HARVARD IN MASSACHUSETTS: FACTS & IMPACT

III.

4 CTS & IMPACA

21

20

# Harvard is proud to be part of the Commonwealth of Massachusetts.

We serve and strengthen our community with hundreds of programs across the state. We advance our mission and address some of the most pressing challenges of our time through our research and teaching. We help to make our region even more vibrant-and to contribute to its long history of innovation and progress.

LAWRENCE S. BACOW PRESIDENT OF HARVARD UNIVERSITY





With thousands of students, employees, and alumni from across Massachusetts, Harvard University is proud to be a part of the Commonwealth's cultural and economic landscape. Through generous financial aid, cutting-edge research, and strategic partnerships, Harvard ensures expanded access to education, spending in the regional economy, and that discoveries made on-campus translate into solutions and startups that address societal needs. Harvard strives to connect its nonprofit mission of teaching and research to the state and to help make Massachusetts a thriving region in which to live, learn, and work.

### HOW DOES HARVARD CONTRIBUTE?

### 2 EDUCATION

Expanding access to education and innovative opportunities for learning. Supporting students with generous financial aid. Contributing to the vitality of the region's workforce and knowledge-based economy.

the regional economy.

<u>4</u> 옷



Anchoring a knowledge-based economy as one of the largest employers in the state. Providing jobs that empower employees to grow and advance in their careers. IMPACT

10 🚔

#### ABOUT THE COVER $(\leftarrow)$

Recognized as one of the world's healthiest lab buildings, Harvard's Science and Engineering Complex (SEC) opened its doors in fall of 2021. At the intersection of climate and health, the SEC features innovative architecture and use of advanced technology, helping Harvard progress toward the University's goals of fossil fuel-neutral by 2026 and fossil fuel-free by 2050.



#### RESEARCH

Attracting hundreds of millions of dollars in research funding to Massachusetts. Fueling science, medical discoveries, and spending in

Cultivating a healthy, thriving, sustainable community that contributes positive social, economic, and environmental benefits. Supporting local businesses and

nonprofits through purchasing.



Driving discoveries that attract private investment, launch new ventures, and advance positive social impact. Sparking the region's entrepreneurial spirit.



Partnering for the common good and engaged communities. Expanding opportunities and access to programs for neighbors. Building upon shared visions of community.

For more information about facts and figures contained in this document, please visit community.harvard.edu/sources

Expanding access to education and innovative opportunities for learning. Supporting students with generous financial aid. Contributing to the vitality of the region's workforce and knowledge-based economy.

### STUDENT POPULATION

2020-2021 Academic Year

35,276 students at Harvard

5,212 Harvard College

students

13,616 16,448 Harvard Extension graduate students

School students

### Harvard Students from **Massachusetts**

# 10,805

students from Massachusetts at Harvard

#### Students by County

Barnstable	70	Norfolk	1,118
Berkshire	39	Plymouth	161
Bristol	125	Suffolk	2,544
Essex	395	Worcester	261
Hampden	54	Franklin, Dukes,	
Hampshire	40	Nantucket, Unattributed	68
Middlesex	5,930		

#### **Professional and Graduate Schools**

Harvard University has <u>12 professional and graduate</u> schools and the Radcliffe Institute for Advanced Study. Every year, these schools confer more than 5,500 master's and doctoral degrees across a wide range of fields-contributing to the vitality of the region's knowledge-based economy.

#### Harvard Extension School

With more than 900 courses in a variety of academic disciplines, the Extension School offers students and adult learners the opportunity to advance in their careers, explore an academic passion, or pursue a degree-expanding access to both undergraduate and graduate education opportunities through a combination of online and on-campus programs.



When I started thinking about college, I knew I wanted to be in a city since I grew up in a small rural town in Western Massachusetts. I decided to apply to Harvard and was ecstatic when I got the admission offer - it wasn't something I expected, coming from a small high school. What made it even better was that Harvard turned out to be the most affordable place to attend, allowing me to truly enjoy and get the most out of my college experience.

