FIRST and Colorado Overview 2021
What is FIRST®?
FIRST is...

“...a unique series of 5 programs for grades pre-K thru 12 (ages 4-18) using robotics as a vehicle to introduce students to STEM concepts at a young age and progressively develop and solidify their interest in pursuing STEM higher education and careers while also developing skills in leadership, time management, and teamwork.”
Mission

“...to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.”

Vision

“To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology heroes.”
2019-2020 Season in Numbers

679K+
students in
~110 countries

320K+
mentor, coach, judge,
and volunteer roles

3,700
events

3,000+
scholarship opportunities from
200+ providers totaling $80M

18%
year-over-year growth in
students reached globally
FIRST students are significantly more likely to show gains in STEM outcomes than comparison students:

- Interest: 2.4x
- Career interest: 2.1x
- Identity: 2.0x
- Activity: 1.8x
- Knowledge: 1.7x
IMPACT of FIRST Programs

Persistence in STEM in college

- 81% of FIRST alumni declared a major in engineering or computer science
- 26% of the comparison group declared a major in engineering or computer science
IMPACT* of FIRST Programs

Sustained STEM career paths for female FIRST alumni

Over 75% of FIRST alumni are in a STEM Field as a student or professional

*FIRST Longitudinal Study: Findings at 72 Month Follow-Up, The Center for Youth and Communities, Brandeis University, May 2020; All differences statistically significant, p >.05.
# FIRST LEGO League

## Student Participants by Year

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1,600</td>
</tr>
<tr>
<td>2000</td>
<td>7,680</td>
</tr>
<tr>
<td>2002</td>
<td>15,216</td>
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<tr>
<td>2004</td>
<td>34,648</td>
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<td>2006</td>
<td>61,970</td>
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<tr>
<td>2008</td>
<td>93,552</td>
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<tr>
<td>2010</td>
<td>126,488</td>
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<tr>
<td>2012</td>
<td>164,494</td>
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<tr>
<td>2014</td>
<td>213,984</td>
</tr>
<tr>
<td>2016</td>
<td>280,458</td>
</tr>
<tr>
<td>2018</td>
<td>378,814</td>
</tr>
<tr>
<td>2020</td>
<td>504,042</td>
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</table>
FIRST Robotics Competition

STUDENT PARTICIPANTS BY YEAR

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Participants</th>
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<tbody>
<tr>
<td>1992</td>
<td>700</td>
</tr>
<tr>
<td>1994</td>
<td>1,100</td>
</tr>
<tr>
<td>1996</td>
<td>2,350</td>
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<tr>
<td>1998</td>
<td>4,975</td>
</tr>
<tr>
<td>2000</td>
<td>9,300</td>
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<td>2002</td>
<td>16,050</td>
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<td>2004</td>
<td>23,175</td>
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<td>2006</td>
<td>28,325</td>
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<td>2008</td>
<td>37,525</td>
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<td>2010</td>
<td>45,200</td>
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<td>2012</td>
<td>58,575</td>
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<tr>
<td>2014</td>
<td>68,175</td>
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<tr>
<td>2016</td>
<td>78,500</td>
</tr>
<tr>
<td>2018</td>
<td>91,500</td>
</tr>
<tr>
<td>2020</td>
<td>97,850</td>
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</table>

FISCAL YEAR

FIRST ROBOTICS COMPETITION

FIRST
Who is FIRST For?

• For students (grades preK-12, ages 4 -18): the hardest fun you’ll ever have

• For mentors, coaches, and volunteers: the most rewarding adventure you’ll ever undertake

• For sponsors/donors: the most enlightened investment you could ever make
FIRST Scholarships

We partner with colleges, universities, technical schools, and other organizations that make available scholarship opportunities specifically for FIRST participants and alumni.

• Over 3,000 opportunities totaling over $80 million
• More than 200 FIRST Scholarship Providers
• Learn more at www.firstinspires.org/scholarships.
FIRST Global Founding & Strategic Sponsors*

*For a complete list see: https://www.firstinspires.org/about/our-supporters
Colorado FIRST Overview

2021
The mission of Colorado FIRST is to deliver high-quality FIRST robotics programs to students in Colorado including managing tournaments, supporting teams, and working with our program mentors. Our long-term goal is to develop the business and technology leaders of tomorrow.
Colorado FIRST Overview

- Founded in 2001 to represent and achieve the mission of FIRST
- Achieved 501(c)(3) status in 2008
- 100% volunteer organization
- Uniquely positioned with the programs of FIRST to identify, recruit and develop the technical leaders of tomorrow for Colorado
- Board of Directors is 8 current and former executives from industry and education
- Strong collaboration with industry and education partners
- Goals (short and long term):
  ✓ Grow overall student participation every year
  ✓ To have teams in at least 75% of the over 1800 high schools, middle, and grade schools throughout Colorado
  ✓ To make the study of STEM fields mainstream by including all students regardless of geographic location and socio-economic status
Colorado FIRST Total Student Participation

