



# A New Headquarters

A Global Center for STEAM  
Education & Technology  
Development

+

Fab Cities Technology Showcase

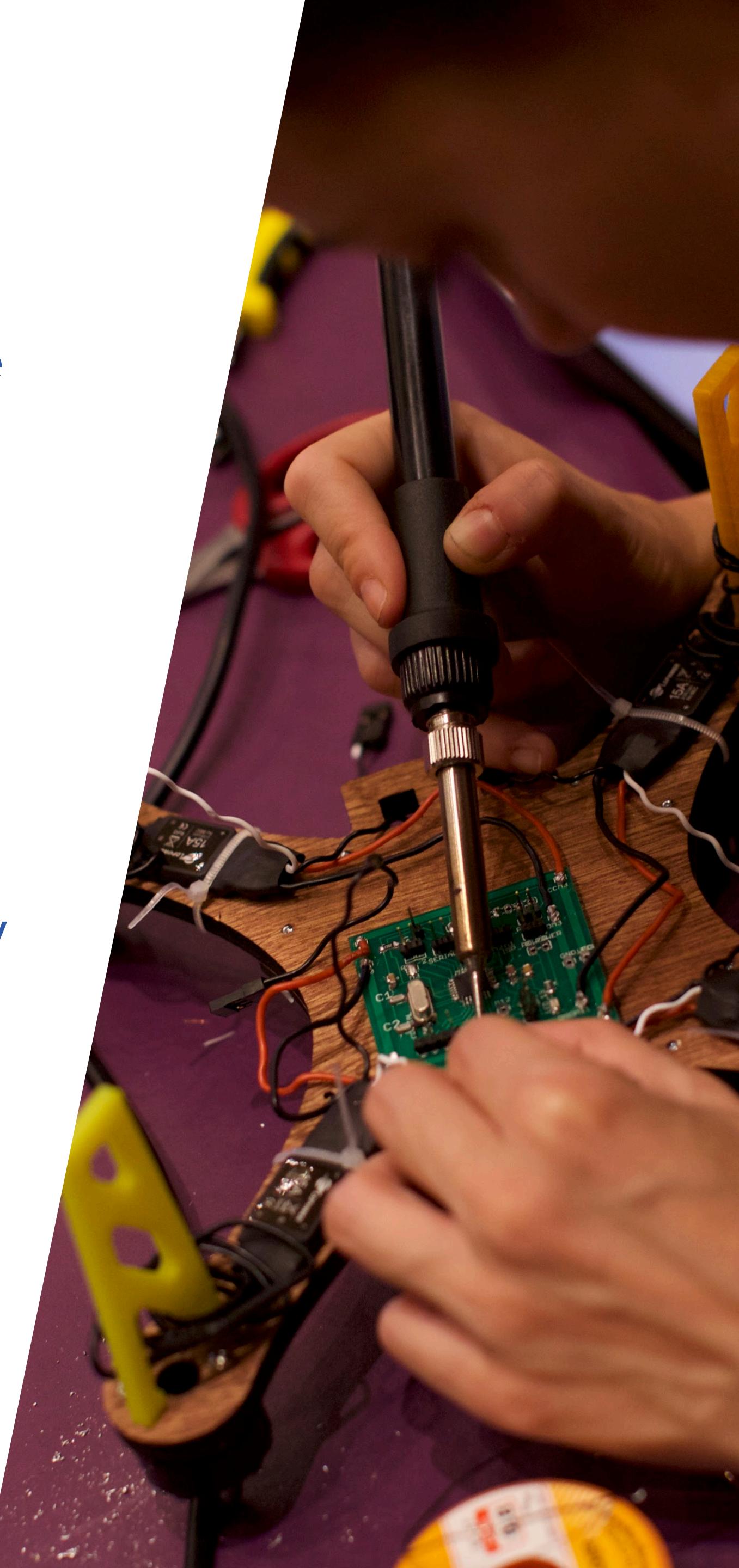
 fabfoundation

# About the Fab Foundation

Fab Foundation was formed February 9, 2009 to facilitate and support the growth of the international Fab Lab network. The Fab Foundation is a US non-profit 501(c) 3 organization that emerged from MIT's Center for Bits & Atoms Fab Lab Program.

