



An International Strategy for Massachusetts

A Report for the Executive Office of
Housing and Economic Development

July 2010



MASSACHUSETTS
TECHNOLOGY
COLLABORATIVE

Massachusetts Technology Collaborative Board of Directors

Executive Committee

Karl Weiss, Ph.D., Chairperson, MTC; Professor Emeritus, Northeastern University

Lawrence J. Reilly, Board Vice-Chairperson, MTC

The Honorable Gregory Bialecki, Secretary, Executive Office of Housing & Economic Development

David D. Fleming, Group Senior Vice President, Genzyme Corporation

Gerald L. Wilson, Ph.D., Professor Emeritus, Massachusetts Institute of Technology

Board Members

Martin Aikens, Business Agent, International Brotherhood of Electrical Workers, Local 103

Patrick Carney, Manager of Field Training, NSTAR

Phillip L. Clay, Ph.D., Chancellor, Massachusetts Institute of Technology

Michael J. Cronin, President and CEO, Cognition Corporation

Stephen W. Director, Ph.D., Provost, Northeastern University

Priscilla Douglas, Ph.D., President, PHDouglas & Associates

Richard M. Freeland, Ph.D., Commissioner, Massachusetts Department of Higher Education

The Honorable Jay Gonzalez, Secretary, Executive Office for Administration and Finance

C. Jeffrey Grogan, Partner, Monitor Group, LP

Alain J. Hanover, Managing Director and CEO, Navigator Technology Ventures

James S. Hoyte, Fellow, W.E.B DuBois Institute for African and African American Research, Harvard University

Penni McLean-Conner, Vice President, Customer Care, NSTAR

Dana Mohler-Faria, Ph.D., President, Bridgewater State College

Paul Wesley Nakazawa, President, Nakazawa Consultants; Lecturer in Architecture, Harvard University

Benjamin I. Schwartz, Novelist; Consultant, Scuderi Group

Frederick Sperounis, Ph.D., Executive Vice Chancellor, University of Massachusetts, Lowell

Krishna Vedula, Ph.D., Professor of Engineering, UMass, Lowell

Jack M. Wilson, Ph.D., President, University of Massachusetts

Officers of the Corporation

Mitchell L. Adams, Executive Director, MTC

Philip F. Holahan, Deputy Executive Director, General Counsel & Secretary, MTC

Christopher B. Andrews, Treasurer, Chief Financial & Administrative Officer, MTC

Message from the Governor

Dear Friends,

Our state enjoys a wide range of both national and global competitive advantages: From some of the world's most celebrated universities, research centers, and financial institutions to one of the most highly skilled workforces in the world, and from the highest health care coverage rate in the nation to the third-highest level of student achievement in the world.



As we say in Massachusetts: "It's all here."

In recent years, we have strengthened our ability to compete by making critical investments in the key innovation industries of tomorrow—life sciences, clean energy, and information technology, among others—as well as by streamlining permitting and improving the delivery of business-support services for all industries.

Although we have much to celebrate, we cannot afford to be complacent. During a visit to Massachusetts, President Obama reminded us that, "boosting our exports is a short-term imperative" and an essential pre-requisite for economic recovery.

That is why I am so pleased to introduce An International Strategy for Massachusetts. This multi-faceted, comprehensive action plan is a roadmap, detailing the ways in which our state can expand exports, attract new investment from overseas, and forge international business partnerships. It includes dozens of creative, cost-effective ideas, many of which we have already begun implementing.

At the heart of the Strategy is a call for a strong, formal public-private partnership that will assess existing activities and implement new ones. Especially in this time of tight budgets, it is imperative for the public and private sector to work in close coordination to increase program efficiency and team up on initiatives.

Please consider this document an invitation for discussion. If you have good ideas that you don't see in these pages, let us know. This document is a beginning, not an end.

I thank you for your interest and look forward to your input on how we can work together to ensure that Massachusetts stars on the global stage.

Sincerely,

A handwritten signature in black ink, appearing to read "Deval Patrick". The signature is fluid and cursive.

Deval L. Patrick

The Massachusetts Technology Collaborative is a public economic development agency chartered by the Commonwealth to promote new economic opportunity and foster a more favorable environment for the formation, retention, and expansion of technology-related enterprises in Massachusetts.

MTC serves as a catalyst in growing the knowledge- and technology-based industries that comprise the state's Innovation Economy. It is working with major healthcare organizations to implement e-health solutions that save lives and reduce costs. The agency is aggressively pursuing federal funding to support economic development in Massachusetts through the American Recovery and Reinvestment Act of 2009. MTC's rich history of successfully managing complex projects that involve significant public and private investment have positioned the agency to serve as an important conduit for infusions of funding into the Commonwealth.

Working through its major divisions—the John Adams Innovation Institute, the Massachusetts e-Health Institute, and the Massachusetts Broadband Institute—the agency is strengthening the innovation economy by supporting and expanding economic clusters.

An International Strategy for Massachusetts

Contents

Governor’s Letter	1
--------------------------------	---

Executive Summary: Key Recommendations	4
---	---

Part One: The Setting for a New State Strategy

A. The Economic Context.....	9
B. Building Blocks of Success: The State’s Assets	15
C. Obstacles to Overcome	18
D. Competition from Other States.....	20

Part Two: Strategies for Global Success

A. A Coordinated Approach by State Agencies.....	24
B. A Public-Private Partnership	26
C. Communicating the Brand.....	29
D. Selecting Targets	32
<i>Sidebar: Targeted Recruiting</i>	36
E. An Effective Program to Attract Foreign Direct Investment.....	38
<i>Sidebar: Focus on China</i>	44
F. Export Assistance for Massachusetts Companies.....	46
G. Making International Students Partners of Massachusetts	49
H. Using the Federal Government’s Resources	52
I. Government Policy.....	56

Appendices

A. Key Organizations for a Public-Private Partnership	59
B. Trade and Investment Programs in Other States	63
C. People and Organizations Consulted.....	67

Executive Summary: Key Recommendations

An International Strategy for Massachusetts offers the Commonwealth a strategic plan to promote economic development and job creation statewide through international activities. The activities recommended will require a high degree of state agency collaboration, public-private partnership, and brand coordination.

This plan is based on three premises:

1. Job creation in Massachusetts is tied to our ability to connect to and succeed in global markets.
2. The state is well-positioned for success in the global arena, because it is a center of innovation, a leader in key growth industries, and home to world-class universities and research centers.
3. Even with severe budget constraints, the state can do much more to maximize exports, galvanize international business partnerships, and increase foreign direct investment.

