

# Clean Air Partners Board Meeting

Education Program Updates

Elizabeth Spike

Education Program Manager

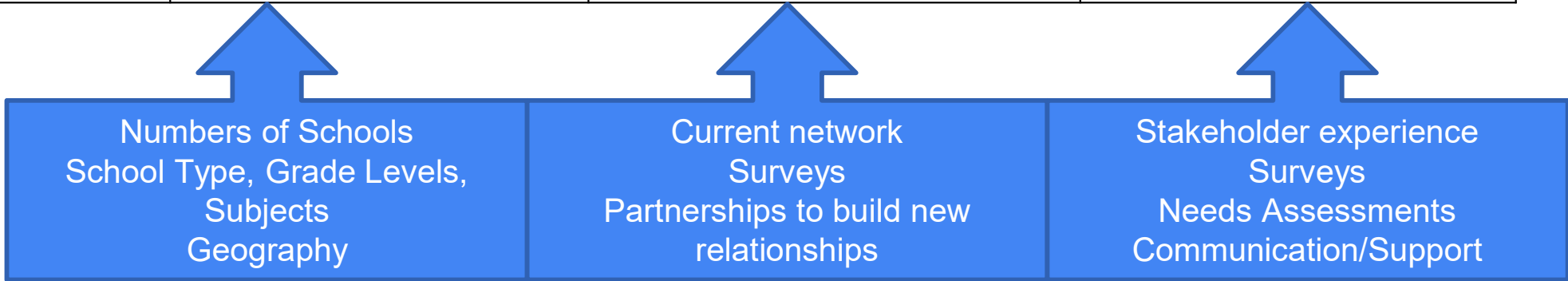
April 18, 2024



How can we educate students to transform awareness of air quality and climate change into personal actions that protect their communities in the Baltimore-Washington region?

<b>Objective:</b> Promote the use of <i>On the Air</i> curriculum. (FY 2023 Work Plan)			
<b>Activity</b>	Target CAP participating member school systems, charter, private, and independent schools in the District of Columbia, Maryland, and Northern Virginia.	Build relationships with stakeholders in public, charter, private and independent schools, school districts, and teachers of grades 5-12 across the BW region to create legacy and longevity for the CAP's Education Program.	Develop evaluation tools to conduct a needs assessment and gauge the extent of promoting the <i>On the Air</i> curriculum and <b>Train-The-Trainer</b> model in the BW region.

