

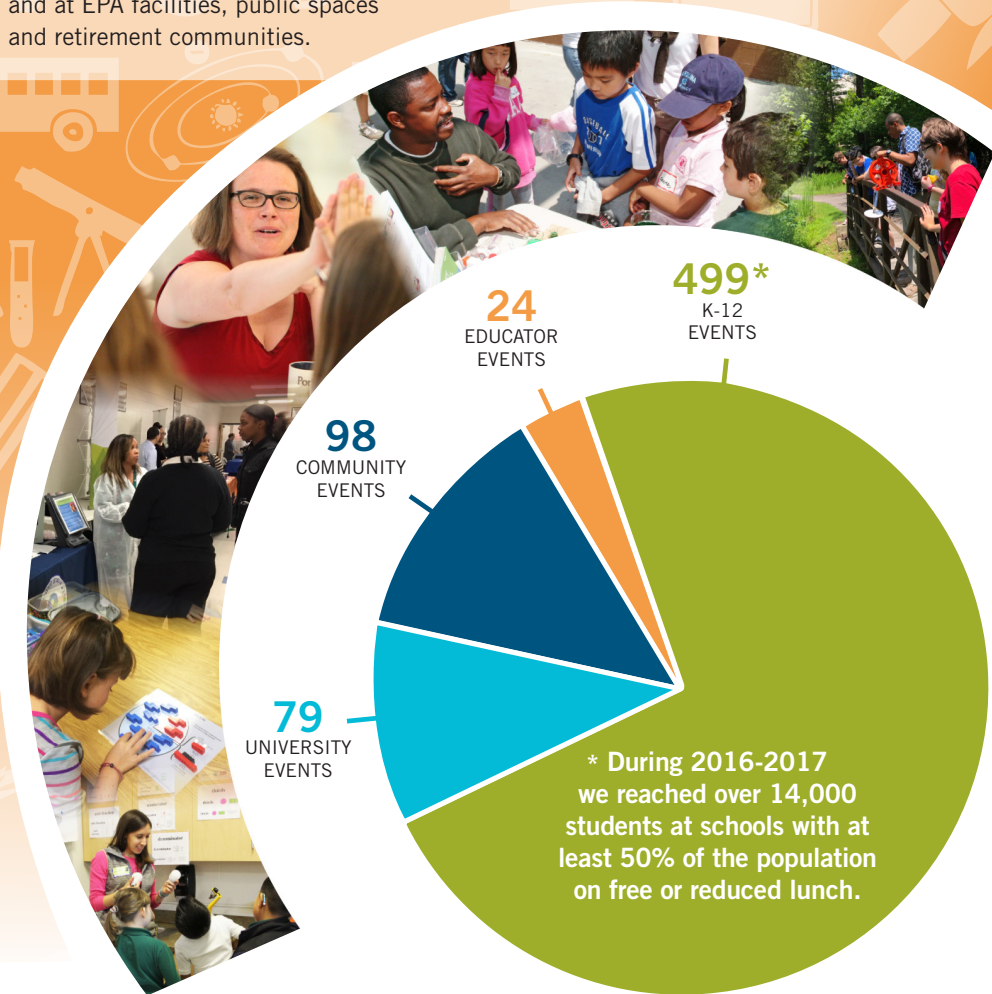


# EPA'S COMMUNITY ENGAGEMENT & STEM EDUCATION PROGRAM IN RESEARCH TRIANGLE PARK (RTP, N.C.)

EPA's Community Engagement and Science, Technology Engineering and Math (STEM) Education Program supports EPA's mission to protect human health and the environment by increasing awareness, providing education, and bringing EPA science directly to the public, especially K-12 students in low-income populations. Since 2004, the program has offered guest speakers, judges at science competitions, and interactive booths at community events, engaged in impactful community partnerships and provided hands-on educational programming for students and teachers in central N.C. and beyond.

## ENGAGEMENT BY AUDIENCE: 2016-2017

During 2016-2017, our program reached over 52,130 students, educators and community members through 758 events held in classrooms, on university campuses, and at EPA facilities, public spaces and retirement communities.



## INCLUSIVE AND DIVERSE

Most of our programming happens in schools where at least 50% of students are on free or reduced lunch. We strive to close the opportunity gap by inspiring all students to consider STEM careers, knowing that a diverse workforce is essential to addressing future environmental challenges.

## HANDS-ON SCIENCE

We develop hands-on activities, such as the [GENERATE](#) energy game and [Connecting Ecosystems & Human Health](#) to share EPA science directly with the public. In 2016-2017, we introduced over 400 teachers to the GENERATE game through trainings and online materials. All our activities align with N.C. Essential Standards for K-12 science to help students make connections with knowledge gained in the classroom.