In today's economy, no state or region can thrive without vigorous efforts to engage global markets. Governor Patrick and his administration have demonstrated a deep commitment to the state's international trade and investment operations by reconstituting the Massachusetts Office of International Trade and Investment (MOITI) and carrying out a successful trade mission to China. *An International Strategy for Massachusetts* contains many recommendations designed to maintain that momentum and achieve greater success in the international arena in the future.

The Role of Leadership

The Governor has effectively promoted Massachusetts as a place for international business development. This signal is significant because his personal engagement as leader of the state is essential to the success of the new strategy. Senate President Murray, House Speaker DeLeo, and other legislative leaders have

also demonstrated great interest in this area, which is important in order to project broad support for international business development activities.

The Secretary of Housing and Economic Development exercises primary responsibility for overseeing the various aspects of the strategy and for working closely with the Governor's office to ensure collaboration across a wide range of state agencies. MOITI should serve as the Secretary's lead agent and be responsible for day-to-day coordination and operations related to the strategy.

A Public-Private Partnership

Many private sector players—industry associations, chambers of commerce, universities, nonprofit organizations, and individual businesses—are already active internationally. The state can advance its efforts most effectively by forging a true collaboration between the public and private sectors to plan, implement, and evaluate international economic activities. Such a partnership has proven to be successful in other states and holds great potential for securing additional revenue for the state's activities. It would also leverage the talents and resources of the many private sector entities engaged in international trade and investment.

We recommend the establishment of a well-defined and structured public-private partnership to include a Massachusetts Global Advisory Council consisting of experts in international business development and high-profile representatives of the business community.¹ The Council would provide insight on general international strategy, assess the impact of economic trends, identify approaches to specific international markets, and assist in the enlistment of private sector partners for trade missions and for hosting international events in the Commonwealth. The Council's first two major tasks should be to develop recommendations for how

The state can advance its efforts most effectively by forging a true collaboration between the public and private sectors to plan, implement, and evaluate international economic activities.

¹ In October 2007, the Senate Committee on Post Audit and Oversight made a similar suggestion for a high-profile advisory group. See Senate Committee on Post Audit and Oversight, *Getting in the Game: Increasing Massachusetts's Presence in the Globalized World* (Boston: Commonwealth of Massachusetts, 2007), p. 3.

Executive Summary: Key Recommendations

the partnership's efforts can increase near-term jobs, especially in the manufacturing sector, and to develop a plan to increase private sector funding of MOITI's programs.

Other aspects of the public-private partnership beyond the Global Advisory Council would include regular meetings of representatives of international business groups, an electronic newsletter by MOITI that would promote both public and private sector activities, and an annual scorecard/report on Massachusetts international trade and investment.

A closer working relationship between government and the private sector on international economic activities is especially important during the current global economic downturn because it can have a quick payback in at least four important ways:

1. It would improve communication, ensuring that more Massachusetts companies know about specific opportunities to increase their exports or attract foreign partners.
2. It would improve the efficiency of the international programs of both the state and private organizations.
3. It would provide a forum for identifying and implementing new ideas.
4. It holds the best promise for attracting additional resources for activities that can have useful short-term results.

Federal Resources

We recommend developing a closer partnership with the federal government. Through the US Department of Commerce, the federal government has developed ambitious trade and investment programs during the past 15 years and now has an extensive network of foreign offices and representatives. Most importantly, the US Commercial Service has greatly expanded its programs to help US companies increase their exports and some of those programs can provide important near-term help to Massachusetts companies. MOITI and the Massachusetts Export Center should not only actively promote those programs, but should inform individual companies when participation in a particular program would (or would not) be especially

beneficial. The Commerce Department can also help the Commonwealth to plan, coordinate, and execute trade missions.

International Students

An International Strategy for Massachusetts proposes a multi-faceted approach for making foreign students partners in the state's international business



Governor Patrick's 2007 mission to China helped open doors for Massachusetts companies and led to new, job-creating investments in Massachusetts.

development efforts. Those students represent a superb resource for helping to grow international business in Massachusetts. By reaching out to current students, fellows, and university visitors, the state can ensure that our temporary residents develop a lasting affinity for Massachusetts and have positive impressions of doing business here. This provides an international network of contacts across the globe as these students return to their home countries after their Massachusetts-based education. The report's recommendations range from hosting receptions in the State House, to creating a post-graduate fellowship program designed to promote life-long business relationships, to developing an international database of key alumni.

Executive Summary: Key Recommendations

Activities Abroad

The concept of overseas missions for trade and investment should be embraced, as Governor Patrick did when he visited China. The Governor led a relatively small, well-focused delegation, obtained considerable outside funding, and was guided by clear goals. Carefully planned and executed missions that include strong follow-up can create new jobs here by strengthening existing Massachusetts companies and attracting new firms.

The Governor, Lieutenant Governor, and Secretary of Housing and Economic Development should periodically lead targeted missions of varying sizes and purposes, and with different degrees of private sector participation. The same holds true for legislative leaders and other state officials. Participation—even on a limited basis—by the Governor in major international conferences and trade shows can be very cost-effective.

Beyond trade missions, MOITI should continue to provide technical and other assistance to Massachusetts companies in introducing their products and services to global markets through exhibits at international trade and technology shows. To use MOITI's limited resources as efficiently as possible, the agency should concentrate on a small number of trade shows where active collaboration with industry associations, regional agencies, and other partners can be developed. MOITI should also expand its marketing at trade shows to promote foreign direct investment and the state's convention facilities, as well as exports. More generally, MOITI should seek to generate more investment leads overseas.

Activities at Home

There is also much the state can do right here in Massachusetts to build international connections, and we can emulate some of the excellent initiatives that other states have developed. Ideas worth considering include reverse trade missions, multi-day conferences featuring major opinion leaders from around the world, and establishing a Governor's International Commerce Award. Such programs provide excellent platforms for the Governor to not only showcase Massachusetts, but also to build public support for the idea that international commerce benefits the local economy.

When it comes to export assistance, Massachusetts companies are fortunate to have access to the Massachusetts Export Center, but its services are not well-known in the business community. The Export Center provides individual companies with free counseling, technical assistance, and market research. Companies can receive information about the size of particular export markets, trade barriers, distribution channels, and other topics. They can also receive an assessment of their export readiness and help developing an international business plan. These services should be much more widely promoted. The Export Center should concentrate on those companies with the best prospects for quickly increasing export-related jobs. The Export Center should closely coordinate its work with MOITI and the two agencies should work together on joint promotional efforts.

