

STARBASE Minnesota-Duluth FY23 Overview & Annual Results



STARBASE Minnesota is: a 501(c)3 nonprofit organization, founded in 1993 whose mission is to educate and inspire youth in science, technology, engineering, and math (STEM). Since 1993, STARBASE has served over 72,000 Twin Cities' youth and since 2017 almost 7,700 students have participated in the STARBASE Duluth program. STARBASE is a program of the Department of Defense and Minnesota National Guard who provide a state-of-the-art facility, access to an exciting, technology-rich environment, in-kind services, and volunteers. STARBASE partners with area school districts to provide STEM programming, corporate partners that provide financial/in-kind support, and volunteer scientists and engineers to programs. STARBASE Minnesota operates two robust STEM programs. STARBASE Minnesota St. Paul operates out of the 133rd Airlift Wing and STARBASE Minnesota-Duluth provides programming on the 148th Fighter Wing. STARBASE has a 23-member Board of Directors and 10-member Duluth Advisory Board with backgrounds in business, education, military, and government. There are 81 STARBASE locations in the U.S. in 36 states, Puerto Rico and Guam.

STARBASE Minnesota provides: immersive five-day, 25-hour STEM programs for area 5th graders, with authentic, rigorous, and engaging learning aligned to standards. STARBASE Minnesota-Duluth supports a comprehensive summer program called STARBASE Explorers for area students entering 4-6 grades. STARBASE hosts area youth organizations for summer programming including such as Family Freedom Center, Neighborhood Youth Services and Fond du Lac Ojibwe School.



In FY23 STARBASE served 2,893 students from 46 schools in Northeastern Minnesota. STARBASE Minnesota St. Paul served 3,444 students from 47 Twin Cities schools for a total of 6,347 students from 93 Minnesota schools. In FY24 STARBASE anticipates serving over 3,000 students in Duluth and 3,500-3,600 in St. Paul.

STARBASE Minnesota-Duluth Student Demographics (<1% unreported)

Male	Female	Non-Binary	Title I Schools	ELL	Hispanic	Non-Hispanic	African American	Native American	Asian American	White	Multiracial
53%	46%	1%	81%	<1%	2%	98%	2%	5%	1%	81%	7%

FY23 Student & Teacher Results (Duluth): (measured by pre and post-tests and surveys)

- 93% of students increased knowledge/skills in science, technology, engineering, and math
- Students gained 22 percentage points pre-post in STEM knowledge and skills
- 96% of students reported that STARBASE made learning fun; 77% reported increased interest in STEM
- Additional pre/post student survey data reflected positive change in attitudes toward STEM, confidence in their STEM abilities, greater self-identity with STEM and in the STEM careers they have interest in pursuing.
- 99% of classroom teachers reported gains in knowledge, teaching methods, and strategies
- 100% of teachers rated STARBASE excellent or very good; 100% want to return with their class

FY23 Educator Participation

- 98 educators participated in XX hours of on-site, school-year programming to bring STARBASE-inspired teaching methods back into the classroom
- 1,006 educators implemented STARBASE Destination Mars STEM kits in 428 schools across Minnesota

FY23 Volunteer Participation

- 34 STEM professionals volunteered 59 hours during graduations, special presenters, STEM career video production
- 30 military volunteered 108 hours during graduations, tours, demonstrations, and summer camp
- 6 STEM professionals and undergraduate students participated 110 hours of coaching for STARBASE after-school programming
- 141 parent volunteers contributed 1,380 hours supporting classroom activities at STARBASE
- Eight STARBASE Minnesota-Duluth Advisory Board members contributed 110 hours

STARBASE Minnesota-Duluth Highlights:

- STARBASE hosted the Galaxy of Giving fundraising event in support of the program raising over \$65,000 from area businesses and private donors
- STARBASE conducted a 14-session middle school STARBASE Club with North Star Academy providing after-school immersive STEM experiences to 16 students grades 6-8
- STARBASE participated in 12 outreach events in the region including the AAUW STEM Workshop in Ely, MN, STEAM Fest (Duluth, MN), Itasca County Water Summit (Grand Rapids, MN), Duluth Airshow (Duluth, MN) and 148th Fighter Wing Bulldog (Family) Day
- A series of six STEM career videos were filmed featuring regional STEM professionals in the Northern Minnesota area.
- STARBASE-Duluth Advisory board and staff hosted 30 tours from local STEM business leaders, legislators, military leaders, academic institutions and others non-profit programs.

Thank you to STARBASE Minnesota Funders in FY23: Department of Defense, State of Minnesota, individual donors; Additional Financial support from: Cenovus Energy (\$40,000), Cirrus Aircraft (\$20,000 In-Kind), Cleveland Cliffs Foundation (\$25,402), Involta (\$15,000 In-Kind), Minnesota Power (\$9,250), IRRR (\$5,000), Kraus Anderson (\$2,500), LHB, Inc. (\$1,000), Ecolab (\$1,000) TKDA (\$1,000), Jamar (\$1,250), Barr Engineering (\$4,512), Harbortown Rotary (\$872), American Peat Technology (\$500), DSGW Architects (\$500), North Shore Bank of Commerce (\$250), Cartier Agency (\$250).

Below are the participating partner Schools or Districts for the 2022-2023 school year:

- Barnum School District
- Carlton School District
- Chisholm School District
- Cloquet School District
- Duluth Catholic Schools
- Duluth Edison Charter Schools
- Duluth School District
- Esko School District
- Fond du Lac Ojibwe School
- Grand Rapids School District
- Mountain Iron Buhl School District
- Mesabi East School District
- Moose Lake School District
- Nett Lake Elementary
- Many Rivers Montessori
- Marshall Private School
- North Shore Community School
- Proctor School District
- St. Louis County School District
- Wrenshall School District