Proposed Science, Technology, Engineering, Art, and Math Center Update

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Topics of Discussion

- What is STEAM?
- The Benefits of a STEAM Facility
- Proposed Location of STEAM Facility
- Proposed Use of STEAM Facility
- Sample City-Initiated Programming
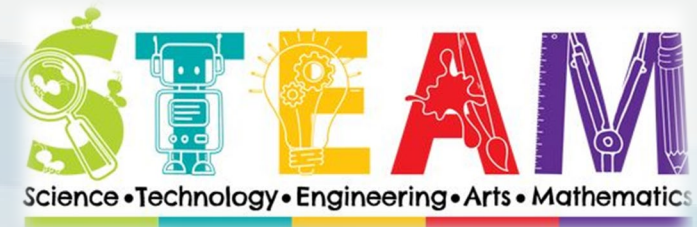- Facility Commitments
- Next Steps

What is S.T.E.A.M.?

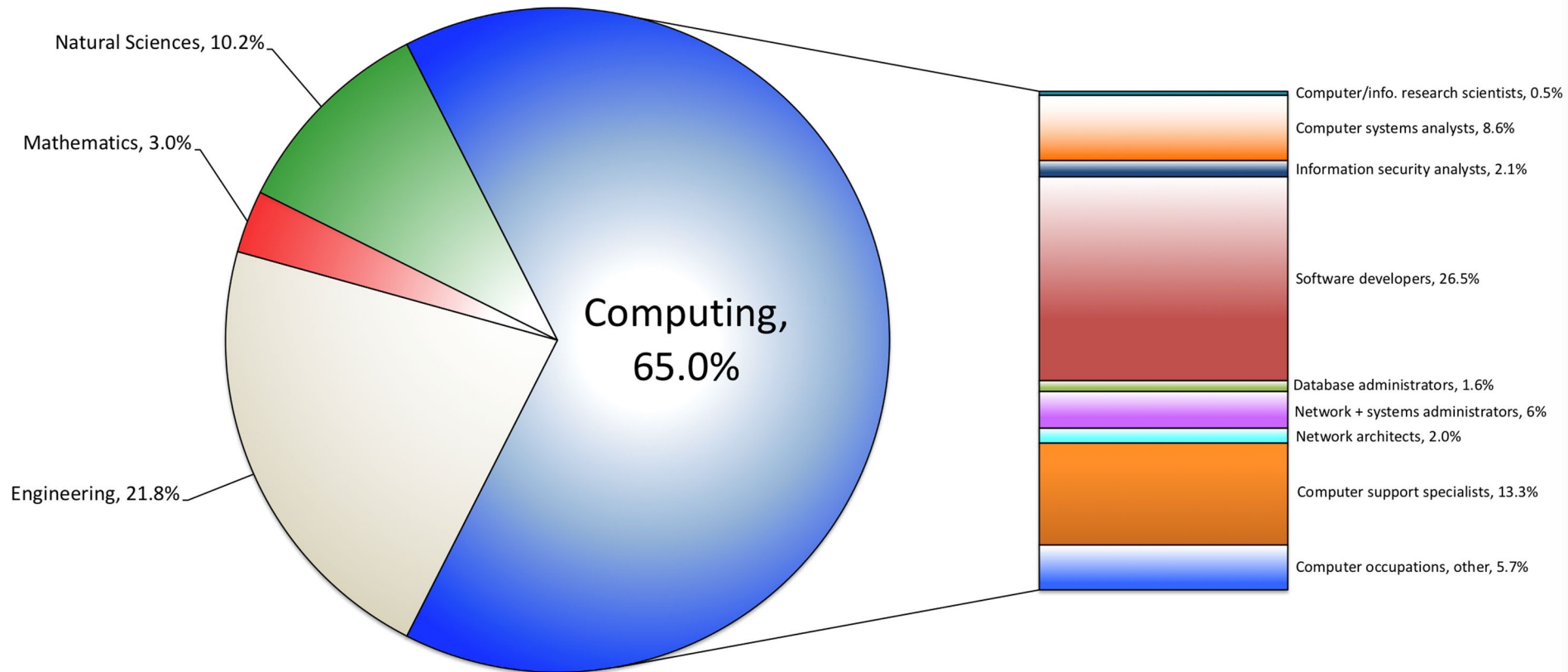STEAM is a combination of two or more of the following within a learning experience: **Science, Technology, Engineering, Arts, and Mathematics**. **STEAM also teaches soft skills needed in all careers, such as:**

- ✓ Creativity
- ✓ Solving tough problems
- ✓ Critical thinking
- ✓ Gathering and evaluating evidence
- ✓ Making sense of information
- ✓ Data analysis
- ✓ Communication

What is S.T.E.A.M.?