Moving Forward in a Time of Tight Budgets

Given diminished revenues and major budget difficulties, it is unrealistic to expect the legislature to significantly increase the budget for international programs. Although implementation of some of the recommendations in this report must be deferred until the economy recovers, others can be developed and executed in short order. Near-term attention should be given to the many recommendations that do not require additional funds, enable greater efficiency, and/or have the potential for generating new revenues through event registrations, conference sponsorships, and fees for services.

The executive and legislative branches should continue to work together to improve communication and coordination among the many public and private organizations already working on international trade and investment. Better coordination will avoid wasteful duplication of efforts and improve each organization's efficiency and return on investment.

Rather than being an excuse for inaction, the tough economy should instead be a strong motivator for decisive action. Efforts to promote international trade and investment are among the most important, most cost-effective ways to grow the number of jobs in the state and ensure that the Massachusetts economy will prosper in the future.

Selected Specific Recommendations

- *Give top priority to China and Europe.* MOITI should have at least one person devoted exclusively to China, with staff members from other agencies participating as appropriate. Europe as a collective market should be allocated resources equivalent to those dedicated to China. Other countries should be targets of narrower, more focused initiatives.
- *Organize focused conferences for foreign audiences.* Business leaders in specific industries around the world perceive great value in interacting with cutting-edge scholars, researchers, and practitioners in Massachusetts. The state can organize tailored events on subjects critical to foreign businesses. Massachusetts universities, research centers, and hospitals would welcome state initiation and coordination of such conferences and local companies would likely provide sponsorship funding.
- *Conduct reverse trade missions.* Organized trips for business and government leaders from elsewhere can yield a high return and cost relatively little as the participants pay for participating. Massachusetts has an advantage over other states, because many foreigners are interested in visiting here, especially if the trips include contact with our key academic institutions. The trips should include a comprehensive introduction to the benefits and ease of doing business in Massachusetts, and highlight opportunities to develop manufacturing in the lower-cost regions of the state outside greater Boston. A successful MOITI-organized tour of Massachusetts in 2009 was an excellent start and it should be replicated. Initial planning for these missions should be guided by the question of whether an itinerary can be arranged that is likely to result in short-term job creation for Massachusetts.
- *Advocate for and assist in obtaining temporary visas.* There have been many instances in recent years when foreign individuals seeking to attend Massachusetts conferences or business meetings were unable to participate because of the extended time needed for visa processing. By better understanding the procedural rules and timelines of the federal Office of Visa Services, MOITI can provide advice to important foreign participants in Massachusetts trade and investment-related events. MOITI should establish a working relationship with the Office of Visa Services so that it is in a position to facilitate visa applications for specific delegations that wish to visit the Commonwealth.
- *Take advantage of the EB-5 visa program.* Massachusetts should explore developing a program to encourage foreign nationals to make major investments in the state in exchange for EB-5 visas. Under a pilot program of the US Department of Homeland Security, individuals who make investments of at least \$500,000 and create at least 10 jobs in certain low-employment areas can receive conditional permanent residence status. The state could create a federally qualified “Regional Center” under this program and promote the opportunities for visa-related investment here.
- *Designate volunteer overseas ambassadors.* MOITI should explore establishing a Bay State “ambassadors” program by enlisting personnel from Massachusetts businesses who are posted overseas. These individuals could be utilized on a selective basis to promote the Commonwealth as a whole and any specific activities relating to that foreign market, as well as using knowledge of their industry and host country to provide market intelligence to MOITI and other state agencies.
- *Organize overseas alumni events.* By maintaining contact with Massachusetts-educated foreign students after they return to their home countries, the Commonwealth can utilize these individuals as informal ambassadors and also capitalize on their unique knowledge of potential markets and business opportunities. When the Governor and other state officials travel overseas, the state should hold receptions for alumni of Massachusetts universities, reinforcing their positive impression of the state and developing valuable long-term relationships. The state can ask the universities to forward event announcements to their alumni.
- *Undertake a cross-national survey of international students.* The state can use foreign graduate students and visiting fellows currently in Massachusetts as proxies for business people in their home countries. This would allow us to more clearly understand

Executive Summary: Key Recommendations

foreign perceptions of the Commonwealth and to determine how those views may change as a result of temporarily living in Massachusetts.

- *Develop a research capability.* To be successful, the state must develop the capacity to research and analyze global market and economic trends, search out unusual opportunities, and identify those firms most likely to be interested in locating to Massachusetts. In particular, when targeting a particular country, the state should ideally be able to analyze how that country's industry clusters match up with ours and determine where there are the greatest opportunities for strategic partnerships and alliances.
- *Reduce the cost of MOITI's Brazil and Mexico offices while expanding their impact.* The Brazil and Mexico offices can help potential Massachusetts exporters enter those markets by providing cost-effective assistance on the ground. MOITI should upgrade the offices' services and widely promote a menu of what they offer. Rather than continuing to pay for the offices solely with state funding, MOITI should charge fees to cover the cost of particular services. If this approach is successful, MOITI should consider offering similar services through its offices in Germany and China, and weigh the potential of opening additional offices in other countries.
- *Monitor and seek to influence federal policy.* International trade agreements and federal policies on such matters as patents and the protection of intellectual property can have significant impacts on the international prospects of Massachusetts businesses. The state should work with the business community to monitor developments in Washington and make sure Massachusetts's interests are advanced.

Part One: The Setting for a New State Strategy

A. The Economic Context

The Current Nature of the Massachusetts Economy

Massachusetts achieved strong economic growth during the 2003-2007 economic expansion, but has lost 3.5% of employment in the most recent economic contraction. These job losses were less severe than the 4.9% of jobs lost nationally or the 6.2% job losses in California.² The education and healthcare sectors were the only sector to add jobs during the recession. The state's deepest job losses occurred in the construction, manufacturing, and wholesale trade sectors. Coming out of the recession, 2010 data shows that the software cluster was the first to rebound from job losses.³

Innovation provides Massachusetts with its competitive advantage and its economy's capacity for self-renewal. The state ranks at the top of the *State New Economy Index*⁴ and the *State Science and Technology Index*.⁵ In the *2008 World Knowledge Competitiveness Index*, Boston-Cambridge ranks second among global cities with three other New England cities on the Boston-New York rail corridor listed in the top ten.⁶ Massachusetts has one of the most R&D-intensive economies in the world and an extraordinary capacity to move ideas from the laboratory to the marketplace.