Our mission is to provide access to the tools, the knowledge and the financial means to educate, innovate and invent using technology and digital fabrication, to allow anyone to make (almost) anything, and thereby creating opportunities to improve lives and livelihoods around the world.

Community organizations, educational institutions and non-profit concerns are our primary beneficiaries.



# Global Steward of the Fab Lab Network

**The Fab Lab Network:  
2000+ Fab Labs in  
126 Countries**

**An Anchor  
Organization of the  
Maker Movement**

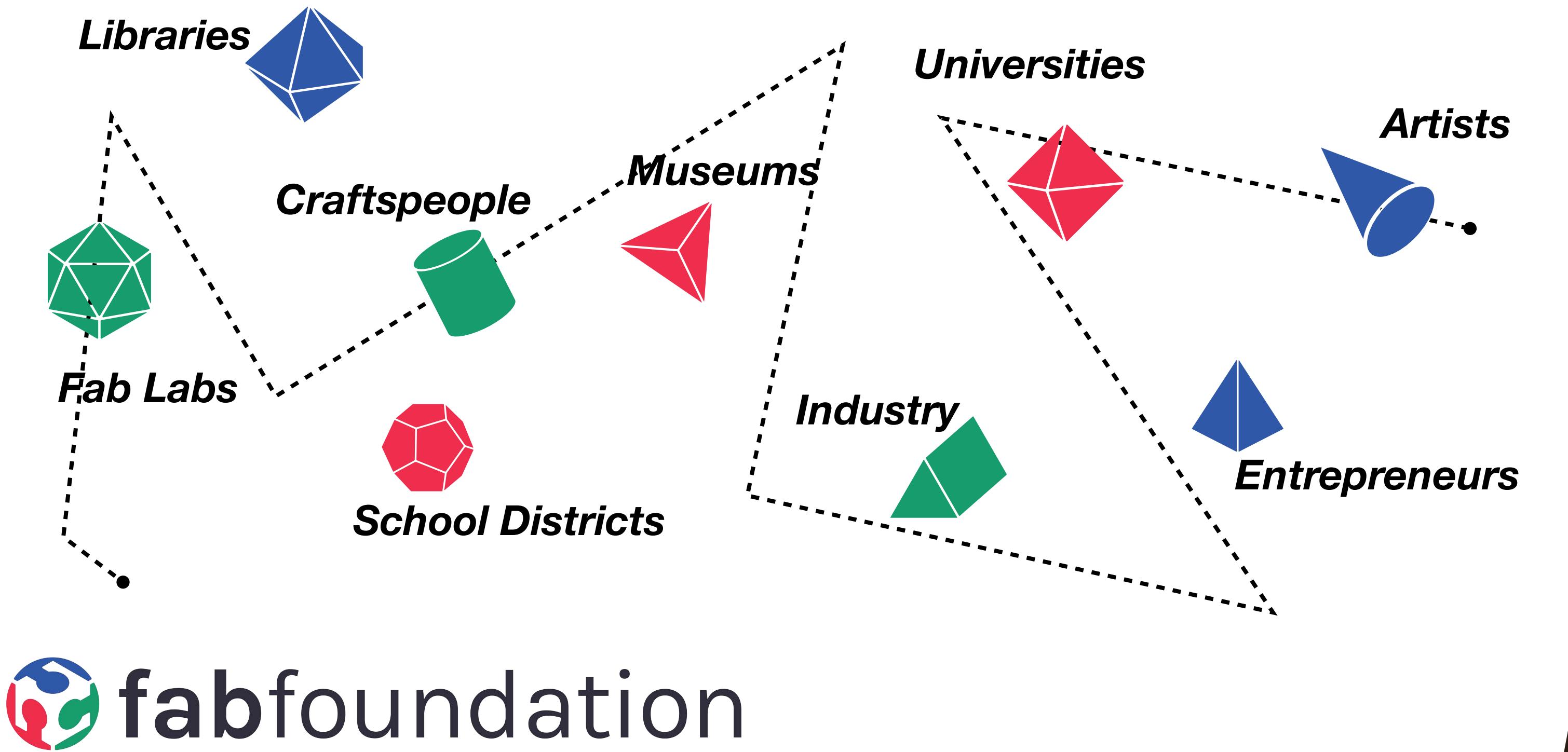
A photograph of a young boy with short brown hair, wearing a grey button-down shirt. He is wearing a pair of light-colored wooden 3D glasses with a rectangular frame and circular holes for the eyes. He is looking directly at the camera with a neutral expression. In the background, there are blurred red and black vertical stripes, possibly from a flag or a banner.