DATA / METRICS



# Promote the use of *On the Air* curriculum: Target CAP participating member school systems

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Local Conferences

Networks

Constant Contact  
Social Media  
Emails

Promote the  
use of  
*On the Air*  
curriculum:  
Building  
Relationships



VDOT/CAP online presentation February 7, 2024



**MAEOE** Maryland Association for Environmental  
& Outdoor Education

Exhibitor/Sponsor February 9-10, 2024

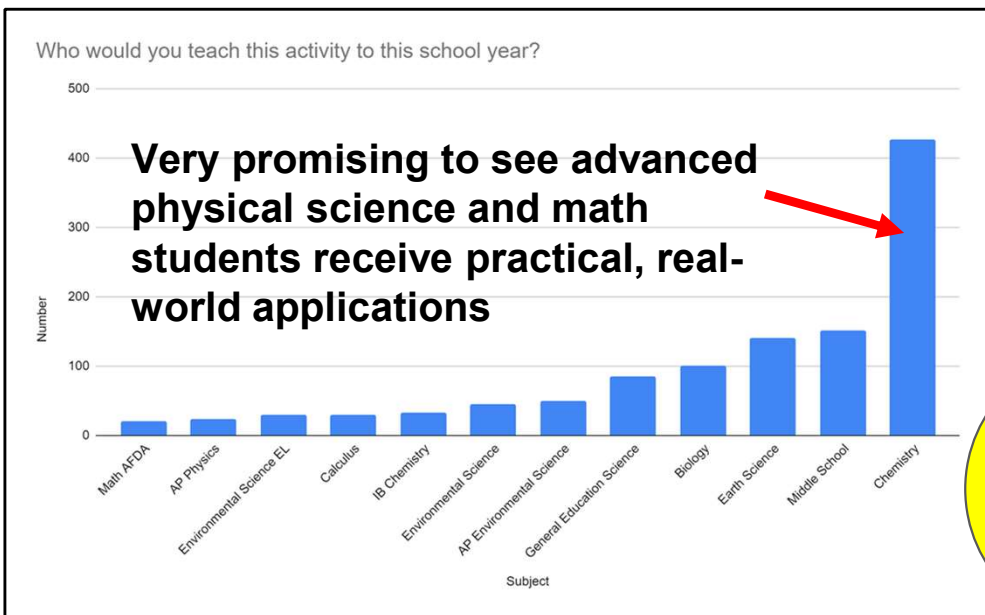
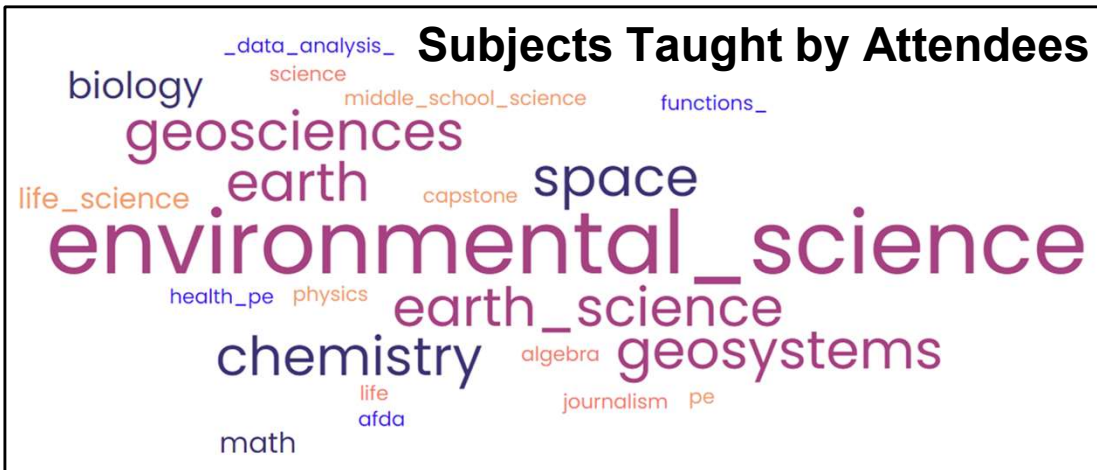


Presenter/Exhibitor/Sponsor February 22-24, 2024

February 7, 2024  
Arlington County Public Schools

How can we address air pollution related to traffic in Virginia?

24 responses



544 Students



February 9-10, 2024  
Maryland Association for Environmental and Outdoor Education



Clean Air Partners tabled.  
'Funny Pictures' broke the ice  
and  
made attendees smile!