The Massachusetts innovation advantage starts with its people. The state has a highly educated population,

with the highest percentage of college attainment in the United States. The state's educational institutions not only have a commitment to educate the people of the region, but are also a magnet and hub for global talent. Having a high rate of talent exchange connecting Massachusetts to other parts of the world contributes to the dynamism of the regional economy. Massachusetts ranks third among the leading technology states in the attraction of college educated adults from other states and abroad.⁷

Massachusetts has a very high concentration of jobs in a broad array of the most research and development intensive industries, including computers and communication equipment, scientific and technical services, biopharmaceuticals, and medical devices. It is preeminent among states for its high concentration of life, physical, and social scientists and information technology professionals (respectively 74% and 54% more as a percentage of all workers than in the US as a whole).

No other US state can compete with Massachusetts in terms of the number of concentrated, innovation-intensive industry clusters.⁸ Thirty-six percent of Massachusetts employment is in ten highly concentrated innovation clusters (See **Table 1**), while

Table 1. Ten Concentrated Innovation Economy Clusters⁹

	Corporate Sales millions of \$	Corporate R&D millions of \$	Employment	Employment Concentration ⁹
Bio, Pharma, & Medical Devices	25,137	6,498	59,254	1.86
Business Services	464	15	147,231	1.11
Computer & Communications Hardware	21,772	3,052	44,859	2.07
Defense Manufacturing & Instrumentation	48,123	2,431	39,870	1.37
Diversified Industrial Manufacturing	4,881	444	43,617	1.25
Financial Services	23,121	0	163,180	1.38
Healthcare Delivery	n/a	n/a	316,099	1.28
Postsecondary Education	n/a	n/a	131,738	2.47
Scientific, Technical, & Management Services	2,749	38	68,296	1.45
Software & Communications Services	14,027	1,165	129,968	1.47
All Ten Innovation Clusters	140,274	13,643	1,144,112	

² Job losses are calculated from the post-2006 employment peak in each state to July 2009. US Bureau of Labor Statistics, *Current Employment Statistics*.

³ Data are from Moody's Economy.com estimates calculated in April, 2010.

⁴ Information Technology & Innovation Foundation and the Kauffman Foundation, *2008 State New Economy Index: Benchmarking Economic Transformation in the States* (Kansas City: Kauffman Foundation, 2008).

⁵ Ross DeVol et al., *State Technology and Science Index: Enduring Lessons for the Intangible Economy* (Santa Monica: Milken Institute, 2008).

⁶ Centre for International Competitiveness. *2008 World Knowledge Competitiveness Index* (www.cforic.org/pages/wkci2008.php). The three other New England metros in the global top ten are Hartford, Bridgeport-Stamford, and Providence-Fall River.

⁷ John Adams Innovation Institute, *2009 Index of the Massachusetts Innovation Economy* (Westborough: John Adams Innovation Institute, 2010), p. 49.

⁸ A concentrated, innovation-intensive cluster is one with a greater concentration in Massachusetts than in the United States as a whole, as calculated in the *2008 Index of the Massachusetts Innovation Economy*. This is measured through location quotient: a comparison of employment in the cluster as a percent of all employment in the state as compared to the employment percentage in the United States. Values above one indicate that the state has more jobs in this cluster relative to overall employment than the United States does.

⁹ Source: Calculations by the Massachusetts Technology Collaborative. Employment data are from Moody's Economy.com 2009 annual average employment as of August 2009. Sales and Corporate R&D figures are 2008 figures from the Standard & Poor's Compustat database.

Part One: The Setting for a New State Strategy

A. The Economic Context

nationally these clusters constitute only 25% of employment.

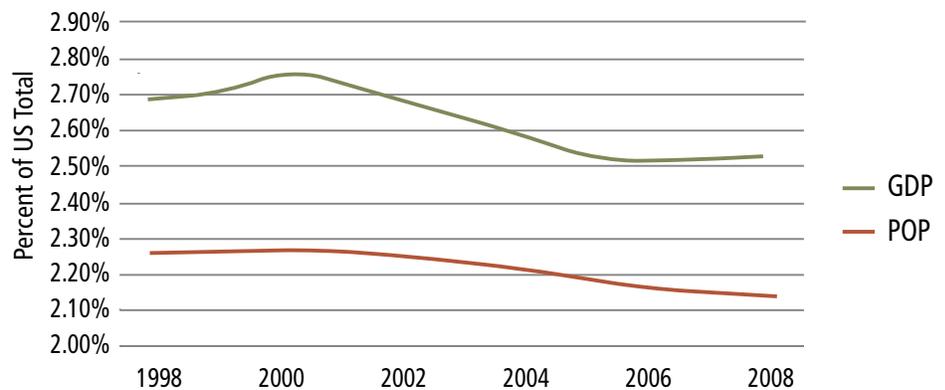
The intensity of these clusters of innovation in the Commonwealth is a direct result of one of the highest concentrations of public and private research universities, colleges, academic health centers, and research institutes in the world. Here are some important facts and figures that underscore the strength and relevance of these sectors for the state's economy:

- Sales grew by 149% in Massachusetts's biotech, pharmaceuticals, and medical devices cluster, from \$10 billion in 2003 to \$25 billion in 2008.
- On a per capita basis, Massachusetts ranks first among US states in funding from the National Institutes of Health, the world's largest funding source for biomedical research, receiving over \$2.5 billion annually (in absolute terms second only to California).
- Massachusetts has the highest per capita patent generation rate for drugs and medical devices in the United States.
- The Massachusetts computer and communications hardware sector saw sales grow from \$13 billion in 2003 to \$22 billion in 2008.
- Massachusetts is second only to California among states in computer and communications patents per capita.
- Massachusetts is second only to California in venture capital investment, but first per capita. A vibrant venture finance community here creates a pull for entrepreneurs to the region to take advantage of venture financing. The depth and sophistication of the state's venture capital community provides smart money to guide entrepreneurs through early-stage business formation and expansion.

With all this strength and activity in the innovation economy, it is not surprising that economists believe that the Massachusetts economy will likely rebound faster than much of the rest of the country. As Eric Rosengren, president of the Federal Reserve Bank of Boston, pointed out, Massachusetts's "key industries have not been at the center of [global] job losses... Our banks and financial institutions are healthier. Businesses are in a better position to get credit here."¹⁰

Although these factors combine to create a competitive advantage for the Commonwealth, the overall Massachusetts economy appears less robust when its gross domestic product (GDP) is compared to the rest of the country. As **Figure 1** shows, Massachusetts continues to produce considerably more than its share of the nation's GDP, but the state's relative position has weakened over time, especially from 2000 to 2005,

Figure 1: Massachusetts's Relative Performance Population and Gross Domestic Product



although things moved in a positive direction from 2005 through 2008. This long-term relative decline cannot be attributed solely to population trends. Growth has been sluggish for some time in the majority of the economy outside the ten innovation clusters. Although the Commonwealth can expect the innovation economy to remain the primary engine of employment expansion, it should take steps (like many of those outlined later in this report) that will help all industries.