# A Global Center for Excellence & Flagship Fab Lab that brings:

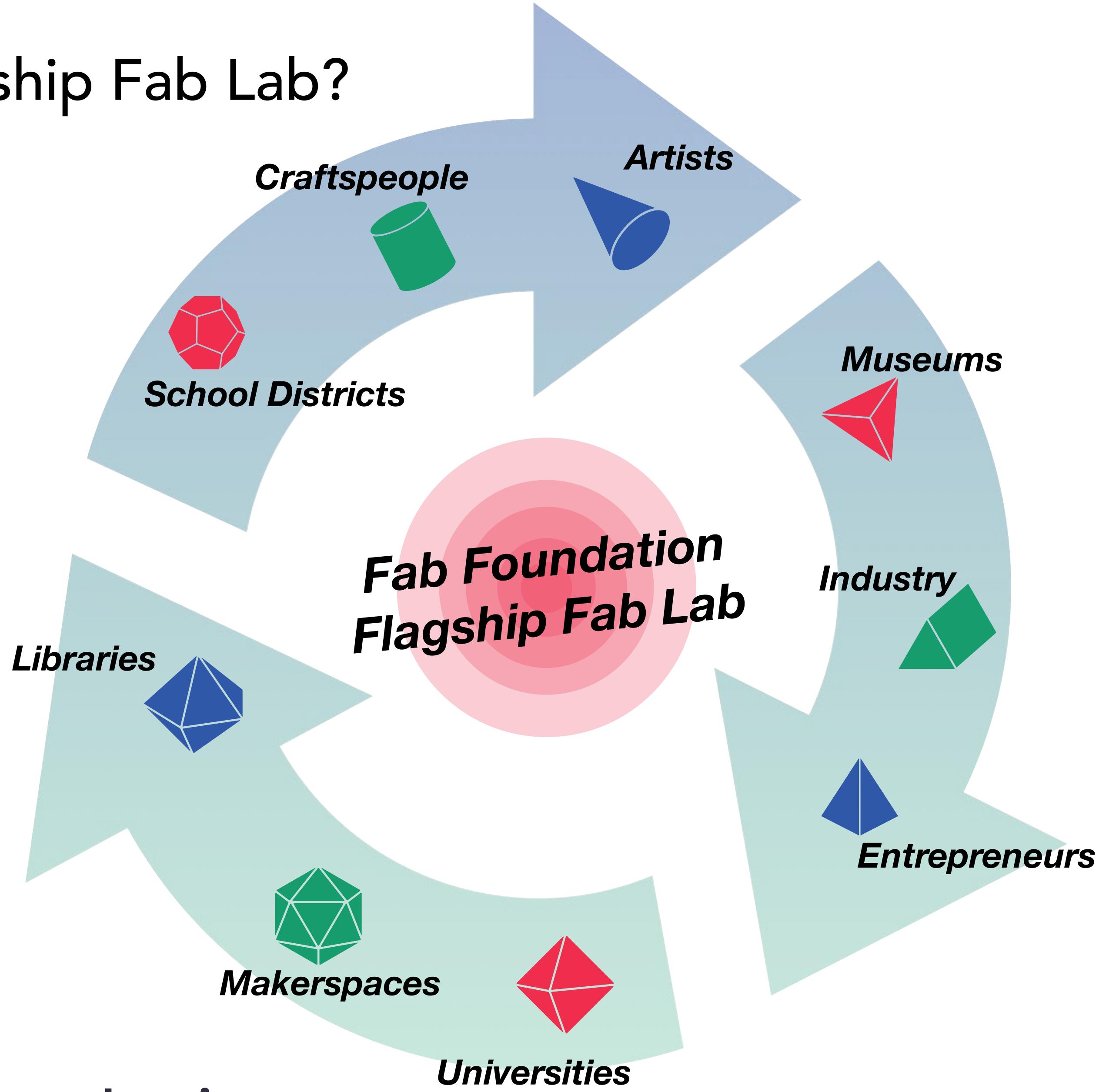
- K-12 STEM Education: digital fabrication teaching and learning
- A Global Community of Practice
- Workforce Development for the Digital Economy
- Entrepreneurship
- Art and Personal Expression
- A Culture of Innovation
- Community Resilience
- Research in Sustainable Manufacturing and Circular Economy Practices

