

ENVIRONMENTAL EDUCATION

October 6, 2020

Environmental Quality and Public Works Committee



LEXINGTON



Brief History of EE Contract: FY2007 thru FY2015

- EE/outreach contract first awarded FY2007; started with Waste Management (1115), business and school recycling
- Over the next few years, WM expanded to add litter, reusable bag campaign, composting, event recycling, apartment recycling
- Water Quality (stormwater: 4051; sanitary: 4002) was added in FY2010; apartment, business and schools
- Tasks continued to be added: Live Green Games, Green Business Challenge, energy efficiency initiatives, zero waste efforts, etc. (some funded with grants)



Brief History of EE Contract: FY2016 thru today

- Split contract into three components
 - Environmental Education
 - Business Outreach (Green Check)
 - Apartments/community



Environmental Education

- Outreach in class, camp or other defined group settings focused on students in (Pre)K-12





Brief History of EE Contract: FY2016 thru today

- Split contract into three components
 - **Environmental Education**
 - Business Outreach (Green Check)
 - Apartments/community
- Tightened up lessons; specific WQ & WM K-12 curriculum; align lessons with funds
- Add professional development for educators
- Better tracking
- Focus resources on students with fewer EE opportunities
 - Pay for buses, substitutes for public schools on related field trips



Current Efforts: COVID Response

- LexPlorers
- Virtual learning
 - One unit per 1st thru 5th grades
 - WQ & WM units for middle and high schools
 - Each includes minimum of three lessons plus a live, virtual field trip
 - Career panel for middle and high schools





Put on Hold by COVID

- Expanded teacher training
 - Separate Teachers' Academies for elementary teachers and middle/high school teachers
- Expanded, in-person field trips
- (Pilot) Middle school camp through community centers



Current Contract: Strengths and Weaknesses

Strengths

- Awesome educators
- Established relationships with many schools/teachers
- Expanded staff available to teach

Weaknesses

- Cost (\$62-\$73/hour)
- Disconnected from other public information and engagement efforts
- Adaptability/flexibility



Current Efforts, Outside EE Contract

- Deepening partnership with Natural Areas within Parks
- Building relationship with community centers
- Making EE resources available online
- Contract with KY Association for Environmental Education
 - Survey of K-12 Fayette County teachers
 - Survey of research on best practices
 - Look to successful program from around the country



Best Practices

- Professional development for teachers
- Co-teaching field trips
- Experiences (e.g., field trips) tied to pre/post-lessons
- On-going connection with students
- Career connections
- Assessment



Preliminary Survey Results

- 467 K-12 Fayette County teachers, public or private
- Representing over 68 schools
- 92.3 % public school teachers
- Questions
 - Characteristics of quality partner programs
 - Field trips
 - Experience working with contractor



Preliminary Survey Results: Program Characteristics

- 92.1% of respondents either agreed or strongly agreed with the following statement: Having people from outside agencies teach in the classroom can be a powerful tool for engaging my students.
- 96.8% of respondents either agreed or strongly agreed with the following statement: Students benefit from being exposed to people with a variety of professional backgrounds.



Preliminary Survey Results: Program Characteristics

- 96.8% of respondents either agreed or strongly agreed with the following statement: Field trips can be an effective way to reinforce classroom-based lessons
- 95.7% of respondents either agreed or strongly agreed with the following statement: Related lessons provided **before** a field trip can make a field trip experience more successful.
- 93.7% of respondents either agreed or strongly agreed with the following statement: Related lessons provided **after** a field trip can make a field trip experience more successful.