¹⁰ Quoted in "State Set to Recover Sooner than US," *Boston Globe*, September 27, 2009.

Part One: The Setting for a New State Strategy

A. The Economic Context

Massachusetts Exports¹¹

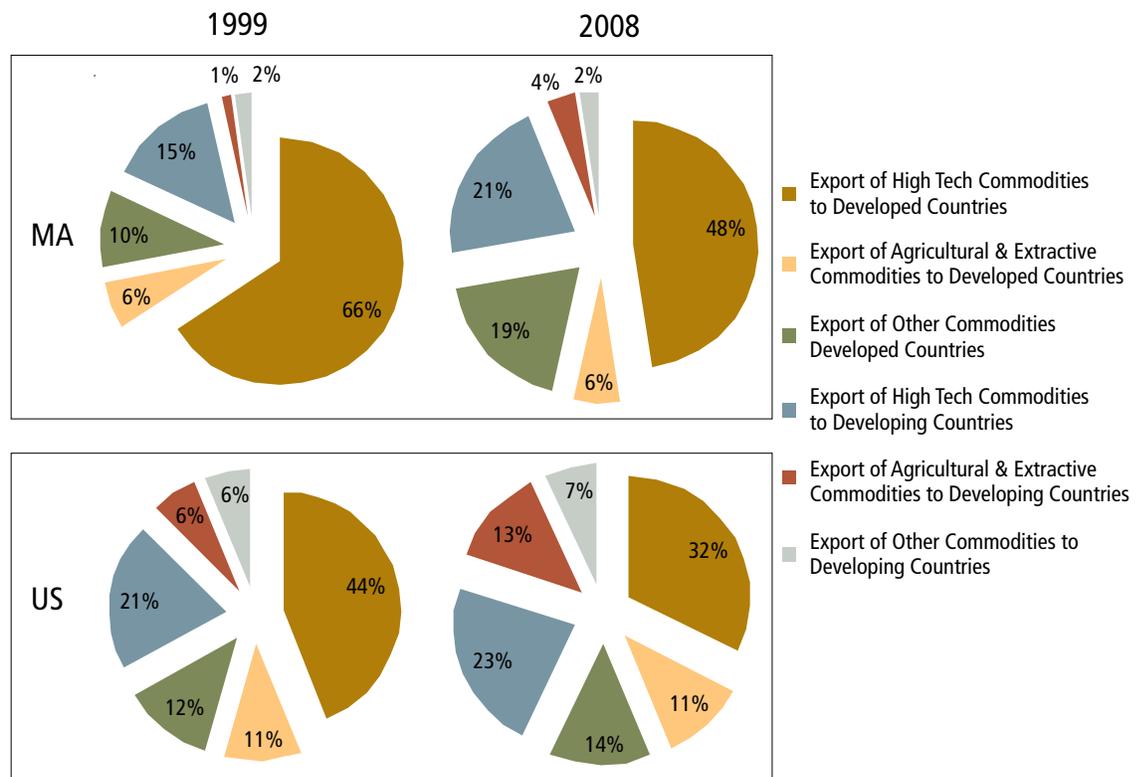
In 1988, Massachusetts was the nation's 4th most heavily trade-dependent state by the percentage of its manufacturing employment owing their jobs to export activity. Since then other states have increased exports faster than Massachusetts. By 2006, the most recent year of measurement of such statistics, the state was tied for 14th.

Part of the state's relative decline stems from the fact that some export-oriented manufacturing businesses have closed or shrunk since 1988.

In addition, manufacturers from other states have been more focused on foreign markets that are growing faster than those to which Massachusetts companies primarily export. Although the fall from 4th to 14th has not been positive, Massachusetts is still clearly above average in the importance of exports to its manufacturers.

Figure 2 evaluates what Massachusetts's companies make and sell in the international market, and compares that to US exports. It divides those exports into three categories: high-tech products (pharmaceuticals, electrical equipment, optics, weapons systems, etc.), agricultural and extractive products, and all other products.¹² It then divides those exports between their

Figure 2: Massachusetts and US Export Markets over Time



destination: developed countries versus developing countries.¹³

Figure 2 shows that Massachusetts clearly sells more high-tech commodities than the rest of the US and that for both Massachusetts and the country as a whole, developing country markets have become increasingly important, growing from 24% to 34% of total US exports and 13% to 25% of Massachusetts exports. Yet, these figures also indicate that Massachusetts remains more focused than the rest of the US on developed country markets.

There has also been a significant change in the types of products exported to the developed and the developing

¹¹ The figures and analysis in this section were prepared by Stephen Coelen (Managing Partner of World Institute for Strategic Economic Research, LLC) using material from the WISERTrade database.

¹² Here "high-tech" refers to broad levels of product and consists of: pharmaceuticals, electrical machinery, rail and other vehicles, aircraft, optics, and arms and munitions; "agricultural/extractive" consists of such products as fish, trees and wood, cereals, cocoa, vegetables, ores, mineral fuels, copper, aluminum, and nickel; and "other products" consists of: inorganic and organic chemicals, photographic goods, leather goods, carpets, textiles, cutlery, musical instruments, arms, and art.

¹³ Here "developed countries" are defined as nations with per capita incomes greater than \$11,176 in 1999 and \$27,149 in 2008. Using these definitions, there were few switches in the ranks of the two categories between the two years, the most significant being that Taiwan switched from "developed" to "developing" because its per capital income grew more slowly than many other countries.

Part One: The Setting for a New State Strategy

A. The Economic Context

countries. Most notably, the proportion of Massachusetts high-tech commodities in our export bundle to the developed countries fell from 76% to 64% while to developing countries, the proportion rose from 8% to 16%. There have been similar trends at the US level. So looking through the lens of Massachusetts and US exports, the developing world is becoming more high-tech oriented while the developed world needs more agricultural/extractive and other goods.