## EMPLOYEE ENGAGEMENT

During 2016-2017, over 520 EPA-RTP employees spent more than 3,280 hours educating and inspiring students with their knowledge of and passion for science and protecting human health and the environment, including significant one-on-one time through 58 K-12 mentoring sessions.

## EPA STEWARDSHIP

Our program's activities help EPA-RTP maintain its certification at the "steward" level as part of the [N.C. Environmental Stewardship Initiative \(ESI\)](#). ESI's mission is to assist organizations in reducing their environmental impacts beyond regulatory requirements. Members at the steward level must implement a process of communicating with the local community about program activities.

## COMMUNITY PARTNERS

We partner with schools and other organizations including Citizen Schools, US2020, STEM in the Park, NC Science Festival, East Durham Children's Initiative and the Research Triangle Cleantech Cluster to promote STEM and environmental education. Our employees staff community events such as career days and festivals, judge science competitions, and participate on advisory councils.

## TEACHER TRAINING

Through participation in local, state and national education conferences, we offer K-12 trainings that provide teachers with hands-on STEM resources for their classrooms, and share our model with other agencies and businesses. In 2016-2017, we hosted teachers from both Wake and Durham County Public Schools for an exploration of EPA science and exposure to career options for their students.

## EPA Science Day at Y.E. Smith Elementary

Since 2004, we've led an annual EPA Science Day at Y.E. Smith Elementary, a Title 1 school in Durham, NC. EPA Science Day brings together more than 20 scientists from EPA and the community and provides students exposure to hands-on science as well as the opportunity to interact with STEM professionals. EPA employees also participate in other STEM events at the school as requested.

“ I didn't realize that protecting the environment meant protecting the people that I love. ”

— STUDENT FROM DURHAM, N.C.

“ During Science Day, our 350 students interact with EPA scientists and engineers and learn about the environment by doing hands-on activities. The students are exposed to career options that they may have never considered. ”

— MORGAN C. HUNT

MUSEUM AND PARTNERSHIP COORDINATOR AT  
Y.E. SMITH ELEMENTARY SCHOOL, DURHAM, N.C.

## Educator Immersion in the Workplace

In partnership with the Kenan Fellows Program for Teacher Leadership at N.C. State University, EPA hosted an Orange County elementary educator for three weeks in 2017. The teacher met one-on-one with more than 30 scientists, learned about various EPA programs, and participated in two EPA-sponsored teacher workshops and four STEM events. After learning about EPA's Clean Cookstove Research, she developed a lesson plan to teach students about this research and air pollutant emissions. In 2018, EPA hosted a high school teacher from Durham Public Schools (DPS) who will use information learned to share EPA's mission and research across all classes as well as with the DPS Hub Farm.



## High School Summer Workshop at EPA-RTP

Each summer since 2011, our program has hosted a week-long workshop for high school students on the EPA-RTP campus. Throughout the week, students tour the campus, explore EPA careers through speed mentoring sessions, and interact with EPA scientists and engineers about their cutting edge research, ranging from air quality to sustainability, that serves to support EPA's mission of protecting human health and the environment. Over 50 EPA employees engage with students in hands-on activities throughout the week including “Benefits of Trees,” “GENERATE: The Game of Energy Choices” and “Connecting Ecosystems & Human Health.”



## AWARDS & RECOGNITIONS

- **US2020 National STEM Mentoring Awards** – Received the Excellence in Volunteer Experience Award, and recognition for Volunteer Mobilization. *October 2017*
- **US2020 Regional Awards: Industry Partner of the Year** – For making a significant impact on EPA/RTP's STEM community during the 2015-16 school year by increasing access to STEM through focused volunteerism and on-site visits (*May 2016*) and the STEM Volunteer of the Year Award for the 2017-18 school year (*May 2018*).
- **Goodmon Award** – The Goodmon Award for EPA's Leadership in STEM education in the Research Triangle Region. *December 2016*
- **Durham Public Schools Community Partnership Award** – For outstanding commitment to the students and families of Durham, N.C. Public Schools. *February 2016*
- **N.C. Science, Math and Technology (SMT) Education Center 2015 Partner Award in Science, Math & Technology Education** – For partnering with schools and community groups to support the advancement of science, math and technology education. *April 2015*
- **N.C. Wildlife Federation Governor's Conservation Achievement Award: Environmental Educator of the Year** – Received by an EPA Fellow for outreach. *September 2017*

## REQUEST AN EPA SPEAKER

Visit the [EPA-RTP Speakers Bureau](#) or contact us directly via email to request an EPA employee for your event. Employees can typically travel within 50 miles of the EPA-RTP campus as their work schedules allow.

### FOR MORE INFORMATION, CONTACT:

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[WWW.EPA.GOV/RTP-SPEAKERS-BUREAU](http://WWW.EPA.GOV/RTP-SPEAKERS-BUREAU)