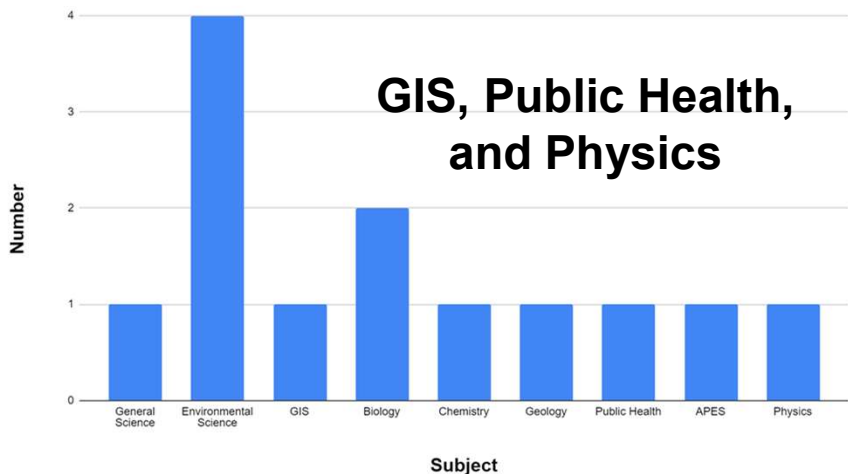


# February 23, 2024 Virginia Association for Environmental Education

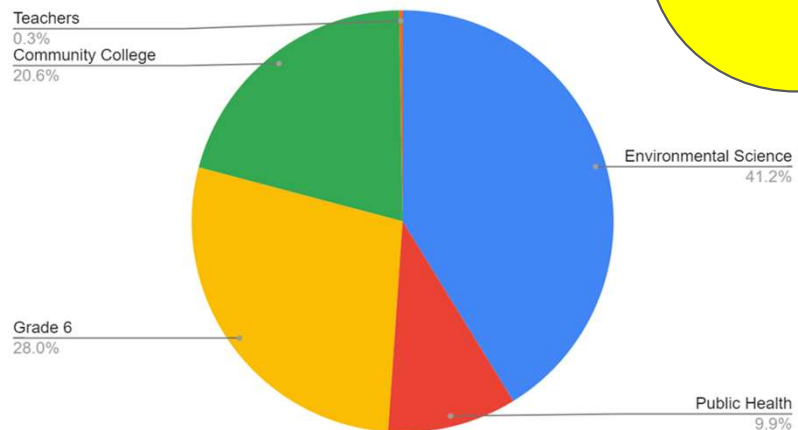


364 Students

Subjects Taught by VAAE Attendees-Formal and Non-Formal Educators from Elementary to Post-Secondary Levels



How many students could On the Air serve?



Promote the use of *On the Air* curriculum: Building Relationships

# Science Fairs



*3/2 The Effect of Ecological Region on Emissions from Wildfires*



*3/16 AirWise: A Deep Learning Framework for High-Resolution PM2.5 Prediction*

*A Novel Blockchain System and Low-Cost Device for Air Quality Aggregation*



*3/20 Nitrogen Content of Lichens as a Bioindicator of Data Center Impact on Air Quality*



*3/23 Unveiling the Green: Investigating Biodegradability and Unmasking Greenwashing in Everyday Materials*



Promote the  
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FCPS Teacher Spring PD April 2, 2024

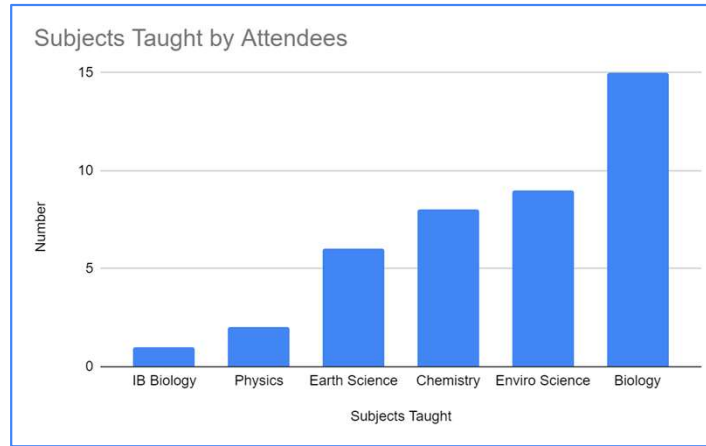
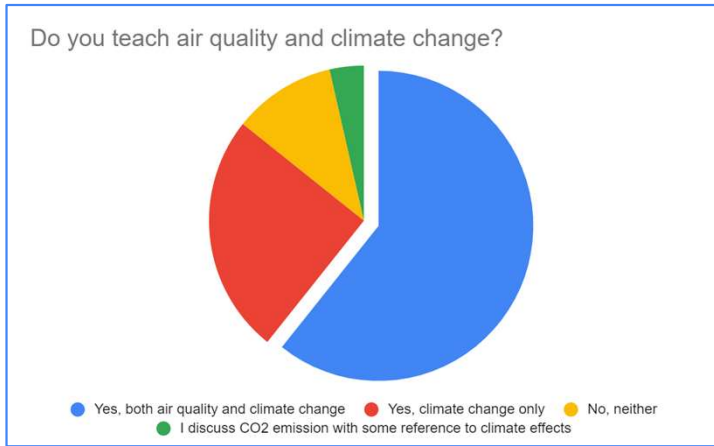


Air Beam training and loan April 2024



Coordination with Science and Social Science District Specialists  
for SY 24-25, thanks to one the Lead Teachers

