Revitalization



Yay!! The seeds came in for the Jefferson Native Pollinator Garden! Can't wait for the Gardening YJP kids to plant them ^-^ We'll start them in a grow stand then move them to the garden later in the season ₹₩#TJMSRocks #APSGreen #APSEarthDay



Long Branch Greg D'addario

Recycling Rangers



5:43 PM · 22 Apr 19 · Twitter for Andro

Nottingham Sarah Wysocki

Green Team led Waste Free Lunch Marker Recycling Black Out Day to Conserve Energy



Oakridge Sean Jones

Food donations to AFAC

New Food & **Pollinator Gardens**

Certified Schoolyard Habitat

Arlington Transportation Partners Platinum Status



Patrick Henry Susan Spranger

Energy Patrols Black Out Fridays Walk to School Wednesdays



Tuckahoe Margaret Egan

Green Team Marker Recycling and National Geographic Event Attendance Schoolyard Habitat Activities



Wakefield **Sean Tracy**

Staff and Student Recycling Perception Research Construction of **Outdoor Classroom**



Yorktown Ana Ratcliffe

Student Environmental Club Lunch Composting Stream Cleanup



In the 2018-2019 school year, SACS has continued to support the program by engaging with the liaisons through a buddy system, where a SACS committee member was paired with a Sustainability Liaison to provide support, guidance, and connections to deeper sustainability expertise. SACS also continued to refine the reportable metrics that would be used to capture the liaisons' work. This school year, the Sustainability Liaison program touched hundreds of students, added to the inventory of sustainability activities across APS, and generated energy among APS schools to improve their recycling and waste reduction efforts (more on this in the following sections). A report summarizing the accomplishments of the Sustainability Liaisons will be delivered in summer 2019.

SACS strongly recommends that APS continue to support and expand the Sustainability Liaison program, allowing APS to document and enhance school-based sustainability activities. In the 2019-2020 school year, SACS understands that the APS budget has allocated funding to continue the liaison program for at least eighteen schools. Our goal is for each school in APS to have a liaison, requiring funding for 13 additional stipends (approximately \$16,000). We also seek support for a greater number of APS staff to help provide unity and coordination for the program. Currently, in addition to the support of Dat Le and Cathy Lin, committee members have contributed a significant amount of time to help manage and guide the program. We anticipate that as the program continues to grow, more dedicated time from APS staff will be needed. Please see the attached one page timeline on the sustainability liaison program attached as an Appendix D to this document.

2019-Work Area-2 Strengthening the Liaison Program

2018-R-2a: Continue to find ways to show appreciation to the liaisons for their contributions, and increase incentives for their participation such as providing sustainability-focused training opportunities that can double as time toward recertification hours.

2018-R-2b: Find additional opportunities to spotlight the impact of the liaison program in media and in meetings, in collaboration with SACS.

This year the SACS Committee agreed that our focus should be on continuing to strengthen the liaison program through a variety of means. Committee leadership established two over-arching goals:

- 1. Implement a committee action plan that helps us to strengthen the sustainability liaison program and promote its value and the broader value of sustainability to the Arlington Public Schools community.
- 2. Investigate external funding opportunities to bolster the liaison program.

After brainstorming a long list of potential actions, the committee "dot voted" on those activities which we believed would be the most high-impact and that we would be willing to devote our time and energy to help achieve. The top ranking items would constitute our "action plan" for the year, in addition to investigating external funding opportunities to support the liaison program. These actions would provide us with a concrete means to help the liaison program grow, continuously improve, and thrive.

