

*Bridging talent, generations
and futures
in technology, science
engineering and design*

*Introduction and Invitation
May, 2019*

Robotics And **Beyond**

A Connecticut 501(c)3

Since 2004 . . . and still learning





We believe that dreams, talent
and a desire for fulfillment
exist in every individual.

We create opportunities for young people
to discover and develop their talents

in fields of
science, engineering, technology and design

Our approach is

effective,

efficient

scalable.

Why we exist

To help young people discover and develop their talents in technology, science, engineering and design

so they can achieve confidence, success and fulfillment in their careers and in their lives.



How we do this

Create an environment
that embraces setbacks,
critical thinking and creativity...



Provide a diverse community of peers and role models,
leadership experience and career insight and opportunities.

Believe in the talent and potential of every individual
and their desire to discover and develop that potential.

What we do

We create and deliver highly impactful discovery and learning experiences for grades k-12, young adults and teachers

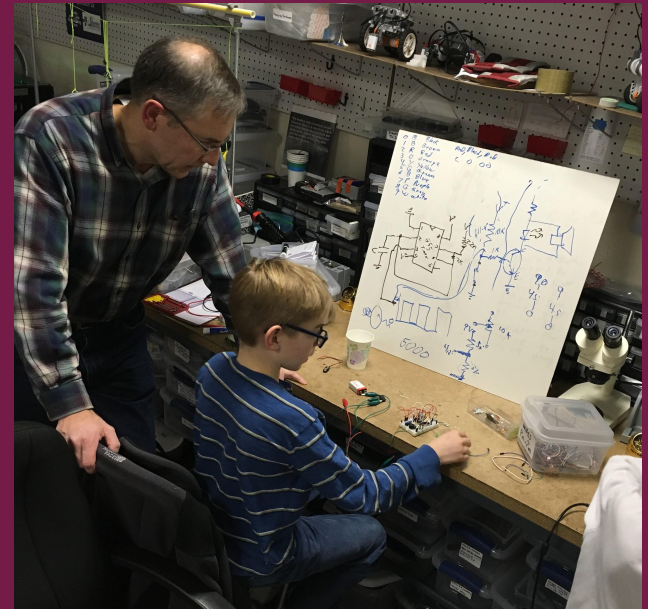
through in-house and off-site programs and workshops for groups and individuals.