SARAH BECKWITH HARVARD COLLEGE | CLASS OF 2022 SOUTH EGREMONT, MA

#### **FINANCIAL AID**

Building on the University's commitment to expanding access to an affordable college education, the Harvard Financial Aid Initiative (HFAI) ensures students can attend Harvard College regardless of economic obstacles. This year, the University announced a significant expansion of financial aid for low- and middle-income families: beginning with the class of '2026, the cost to attend Harvard College will be free for families with annual incomes below \$75.000.



**READ MORE on the Harvard Gazette:** 

Harvard to expand financial aid starting with Class of '26

#### 2020-2021 ACADEMIC YEAR

<sup>\$</sup>173.2м in institutional need-based grant aid provided to Harvard College students

\$48.800

average award to Massachusetts students enrolled in Harvard College receiving aid

784 Massachusetts students enrolled

### 396

in Harvard College

Massachusetts students enrolled in Harvard College received need-based scholarship assistance

### <sup>\$</sup>19.3м

in scholarships awarded to Harvard College students from Massachusetts

### HARVARD FINANCIAL AID INITIATIVE

### \$**N**

families with annual incomes of less than \$75,000 pay nothing towards their child's education

100%

of students can graduate debt free

### **55**<sup>%</sup>

of undergraduates receive need-based grant aid

### <sup>\$</sup>2.5в

in grant aid distributed to undergrads since HFAI was launched in 2004

### LIFE SCIENCES OUTREACH PROGRAM **AT HARVARD UNIVERSITY**

#### Expanding Access to Life Sciences Programming for High School Students and Teachers

Established in 2002, the Life Sciences Outreach Program at Harvard University supports high school biology education through professional development programs for teachers and hands-on laboratory experiences for students. The program enables teachers to deepen their understanding of current research and provides students direct experiences with critical research tools and techniques. In partnership with Harvard faculty and participating teachers from public schools across Massachusetts, the Life Sciences Outreach Program develops innovative materials for teachers and further engages students' interest in the life sciences.

#### 2020-2021 ACADEMIC YEAR

1.200 Massachusetts high school students reached reached

### 72

Massachusetts teachers

### 8

Harvard faculty and araduate students contributed to the program

Attracting hundreds of millions of dollars in research funding to Massachusetts. Fueling science, medical discoveries, and spending in the regional economy.

### **FY21 RESEARCH FUNDING**

Expanding Knowledge, Anchoring Massachusetts Industries and Innovation

\$913M in research funding attracted to Massachusetts by Harvard

\$624M contributed by federal sources (68.3%)

### LOCAL JOBS, LOCAL PURCHASING

Harvard's research funding supports local jobs, businesses, and organizations.

# \$474м

of research dollars received were spent on purchases and salaries in Massachusetts (FY21)

### \$131м

<sup>\$</sup>78м

were used to purchase goods and services from businesses and organizations in Massachusetts



<sup>\$</sup>9.8м

supported businesses and organizations in Boston

supported businesses and organizations in Cambridge <sup>\$</sup>289M contributed by nonfederal sources (31.7%)

\$274м funded by Harvard to advance research, crucial to support early-stage ideas

### Eds and Meds Together

Harvard is affiliated with 14 teaching hospitals in Massachusetts that allow physicians, researchers, and scientists to generate the specialized knowledge needed to attract research funding and translate discoveries into treatments. In FY21, these hospitals attracted \$1.6 billion in NIH funding to the Commonwealth.

affiliated teaching hospitals

14

### .000+ Harvard Medical School faculty and

researchers working on campus and affiliated teaching hospitals

### ADVANCING SUSTAINABILITY AND **CLIMATE RESEARCH**

With more than 220 courses on climate change, energy, and sustainability, Harvard University is deeply engaged in advancing research about the environment and its many interactions with society. Through an interdisciplinary effort that encompasses a wide range of study fields - humanities, law and public policy, medicine and public health, architecture and design, sciences and engineering – Harvard students and faculty are working to address the many challenges of climate change while contributing to science, policies, and practices that promote a healthier planet. The Emmett Environmental Law & Policy Clinic at Harvard Law School, for example, is helping cities and towns across the Commonwealth of Massachusetts reach their net zero emissions goal. Together with the Law School's Environmental Law Program, the Clinic employs rigorous legal analysis to tackle some of the most pressing environmental challenges.