Among twenty five proposed actions, the following constituted the top five receiving votes. Below we summarize the progress that SACS has made to date in pursuing them, as well as our additional goal to investigate external funding opportunities to bolster the liaison program:

Top-Voted Actions for SACS	Progress Made / Next Steps
1. Honor APS custodians as conservation champions as part of our recycling and waste reduction initiatives.	We have made significant progress on this goal and will discuss it in detail in the next section of our report.
2. Give the Liaisons recognition for their service – e.g. give a certificate, give in front of an audience/assembly.	This year we decided that we would send a formal, partially customized letter to each participating school principal jointly from SACS and Dr. Murphy thanking the liaisons for their contributions to sustainability at their schools. We have not done this previously, and think this is a good first step in further acknowledging liaisons. We have also started to investigate if we can help provide a pathway for liaisons to get recertification hours for participating in future communities of practice / training opportunities related to their roles as sustainability liaisons, such as how to encourage better recycling behaviors at their schools. We request the

	support of the Superintendent's Office to pursue this goal in the coming year.
3. Provide a toolbox and repository of project ideas (particularly waste reduction and recycling projects) for liaisons.	We struggled to make progress on this goal until the end of the year, but now have we created a prototype for the type of content that will go in the toolbox that we will discuss further in the next section our report. In short, we anticipate that we can achieve important aspects of this project next year.
4. Give Green Action Awards to Sustainability Projects at Science Fair.	While the committee has given Green Action Awards in the past, for the 2 nd year in a row the committee could not agree on how to give them in a meaningful way that would also be time efficient. The timing of the science fair and the potential workload it created for members of the committee was also a factor that precluded this goal from being achieved. It will need to either be tabled or rethought entirely in the next year.
5. Try to get media coverage of the liaison program from a variety of news outlets including Washington Post, Arlington Magazine, Arlington Gazette, and Arlington Now.	The committee feels confident that we are close to having the tools we needed to do this well. To pitch members of the media to do stories about the program and its impact, we've been waiting to have several data reports completed to pair them with exciting examples of the projects liaisons have achieved. We anticipate pitching these outlets in the early fall of 2019 at the start of the new school year. We request the support of the Superintendent's Office to support these efforts and others to bolster awareness of the liaison program's successes.
Additional Priority Goal: Investigate external funding opportunities to bolster the liaison program.	A team of committee members spent a considerable amount of time exploring what a pitch to local foundations would look like that would support the work of the sustainability liaison program. Ultimately, it was agreed that the committee does not have sufficient command of the implications of what a large chunk of funding if received would mean administratively for APS, and how the committee could have a role in managing this workload given that it would almost certainly require more staff support from APS than is allocated at this time. Instead, the team came to the conclusion that it would be more helpful to create a list of small grant opportunities for liaisons that was relevant to their projects, and offer our

assistance to help them provide feedback on grant proposals in advance of submitting should they choose to in the future. We will continue to build out this resource and adapt it in the coming year for the liaisons based on their feedback.

2019-Work Area-3 Improving Recycling and Waste Reduction Efforts in APS

2019-R-3a: Support the creation of a week in October to honor APS custodians for their

important roles, and in particular as conservation champions.

2019-R-3b: Support the creation of detailed written guidelines about waste and recycling

practices so all schools have information about best practices.

Throughout the school year, SACS frequently discussed how recycling and waste reduction efforts in APS could be improved, and kept in touch with liaisons to hear about the successes and challenges they faced as they conducted their site waste assessments and implemented their projects. For our February SACS meeting, liaisons participated in a lively discussion about recycling and waste in APS with Kerm Towler, Assistant Manager of Plant Operations for APS, and Shani Kruljac, Arlington County Solid Waste Bureau Operations Manager.

Once the data were aggregated for site waste assessments from the seventeen schools who conducted them this quantitative data largely reflected what teachers were saying and observing. (Please note: Nottingham Elementary School had already completed a more comprehensive study in the spring of 2018 and was the one school that did not participate among this with liaisons.) While APS has done an excellent job providing bins to recycle and throw away trash in most locations throughout schools as well as signage, there is still large room for improvements. Data indicate that most recycling bins include a high percentage of what is actually trash and liquid contamination, and vice versa. Most trash bins contain a significant percentage of items that can be recycled and / or composted.

There is a strong sentiment among the liaisons and school staff that more education is needed among both students and teachers, and that the right interventions to change attitudes, perceptions, and behaviors toward recycling and waste reduction are still not entirely clear despite some positive signs of progress. Additional analysis of the data we collected is required to understand which schools are high performers and determine the factors which permit them to have higher levels of success.