Who we are

personally invested
career professionals

from fields of science,
technology,
design and education

sharing knowledge,
perspective and passion



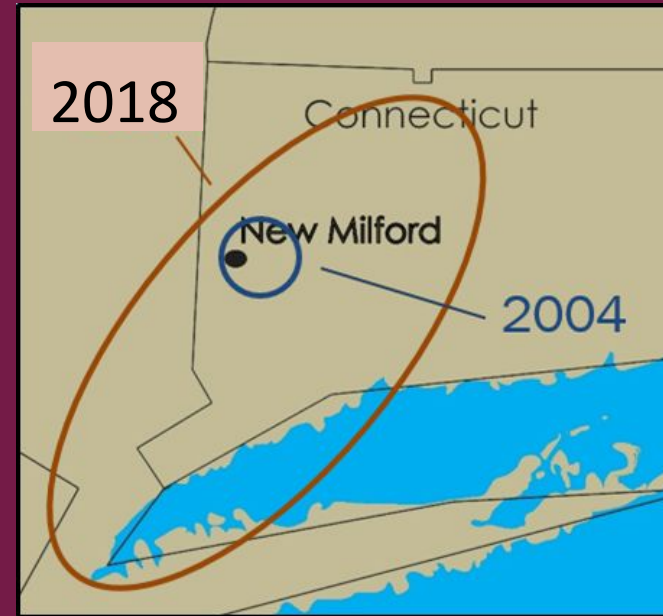
Impact

Reach & number served



2004

**11 students
from 2 towns**



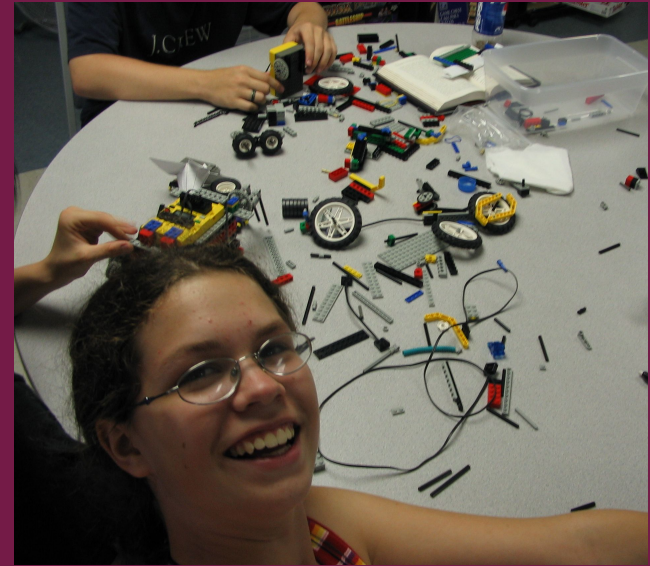
2016 - 2018

**300-400 students/yr
50+ towns, 60 mile radius
Avg. 25 hours/student/year**

Then and now - outcomes



Louise, 2014, gr.8
Presenting string theory to campers.
Freshman, Univ. Chicago, Physics



Katie, 2004, gr.7
Our first mentor, intern and graduate
Quality assurance manager for
electrical components, and mother.

Then ...

3 students from 3 towns
meet at RAB summer camps

attend 3 colleges
electrical eng. and computer sci.

Pat, 2006, gr.8



Kerry, 2005, gr.7



Zach
2009
gr.11

... and now



4+ years on the
Apple iPhone team

3 of our 5 biggest
individual donors

Robotics And Beyond

In the words of students and parents



Louise, long time student (since 6th gr.)