### 220+

courses on climate change, energy, and sustainability across campus



The urgency of the climate crisis demands that we all rise to the challenge. Harvard is committed to producing the knowledge that can help Massachusetts and the world prepare for worsening climate impacts ahead and to transition to a sustainable future.

#### JAMES H. STOCK

VICE PROVOST FOR CLIMATE AND SUSTAINABILITY HAROLD HITCHINGS BURBANK PROFESSOR OF POLITICAL ECONOMY HARVARD UNIVERSITY

### A COMMONWEALTH PARTNER IN **RESEARCH & INNOVATION**

Harvard is proud to collaborate with the Commonwealth of Massachusetts on a range of research initiatives that are critical to Massachusetts residents. In the past decade, the University has partnered with 16 state agencies, including the Massachusetts Life Sciences Center, on 70 research projects focused on addressing educational, environmental, and public health issues.

FY12 - FY21 16 Commonwealth of Massachusetts partners

### 70

research projects, advancing educational. environmental, and public health initiatives



#### IN FOCUS

Learn more about how the Harvard community is taking a multi-faceted approach to addressing and reversing the effects of climate change:

Addressing Climate Change

# **Ä INNOVATION**

Driving discoveries that attract private investment, launch new ventures, and advance positive social impact. Sparking the region's entrepreneurial spirit.

### AN ENGINE OF INNOVATION

Harvard's research enterprise yields discoveries with the potential to improve lives, transform industries, and make a positive social and economic impact. Through the Office of Technology Development, the University advances science, fosters innovation, and translates new inventions into useful products that are available and beneficial to society.

383

innovations reported by Harvard researchers in FY21

180 new patent applications filed by Harvard in FY21 4,465

90+

startups launched around Harvard research innovations during the past 5 years

total patents held by Harvard

as of July 1, 2021

992 technology licenses are active with 656 industry partners as of July 1, 2021

### **A BRIDGE TO INNOVATION**

Harvard operates two accelerator programs that combine funding strategies, technical support, and business expertise to help technology breakthroughs make the leap from campus labs to the commercial sphere.

#### **BLAVATNIK BIOMEDICAL ACCELERATOR**

Advancing innovations to improve health care and medicine

### <sup>\$</sup>24м+ <sup>\$</sup>125м+

in grants awarded to 134 projects in the past 14 years

in follow-on revenue and research funding generated to support continued innovation at Harvard that contributes to the launch of new Massachusetts-based companies

#### **PHYSICAL SCIENCES & ENGINEERING ACCELERATOR**

Advancing innovation in robotics, guantum computing, energy storage, and more

<sup>\$</sup>2.7м in grants awarded to 30



in financing raised by 11 projects in the past 7 years Harvard-launched startups

### Hi

#### HARVARD INNOVATION LABS Harvard i-lab | Launch Lab X | Pagliuca Harvard Life Lab

Harvard's Innovation Labs transform ideas into startups and businesses.

### AT THE HEART OF MASSACHUSETTS **INNOVATION ECONOMY**

Harvard's research enterprise, coupled with the affiliated teaching hospitals and sister institutions, create a powerhouse for attracting funding, generating early-stage ideas, driving innovation, discovering cures, and building Massachusetts' economy.

### <sup>\$</sup>4.5<sub>B</sub>

in equity financing raised by startups launched to commercialize Harvard technologies in the past 5 years

# L ANDMARK BIO

New Center Aims to Boost Cell and Gene Therapies

Landmark Bio, born of a partnership of Boston-area universities, hospitals, and private industry led by Harvard and MIT, is working to accelerate the development and industrialization of novel therapeutics.

In recent years we have seen an eruption of groundbreaking discoveries in the life sciences. Thanks to the innovative publicprivate partnership led by Harvard and MIT, the newly launched Landmark Bio is working to translate these discoveries into life-saving therapies.