# FCPS, VA Staff Development Day April 2, 2024

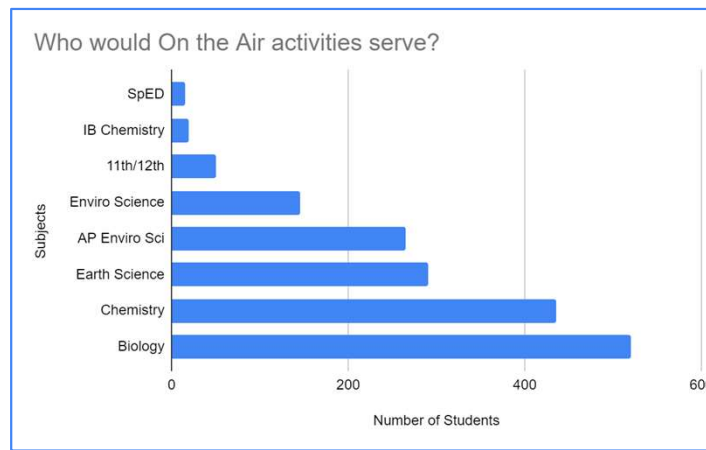
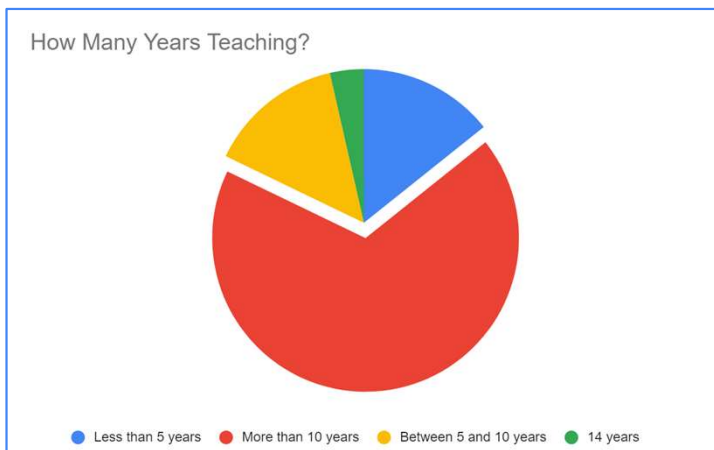


40+ High School Science Teachers in attendance

None have worked with Clean Air Partners

Four *On the Air* activities:

- Introducing Tati and Calvin
- AQI in the BW Region
- PM in the Community
- What's in our Airshed?



1739 Students

Promote the  
use of  
*On the Air*  
curriculum:  
Building  
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**MAEEOE** Maryland Association for Environmental  
& Outdoor Education



Attended MAEEOE's Project Learning Tree PD 4/6

Reviewed applications submitted to MAEEOE for Green School  
Designation April 2024



VIRGINIA DEPARTMENT OF  
**EDUCATION**



Virginia Department of Conservation and Recreation  
CONSERVE. PROTECT. ENJOY.

Applied to join summer SOL review committee for Earth Science  
Standards Mar/April 2024

Collaborate with VA DCR's EE website to promote *On the Air*  
March 2024

# Promote the use of *On the Air* curriculum: Building Relationships



Build Your Own STELLA-AQ



## NASA STELLA DIY Low-Cost Sensor



Local Teachers

Published 5 Lessons inspired by *On the Air*:

1. What's in our Air?
2. Where is the air pollution coming from and how does it affect us?
3. What does the air pollution do when it's in the air?
4. What are other communities doing about this problem?
5. What can 'we' do to improve air quality in our community?