US-BLS Avg Annual STEM Job Openings Thru 2028 As Percentage

Natural Sciences, 10.2%
Mathematics, 3.0%
Engineering, 21.8%
Computing, 65.0%

Computer/info. research scientists, 0.5%
Computer systems analysts, 8.6%
Information security analysts, 2.1%
Software developers, 26.5%
Database administrators, 1.6%
Network + systems administrators, 6%
Network architects, 2.0%
Computer support specialists, 13.3%
Computer occupations, other, 5.7%

Data Source: US-BLS Employment Projections (*https://www.bls.gov/emp/tables/emp-by-detailed-occupation.htm*)
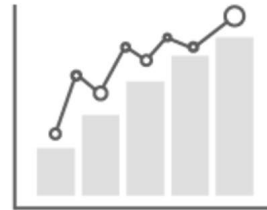
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Benefits of providing S.T.E.A.M. Programming

26%
STEM workers tend to earn about 26% more than non-STEM workers.

2x
Yearly growth for STEM jobs is projected to be almost double that of non-STEM jobs.

Whether they work in a STEM field or not, people with a degree in STEM earn more than non-STEM counterparts.

Employers in non-STEM fields heavily recruit graduates with STEM degrees because they possess skills that students with other majors may not have developed.

Facility Location

The Bledsoe-Miller Community Center is a 14,000 sq. ft 2-story concrete and stucco structure on Martin Luther King Jr. Blvd.
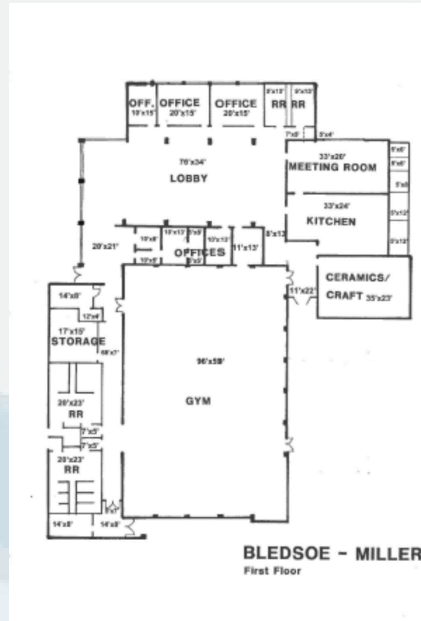
Proposed Space Design & Layout

The Bledsoe-Miller Community Center was explored by Digital Harbor Foundation located in Baltimore, Maryland. The recommended Facility usage includes:

- Digital Fabrication Labs
- Virtual Reality Labs
- Math/Science Labs
- Computer Lab
- Invention Education Classrooms
- Entrepreneurship Education Classrooms

- Video Production & Digital Editing
- Graphic Design
- Sound Production
- Robotics Labs
- Music Room
- Radio Broadcasting Station
- Office Space

FIRST FLOOR
18,320 S.F.

BLEDSOE - MILLER
First Floor

Proposed Use of the Bledsoe-Miller Space

• Operate a STEAM Center Hub

• Classrooms for Seminars and Workshops

• Provide Exhibit Hall Space

• Outdoor Exhibit Area

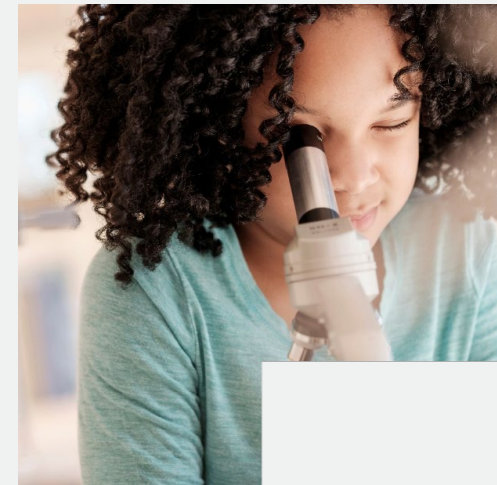CITY OF WACO

Sample City-Initiated Programming

Our Libraries, Parks & Recreation, Public Works, Engineering Services, & Water Utilities Departments have offered the following STEAM. enrichment opportunities:

- Water Education Today (WET) Conservation Water Science Program
- Minecraft & Roblox clubs
- Candy Science program for teens
- Bird watching
- Gardening activities
- Kids Cooking
- Lego S.T.E.M. Class
- S.T.E.A.M. Day (Previously "Engineering Day")

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Commitments to Date

- City of Waco

- Baylor University

- SpaceX

- M&M Mars

- Cisco

Next Steps

- Develop Program Steering Committee
  - October/November 2022

- Establish Cost for Facility Design
  - October/November 2022

- Continue to Identify Collaborators
  - Ongoing

- Continue to Identify Funding Opportunities
  - Ongoing

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Questions?