# Why a Flagship Fab Lab?

Currently there are many partners and individuals that use digital fabrication in the area; this Flagship Fab Lab amplifies the impact that these organizations and individuals can have in the community, by providing support, training and expertise, and unifying the digital fabrication community of practice.



# Why a Flagship Fab Lab?



# Key Resources and Benefits for Community:

State of the art digital fabrication facility, including:

Lasers, large CNC machines, precision NC milling machines, 3D printers, NC cutting machines, plasma cutting, molding and casting, digital sewing machines for wearables, electronics design and production tools and more...

GE - Celtics Teaching and Learning Center

Supporting Boston area schools with professional development for teachers, workshops and curriculum development for students.

Global Education and Training Center

Supporting STEAM learning globally through professional development and the SCOPES-DF program, training for fab lab managers, training for technology and digital workforce skills.



# Key Resources and Benefits for Community:

## Innovation Center

Providing training in technical innovation (Fab Academy, Fabricademy, Bio Academy) as well as prototyping support and training for local entrepreneurs, SMEs and artists.

## Community Access Facility

Open access hours, after-school programming, community benefit projects and initiatives and collaborations with local organizations.

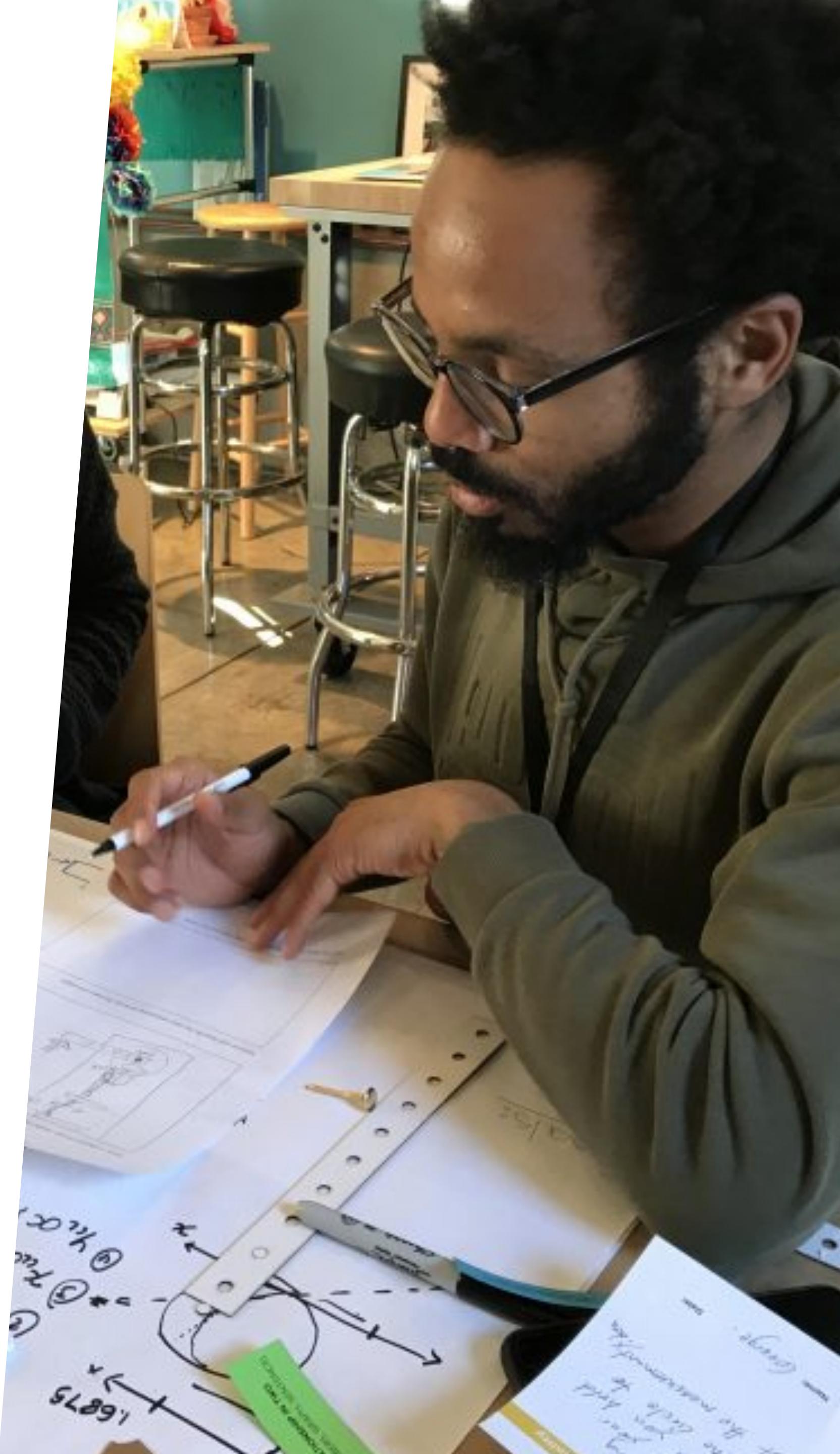
## Fab Cities Technology Showcase @ Assembly Row

A research center for sustainable living and manufacturing, supporting a global community of makers engaged in circular economy research and practices, through the Fab City Global Initiative: 38 cities across the world, collaborating in a global public-private partnership and including Somerville, Cambridge and Boston.



# Community Resiliency

The tools for 21st Century workforce development and innovation



# Community Resiliency

Developing human capacity to respond to community needs



**48,000,000+ PPE  
products  
produced globally  
between March  
and November of  
2020**

The collage illustrates the global impact of makers and engineers during the pandemic, showcasing projects like 3D-printed medical parts, DIY solutions, and large-scale production of essential items.

# Partners and Flagship Users

The flagship fab lab will engage a wide range of partners that will be able to benefit from access to the lab's programs. There will also be free public access hours for community members and organizations to work in the lab.