**COLORADO**  
Department of Public  
Health & Environment

Promote the use of *On the Air* curriculum: Building Relationships



Resource Provider

- Curriculum
- LCS
- External Resources



Sponsorships

- Attune IOT \$1,000
- Leidos \$10,000



LTLC Summer Luncheon

Promote the  
use of  
*On the Air*  
curriculum:  
Feedback  
Tools



Updated feedback form with more insightful  
and actionable questions



Debrief Focus Group 3/20

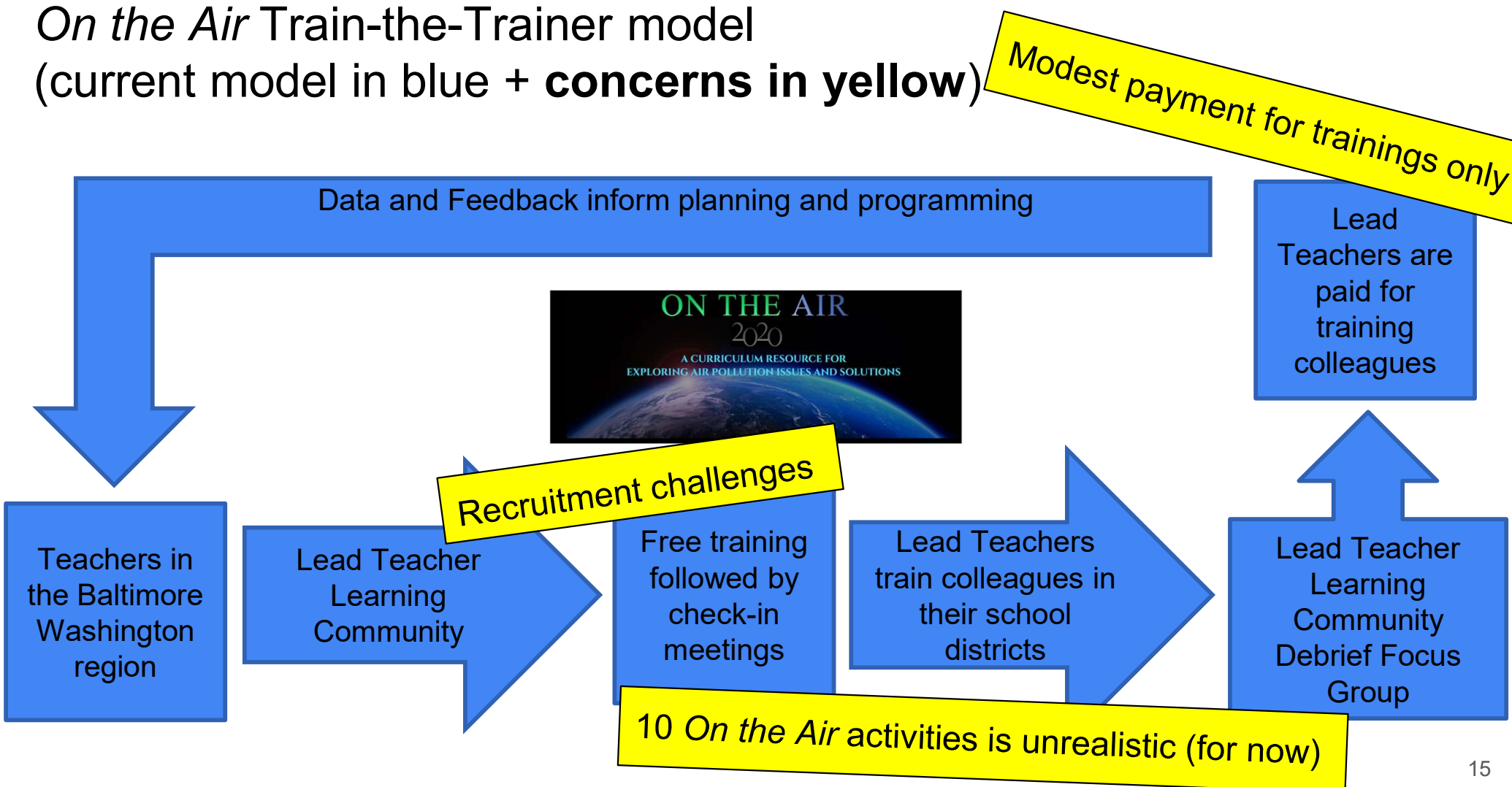
- Glows and Grows
- Suggestions for improvement