RAN ZHENG CEO | LANDMARK BIO

**EXAMPLES OF MASSACHUSETTS-BASED COMPANIES LAUNCHED AROUND HARVARD TECHNOLOGIES** 













Semma THERAPEUTICS



ZAPATA

### 1,600+ ventures created through iLabs in the past decade



### 2021 BIOTECHNOLOGY VC FUNDING

<sup>\$7.9</sup>B

in venture capital funding was received by 97 biotechnology companies in Massachusetts

### <sup>\$</sup>7.1в

of which was received by 79 companies with connections to Harvard (89 percent of the funding awarded)

A Harvard alum or faculty member serves on the board or on the management team of 21 of the 25 largest life science companies in Massachusetts



**READ MORE** on the Harvard Gazette:

Partnership aims to accelerate cell and gene therapy

Anchoring a knowledge-based economy as one of the largest employers in the state. Providing jobs that empower employees to grow and advance in their careers.

5th largest employer of Massachusetts residents

#1 largest employer in the City of Cambridge for 22 consecutive years

### **PROFESSIONAL DEVELOPMENT & CAREER ADVANCEMENT OPPORTUNITIES**

#### **CENTER FOR WORKPLACE DEVELOPMENT**

Through the Center for Workplace Development (CWD), Harvard provides programs, tools, coaching, and consulting to employees to help them succeed and advance in their careers.

2,347

270

employees completed 177 CWD leadership, management, and professional development courses in FY21

employees have become U.S. citizens through CWD's Bridge Program to date

#### **TUITION ASSISTANCE PROGRAMS (TAP)**

Harvard offers employees opportunities for lifelong learning and the ability to earn an undergraduate or graduate degree from a Harvard school for a fraction of the cost through tuition assistance programs.

1,776

Harvard employees took Harvard Extension School courses using TAP benefits during the 2020-2021 academic year



CREW CHIEF

# 17,245

MASSACHUSETTS RESIDENTS DIRECTLY EMPLOYED BY HARVARD

ACADEMIC		NON-ACADEMIC
4,709		12,536
•	1,699	includes research and faculty assistants, lab technicians, staff members, and administrators



#### **MA COUNTIES\***

Barnstable	57
Berkshire/Dukes/ Hampden/Nantucket	24
Bristol	181
Essex	787
Franklin	12
Hampshire	29
Middlesex	9,860
Norfolk	2,101
Plymouth	387
Suffolk	3,494
Worcester	312
Outside of MA	1,457

\* AS OF SEPTEMBER 2021

### **APPRENTICESHIP AND YOUTH INTERNSHIP OPPORTUNITIES AT HARVARD**

Harvard partners with local communities to provide apprenticeship and internship opportunities, expanding access to valuable learning and work experiences for youth.

### 700+

high school students have worked in various office and lab positions across Harvard over the past 5 years including through:

- Summer Youth Employment Program
- Life Science Lab Apprenticeship Program
- · Cambridge Rindge and Latin School Marine Science Internship
- Harvard Science Research Mentoring Program

### 281 Year Up interns have been hired since Harvard first partnered with the organization more than 15 years ago

### Ь

individuals have been hired at Harvard through Apprenti, a technology-focused apprenticeship program

I did not expect to get where I am so guickly. CWD's Bridge Program is life-changing and I'm motivated to let my colleagues know about it so they, too, can add to their skills and experiences at Harvard.

**GABIE DILIGENT** HARVARD UNIVERSITY CAMPUS SERVICES

Cultivating a healthy, thriving, sustainable community that contributes positive social, economic, and environmental benefits. Supporting local businesses and nonprofits through purchasing.

### SUSTAINABILITY AT HARVARD

Harvard is committed to transitioning away from fossil fuel use. In 2018, the University announced two bold, climate action goals:



In 2019, Harvard formed a new Presidential Committee on Sustainability to advise the University on meeting the sustainability goals, while leveraging the community's strengths to catalyze solutions that can be scaled by other organizations, cities, and countries for a fossil fuel-free future.