now a Univ. of Chicago freshman in physics.



James, research scientist, parent of long-time student
now in 11th gr. and member of our server team.



Different gifts, different needs.

More words of students and parents

“Is there anything like RAB in (San Francisco, Florida, Vermont, Maine, Ohio)”

“I owe a lot of what I have now to Robotics And Beyond”

“I finally feel like I belong.”

“Robotics and Beyond was the reason I became interested in electrical engineering in the first place.”

“She's excited and I'm thrilled she's excited!”

“Volunteering as a mentor really builds his self esteem.
I appreciate how much you believe in him!!!
Thank you from the bottom of my heart.”

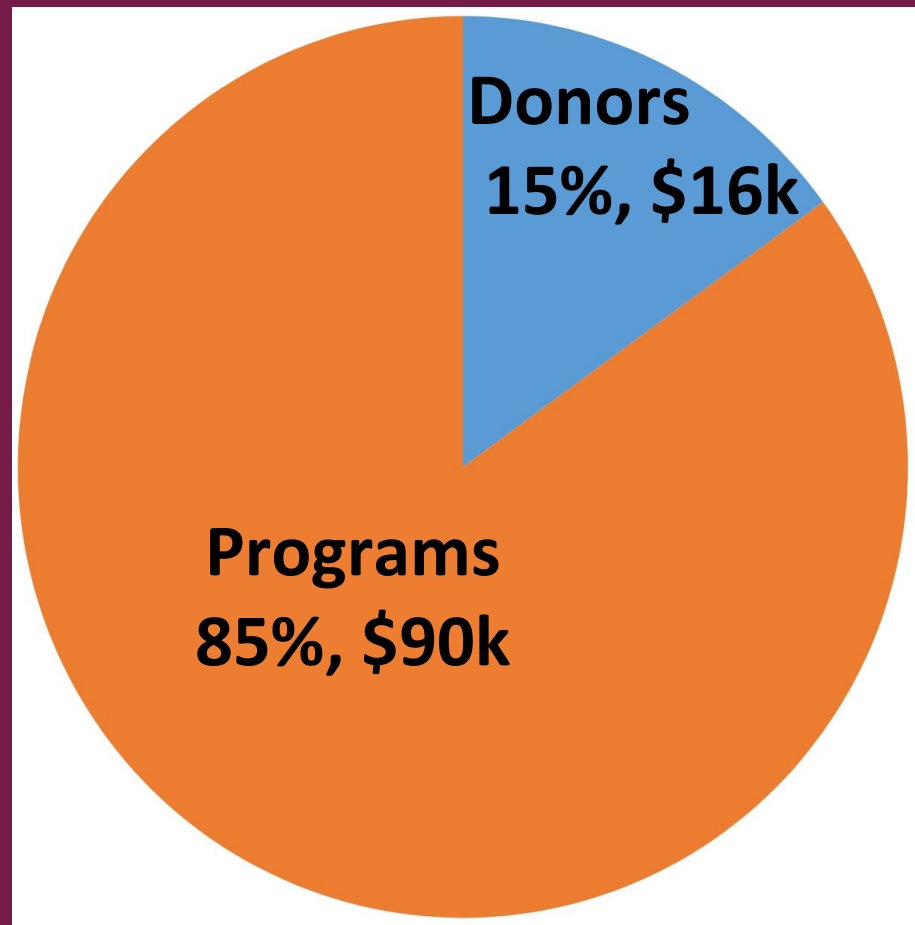
Impact Numbers (Summary) 2004 to 2018

Individual students served	2,700
Student activity hrs	49,000
Student & adult volunteer hrs	35,000
Student Mentors	130
Student teaching hrs	15,600 (50+ topics)
Operating Budget (2019)	\$120,000
Public Support v. Program Revenue	15 / 85

