2015

Annual Report

STRENGTHENING the STEM NETWORK
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16-17. 5 Years of Growth
It has been an exciting, busy, and impactful year for everyone involved with TAME. The 2 Trailblazers visited 172 schools and inspired 25,005 students by showing them what engineers and scientists do. The State Office and the K-12 Special Interest Group have done a tremendous job of instigating and supporting new TAME clubs continuing to expand our footprint throughout the state of Texas. 961 TAME students demonstrated their proficiency in science, mathematics, design, and teamwork at the 11 Divisional STEM competitions and the State STEM competition.

The most rewarding part of being the Board Chair for TAME is meeting the students and hearing about how their experiences with TAME have inspired them in addition to giving them the skills and confidence to pursue a career in STEM. Thanks to strong support from TAME board members, ConocoPhillips, Alcoa, Pratt & Whitney and university partners like Texas Tech, Texas A&M and The University of Texas at Austin, 17 TAME students are receiving financial assistance to pursue STEM careers.

Our Advisory Board members, Board members, volunteers, staff and corporate and private donors have helped us provide programming for well over 26,000 Texas youngsters. I thank them for helping to develop the next generation of STEM talent for our state and nation, and challenge you to join us as we continue our mission!

ANDY DECK
Chair, TAME Board of Directors
our Mission
ENABLING TEXAS STUDENTS TO PURSUE CAREERS IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM) BY:

- Creating partnerships among educators, industry, government and families to inform, educate and motivate students
- Implementing classroom and extra-curricular programs and activities
- Focusing on populations that remain underrepresented in fields of STEM
- Promoting diversity in STEM careers

our Vision
EVERY K-12 STUDENT HAS THE EDUCATIONAL EXPERIENCES NECESSARY TO PURSUE A CAREER IN THE FIELDS OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH.

TAME programs are inclusive but are geared towards engaging underrepresented minority students, especially those that are the first in their family to consider higher education and STEM careers.
our PROGRAMS

SCIENCE SQUAD™ COMICS
Available in English and Spanish, the Science Squad™ comic books get younger children excited about science through the adventures of five ethnically diverse TAME students who use their abilities in math and science to save the day.

TAME TRAILBLAZERS
The TAME Trailblazers, unique, interactive museums-on-wheels that travel to schools, libraries and communities across Texas to bring hands-on science to students. Trailblazers don’t just show students the moon - they show them how to get there.

TAME CLUBS
TAME Clubs provide a supportive, challenging place for K-12 students to build math, science and problem-solving skills. Clubs grant students access to competitions, scholarships and a network of peers, mentors and future employers.

MATH & SCIENCE COMPETITIONS
High-performing TAME Club students come together to compete and celebrate achievement in math, science and engineering challenges. Since 2012, 100% of high school seniors plan to attend college. Of those, 85% study STEM.

SCHOLARSHIPS
TAME provides scholarships for students pursuing STEM degrees and connects scholars to a network of peers and mentors for ongoing encouragement and guidance. Long-term support is critical in building a workforce that looks like Texas.

PROFESSIONAL DEVELOPMENT FOR TEACHERS
TAME works with our academic and corporate partners to connect our K-12 teachers to cutting-edge professional development opportunities, a strong network for sharing ideas and concerns, and a wealth of teaching resources.
Science Squad™

COMIC BOOKS

A professionally produced comic series that supports TAME’s mission by showing the adventures of five ethnically diverse TAME students who use their abilities in math and science to save the day. Designed for children in Pre-K through 5th grade.
The TAME Trailblazers are unique interactive museums-on-wheels, traveling to schools and communities across Texas to bring science to students. With curated content from NASA, NOAA and the National Energy Discovery Project, the Trailblazers offer hands-on activities and exhibits that allow students to explore concepts in energy, space, weather, biotechnology, and aerodynamics.
Family STEM EVENTS

Program COMPONENTS

1. TAME TRAILBLAZER
2. COORDINATOR TRAINING
3. VOLUNTEER RECRUITMENT
4. FAMILY ENGAGEMENT

the STATS

PROGRAM DATES: 2012 - 2015

30 Number of Family STEM Events
30 Coordinators Trained
500 Community Volunteers
812 Adult Visitors to the Trailblazer
3,787 Student Visitors to the Trailblazer