- Individual Educators and Students
- Middle Schools
- High Schools
- School Districts
- Universities
- Libraries
- Youth and families
- Community members and stakeholders
- Educational organizations (formal or informal)
- STEM organizations: MA STEM ecosystem, BosSTEM
- Non-profit organizations
- Entrepreneurs
- Corporations: Team Building, Professional Development
- Local businesses and industry (for training and re-skilling)
- Local municipalities: Somerville, Cambridge, Boston





# Our Supporters

The Fab Foundation has 10-year history of working in public-private partnerships. We are funded by grants and fee-for-service consulting in education, lab design, installation & training and community program development services. Our supporters and partners over the last decade

- Airbus
  - Autodesk
  - Boston Public Schools (BPS)
  - Cambridge Public Library
  - Chevron
  - Cisco
  - Crown Prince Foundation (Jordan)
  - DARPA
  - GE Foundation
  - General Motors (GM)
  - Google
  - International Development Bank
  - Kingdom of Bhutan
  - Lawrence School District
  - Malden School District
  - Ministry of Education (Egypt)
  - National Science Foundation (NSF)
  - Red Cross Society (Kenya)
  - Solidworks - Dassault Systèmes
  - United Nations Development Program (UNDP)
  - USAID
- include:
-  fabfoundation

# Union Square - Global Center for STEAM Education & Technology Development



# Specifications for Global Center for STEAM Education & Technology Development

Approximately **6,000 sq.ft** of space divided in:

## Lab Space

3,000 sq.ft

AC / Heat

Plumbing

External Ventilation

120V & 220V

Storage Space

## Class Space

1,500 sq.ft

AC / Heat

Visible and Accessible

Foot Traffic Ideal

Public Transport

Parking Available

Restrooms

## Office Space

1,500 sq.ft

AC / Heat

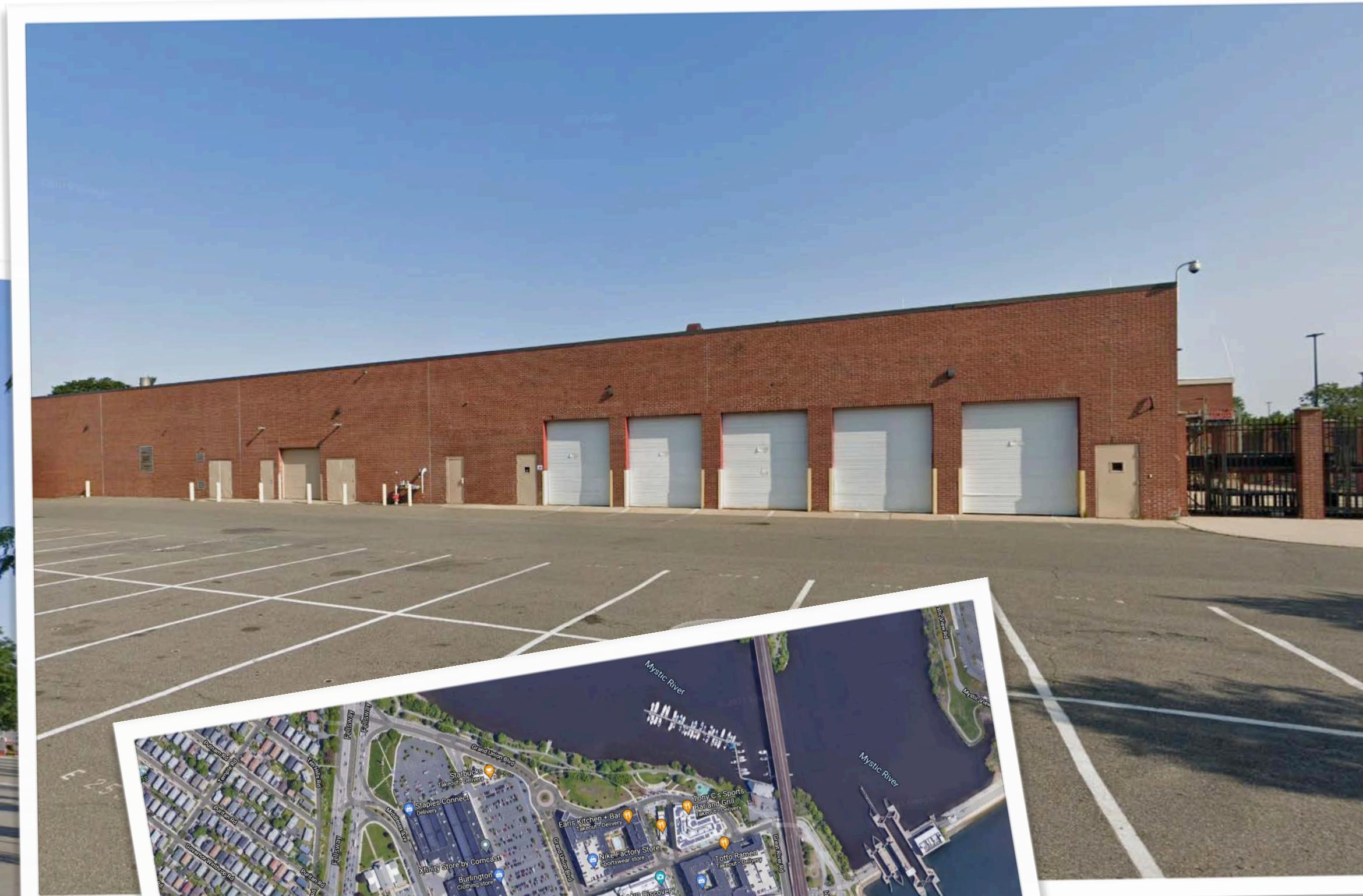
Food & Coffee Options

Restrooms

Natural Light



# Assembly Row - Fab Cities Technology Showcase



# Fab Cities Technology Showcase - R&D Centered Fab City Hub

Approximately **8,700 sq.ft** of raw R&D space divided in:

## Urban Agriculture

*"Urban farming will scale up from experimental practice to large scale infrastructure. Local production of foods at domestic, neighborhood and city scales will create a closed loop system for food production and harvesting." - Fab City Whitepaper*

2,000 sq.ft

Advisor(s)



José Duarte  
Restauranteur, Tambo22

## Machine Making

*"Creating an advanced manufacturing ecosystem: Being part of a global network of cities that share knowledge and best practices on urban solutions emerging from citizens, companies, educational institutions, and governments. Local networks of Fab Labs and mid-scale production centers connected to the larger global network of supply chains, sharing knowledge, best practices and projects." - Fab City Whitepaper*

2,000 sq.ft

Advisor(s)



Maxim Lobovsky  
Co-Founder & CEO, Formlabs

## Energy Conversion

*"With the advent of domestic batteries and efficiency improvements in solar and other means of clean power generation, energy distribution itself will face enormous changes. Distributed grids will change the role of households and businesses in power, water and resources distribution." - Fab City Whitepaper*

2,000 sq.ft

Advisor(s)



Saul Griffith  
Founder, Instructables



Amory Lovins  
Chairman, Rocky Mountain Inst.

## Recycling & Up-Cycling

*"Reduce the amount of imported goods, food and resources like water or energy. Increase the use of recycled raw materials for the production of objects in cities. Create added value in every iteration of a new product." - Fab City Whitepaper*

2,000 sq.ft

Advisor(s)