One topic that has been frequently discussed by SACS, liaisons, and school staff is how important school custodial staff are to recycling efforts. While they are often not as appreciated as they should be, SACS sees tremendous value in both training them and showing appreciation to them for their efforts. As mentioned previously, finding a way to honor them as conservation champions received the most votes out of any action SACS members thought our committee should prioritize. SACS did some research and consequently met with School Board Member Tannia Talento to discuss our idea to create an APS day or week of recognition for custodians. She was very supportive of the concept and asked us to develop a short written proposal with some of key points to share more broadly with the School Board. We submitted it to her for consideration on June 18th. Our proposal is attached as Appendix B. We have proposed October 2nd as the most specific day to honor them to match with National Custodial Worker Day. We request the support of the Office of the Superintendent to make this goal a reality.

In addition to honoring custodians, we heard from liaisons that learning from the experiences of other schools in their efforts to advance waste reduction and recycling efforts was critical. Lessons don't need to be repeatedly learned school by school in isolation, even as schools often have different circumstances that influence waste reduction and recycling efforts. Additionally, we also heard that resistance from their fellow teachers, staff, and principals also sometimes influenced what was possible. APS waste and recycling policies were not well known or understood, and without pressure for individual schools to enforce policies from above, it was sometimes easy for staff to argue that it was too challenging to prioritize these kinds of changes or efforts without APS-wide support. Of course, this isn't to say that some staff and principals were not supportive of actions, just that this type of barrier was not unusual for potential game-changing actions such as changing how cafeterias operate to reduce food waste across the school system. Particularly with specific topics such as share tables, milk disposal and waste, and composting, the need for more clear guidance and accessible expertise was made clear by the liaisons. For this reason, SACS believes that creating a set of resources that facilitate an improved understanding of existing recycling and waste-related policies will be beneficial. We request the support of the Office of the Superintendent to work with us to help clarify, reinforce, and strengthen existing policies to have the most impact in the coming year. Additionally a toolkit with concrete, tested project ideas from APS liaisons will help to further advance sustainability goals with examples to follow. Appendix C shows a prototype of what part of this resource could look like, with an example from Claremont showing how they created a display to honor their custodians as recycling heroes. Finally, the liaisons mentioned in our final meeting of the year that it would be helpful to meet more often to not lose momentum (note: there were only three meetings held with the liaisons this school year).

2019-Work Area-4

Publishing Reports on the Data We Collected

2019-R-4: Help to make sure that APS staff, partners, and stakeholders are aware of these reports and the trends and realities that the data reflect.

SACS has asked for Sustainability Liaisons to complete a school inventory since the program's pilot year. The goal of this particular data collection effort is to better understand the breadth of sustainability activities taking place in APS. At the beginning and the end of each school year, Sustainability Liaisons document sustainability practices in their school related to water/stormwater, schoolyard habitats, sustainable food, energy, toxics, transportation, and consumption and waste. The approach and questions are similar to that used by the Montgomery County Public Schools School Energy and Recycling Team checklist, which is based on the U.S. Department of Education Green Ribbon School program guidance. In 2018-2019, 17 schools completed a Sustainability Inventory. The results provide a good snapshot of sustainability efforts at the schools. For the first time SACS plans to publish and distribute the data for this inventory in a short report.

The aforementioned school site waste assessment data has also been aggregated into a brief report and summary for publication and distribution. Both of these reports and data sets contain interesting findings and new information that will help trigger new actions to help schools individually and APS collectively to improve their sustainability efforts. SACS requests the assistance of the APS Superintendent to help disseminate these reports and their findings to staff, partners, and APS stakeholders. We will also use them as part of the informational packages in our pitches to media at the start of the upcoming school year.