Figure 3, which shows who in the world is buying what, makes it clear that the trends in Massachusetts and US exports are linked to larger global trends. The developing countries have been making an increasing share of the world's purchases, growing from 22% to 33% of the world's total between 1999 and 2007. One obvious conclusion is that Massachusetts companies need to give more attention to selling their products to developing countries.

Figure 4 shows how Massachusetts, the ten other Northeastern states, and the rest of the US fared in recent years in comparison to other leading exporting countries. Unfortunately, Massachusetts's exports grew more slowly (2.4%) than the other Northeastern States (12%), the US (10%), and the world as a whole (14%).

Figure 5A focuses on the industrial orientation of

Figure 3: World Commodity Purchases by Development over Time

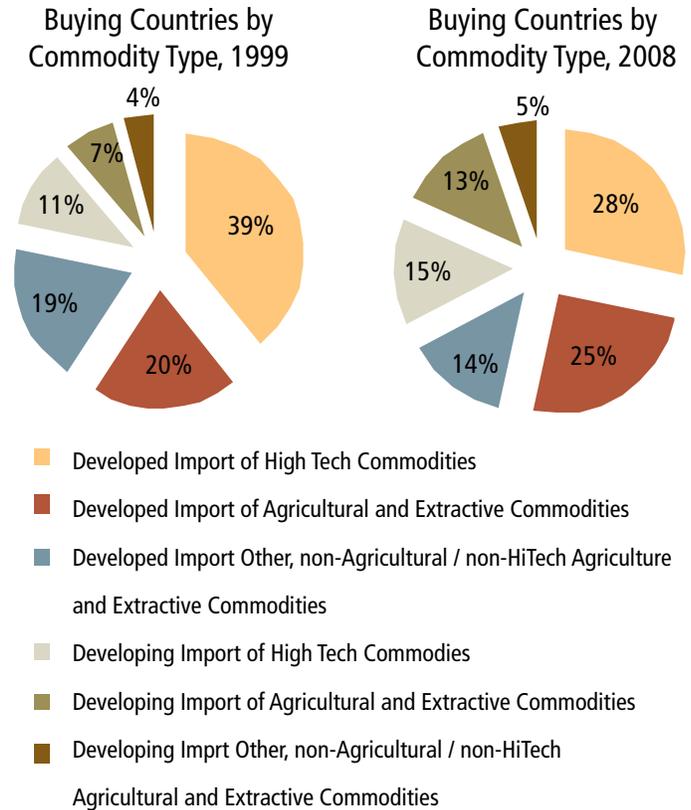
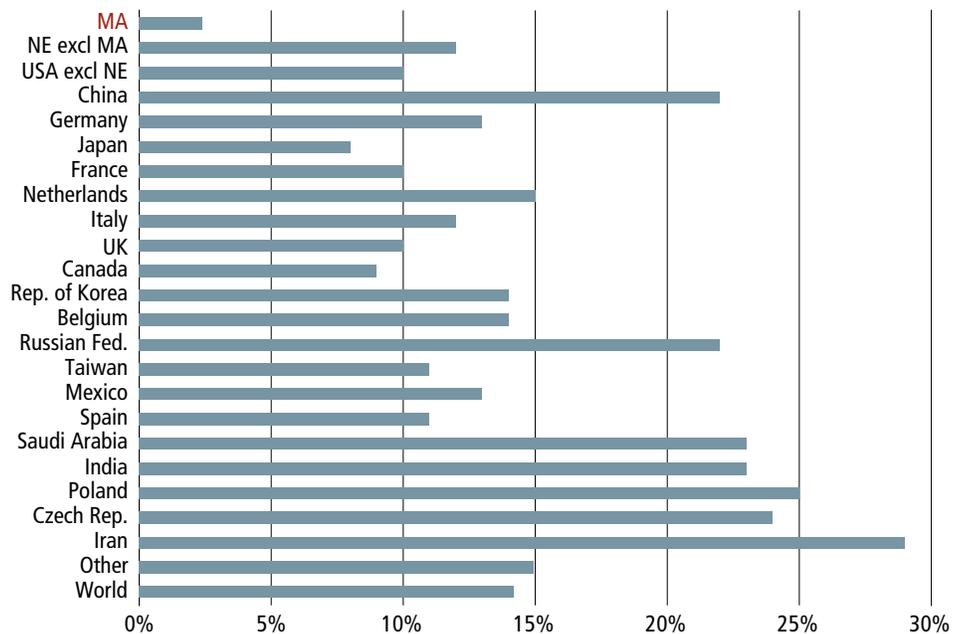


Figure 4: World Export Growth from Top Suppliers 2004-2007



Part One: The Setting for a New State Strategy

A. The Economic Context

Massachusetts export activity. It charts the trends over a decade for the top five industries as well as a sixth category for all other commodity groups. For one thing, the top five industries account for about two-thirds of the state's exports. Four of those leading industries experienced growth in exports, while electrical machinery remained stable, yet still accounting for a significant share of the total.

But, as **Figure 5B** indicates, the picture is less rosy when looking just at the period from 2004 to 2007 and when exports from Massachusetts are compared to those from the Northeast, the US, and the world as a whole. Two of the largest exporting industries that experienced export growth—instrumentation and pharmaceuticals—did not perform as well as the Northeast, the US, and the world. Two of the other five largest industries—electrical machinery and organic chemicals—experienced decline, although the results for organic chemicals were affected by highly atypical exports in 2004 (see figure 5A). Only in the category of machinery and computers did Massachusetts hold well, growing at roughly the same rate as the Northeast and faster than the rest of the US. Among Massachusetts's smaller exporting industries, jewelry and precious metals, fish, chemical products, vehicles, and arms and ammunition did especially well compared to their competitors elsewhere.

