

<u>Investing in the Future: Catalyzing Massachusetts' Research and Innovation</u> <u>Ecosystem</u>

Massachusetts is the global leader in innovative research and the discovery of lifesaving cures. The state's world-class institutions, cutting-edge discoveries, and highly skilled workforce have made it a hub for life sciences, health care, technology, and education. Research funding is also foundational to the Massachusetts economy – it's economic infrastructure here, supporting tens of thousands of jobs and generating billions for our economy.

Governor Healey is putting forward a coordinated, forward-looking proposal that includes legislation and executive action. The **Discovery, Research, and Innovation for a Vibrant Economy Initiative** (DRIVE) Initiative, will create jobs across industries – from construction and food services to health care and education – and protect Massachusetts' global leadership in health care, innovation, and discovering cures to help families across the world.

The proposed legislation creates major new funding vehicles: it establishes at MassDevelopment a \$200 million Research Resilience Fund and a new entity called the Research Catalyst Fund, which will accept and deploy philanthropic and industry contributions. Together, these funds will be governed by a newly created Research Opportunity Review Board, which will identify and support high-impact projects that benefit the public and advance the state's innovation economy. The legislation also establishes a Public Higher Education Bridge Funding Reserve, a separate \$200 million investment designed to strengthen research operations, talent pipelines, and partnerships at the state's public colleges and universities.

Complementing these legislative efforts, Governor Healey signed an executive order to establish the **Advisory Commission on Advancing Research and Discovery in Massachusetts**, a strategic forum for collaboration among leaders in research, education, and industry. The Commission will guide long-term thinking on sustainability, partnerships, and statewide opportunity.

Massachusetts as a Global Leader in Research and Discovery

Massachusetts has long been a global leader in research and innovation. The state's economy is powered by a dense network of universities, hospitals, independent research institutes, and industry partners, all supported by an unparalleled talent pipeline and a history of breakthrough discoveries.

According to a report recently released by the UMass Donahue Institute, the \$8.57 billion in federal research and development funding that Massachusetts received in FY24 supports 81,300 jobs, \$7.8 billion of income, and generates more than \$16 billion



in economic activity. The funding also represents a good return on investment. For every dollar invested, the state sees an economic benefit of double that amount. Massachusetts is home to one in every 10 jobs in research and development in the United States. Two out of every five of the jobs created by this funding are in sectors outside of research and development, including: construction, food services, health care, retail and administrative support.

Why We Need to Invest Now: Research Powers the Massachusetts Economy

Massachusetts' research ecosystem is not just a hub of innovation, it is a cornerstone of the state's economy, providing high-quality jobs, attracting talent, and sustaining industries across the Commonwealth. The sector directly employs tens of thousands of people and anchors regional economies in every part of the state.

Massachusetts's innovation economy accounts for nearly 40% of jobs in the state,¹ and continues to grow. In 2023, the state's R&D workforce grew by 3.7%, even as the national R&D workforce declined by 0.5%.² Worcester County biomanufacturing jobs rose by 11.8%, outpacing national trends.³ Also in 2023, the state added nearly 3,000 net new biopharma jobs, accounting for 17% of job growth across the entire state.⁴

Public research institutions play a particularly vital role. The UMass System contributed \$8.3 billion in economic activity in FY22, through operations, construction, staff and student spending, and supplier contracts that ripple outward into the broader economy. UMass Amherst, the flagship campus, strengthens the state's talent pipeline: about 60% of alumni remain in the state after graduation, fueling the Commonwealth's workforce and innovation economy.

The impact of research extends far beyond the institutions and sectors that directly receive funding. Research activity creates jobs across the entire economy, sustaining thousands of blue collar and service jobs in construction, food services, retail, transportation, and administrative support.

The numbers tell a powerful story of both direct and indirect impact:

- In FY24, Massachusetts received \$8.6 billion in federal R&D funding.⁵
- This funding directly and indirectly supports 81,300 jobs, \$7.8 billion in income, and more than \$16 billion in total economic activity.
- Direct jobs account for 57% of this total, while 43% (approximately two out of every five) are in supporting industries like real estate, retail, transportation, and

¹ MAInnovationIndex-2022-8-24.pdf

² Massachusetts Biopharma Adds 3,000 Jobs in 2023, MassBio Industry Snapshot Finds - MassBio

³ Massachusetts Biopharma Adds 3,000 Jobs in 2023, MassBio Industry Snapshot Finds - MassBio

⁴ Massachusetts Biopharma Adds 3,000 Jobs in 2023, MassBio Industry Snapshot Finds - MassBio

⁵ UMass Donahue Institute | Economic Impacts of Research and Development Funding In Massachusetts



food services. Specifically, research activity sustains approximately 4,000 jobs in real estate, 3,000 in retail, and 1,600 in transportation and warehousing.

• Every dollar invested in research yields nearly two dollars in economic benefit, underscoring the high return on investment for the Commonwealth.

