Harvard and the Massachusetts Economy
Universities are an essential part of Massachusetts’ innovation and economic landscape. They provide the intellectual infrastructure—the wellspring of ideas, solutions, and technologies and patents that fuel growth, attract the startups and the established companies that create new jobs and need knowledge workers to grow. Harvard is proud to be part of this region, and to contribute in a way that makes the communities we call home stronger, safer, and more vibrant as a result of the work we do together.

DREW GILPIN FAUST
PRESIDENT OF HARVARD UNIVERSITY
LINCOLN PROFESSOR OF HISTORY
Harvard and the Massachusetts Economy

Harvard University takes pride in being part of the Massachusetts community. Through our teaching, research, and operations, we seek to contribute to the region’s innovation ecosystem and to help create jobs, businesses, and economic growth.

How does Harvard contribute?

**EDUCATION**  |  2
---
Supporting traditional and nontraditional students with generous financial aid, making education available to the most talented students, regardless of their ability to pay.

**RESEARCH**  |  4
---
Attracting more than three-quarters of a billion dollars in research funding to Massachusetts, fueling science, medical discoveries, health improvements, and spending in our local economy.

**INNOVATION**  |  6
---
Making discoveries that attract private investment and launch new ventures, sparking our region’s entrepreneurial spirit.

**EMPLOYMENT**  |  8
---
Serving as one of the largest employers in the state, providing good jobs that help employees grow and advance their careers.

**IMPACT**  |  10
---
Spending nearly $1.4 billion locally to operate the University and maintain facilities.

For more information about the facts and figures contained in this document, please visit community.harvard.edu/sources
Supporting traditional and nontraditional students with generous financial aid, making education available to the most talented students, regardless of their ability to pay.

**STUDENT POPULATION**

34,202

TOTAL STUDENTS

- 6,962 undergraduates
- 13,638 professional and graduate students
- 13,602 Extension School students

**PROFESSIONAL AND GRADUATE STUDENTS**

Harvard University contains 11 degree granting professional and graduate Schools: Harvard Business School, the Graduate School of Design, Harvard Graduate School of Education, the John F. Kennedy School of Government, Harvard Law School, the Harvard T.H. Chan School of Public Health, the Harvard School of Dental Medicine, the Harvard Divinity School, the Harvard John A. Paulson School of Engineering and Applied Sciences, the Graduate School of Arts and Sciences, and Harvard Medical School.

**HARVARD EXTENSION SCHOOL**

The Harvard Extension School is designed to serve the educational interests and needs of Greater Boston residents. The Extension School allows students to take classes taught by a combination of Harvard faculty, adjunct faculty, and experienced professionals in a wide variety of academic disciplines. Students may apply to master’s, undergraduate, associate degree, or professional certificate programs. Online courses are also available.

**UNDERGRADUATE CLASS OF 2020: WHERE ARE THEY FROM?**

- 19.5% Mountain Pacific
- 10.5% Central/Midwest
- 23.1% Mid-Atlantic
- 16.4% South
- 17.7% New England
- 12.8% International & territories
There was absolutely no chance I could have come here [to Harvard] without financial aid. It made the most fundamental difference.

SOPHIE CARROLL
HARVARD COLLEGE CLASS OF 2017

FINANCIAL AID

One in five Harvard undergraduates is from a family with an annual income of $65,000 or less. In fact, nearly 60 percent of undergraduates receive need-based Harvard scholarship aid, and 100 percent of Harvard College students can graduate debt-free.

$47,022
average award to Massachusetts students receiving aid in the 2015–2016 academic year

943
Massachusetts students enrolled in Harvard College (2015–2016)

525
Massachusetts students enrolled received need-based scholarship assistance

$172m
in institutional need-based scholarship support was budgeted for use by Harvard College students (2015–2016)

$51,350
Harvard, federal, and outside scholarships

$12,050
parent contribution

$2,000
student term-time job

$1,150
student summer work and asset contribution

EDX AND HARVARDX

In May 2012, Harvard joined forces with MIT to form edX, a not-for-profit, open-source online learning platform that features interactive and innovative tools for teaching and studying via the Web. Backed by a shared $60 million commitment, edX allows 95+ educational partners to distribute course content and other academic materials through 80+ open courses. The goals of edX are to expand access to education worldwide, improve teaching and learning on campuses and beyond and advance teaching and learning through educational research.