#### **BY THE NUMBERS**

NFT **30**<sup>%</sup>

campus

144 LEED-certified

buildings

reduction achieved in 2016

18

vegetated green bike parking spots roofs across

### installations **30**<sup>%</sup>

2.5

megawatts of

onsite solar energy

of Harvard's bus fleet is electric

### PARTNERING FOR A SUSTAINABLE FUTURE

### City of Boston's Climate Action Plan

Harvard co-chairs the Higher Education Working Group of the Boston Green Ribbon Commission (GRC), a group of business, institutional, and civic leaders, working to provide advice and counsel to the City of Boston on the design and implementation of its Climate Action Plan.

### **Cambridge Community Compact for a** Sustainable Future

Harvard is a founding partner of the City of Cambridge's Community Compact for a Sustainable Future, created to leverage the intellectual and entrepreneurial capacity of the public-private sectors in Cambridge and to build a healthy, livable, and sustainable future.

### **HARVARD'S SCIENCE & ENGINEERING** COMPLEX (SEC)

At the intersection of climate and health, Harvard's SEC, which opened in fall of 2021, has been recognized for its healthy, sustainable, and energy-efficient design. In addition to helping the University achieve its sustainability goals, the construction of the SEC served as an opportunity to help society make healthier decisions and create safer supply chains.

### 6.000+

building materials evaluated by Harvard

### 1,200+

companies publicly disclosed the ingredients in their products



### **READ MORE** on the Harvard Gazette:

New Complex Recognized as One of the World's Healthiest Lab Buildings

### **IMPACT OF LOCAL SPENDING**

In FY21, Harvard spending totaled **\$3.1 billion**. Harvard personnel expenses totaled **\$2.7 billion**. The majority of spending went to purchase supplies, maintain and expand the physical plant, and run the University. These activities cost **\$5.8 billion.** 

### **ALUMNI & PUBLIC SERVICE**

Harvard alumni are deeply engaged in their communities and in making a positive impact by dedicating their careers to public service and serving as board volunteers.

51,141 estimated Harvard alumni living in Massachusetts



A Harvard alum or faculty member serves on the board or on the management team of 23 of the 25 largest nonprofit organizations.

21

# 55

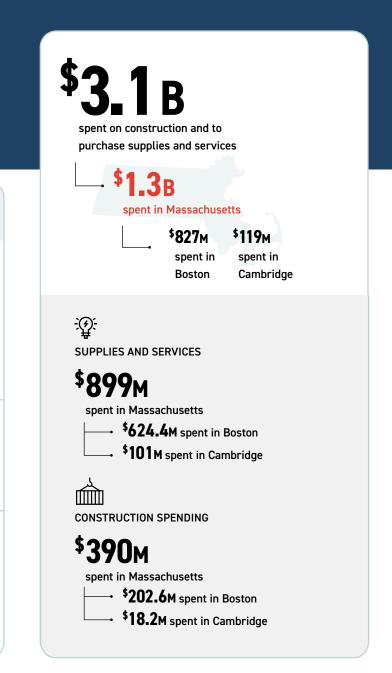
Harvard alumni are members of the 192nd General Court of the Commonwealth of Massachusetts United States Congress

### Harvard alumni are members of the 117th

### **2ND ANNUAL GLOBAL DAY OF SERVICE**

Harvard's Global Day of Service is a community-wide effort to help neighbors and serve community needs through inperson and remote volunteer projects. This past fall, students worked with 71 service projects, 29 that took place in Boston and Cambridge.

1.500 volunteers participated in the Global Day of Service in fall of 2021





**READ MORE** on the Harvard Gazette:

United in Service

# **Solution** COMMUNITY ENGAGEMENT

Partnering for the common good and engaged communities. Expanding opportunities and access to programs for neighbors. Building upon shared visions of community.

Harvard operates many community-serving programs that are a natural extension of the University's mission of teaching and research. From educational and employment opportunities to critical health and legal services, these programs help open doors for thousands of people and empower local communities.

#### Project Teach

Harvard's Official College & Career Awareness Program

Project Teach is a program for middle school students enrolled in Boston Public Schools and Cambridge Public Schools that aims to demonstrate how college can be an affordable and attainable goal for everyone. The program is based on the research of Dr. Mandy Savitz-Romer of the Harvard Graduate School of Education and focuses on communicating college and career goals, sharing resources, developing partnerships between students and colleges, and engaging families.