Yet Massachusetts's leadership and success are not guaranteed. Other states and countries are investing aggressively in their own research and innovation economies, seeking to compete for the projects, partnerships, and talent that have long made Massachusetts a destination for discovery. Our research institutions face growing pressure to modernize infrastructure, retain early-career talent, and remain competitive in attracting top-tier projects. Steep cuts to federal research funding, including reductions from the National Institutes for Health (NIH), National Science Foundation (NSF), and National Oceanic and Atmospheric Administration (NOAA), combined with caps on indirect spending, threaten the researchers and institutions that have anchored our innovation economy and pushed scientific discoveries forward.

Now is the moment to invest. By proactively strengthening our research ecosystem in Massachusetts, we can:

- Preserve and expand high-quality jobs across industries;
- Retain top talent and attract new innovation leaders;
- Build regional economic strength across the state; and
- Keep Massachusetts at the forefront of global discovery.

These investments are not about weathering a crisis, they are about seizing an opportunity to shape the next era of Massachusetts's leadership, resilience, and economic vitality.

The Healey-Driscoll Proposal

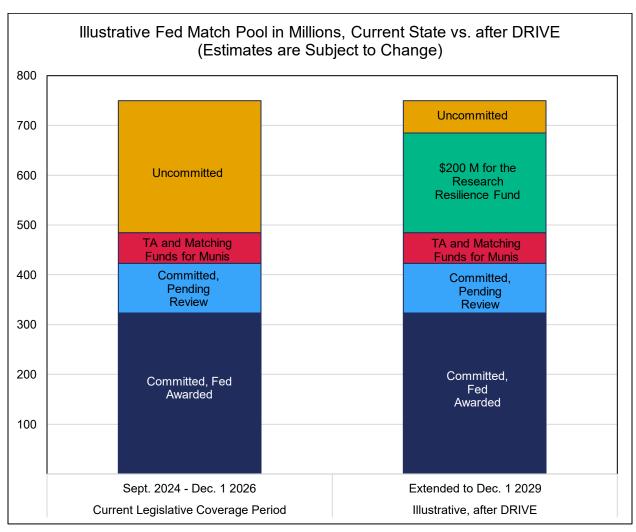
To ensure that Massachusetts remains a global leader in research and discovery, the Healey-Driscoll Administration has put forward a coordinated, forward-looking proposal that combines new legislation with executive action. This initiative will establish infrastructure to support high-impact research, strengthen public higher education, and create opportunities for philanthropy and industry to work together in new ways to boost investment in the Commonwealth's innovation economy.

At the core of the legislation are two major funding mechanisms designed to ensure that Massachusetts can continue to drive progress even as the research landscape evolves:

The Research Resilience Fund will provide \$200 million for research at
Massachusetts hospitals, universities, and independent research institutions.
These funds will be used to support high-value initiatives with clear public benefit,
scientific promise, and significant economic and workforce impact. The legislation



would expand the allowable uses of the Federal Matching and Debt Reduction Fund, which was created in 2024 to match high-leverage federal discretionary grant opportunities and reduce debt. We will be able to meet all commitments for existing grant matches while also taking advantage of future high-leverage, high-impact funding opportunities by extending the ability to commit funds for three more years. The below chart shows current fund commitments and an illustrative example of how the funds could be spent under this legislation.



• The **Research Catalyst Fund**, a newly created 501(c)(3) entity, will serve as a vehicle to accept and distribute philanthropic contributions and matching funds from industry. Donors will be able to direct funds toward particular institutions or projects or contribute to a shared pool. These dollars will be used to complement public investments and extend the reach and flexibility of the overall strategy.

Both the Research Resilience Fund and the Research Catalyst Fund will be governed by the **Research Opportunity Review Board**: a group of experts in higher education,



research, philanthropy, health care, and industry. The Board will apply clear criteria and manage funding decisions independently of state government, ensuring accountability, public value, and alignment with Massachusetts' long-term goals.

The legislation also establishes a separate **Public Higher Education Bridge Funding Reserve**, a \$200 million investment funded through Fair Share revenue to support the state's public colleges and universities. This funding, administered separately from the Board, is designed to reinforce institutional research capacity, preserve critical talent, and strengthen partnerships across regions. It includes:

- \$80 million in flexible campus funding for research-related expenses
- \$50 million to retain and extend positions for graduate students, postdocs, and early-career researchers
- \$50 million bridge funding for Massachusetts public colleges and universities, our state's regional workforce and economic opportunity engines, as they adapt to a changing landscape over the next three fiscal years
- \$20 million to support regional research partnerships and joint ventures, with a focus on expanding access and opportunity statewide

Complementing this legislative framework, the Governor will issue an executive order establishing the **Advisory Commission on Advancing Research and Discovery in Massachusetts**. This Commission will provide a statewide forum for long-term strategy, bringing together leaders from academia, industry, and government to evaluate trends, propose new models for collaboration and sustainability, and recommend new initiatives to keep Massachusetts at the forefront of innovation.

Together, these actions position Massachusetts to sustain and grow its research economy for the decades ahead, fueling discovery, job creation, and shared prosperity across the Commonwealth.

Conclusion

Massachusetts has the institutions, talent, and track record to remain a global leader in research, but continued leadership requires smart, sustained investment. This proposal creates the tools to strengthen our research infrastructure, support talent across sectors, and expand opportunity statewide. With these steps, Massachusetts is building a stronger research ecosystem that supports innovation, jobs across industries, and long-term economic growth.