Marcin Jakubowski  
Founder, Open Source Ecology



# Specifications

Unfinished Space

Concrete Flooring

AC / Heat

Restrooms

External Ventilation

120V & 220V Power Drops

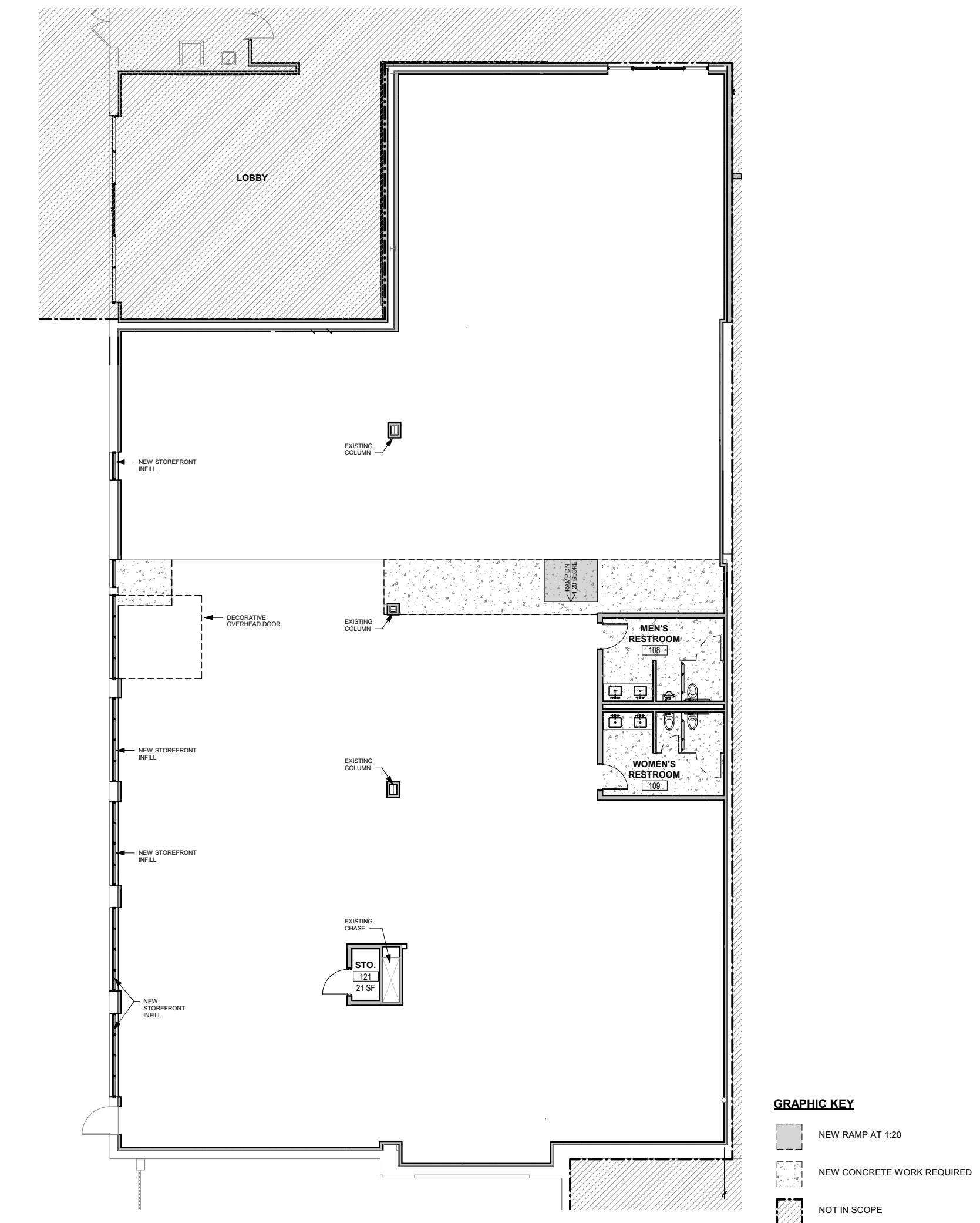
Sink(s) and Water Taps

Sewer Connection

Concrete Work (Ramp)

Decorative (PC) Overhead Door

New Storefront Infills



FAB FOUNDATION

77 MIDDLESEX AVENUE  
ASSEMBLY SQUARE TEST FIT

SUITE F, SOMERVILLE, MA 02145

FEDERAL  
1962



PHASE ZERO  
DESIGN  
architects | interior designers



## Contact:

**Sherry Lassiter:**  
[Sherry.Lassiter@fabfoundation.org](mailto:Sherry.Lassiter@fabfoundation.org)  
(617) 331-4659

**Luciano Betoldi:**  
[Luciano@fabfoundation.org](mailto:Luciano@fabfoundation.org)  
(857) 308-6019