"It was such a positive experience to watch my children participate and recognize that learning can be FUN!"
Science Rocks Library Programs are offered in the summer, typically in conjunction with summer reading programs. Training and toolkits help library staff offer informal STEM programs in the community.

the STATS

PROGRAM DATES: 2012 - 2015

<table>
<thead>
<tr>
<th>Libraries Visited</th>
<th>Library Staff Trained</th>
<th>Circulating Books Given to Libraries</th>
<th>STEM Programs Offered in Libraries</th>
<th>Community Volunteers</th>
<th>Books Given to Youth</th>
<th>Patrons at the Library on Trailblazer Days</th>
<th>Patrons Attending STEM Programs in Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>308</td>
<td>502</td>
<td>760</td>
<td>2,339</td>
<td>6,578</td>
<td>25,875</td>
<td>41,000</td>
</tr>
</tbody>
</table>
TAME Chapters provide local leadership and support for STEM education. Chapters, which correspond to the regions defined by the Texas Education Agency, bring together volunteers from local schools, colleges, universities, corporations, businesses and community organizations into a leadership team. They offer locally relevant programs like career days, factory tours, and professional development for teachers.
A TAME Club is an enrichment program that is designed to support students interested in exploring STEM subjects with the guidance of sponsors and leaders. While all TAME programs are inclusive, TAME clubs focus on recruiting women and under-represented minority students. The clubs are typically sponsored by teachers or community partners and are usually hosted on a school campus. Clubs meet weekly and program activities are designed to increase student skills, awareness of STEM careers and access to role models.

<table>
<thead>
<tr>
<th>TEA REGION</th>
<th>CITY</th>
<th>TAME CHAPTER</th>
<th>CHAPTER CHAIR(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Houston</td>
<td>Gulf Coast (GC TAME)</td>
<td>Emanuel Guidry</td>
</tr>
<tr>
<td>5</td>
<td>Beaumont</td>
<td>Golden Triangle (GT TAME)</td>
<td>Annie Carter</td>
</tr>
<tr>
<td>9</td>
<td>Wichita Falls</td>
<td>Wichita Falls</td>
<td>Ed Downing</td>
</tr>
<tr>
<td>10</td>
<td>Dallas</td>
<td>Dallas</td>
<td>Maurine Amend &amp; Jacqui Long</td>
</tr>
<tr>
<td>11</td>
<td>Fort Worth</td>
<td>Fort Worth</td>
<td>Eva Trevino &amp; Steve DeLeon</td>
</tr>
<tr>
<td>13</td>
<td>Austin</td>
<td>Capital Area</td>
<td>Karl Nichols</td>
</tr>
<tr>
<td>15</td>
<td>San Angelo</td>
<td>San Angelo</td>
<td>Janice Trees</td>
</tr>
<tr>
<td>16</td>
<td>Amarillo</td>
<td>Amarillo</td>
<td>Floyd Anthony</td>
</tr>
<tr>
<td>17</td>
<td>Lubbock</td>
<td>Lubbock</td>
<td>De’Lila Holder</td>
</tr>
<tr>
<td>18</td>
<td>Odessa</td>
<td>West Texas</td>
<td>Kim McKay</td>
</tr>
<tr>
<td>20</td>
<td>San Antonio</td>
<td>San Antonio</td>
<td>Sheila Madkins</td>
</tr>
</tbody>
</table>

“I credit TAME with their curriculum, their goals, and their support. I can always call the TAME office for help. It’s so different from anything else that’s here, and the kids get really excited.”

- Janice T., Chapter Chair and Club Sponsor, San Angelo
The annual TAME State Math & Science Competition brings together hundreds of high-performing minority and female students, grades 6-12, to challenge their science and math skills and connect with a network of peers and mentors across Texas and beyond.