HarvardX
Founded in tandem with edX, HarvardX enables faculty to build and create open online learning experiences for residential and online use, and advances research in the learning sciences.

4.31m+
global course registrations*

of which

110,000+
were in MA*

1.47m+
global unique course participants*

of which

37,000+
were in MA*

* AS OF SUMMER 2016
**RESEARCH**

Attracting more than three-quarters of a billion dollars in research funding to Massachusetts, fueling science, medical discoveries, health improvements, and spending in our local economy.

**FUNDING**

$795.7m

| RESEARCH FUNDING: EXPANDING KNOWLEDGE, BENEFITING MASSACHUSETTS (FY15) |
|---|---|
| $577.5m | $218.2m |
| CONTRIBUTED BY FEDERAL SOURCES | CONTRIBUTED BY NONFEDERAL SOURCES |

Nearly 75 percent of Harvard's research activities were funded by federal research dollars.

$402.5m

from NIH GRANTS
The single largest source of research dollars is the National Institutes of Health (NIH).

$175m

from NSF, DOD, HHS, DOE, NASA, and others

More than 25 percent of Harvard's research funding came from non-federal sources including industry and foundations such as the Gates Foundation.

Between FY14 and FY15, research funding from non-federal sources increased by more than 7 percent.
My lab works on proteins that get information and materials across the membrane barriers of the cells. And, by nature of transporting things, these systems are dynamic. And we’re developing biophysical tools to reveal the architecture and motional aspect for understanding how they work.

DR. JAMES CHOU
PROFESSOR OF BIOLOGICAL CHEMISTRY & MOLECULAR PHARMACOLOGY,
HARVARD MEDICAL SCHOOL

LOCAL SUPPORT, LOCAL HIRES, LOCAL PURCHASES

$317.6m

of the research dollars received were spent on purchases and salaries in Massachusetts (FY15)

$282.3m

supports researchers and staff

$35.3m

of the research dollars received were used to purchase goods and services from companies located in Massachusetts

$4.3m

supported companies in Cambridge

$10.6m

supported companies in Boston
INNOVATION
Making discoveries that attract private investment and launch new ventures, sparking our region’s entrepreneurial spirit.

AN ENGINE OF INNOVATION
The Office of Technology Development is charged with protecting, supporting, and advancing the development of new discoveries and inventions arising from Harvard’s research enterprise.

THE HARVARD INNOVATION LABS
The Harvard Innovation Labs is a vibrant, cross-disciplinary ecosystem for the Harvard, Allston, and Greater Boston communities to explore innovation and entrepreneurship while building deeper connections. Between the i-lab’s initial opening in November 2011 through spring 2016:

- 253,000+ visits since opening
- 243 new patent applications FY15
- 450 innovations FY15
- 100+ startups launched**
- 651 active licenses*
- 361 industry partners*
- 70–100 Harvard Ventures in Residence at any given time
- 2,105 active patents held*
- 13m in grants were awarded to 68 projects between 2007 and 2016. These projects have, in turn, attracted an additional $28 million in industry-sponsored research funding.
- 75 Experts in Residence hold regular office hours to mentor and advise entrepreneurs
- 850 community-partner sponsored events held at the i-lab in the past five years
- 4,675+ events have been held

* AS OF JULY 1, 2016
** BASED ON HARVARD IP DURING THE PAST DECADE

BLAVATNIK BIOMEDICAL ACCELERATOR
I think Harvard has true thought leaders—people who are at the top of their game. If I find someone who is zeroed in on a problem I care about and doing it in a way that I see a future in, on many occasions it’s a Harvard professor, or a Harvard student or post-doc.

CARMICHAEL ROBERTS
GENERAL PARTNER, NORTH BRIDGE VENTURE PARTNERS

VENTURE CAPITAL AWARDS

In 2014 and 2015, young Massachusetts companies received nearly $10 billion in venture capital funding, and more than half of those companies have a strong connection to Harvard.