Donor support* vs. program revenue

**2017 & 2018
(most recent
Phase 1 years)**

*** individuals,
foundations,
businesses**



Demographics- current and goals: number (%)

	2018	2021+	Region (%)
Racial minorities**	30 (10)	240 (30)	65*
Poverty/Income Constrained*	30 (10)	400 (50)	11 / 33*
Female	60 (20)	320 (40)	50
Special learning needs:	30 (15)	240 (30)	

* datausa.io and unwesternct.org/alice

** African Amer., Hispanic, Asian, others

Potential reach and impact

- Home region can reach 800+ users by 2021
- Exponential scaling is possible
 - model adoption elsewhere
 - organic growth of original and new centers (power of compound “interest”)
- Demographic goals are feasible



REFINE

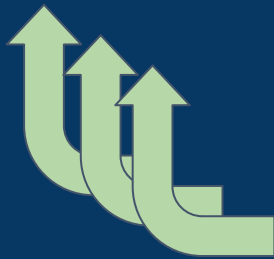
Phase 2
18-24 months



DEFINE



FEEDBACK



PATH

Phase 3
2-3 years

DISTRIBUTE



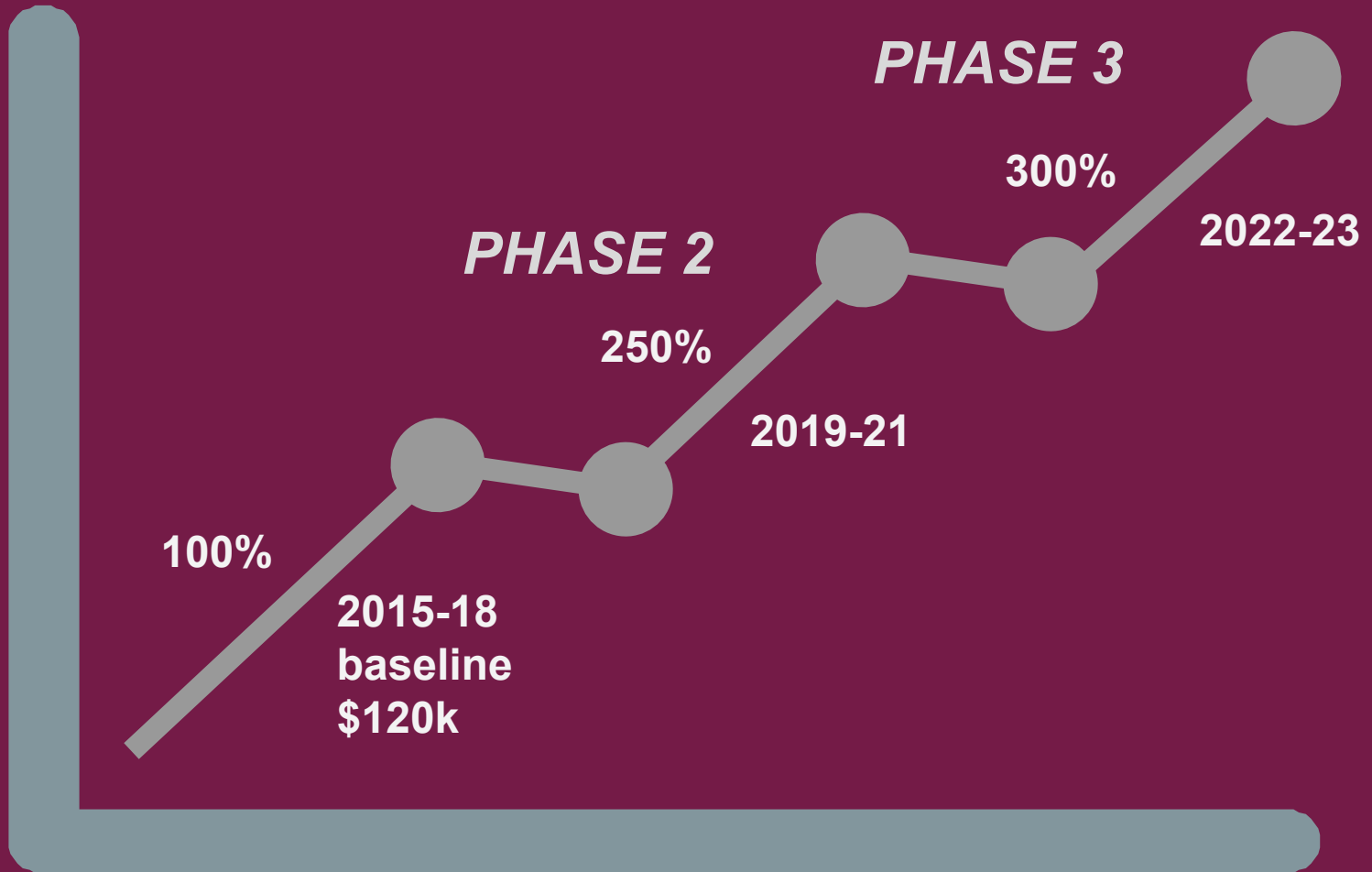
DUPLICATE

Achieving Our Vision

2023+



Annual # Served and \$ Need



Timeline

Robotics and Beyond

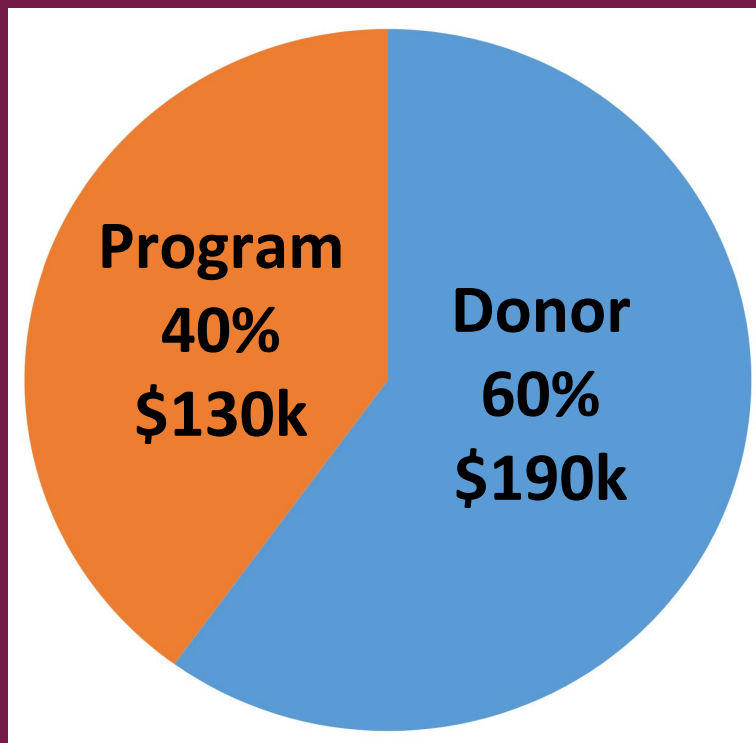
Timeline summary

- **Phase 2: 18-24 months**
 - **refine, define**
- **Phase 3: 2-3 years**
 - **publish, distribute, duplicate**
 - **adapt, improve, communicate**