Appendix A: SACS 2018-2019 Membership

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

Michael Cruse Resource Teacher, Arlington Career Center

Heather Dantzker MS, PhD, Owner and Principal, Dantzker Consulting, LLC

Barbara Englehart MBA, CPA, Financial Management Consultant, Englehart Consulting

Elenor Hodges M.Ed., Executive Director, <u>EcoAction Arlington</u>

Rachel Lang MS, PLT Program Coordinator, Sustainable Forestry Initiative, Inc.

Gregory Lloyd CCM, LEED AP BD+C, TRUE Advisor, Construction Manager, Wesley Housing

Development Corporation

Kate Marshall MURP, Real Estate Senior Manager, GDIT

Levi Novey MS, Outreach & Education Specialist, International Affairs, U.S. Fish and Wildlife

Service

Cynthia Palmer JD, MPH, Convener, Sports for the Earth

Robin Puttock LEED AP BD&C, RA, WELL AP Architect, Architecture Faculty at Catholic University

Andrew Soles BS, Financial Advisor, K Street Financial

Aracely Vance Science Teacher, Claremont Elementary School

Laura Watchman LEED AP Neighborhood Development, Principal, Watchman Consulting

Arlington County Liaison

Joan B. Kelsch LEED AP BD+C, Green Building Program Manager, Office of Sustainability and

Environmental Management, Arlington Department of Environmental Services

Staff

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

Student Liaisons

Rose Duane Yorktown High School

Class of 2019

Olivia Kennett Washington-Lee High School

Class of 2019

Liaisons to Other Committees

Gregory Lloyd Advisory Council on School Facilities and Capital Programs

Appendix B: Request to Add a Custodial Worker Appreciation Day / Week to APS Calendar

Memo

To: Arlington Public School Board

Attention: Tannia Talento, Vice Chair

From: Rachel Lang and Andrew Soles on behalf of the Superintendent's Advisory

Committee on Sustainability (SACS)

Date: June 17, 2019

Subject: Request to add a Custodial Worker Appreciation Day to the annual calendar

This memo is to request that the Arlington Public School Board approve the addition of a Custodial Worker Appreciation Day to the annual calendar.

On behalf of the Superintendent's Advisory Committee on Sustainability (SACS), we request that a Custodial Worker Appreciation Day be observed on October 2 each year, in recognition of services custodians provide to maintain building operations and to keep our buildings clean and enjoyable for students, staff, and visitors.

Arlington Public Schools (APS) has a long tradition of celebrating teachers, staff, and administration, which includes a Teacher and Staff Appreciation Week, Administrative Professionals Day, and Crossing Guard Appreciation Week. These recognition days are a meaningful way to remind the school community of the valuable contributions that our staff and administrators make to our dynamic learning environments and more importantly, to remind those individuals how much we appreciate their work. While custodial staff may be included in some of these appreciation programs on an ad-hoc basis, there is no system-wide recognition scheduled.

SACS is acutely aware of the contributions our custodial staff are making to our school. We recognize that the custodial team is integral to achieving APS and County sustainability goals, which are to integrate energy and environmental conservation into our daily operation with consideration of fiscal responsibility. When it comes to waste, recycling, and energy conservation, our custodial team are an irreplaceable force to ensuring that we achieve this in collaboration with students, faculty, staff, and other visitors to our buildings.

Given the importance of custodial staff to sustainability efforts at APS, we want to positively reinforce the value they bring to the schools which oftentimes goes unnoticed on a day to day basis. In some schools, like at Claremont Elementary, environmental clubs or individual teachers have recognized custodians for their support and execution of the recycling mandates that support sustainability efforts. However, we believe that a district-wide day of appreciation would ensure that our custodians are recognized at every APS building.

On national calendars, a National Custodial Worker Day is held on October 2, with the purpose of showing appreciation for custodial workers nationally. SACS frequently hear custodial staff blamed for ineffective recycling in our schools. However, our analysis suggests just the opposite.

The custodial staff at APS are often unrecognized champions for sustainability, making extra efforts to sort recycling and comply with complicated sorting and handling. We want to ensure that we honor and share the many stories of custodial staff that go the extra mile to help APS recycle, both through their influence and actions.