2014

$4.41bn received by MA companies

341 companies received funding

62% (212) of those have a Harvard connection

14% (48) have a connection to a Harvard affiliated teaching hospital

2015

$5.5bn received by MA companies

321 companies received funding

72% (232) of those have a Harvard connection

16% (59) have a connection to a Harvard affiliated teaching hospital

Some companies are still in “stealth mode,” making it impossible to assess possible Harvard connections. In addition, the amount of venture capital funds some companies received is not yet publicly available.

2015 BIOTECH DEALS

$933.9m in venture capital funding was received by 30 companies in Massachusetts

$854.2m of which was received by 27 companies with connections to Harvard (91% of the funding awarded)

SELECTED HARVARD CONNECTIONS

VENTURE CAPITAL BACKED MASSACHUSETTS COMPANIES THAT RECEIVED FUNDING IN 2015

- RANA THERAPEUTICS
- ImmuneXcite
- SPERO THERAPEUTICS
- UNUM THERAPEUTICS
- 480 biomedical
Serving as one of the largest employers in the state, Harvard provides good jobs that help employees grow and advance their careers.

**PEOPLE DIRECTLY EMPLOYED BY HARVARD IN MASSACHUSETTS**

18,335

**TOTAL PEOPLE IN MASSACHUSETTS DIRECTLY EMPLOYED BY HARVARD***

<table>
<thead>
<tr>
<th>ACADEMIC</th>
<th>NON-ACADEMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,320</td>
<td>13,015</td>
</tr>
<tr>
<td>3,298</td>
<td>2,022</td>
</tr>
<tr>
<td>faculty</td>
<td>post-docs</td>
</tr>
</tbody>
</table>

Staff members responsible for supporting Harvard’s academic mission and the day-to-day operation of the University

**RESIDENCE OF HARVARD EMPLOYEES IN MASSACHUSETTS***

Harvard has been the largest employer in the city of Cambridge for 18 consecutive years.

<table>
<thead>
<tr>
<th>Residence</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnstable</td>
<td>33</td>
</tr>
<tr>
<td>Berkshire</td>
<td>2</td>
</tr>
<tr>
<td>Bristol</td>
<td>168</td>
</tr>
<tr>
<td>Dukes</td>
<td>0</td>
</tr>
<tr>
<td>Essex</td>
<td>706</td>
</tr>
<tr>
<td>Franklin</td>
<td>16</td>
</tr>
<tr>
<td>Hampden</td>
<td>5</td>
</tr>
<tr>
<td>Hampshire</td>
<td>16</td>
</tr>
<tr>
<td>Middlesex</td>
<td>10,666</td>
</tr>
<tr>
<td>Nantucket</td>
<td>0</td>
</tr>
<tr>
<td>Norfolk</td>
<td>2,068</td>
</tr>
<tr>
<td>Plymouth</td>
<td>329</td>
</tr>
<tr>
<td>Suffolk</td>
<td>3,418</td>
</tr>
<tr>
<td>Worcester</td>
<td>257</td>
</tr>
<tr>
<td>Outside of MA</td>
<td>651</td>
</tr>
</tbody>
</table>

*AS OF DEC. 31, 2015
The Summer Youth Employment Program allows Harvard University managers to connect with amazing students who truly represent the future of the workforce. These opportunities help students develop invaluable skill sets, gain firsthand experience in the workplace, and set them up for success in the future. It’s an immensely valuable program for Harvard that will grow our relationship with these communities in the years to come.

MICHELLE GORDON-SEEMORE
DIRECTOR OF RECRUITMENT SERVICES, HARVARD HUMAN RESOURCES

PROFESSIONAL DEVELOPMENT

Harvard offers its employees—nearly 50 percent of whom are represented by a union—an array of professional development opportunities, and we partner with our host communities to establish strong internship programs for high school students.