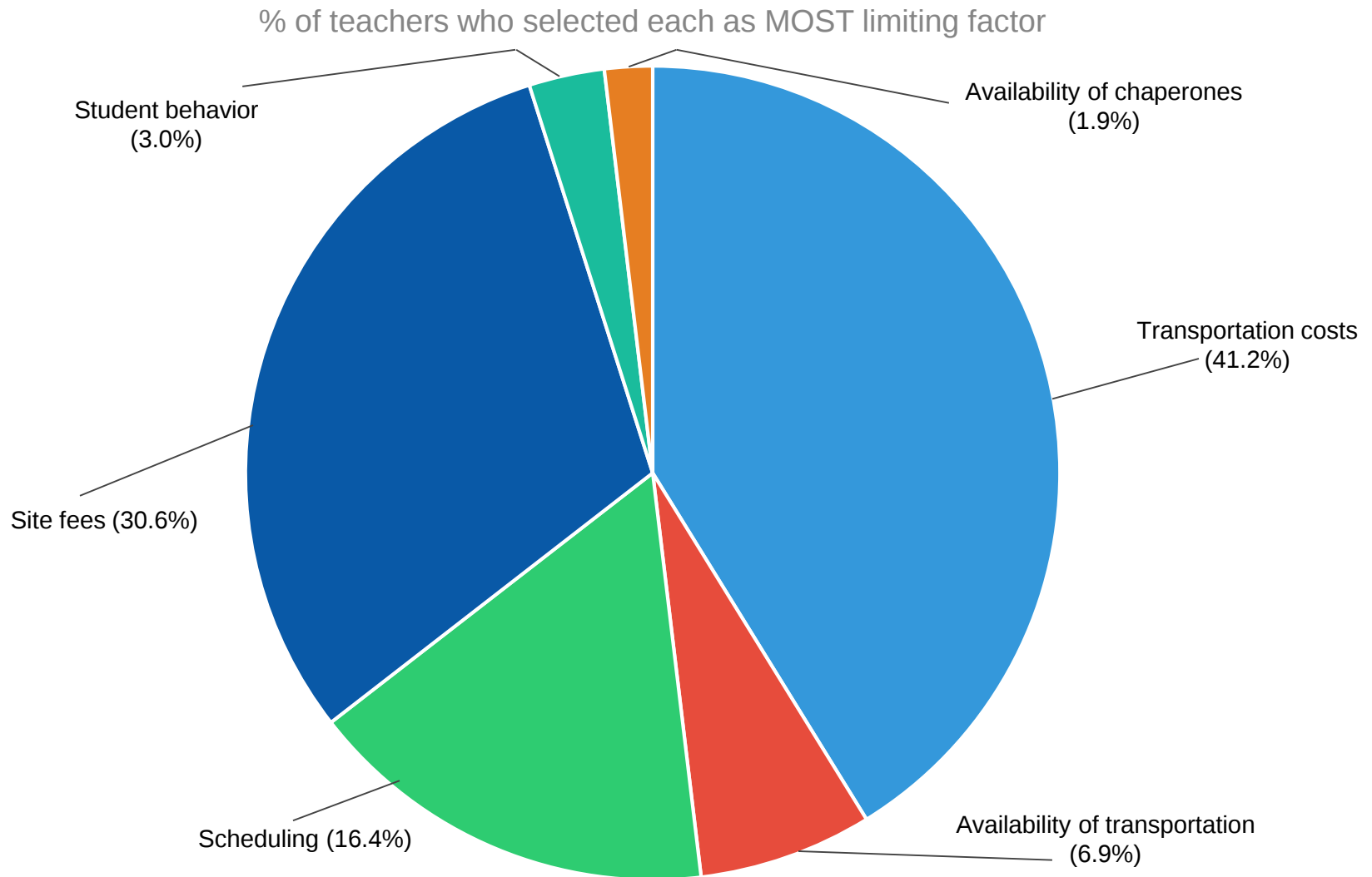


Preliminary Survey Results: Program Characteristics

Characteristic	% who selected Important or Very Important on a 6-point scale
Professional development for teachers	64.1
Trained guest educators	86.7
Field trips	77.8
Student interaction with professionals working in fields related to program content	92.0
Standards-based content	78.3
Student-led projects	85.2
Opportunities for Title I students	93.5
Materials available in multiple languages	87.5
Job shadowing/internships for middle and high school students	84.5/87.1



Preliminary Survey Results: Field Trips





Preliminary Survey Results: Contractor Experience

- 16.9% had worked with our EE contractor
- 95.5% of those respondents either agreed or strongly agreed with the following statement: The students better understand their impact on the environment as a result of the lesson.
- 60.6% of those respondents either agreed or strongly agreed with the following statement: My students' behavior has changed to be more consistent with what they learned.
- 72.7% of those respondents either agreed or strongly agreed with the following statement: I would feel comfortable presenting the lesson the educator taught to my students.



Next Steps

- Hire Environmental Education Coordinator
 - Part-time CERS, budget neutral
- Hire AmeriCorps Member
 - Budget neutral
- Restructure EE contract
 - EQPW develops curriculum/EE framework and leads PD for classroom teachers (time intensive components)
 - Contractors carry out classroom lessons
 - Better control costs
- Continue to build community relationships to better reach, educate and engage a diversity of students, especially those with less access to EE opportunities

Questions?



LEXINGTON