Through an APS-wide recognition of custodial staff, we will also impart an important message to our students that support services, such as custodial work, is just as important as the work of our principals, teachers, and administrative staff. Taking the time to recognize APS custodial staff will encourage students and staff to stop and remember that there are individuals in our community that take care of the messes we leave behind. Further, we believe it will help students and others to consider more deeply the impact of their own actions and relationship with waste and recycling.

Possible activities for APS Custodial Worker Appreciation Day

- APS distributes an email communication to recognize Custodial Worker Appreciation Day to students, parents, faculty, and staff
- PTA, school-wide, or individual classrooms/school groups create a bulletin board honoring and recognizing the custodial staff at the school
- PTA coordinates school-wide gifts to custodial staff, with special recognition for contribution to school sustainability goals.
- APS organizes and budgets for a lunch for custodial staff at each school; PTA groups fundraise to host an appreciation lunch at each school
- Student groups organize to follow a custodian for portions of the day, supporting clean up and daily operations as appropriate for student age and ability.
- SACS coordinates among APS Sustainability Liaisons to institute a Custodial Appreciation activity (this may occur in spring, closer to Earth Day).

Appendix C: Toolkit / Best Practices for Recycling and Waste Reduction Example

Idea: School Display Honoring Custodians as Recycling Heroes

Every school year, we debate and wonder about what should be featured in the main display case at the school entrance. This year was no different, and I knew that in December I was up and I would have to showcase what our school has accomplished with sustainability or student science work. Around the same time, I had received great news from the Sustainability Committee. Cathy mentioned that Claremont had the highest recycling rate for all APS schools at 43% in FY18. I was floored and felt a little



embarrassed about the pessimism surrounding recycling at our school. Every time the teachers, parents, and students discussed our recycling attempts, they were doubtful that the recycling was even making it to the right bins outside at the end of the day.

After carefully looking at the data that Levi provided me with, it turned out that we recycled about 66 lbs per student last year. I was so proud of our students and staff and I wanted to share the news with everyone. I wanted to tell them that recycling was really happening! The more I thought about how to approach it, I realized that our custodial staff deserved to be honored. After all, we had doubted them all of this time, and the data showed that they were doing their part. So I came up with the idea (I think SACS put a bug in my ear!) of featuring them as recycling heroes.

I shared the news in our staff newsletter and asked them to congratulate the custodians for their hard work and dedication. The recycling heroes faces lit up when they saw the display and their dedication to recycling efforts only increased as the entire school community recognized them. From my experience, this well deserved small gesture and celebration increased motivation and empowered our entire school to work together in our recycling efforts.

--- Aracely Vance, Claremont Elementary School

APS Sustainability Liaison Program Overview















2016-2017

- Pilot year of program
- •10 Schools with Liaisons
- Explored how we might provide more coordination and structure to sustainability initiatives in Arlington Public Schools

2017-2018

- Expanded to 15 Schools with Liaisons
- Added Committee Member support as "buddies" to liaisons
- Refined data collection effort to better demonstrate program impact and monitorthe breadth of sustainability activites happening at APS

2018-2019

- Expanded to 18 Schools with 20 Liaisons
- Mandated focus on waste reduction and recycling to stimulate APS-wide improvement
- Each school conducted a waste audit
- Created plan to honor APS custodians with a celebratory week as vital conservation champions

Future Goals

- Every school has a Liaison
- Secure additional APS staff support and / or establish an Office of Sustainability to fortify and coordinate the program
- Have additional funding for liaisons to accomplish projects
- Focus on other specific areas of sustainability to make advances in APS at scale (e.g. transporation, energy conservation, outdoor beautification)

The Arlington Public Schools (APS) Sustainability Liaison Program was created in 2016 to help bolster sustainability in APS such that students, staff, parents, and the communities at their schools gain environmental literacy and exhibit behaviors that reflect sustainability in their lives and the culture of the school. Principals nominate interested teachers to serve as the liaisons for their school. In exchange for completing a certain number of sustainability tasks and tasks and projects, teachers receive a small stipend.