SUMMER JOB PLACEMENT
HIGH SCHOOL STUDENTS

781 jobs Harvard has provided for Cambridge and Boston high school students over the past five years

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153 153 163 159 153
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HARVARD BRIDGE PROGRAM

An education and training program open to all Harvard staff and faculty, the Bridge Program offers classes including academic writing, business writing, college preparation, career exploration, computer skills, English for speakers of other languages (ESOL), high school diploma preparation, advanced pronunciation, and more. Bridge students may also request one-on-one tutorial sessions, including citizenship preparation. Career development services include individual counseling, professional internships, and job shadowing opportunities. The following information about the Harvard Bridge Program is current as of July 2016.

3,421 students who have enrolled in classes through the Bridge Program since 2000

240 employees have become US citizens through the Bridge Program since 2007

In 2015, the Bridge Program offered six weekend computer classes to Harvard service employees. These trainings allow employees to continue to develop professionally and personally, and they accommodate employees’ normal work schedules.

70 Bridge students took part in the Healthy Harvard initiative, taking Mindfulness Meditation classes, which help employees to reduce stress and improve the quality of their lives.

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LEARN MORE
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Harvard’s economic, health, and social impacts are felt around the globe and in our backyard. In Massachusetts, Harvard’s 50,000 alumni are playing leading roles at world-renowned teaching hospitals, cultural centers, and research institutions.

### ALUMNI

A Harvard alumni or faculty member serves on the board or in management of **23 of the 25 largest nonprofits** in Massachusetts (as measured by total assets according to the Boston Business Journal).

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>271,000</strong></td>
<td>estimated alumni living in the United States</td>
</tr>
<tr>
<td><strong>2,430</strong></td>
<td>alumni hold senior leadership positions in or were the founders of Massachusetts companies</td>
</tr>
<tr>
<td><strong>49,600</strong></td>
<td>estimated alumni currently living in Massachusetts</td>
</tr>
<tr>
<td><strong>47</strong></td>
<td>Harvard alumni are members of the 114th Congress</td>
</tr>
</tbody>
</table>

### VISITORS

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>70,253</strong></td>
<td>people visited the Harvard Information Center in 2015</td>
</tr>
</tbody>
</table>

### EMPLOYEES

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18,335</strong></td>
<td>employees made Harvard the fourth largest employer in Massachusetts in 2015</td>
</tr>
</tbody>
</table>

### DOCTORS

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10,400</strong></td>
<td>doctors at Boston-area hospitals hold academic appointments at Harvard Medical School</td>
</tr>
</tbody>
</table>

### AWARDS AND RECOGNITIONS

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>95</strong></td>
<td>Nobel laureates and Pulitzer Prize winners have been members of the Harvard faculty</td>
</tr>
<tr>
<td><strong>AAA</strong></td>
<td>Harvard’s stable presence has been cited by bond rating agencies as contributing to Cambridge’s triple-A bond ratings</td>
</tr>
</tbody>
</table>
In FY15, Harvard spending totaled almost $5 billion; Harvard personnel expenses totaled $2.2 billion. The majority of Harvard spending went to purchase supplies, maintain and expand the physical plant, and run the University. These activities cost $2.8 billion.

Harvard has been a terrific partner in working to ensure that excess food from its dining halls does not go to waste, and instead finds its way to our neighbors who need it most. Harvard’s commitment, time, energy, and resources have made a lasting difference in the battle on hunger.

SASHA PURPURA
EXECUTIVE DIRECTOR, FOOD FOR FREE

SPENDING BENEFITS THE LOCAL ECONOMY

In FY15, Harvard spending totaled almost $5 billion; Harvard personnel expenses totaled $2.2 billion. The majority of Harvard spending went to purchase supplies, maintain and expand the physical plant, and run the University. These activities cost $2.8 billion.

$2.8bn spent on construction and to purchase supplies and services

$1.4bn spent in Massachusetts

$785m spent in Boston

$129.6m spent in Cambridge

CONSTRUCTION SPENDING

$433m spent on construction

$373m spent in Massachusetts

$183m spent in Boston

$22.3m spent in Cambridge

SUPPLIES AND SERVICES SPENDING

$2.4bn spent on supplies and services

$1bn spent in Massachusetts

$601.6m spent in Boston

$107.3m spent in Cambridge

FACTS & IMPACT

Learn more