100% OF HIGH-SCHOOL SENIORS AT THE COMPETITIONS GO TO COLLEGE

85% MAJORING IN STEM // 50% MAJORING IN ENGINEERING

2015 State Competition Host and Presenting Sponsor: LOCKHEED MARTIN AERONAUTICS
### Divisional Competitions

**Students:** by Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian/Pacific Islander</td>
<td>291</td>
</tr>
<tr>
<td>Caucasian</td>
<td>193</td>
</tr>
<tr>
<td>Hispanic</td>
<td>349</td>
</tr>
<tr>
<td>African American</td>
<td>105</td>
</tr>
<tr>
<td>Native American</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
</tr>
</tbody>
</table>

**Students:** by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>433</td>
</tr>
<tr>
<td>Male</td>
<td>528</td>
</tr>
</tbody>
</table>

**Total Students:** 961

961 students competed at 11 divisional competitions held across Texas.

### State Competition

**Total Students:** 294

294 students competed at the state level.
## SCHOLARSHIPS

TAME supports careers in science, technology, engineering, and mathematics by offering scholarships to TAME club members who have been accepted into an accredited university or community college to pursue higher education in a STEM-related field.

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>UNIVERSITY</th>
<th>MAJOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aida Lu</td>
<td>Columbia University</td>
<td>Engineering - Operations Research</td>
</tr>
<tr>
<td>Alejandro Prieto</td>
<td>Midwestern State</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Alicia Downing</td>
<td>West Texas A&amp;M University</td>
<td>Nursing</td>
</tr>
<tr>
<td>Blanca Miranda-Martinez</td>
<td>University of Texas Dallas</td>
<td>Chemistry</td>
</tr>
<tr>
<td>James McGuire</td>
<td>Texas Tech</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Joshua Quaid</td>
<td>Texas Tech</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Lilia Requena</td>
<td>Texas A&amp;M University</td>
<td>Biology</td>
</tr>
<tr>
<td>Maryana Mbalule</td>
<td>Midwestern State</td>
<td>Nursing</td>
</tr>
<tr>
<td>Michelle Zhou</td>
<td>Cornell University</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Natalie Sahagun</td>
<td>University of Texas at Austin</td>
<td>Aerospace Engineering</td>
</tr>
<tr>
<td>Nathanael Garlington</td>
<td>Midland College</td>
<td>Computer Science/Engineering</td>
</tr>
<tr>
<td>Nicholas Curtis</td>
<td>University of Texas at Austin</td>
<td>Chemical Engineering</td>
</tr>
<tr>
<td>Reginald Blow</td>
<td>Texas Tech</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Sayon Rhodes</td>
<td>University of Dallas</td>
<td>Chemical Engineering or Math</td>
</tr>
<tr>
<td>Shaharyar Ali</td>
<td>University of Texas at Austin</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Sheldon Carter</td>
<td>Oral Roberts University</td>
<td>Physical Education &amp; Engineering</td>
</tr>
<tr>
<td>Stephanie Nguyen-Okwu</td>
<td>Texas A&amp;M University</td>
<td>Biomedical Engineering</td>
</tr>
</tbody>
</table>
2014-15 Financials

Revenue

CONTRIBUTIONS: $566,342
PROGRAM REVENUES: $130,409
OTHER INCOME: $1,700

TOTAL REVENUE: $698,451

Expenses

PROGRAM SERVICES: $606,623
FUNDRAISING: $18,044
MANAGEMENT & GENERAL: $97,966

TOTAL EXPENSES: $722,633

Total Assets: ($24,182)
BOARD of DIRECTORS

**Officers**

**ANDY DECK, Chair**
National Instruments

**TRICIA GORE, Chair Elect**
The University of Texas at Austin

**TAMARA CRAWFORD, Secretary**
Lockheed Martin

**DEB DORMAN, Treasurer**
IBM

**Members & Regional Representatives**

- **Mike Alvarez**
  Shell Oil Company // Member

- **Laura Bosworth**
  TeVido Biodevices // Member

- **Grant Butkus**
  Macquarie Capital // Member

- **Dominic Cortez**
  B&W Pantex // Regional Representative

- **Steve DeLeon**
  Lockheed Martin (Retd.) // Regional Representative

- **Chris Giuffreda**
  ConocoPhillips // Member

- **Emanuel Guidry**
  SK E&P Company // Regional Representative

- **Deborah Kariuki**
  Round Rock ISD // Member

- **Aaron Maestas**
  Raytheon // Member

- **Karl Nichols**
  E3 Alliance // Member

- **Ifeanyi Okonkwo**
  BASF // Member

- **Tramaine Singleton**
  Halliburton // Member

**Advisory Board**

- **Annie Carter** // Chevron Phillips (Retd.)
- **Cres Guzman** // ASCE Texas Chapter
- **Gail Harrison** // ConocoPhillips
- **Magda Lagoudas** // Texas A&M University
- **Bridget Lauderdale** // Lockheed Martin
- **Patricia Rossman** // BASF
DONORS & PARTNERS