Figure 5A: Massachusetts Exports by Leading Industry

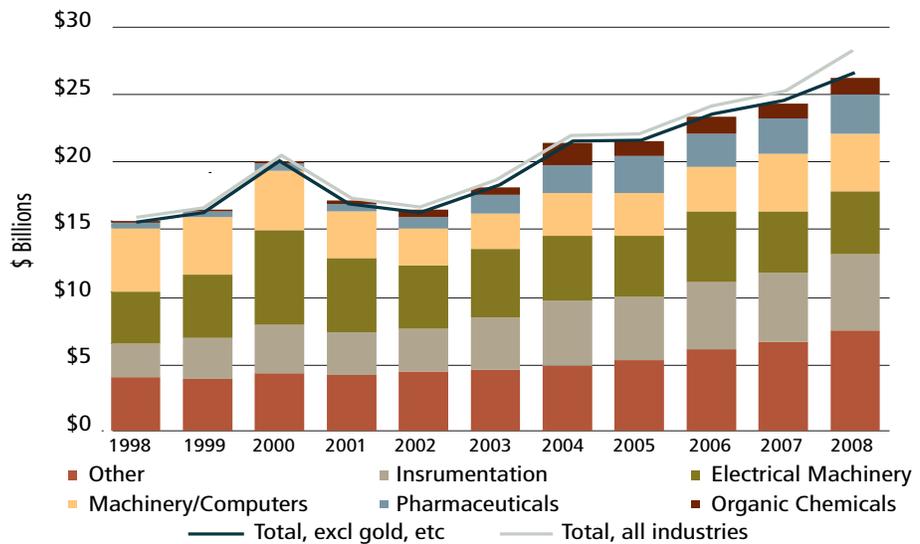
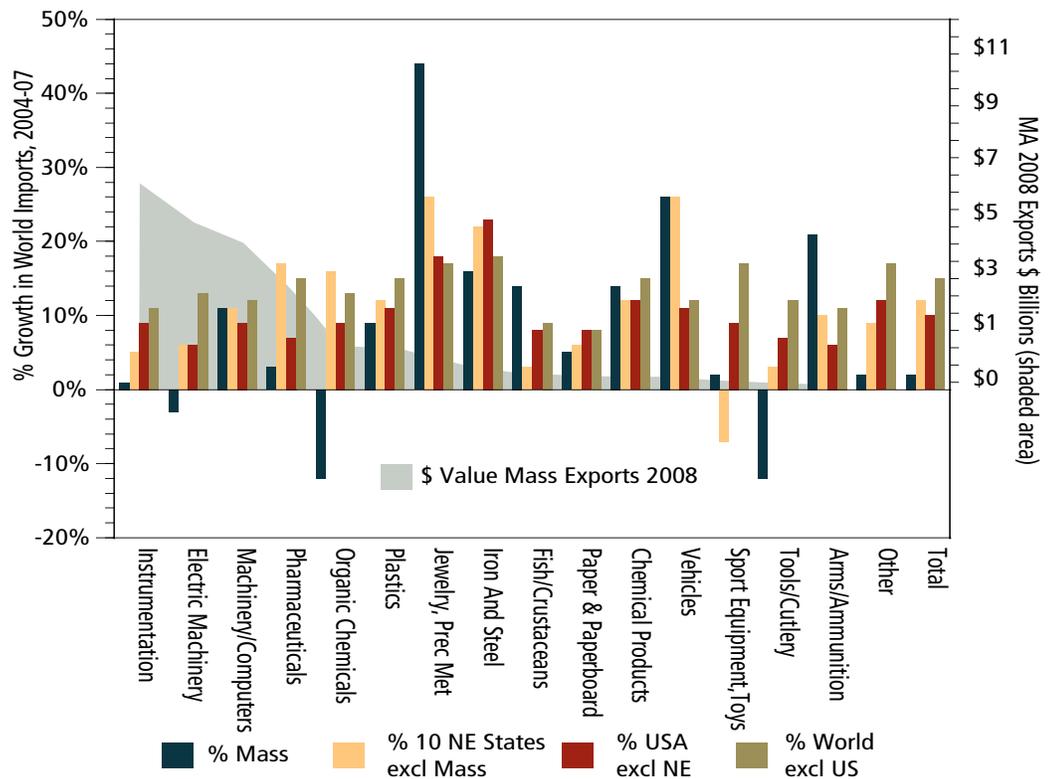


Figure 5B: World Imports of Massachusetts's Top Exports by Growth from MA, Northeast, US, World, 2004-07



Part One: The Setting for a New State Strategy

A. The Economic Context

Figure 6A: Massachusetts Exports by Top Destination

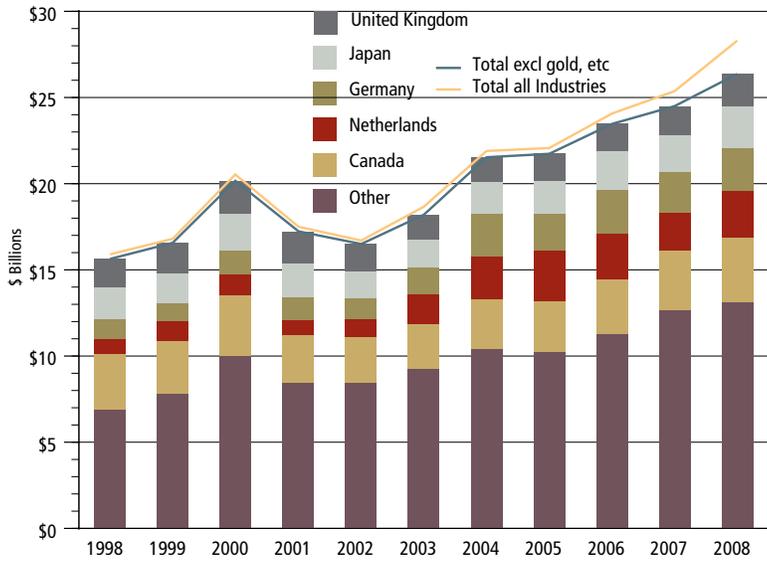
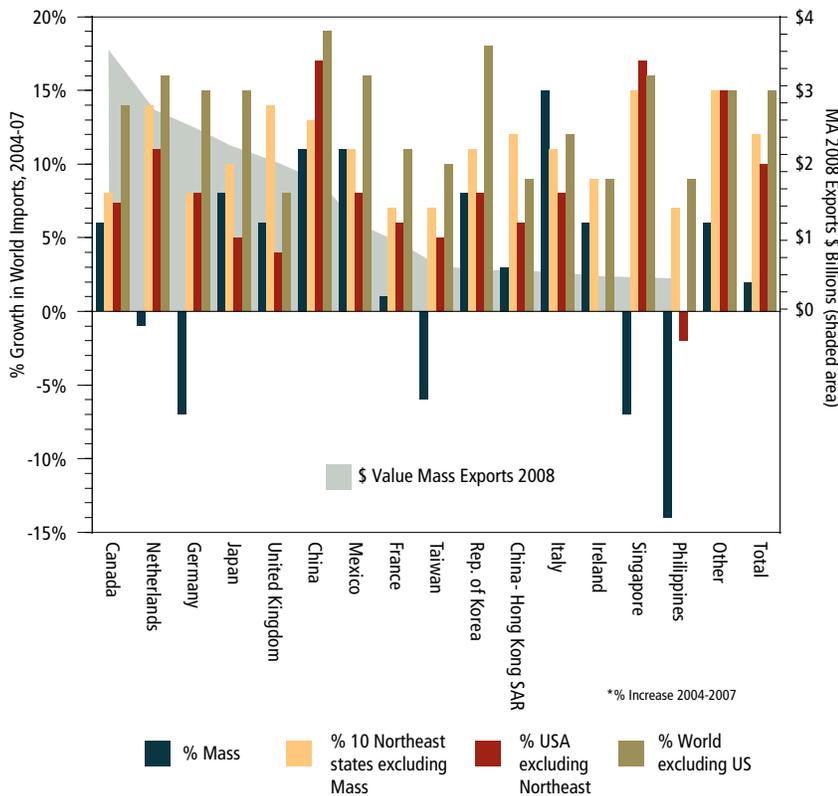