- **FLL**: 552 teams, 3,990 students
- **FRC**: 43 teams, 1,075 students
- **FTC**: 69 teams, 690 students

**5,755 Total Students Participating**
Colorado FIRST Programs Student Geographic Distribution
Colorado FIRST Student Gender

- Male: 72%
- Female: 28%
Colorado FIRST Programs Diversity

- African American / Black: 0.1%
- Asian: 9.8%
- Caucasian / White: 69.4%
- Hispanic: 12.3%
- Native American / Alaskan: 1.6%
- Native American / Pacific Islander: 0.2%
- Multiple Races: 0.1%
Colorado FIRST Volunteers

Colorado FIRST® 2019/20 Season Total Volunteer Summary

- FLL Mentors
- FTC Mentors
- FRC Mentors

Event Volunteers

2,771 Total Colorado FIRST Volunteers
### 2019 Colorado FIRST Fiscal Year P&L

#### Income:
- Cash donations: $245,852
- Other income: $7,173
- **Total income**: $253,025

#### Expenses:
- FRC support: $19,337
- FTC support: $33,708
- FLL support: $84,936
- G&A: $10,777
- **Total expenses**: $148,758
- **Net income**: $104,268

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1. Audited results for July 2019 thru June 2020
2. Significant expense reduction of over $100K due to cancellation of marquee event due to COVID
3. G&A is 7.2% of expenses and 4.3% of revenue
Colorado FIRST Financial Trends

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Program Expenses</th>
<th>G&amp;A</th>
<th>Net Income</th>
<th>Total Liabilities &amp; Equity</th>
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</thead>
<tbody>
<tr>
<td>2009</td>
<td>$174,835</td>
<td>$115,849</td>
<td>$3,664</td>
<td>$55,322</td>
<td>$70,377</td>
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<tr>
<td>2010</td>
<td>$194,461</td>
<td>$156,741</td>
<td>$9,738</td>
<td>$27,981</td>
<td>$101,707</td>
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<td>2011</td>
<td>$183,066</td>
<td>$182,690</td>
<td>$6,875</td>
<td>$6,499</td>
<td>$96,402</td>
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<td>2012</td>
<td>$246,655</td>
<td>$188,075</td>
<td>$5,882</td>
<td>$52,698</td>
<td>$147,417</td>
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<td>2013</td>
<td>$206,399</td>
<td>$187,171</td>
<td>$8,278</td>
<td>$10,950</td>
<td>$160,467</td>
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<tr>
<td>2014</td>
<td>$216,103</td>
<td>$206,091</td>
<td>$21,367</td>
<td>$(11,355)</td>
<td>$147,012</td>
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<tr>
<td>2015</td>
<td>$213,335</td>
<td>$191,094</td>
<td>$13,394</td>
<td>$8,847</td>
<td>$155,859</td>
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<tr>
<td>2016</td>
<td>$234,132</td>
<td>$215,484</td>
<td>$7,476</td>
<td>$11,172</td>
<td>$165,825</td>
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<tr>
<td>2017</td>
<td>$255,956</td>
<td>$223,746</td>
<td>$11,236</td>
<td>$20,975</td>
<td>$186,747</td>
</tr>
<tr>
<td>2018</td>
<td>$286,040</td>
<td>$227,474</td>
<td>$9,755</td>
<td>$48,811</td>
<td>$241,912</td>
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<tr>
<td>2019</td>
<td>$253,025</td>
<td>$137,981</td>
<td>$10,777</td>
<td>$104,268</td>
<td>$345,078</td>
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</table>
Colorado FIRST Current Year Sponsors

Ball
LOCKHEED MARTIN
ARROW

DANIELS FUND

US ENGINEERING
ADOOLPH COOKS FOUNDATION
S&P Global Foundation

TEOCALI ENERGY LLC

BOEING
MINES
TERUMO BCT

LEFT HAND ROBOTICS

UNIVERSITY OF DENVER
DENVER MUSEUM OF NATURE & SCIENCE

GATES
POLISINELLI

TWO MEN AND A TRUCK
GAYLORD ROCKIES RESORT & CONVENTION CENTER

FIRST LEGO LEAGUE
FIRST TECH CHALLENGE
FIRST ROBOTICS COMPETITION
Get Involved!

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Financial support</td>
<td>Strengthens reputation and community relations</td>
</tr>
<tr>
<td>Equipment/parts</td>
<td>Builds technological literacy</td>
</tr>
<tr>
<td>Scholarships</td>
<td>Pipeline for interns and future employees</td>
</tr>
<tr>
<td>Facilities for teams and events</td>
<td>Motivating volunteer opportunities for employees</td>
</tr>
<tr>
<td>Mentors, volunteers, consultants</td>
<td>Applied professional development for employees</td>
</tr>
<tr>
<td>Internships</td>
<td></td>
</tr>
</tbody>
</table>

[www.coloradofirst.org](http://www.coloradofirst.org)