DONORS

Platinum: 50K+
ConocoPhillips
Shell Oil Company
IBM
The Boeing Company
Lockheed Martin Aeronautics
American Honda Foundation

Diamond: 25 - 50K
Tocker Foundation
BASF
The University of Texas at Austin

Gold: 15 - 25K
Texas Regional Collaboratives
3M Foundation
Alcoa Foundation

Silver: 10 - 15K
Workforce Solutions of West Central Texas
ESC Region 14
TLL Temple Memorial Library
Chevron Phillips
Kathy & Bob Zerda
Port Arthur Industrial Group
GM Foundation

Bronze: 5 - 10K
Dallas ISD
Houston ISD
Pratt and Whitney Canada
Marathon Oil Company
Alief ISD
Raytheon
Abell Hanger Foundation
Emerson Process Management
McCoy Foundation

Friends of TAME
Adam Lewis
Adriana Fernandez
American Society of Civil Engineers
Andy Deck
Anthony Sanchez
Applied Materials Foundation
Austin ISD
BASF Total Petrochemicals LLC
Brian B. Raygon
Cactus Ranch Elementary School
Chevron Phillips Chemical
City of Hempstead
Coastal Bend College
Debra F. Owens
Dow Chemical Company
Emanuel Guidry
Exxon Mobil Corporation
Fannie Brown Booth Library
Flint Hills Resources
Friends of Round Rock Library
Gail Harrison
Harlandale ISD
Harris County Precinct One
Houston Community College
Ilana C. Ruiz
Invista
Jayar Medlock
Karnes City ISD Foundation
Koch Companies
Lamar University
Livingston Municipal Library
Maria Reyes
Monica R. Cates
Motiva Enterprises
Mustang Engineering
National Instruments
Oxbow Calcining
Parades Elementary School
Patricia A. Gore
Prashanth Gadgil
Rockwell Collins
Round Rock Public Library
Sam Zigrossi
Samsung Austin Semiconductor
Steve DeLeon
Steven Hill
Texas A&M International University
Texas A&M University
Texas Tech University
The University of Texas - Pan American
TOTAL Petrochemicals
Tramaine Singleton
Tricia S. Berry
TXU Energy
Valero
Veolia
Xcel Energy
Zpryme

COMMUNITY PARTNERS

American Society of Civil Engineers
American Society of Mechanical Engineers
Connecting Texas Libraries Statewide
National Society of Black Engineers
Skillpoint Alliance
Texas Regional Collaboratives

HIGHER EDUCATION PARTNERS

Amarillo College
Angelo State University
Coastal Bend Community College
Educational Service Centers
Lamar University
Odessa College
Prairie View A&M University
St. Phillips College
Tarrant County Community College
Texas A&M University
Texas Tech University
University of Houston
University of Texas at Austin
University of Texas Permian Basin
Over the past 5 years, TAME has pursued a strategy of sustainable growth by diversifying our funding sources, solidifying partnerships and investing in our organizational infrastructure. The result? Annual income, doubled. Scholarship applicants, doubled. Number of Trailblazers, doubled. Number of schools that the Trailblazer visited, tripled. But one number hasn’t changed: High-school seniors at the TAME Math & Science Competitions who go to college, still at 100%.

TAME PROGRAM TOTALS from 2010 - 2015

- Club Members: 1,487
- Scholarships Awarded: 3,731
- Trailblazer Visits: 556
- Divisional Math & Science Participants: 79
I participated in TAME competitions for 5 years before proudly becoming a TAME Scholar and paying it back through volunteering. I’m now working my way through geology field courses and plan on studying abroad in Botswana summer of 2015. TAME really introduced me and encouraged me in the STEM fields where there weren’t many other influences.

- Zoi T., The University of Texas at Austin - Environmental Science Major