436 students participated in Project Teach during the 2020-2021 academic year 7.000+

students have been reached since 2001

#### Clinical & Pro Bono Programs Harvard Law School

The Clinical and Pro Bono Programs - a collection of 49 in-house clinics, externship clinics, and student practice organizations provide referrals and free legal services to low-income individuals across the Commonwealth. Harvard Law School faculty and students help residents on issues ranging from housing, family law, domestic violence, taxes, consumer protection, government benefits, criminal defense, special education, immigration, and bankruptcy.

# 393K+

pro bono hours contributed by the JD Class of 2021

#### **HMS MEDscience**

Bringing Science to Life for High School Students

MEDscience is an innovative high school science curriculum that provides students with the opportunity to bring science to life through hands-on mock clinical cases and classroom lessons conducted at Harvard Medical School. The program addresses the inspiration gap in the science, technology, engineering, and math (STEM) fields and engages traditionally underserved and underrepresented youth, empowering them with the skills for success in their academics and future careers.

### 500+

students reached during the 2020-2021 academic year



READ MORE on the Harvard Gazette: Medical Immersion for Students Shifts Online in Pandemic

#### The Crimson Summer Academy at Harvard University

The Crimson Summer Academy (CSA) is an educational program that provides traditionally underserved high school students with a stimulating mix of classes, projects, and cultural activities on Harvard's campus, helping them prepare for success in college and beyond. Over the course of three consecutive summers, students from public schools in Boston, Cambridge, and Somerville receive instruction, sustained support, and close mentoring relationships with Harvard College undergraduates that help expand their vision of what's possible.

**94**<sup>%</sup> of CSA graduates complete college in four years

58 students reached during the 2020-2021 academic year

### The Family Van

The Family Van is a mobile clinic affiliated with Harvard Medical School that is dedicated to increasing access to health care, health resources, and various social services. Designed in collaboration with community partners over 29 years ago, the Van provides free preventive health screenings and education, creating more equitable health outcomes. The Van regularly sees patients in some of Boston's underserved communities, carrying out curbside testing, health coaching, and referrals for follow-up care. By traveling directly to areas in which the need is greatest, The Family Van fosters an atmosphere of trust and removes barriers to care.

# 1,112

individuals received health screenings. health education and referrals during 1,548 free visits in FY21

# <sup>\$2\_8</sup>м

in estimated avoided emergency room costs over five years



**READ MORE** on the Harvard Gazette:

Driven to Provide Health Care



Aolani Perillaari (right) administers a blood pressure test.

#### LabXchange Expanding Access to STEM Education

LabXchange – a collaboration between Harvard Office of the Vice Provost for Advances in Learning and Amgen Foundation – is designed to bring the scientific process to life in the classroom and beyond. Through high-quality content, including simulations and assessments, and opportunities for mentorship and dialogue, LabXchange helps to expand access to STEM education and promote students' exploration of STEM careers. Through an interdisciplinary collaboration with several historically Black colleges and universities, and other institutions, LabXchange is launching a new initiative, Racial Diversity, Equity, and Inclusion in Science Education, aimed at advancing racial equity in healthcare, education, and STEM

26k+ Massachusetts educators, students, and lifelong learners supported

110+ school & institutional collaborators

11<sub>K</sub>+ hours of teaching and learning

70+ educator co-developers and content collaborators



**READ MORE** on the Harvard Gazette:

LabXchange produces new digital antiracism resources

As a student from UMass Boston, I'm grateful for the internship opportunity with The Family Van that's affiliated with Harvard Medical School. The Van is demonstrating the crucial role a mobile clinic can have in bringing health equity in communities with racial and ethnic minorities.

**AOLANI PERILLAARI** SUMMER 2021 INTERN | THE FAMILY VAN



Public Affairs & Communications 114 Mount Auburn Street, 6th Floor Cambridge, MA 02138 617-495-4955

COMMUNITY.HARVARD.EDU EDPORTAL.HARVARD.EDU LEADLOCALLY.COMMUNITY.HARVARD.EDU