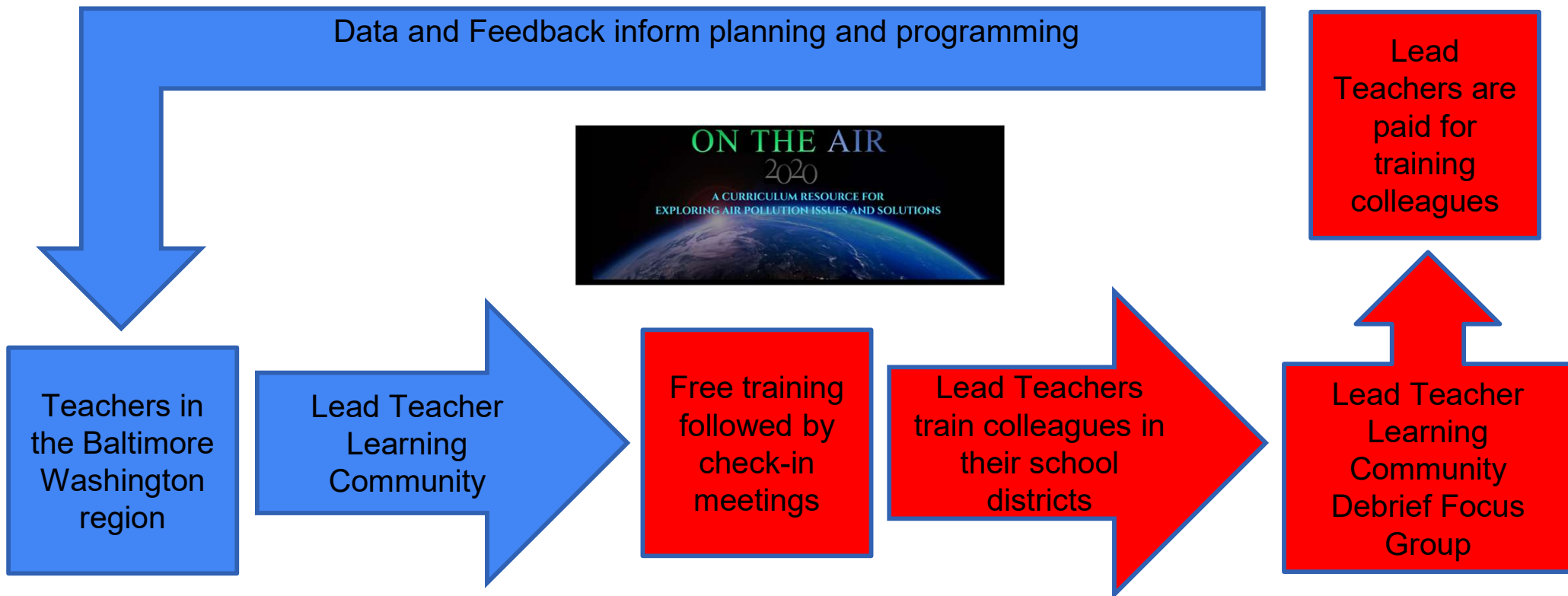
Proposed changes to Lead Teacher Learning  
Community structure—three concerns



# On the Air Train-the-Trainer model (current model in blue + **concerns in yellow**)



# *On the Air* Train-the-Trainer model (changes to red polygons)



**Goal:** recruit, train, and manage **10** Lead Teachers in SY24-25 to promote *On the Air* and collect feedback

<p>SY 23-24 \$5,000 for 10 Lead Teachers Spent \$500 so far Train-the-Trainer during the SY \$50/teacher training</p>	<p>SY 25-26 \$10,000 for 10 Lead Teachers \$5,000 CAP \$5,000 Leidos + \$1,000 Attune IOT Payment for summer training, pilot testing, training teachers, collecting feedback, and focus group</p>	<p>SY 25-26 \$5,000 balance from Leidos Details TBD</p>
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- ✓ 1-3 trainings are more realistic given recruitment challenges.
- ✓ Student feedback potential from pilot testing.
- ✓ The payment is more competitive, inclusive and respectful of limited teacher time.

# On the Horizon...

April 2024	May 2024	June 2024	July 2024	August/Sept 2024
<p>LTLC Information Session online 4/17</p> <p>PG County Student Environmental Alliance Bowie State U 4/29</p> <p>Submit conference proposals to AGU 4/24 and NAAEE 4/26</p>	<p>Howard County Conservancy Youth Climate Capstone 5/1</p> <p>LTLC Information Session online 5/23</p> <p>MD Green Schools Youth Summit Sandy Point SP 5/30</p>	<p>LTLC Summer Training online TBD (6/18-6/20)</p> <p>VA SOL Earth Science Curriculum Review Committee 6/25-6/27</p>	<p>Earth Educators Rendezvous Philadelphia, PA July 15-19</p> <p>LTLC Summer Training online TBD (7/30-8/1)</p>	<p>LTLC Summer Training online 8/6-8/8</p> <p>CEEJH EJ Symposium Education Panel and Teacher Training UMD 9/11-9/14</p>

# Questions?

Contact me at [espike@cleanairpartners.net](mailto:espike@cleanairpartners.net)

Let's partner. Interest in..

- attending the focus group
- attending the summer luncheon
- co-presenting
- joining a summer LTLC training—introduce yourself, your org, your commitment to AQ
- introducing me to your networks
- collaborating on grants and sponsorships
- introducing me to your organization