

Timeline: Mass Insight's Science and Technology Initiatives

Since 2000, Mass Insight has been the state's premier policy development organization by facilitating leadership groups and a series of initiatives to connect industry, university and government assets in Massachusetts. This collective effort has shaped the state's first-ever S&T strategy, which is now evolving into a talent and innovation-based state strategy and building collaborations to lead in science, innovation and business and institutional expansion. Working with a broad spectrum of partners, we have played an important role moving public and private sector leadership to put in place the building blocks and model partnerships for a development strategy organized around universities as our region's major economic driver:

2000: "Call to Action" First report on the links between universities and industry in Massachusetts provides a "call to action" from 30 industry and university leaders interviewed, identifies the need for a strategy, for increased UMass and public higher education investments and the challenge of establishing collaborations in Massachusetts compared to other regions in the country.

2002: "An Economy at Risk" released, Science and Technology Initiative organized. State match fund proposed. Need for technology "audit" declared. Major business associations and university partners organize an ongoing initiative during the gubernatorial campaign to establish a state S&T strategy and investments, including a state match fund facility to leverage federal R&D programs, an expansion of the UMass role and new public and private higher education partnerships with industry. Our second report on university-industry-government partnerships, "An Economy at Risk", and a series of gubernatorial transition briefings, frame the key elements of a strategy, including state match fund investment facilities, and highlights the increasing competition from strategies in NY, California, Texas and other states.

2003: Economic Stimulus Bill establishes state match fund facility, state strategy develops. First economic stimulus bill includes the S&T Initiative's major proposal for a state "match" fund facility to leverage federal and private R&D program dollars (the John Adams Innovation Institute). Adams Institute at the Mass. Technology Collaborative gains staffing and advisors to support a state strategy.

2004: Mass Insight/Battelle Technology Road Map "audit" frames UMass, match fund investments. Called for by academic and industry leaders in "An Economy at Risk", this "audit" of the state's university, teaching hospital and industry R&D capacity is shaped by a high level university-industry advisory committee and provides the framework and guidance for UMass and state match fund "talent" and program investments. The study calls for an expanded UMass role and support for public and private university partnerships with industry and kicks off work groups in homeland security, nanotechnology, ocean research and drug development.

2005: Mass Insight/Battelle Ocean Research work group and report, Adams Institute initiatives bring Woods Hole, UMass, MIT together around a collaborative research agenda. A new report funded by the UMass President's investment fund and the South Coast Partnership highlights the challenges from the West Coast and the opportunities for leadership in ocean research. The Mass Insight industry-led work group and parallel Adams Institute investment and staff support build new links between Woods Hole Oceanographic Institution, UMass, industry and the state. (In 2007, Woods Hole, in partnership with Scripps/San Diego, wins a \$100 million plus coastal ocean research grant, with \$10 million of state match funding committed from JAIL for follow on regional initiatives including UMass and other partners.)

2005: Mass Insight Drug Development work group highlights "cost of failure," calls for new collaborations to transform "broken drug development model," align with federal initiatives. With pharma, biotech, UMass Medical and private teaching hospital partners, Mass Insight releases a white paper describing the 90% failure rate in drug development, \$1 billion cost per approved drug compound and the limits of the blockbuster era. The work group explores a potential collaborative model biomarker imaging center. (In 2007, collaborations to transform drug development are a focus of the McKinsey study, and the agenda is adopted by the leadership group organizing an Asia-focused drug development institute.)

2007: Work groups complete work on sector-based talent and innovation strategy in financial services, life sciences, climate change/energy and the tech sectors/defense. McKinsey studies provide recommendations for building regional alliances and global partnerships in key sectors.

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2008-2013: Mass Insight Education launched the Mass Math + Science Initiative (MMSI), with initial funding from Exxon Mobil, an academic program focused on STEM education in high schools across the Commonwealth. Designed to create college career pathways into science and technology sector, the program's more than doubled participation and performance in Advanced Placement (AP) math, science and English courses. Thermo Fisher Scientific, Vertex Pharmaceuticals, Biogen Idec, Cubist and academic partner Worcester Polytechnic Institute fund the private-public partnership with matching state funding.

2010: Driven by the strength of New England's regional assets in technology, Mass Insight pilots a collaborative working group of IT executives, practitioners, and academics organized around cyber crime and commercial espionage attacks on the most sophisticated IT systems.

2011: Mass Insight launched and continues to support in an independent nonprofit the 28 member Advanced Cyber Security Center as a result of the 2010 collaboration. Threat sharing is led by the Boston Federal Reserve Bank and Mitre, and R+D initiatives are in planning with MIT and the other research university members.