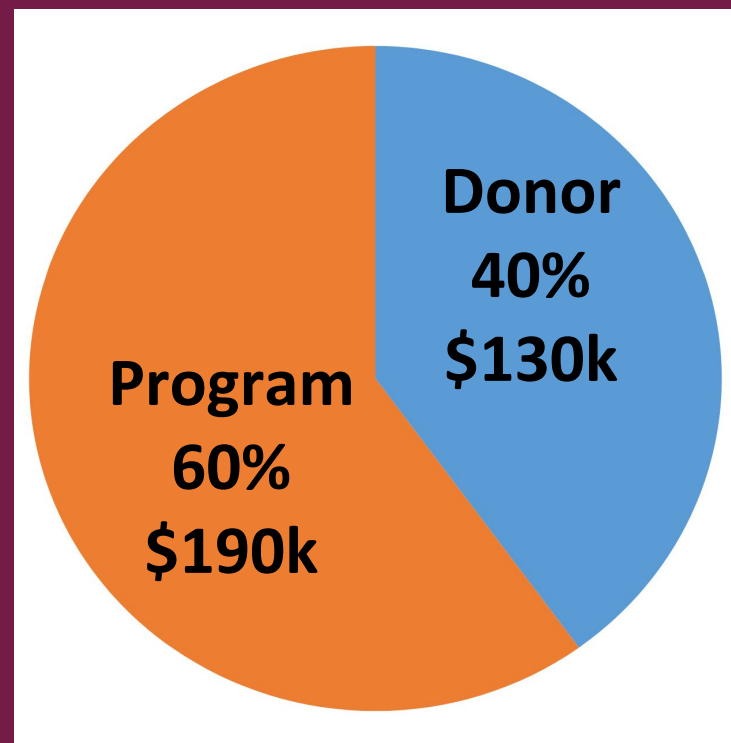
Critical needs for Phase 2: 2019-2021

- **Facilities (\$35k)**
 - more space, equipment
- **Tuition assistance fund (\$20k)**
 - reduce barriers for disadvantaged families
- **Staffing (\$125k)**
 - part-time paid admin positions
(communications, development, scheduling, others)
 - raise Director to fully-paid status
- **Increased programming, more instructors**
- **\$180k/year** total added donor support
 - \$160k in Phase 3 with increased program revenue

Funding and sources for Phases 2 & 3



Phase 2
2019-2021



Phase 3
2022-2023

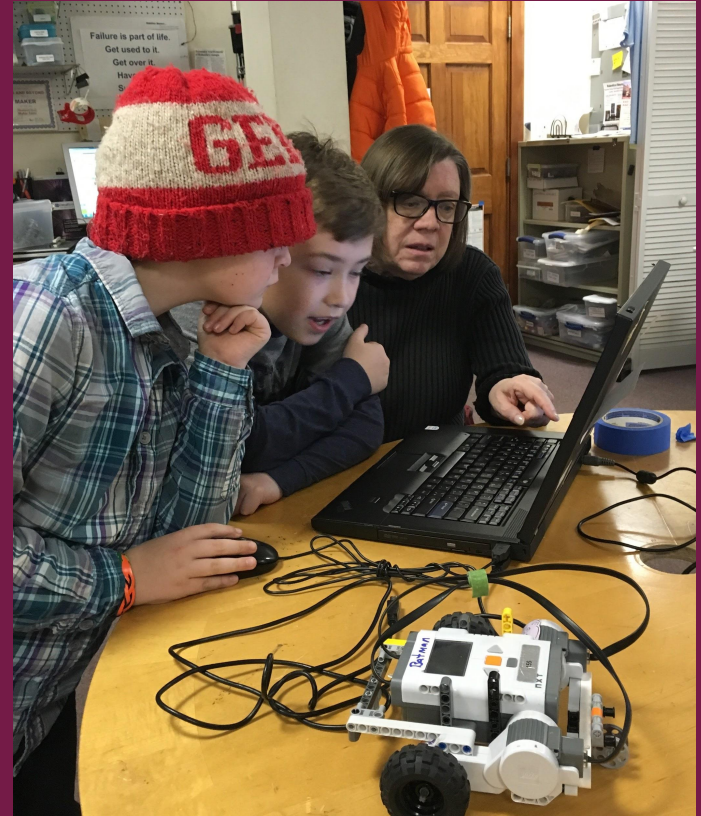
What helped you on your path?

A parent?

Teacher or other adult who took an interest?

Internship or summer job?

Enrichment program or a competition?



What if that never happened?

- How to be involved -

- **Primary supporter and visionary**
 - one-time or renewable support
 - \$10-180k/year
- **Sponsor of a topic or field**
 - content, materials, instructors, tuition aid...
 - \$3-5k/year, one-time or renewable
- **Referral to potential supporters**
- **Advisor or board member**
- **Host for interns**
- **Mentor to students**

**Be part of something remarkable.
Inspire minds and futures.**

**Believe
Support
Live forever**



Robotics And Beyond Supplemental Information Available by PDF or link

- **Capacity growth charts for Phases 1, 2 & 3**
- **Student entry points, impact areas and impact number detail**
- **Groups served, Special needs students**
- **Demographics served**
- **Collaborations**
- **Approach**
- **Subject area examples**
- **Video of a typical camp week**
- **A student's path from K to career and detail**
- **Mission detail**
- **Review of the RAB model**
- **Cost of implementing vision (\$ detail)**
- **Vision flowchart with detail**
- **Uniqueness of our model**
- **Yearly calendar**
- **Success and impact detail**