2013: Mass Insight launches the Science & Technology Initiative to support new models to engage and fund industry-university innovation and research partnerships and respond more quickly to large-scale research challenges, specifically in the IT sector.

Reports: Mass Insight's Science and Technology Initiatives

Sustaining and Enhancing a Leadership Position for Massachusetts in IT, Communications and Defense — Massachusetts's current strength as a global high-tech and defense cluster is at risk of being significantly diminished in the decades ahead without greater industry-university collaboration and targeted state investment. (release date: 6/16/08)

[Sustaining and Enhancing a Leadership Position for Massachusetts in IT, Communications and Defense](#)

Life Sciences in Massachusetts: Forging Connections to Lead in a Changing World — Massachusetts has a world-class life sciences cluster, but global competition, inconsistent collaboration between industry and academia and the lack of a talent strategy threaten the Commonwealth's leadership status, according to a groundbreaking report released today by Mass Insight Corporation's Global Mass 2015 initiative. (release date: 2/25/08)

[Forging Connections to Lead in Life Sciences in a Changing World](#)

Case Statement & Core Technology Audit — An assessment of the state's core technology focus areas and potential strategic opportunities for the future.

[Choosing to Lead: The Race for National R&D Leadership & New Economy Jobs](#)

Model Partnerships Report — This web-based Model Partnerships Report is a collection of profiles of talent/education and R&D partnerships between university, industry, and government partners in the life sciences, financial services, and clean energy sectors, with a special chapter devoted specifically to university partnerships. Launched at the U.S.-China-India Innovation Partnerships Conference, many of the featured partnerships are collaborations between institutions in Massachusetts and Asia, but examples of other U.S. and global partnerships are included. (release date: 12/8/08)

- [Clean Energy Research and Education Center](#)
- [Duke & NUS](#)
- [Energy Technology Innovation Policy](#)
- [Genzyme](#)
- [Global Climate & Energy Project](#)
- [MIT – China Management Education Project](#)
- [MIT-Department of Biotechnology, Indian Ministry of Science and Technology](#)
- [National Emerging Infectious Diseases Laboratories](#)
- [Novartis-Fudan Joint Research Laboratory](#)
- [Public Health Foundation of India](#)
- [Singapore-MIT Alliance](#)
- [State Street & Bentley University](#)
- [Translational Medicine Research Collaboration](#)
- [Tufts in India](#)
- [UMassOnline-CerEdu-CCEA](#)
- [WPI Senior Projects Center](#)

Additional Reports

Science & Technology

The Massachusetts Research & Development Agenda, 2007 — White paper outlines the elements of a successful state investment strategy.
Massachusetts Technology Road Map Study - Case Statement & Core Technology Audit, 2004 - PDF
Massachusetts Technology Road Map Study - Strategic University-Industry Alliance Opportunities, 2004 - PDF
An Economy At Risk, 2002 - PDF
Transition Briefing Series - Higher Education Brief, 2002 - PDF
Cybercrime: The Priority Privacy Issue, 2001 - PDF
Privacy & Technology: Getting the Balance Right, 2000 - PDF
A Call to Action: Expanding the Links between Business and Higher Education, 2000 - PDF

e-Newsletters

Rising Costs, Declining Output put Spotlight on Collaboration in Drug Development (February 2006)
BRAC a Major Victory for Massachusetts (December 2005)
The Alternative Energy Agenda: How Viable an Alternative This Time Around? (June 2005)
Research Centers, Alliances and Economic Growth for Massachusetts (May 2005)
The Nanotechnology Revolution and Industry: Will Massachusetts be a World Leader? (January 2005)
The Drug Development Pipeline: The Massachusetts Agenda (December 2004)
Homeland Security Challenges and Massachusetts' Response (November 2004)
Briefing Highlights Need for Partnering (October 2004)
\$40-50 Million+ R&D Center Opportunities (June 2004)

Economic Development

Securing Massachusetts' Leadership Position in Financial Services, 2007 - PDF
Massachusetts Foreign Student Trends and Global Policy Priorities, 2007 - PDF
Massachusetts Community Colleges: Creating a World-Class System Aligned with Employer Needs, 2007 - white paper
An Economy At Risk, 2002 - PDF
Competitive Local Permitting: Seven Steps Communities Can Take, 2001- PDF
The Case for Infrastructure Investment, 2001 - PDF
A Call to Action: Expanding the Links between Business and Higher Education, 2000 - PDF
Made in Massachusetts: Competitive Manufacturing in a High Skill Location, 1999 - PDF