Figure 6B: World Import Growth 2004-08* from Massachusetts, Northeast, US, and World in Massachusetts's Top Export Destinations



Figures 6A and 6B show the countries important to the Commonwealth's export activities. Canada, the Netherlands, Germany, Japan and the United Kingdom are the leading destinations and, excluding gold, diamonds and valuable artwork from the calculations, they absorb nearly half (46.7%) of the Commonwealth's exports. Figure 6B shows, however, that both the Netherlands and Germany reduced their imports from Massachusetts between 2004 and 2008. In the cases of Canada and Japan, the Commonwealth's single biggest and fourth largest markets, there was import growth from Massachusetts, but not as much as from the rest of the world. On the other hand, these top destinations are becoming relatively less important to Massachusetts, since exports to such other countries as China, Mexico, Korea, and Italy are increasing at a more rapid pace.

All of these numbers and trends suggest that Massachusetts businesses need to give more attention to export markets in order to maintain their relative place in the world. In addition, the Commonwealth would benefit from better monitoring global trends and from seeking to identify particular growth opportunities. We will discuss this more in the recommendation section of the report.

Part One: The Setting for a New State Strategy

B. Building Blocks of Success: The State's Assets

The state's strategy for increasing economic ties to other parts of the world should start with an understanding of Massachusetts's strengths, and then build on those strengths.

Three Key Strengths

Three intertwined and enduring characteristics of the state are especially meaningful and appealing to businesses and institutions from other parts of the world.

1. *Massachusetts is a center of innovation.* As detailed in the previous section of this report, Massachusetts is a leader in innovation, and this has shaped the state's image and reputation in the global business community. In particular, Massachusetts is well-known for having helped incubate the computer, biotechnology, and other technology-oriented, knowledge-based industries. The state remains an excellent place to start up and build a business that relies on technology and/or sophisticated knowledge.

Considerable cutting-edge research takes place in Massachusetts and many innovative businesses have grown out of research projects at universities, hospitals, and other institutions. A recent study found that 6,900 companies in the state had been founded by MIT alumni alone, and those companies account for 26% of all sales by Massachusetts companies. The state's universities and research centers draw people from around the world, some of whom stay here to build businesses. In the case of MIT, even though fewer than 10% of the institute's students grew up in Massachusetts, 31% of alumni companies are located here.¹⁴ A survey of 2008-09 MIT Ph.D. graduates found that 45% intend to stay in Massachusetts, even though only 6% went to high school here.¹⁵ The state's other universities throughout the Commonwealth also contribute to an inflow of entrepreneurial talent.

Three intertwined and enduring characteristics of the state are especially meaningful and appealing to businesses and institutions from other parts of the world.

More generally, the Boston region has a strong financial services sector that provides expertise, funding, and assistance for new enterprises. According to the 2009 Global Financial Centres Index, Boston is perceived to be the third strongest financial center in the US (after New York and Chicago) and the ninth strongest in the world.¹⁶ Law firms, accountants, real estate specialists, and design firms also provide specialized services to businesses in the innovation economy. After California, Massachusetts has the world's largest, most active, and most experienced collection of angel investors and venture capital firms.

New and growing companies can draw on a skilled, experienced technical workforce with strengths in such key fields as machine tooling and engineering. More generally, Massachusetts has a highly educated workforce, with a higher percentage of the working-age population having at least a bachelor's degree than any other state. And the state's population is becoming better educated over time. Since 2005, the percentage

of working-age Massachusetts residents with at least a four-year college education rose from 41% to 47%. During that same period, the percentage of young people completing high school increased significantly and is now the highest of the nation's leading technology states at 93%.¹⁷

Earlier in this report, Massachusetts's culture of innovation was described as a powerful magnet for foreign businesses and individuals in key industries. However, as we will discuss later, the state can

do far more to make foreign firms, institutions, and individuals aware of the specific opportunities and make it easier for them to do business in the Commonwealth. This type of vigorous and sustained effort to maintain and expand its standing as the hub of innovation becomes more critical for Massachusetts in

¹⁴ Edward B. Roberts and Charles Eesley, *Entrepreneurial Impact: The Role of MIT* (Kansas City: Kauffman, The Foundation of Entrepreneurship, 2009), Executive Summary pp. 5-6.

¹⁵ MIT Office of the Provost, *45 Percent of MIT Ph.D. Graduates Remain in Massachusetts*, September 20, 2009, web.mit.edu/newsoffice/2009/grads-in-mass.html.

¹⁶ Z/Yen Group, *Global Financial Centres Index* (London: City of London, 2009), p. 4.

¹⁷ John Adams Innovation Institute, *2009 Index of the Massachusetts Innovation Economy* (Westborough: John Adams Innovation Institute, 2010), pp. 44-45.

Part One: The Setting for a New State Strategy

B. Building Blocks of Success: The State's Assets

a world where many states and countries are competing to build knowledge-based industry clusters, often by trying to woo some of our industry leaders.

2. Massachusetts is home to an unparalleled concentration of universities and research institutions.

The state is a global center for higher education, research and medicine. No other comparably sized geographic body in the world has more universities and research institutions, or more globally significant research being conducted across a wide range of disciplines.



Foreign businesses and governments perceive Massachusetts's rich collection of universities and research institutions to be an important asset of the state.

Universities and research centers are important to the state's international economic development efforts for reasons beyond their nurturing of entrepreneurs and new technologies. They also attract tens of thousands of people from around the world to be researchers, faculty, fellows, and students. Some of these individuals become permanent residents of the Commonwealth and play important roles in Massachusetts-based enterprises. They afford the state with intimate knowledge of their countries of origin, facilitating the development of economic ties between businesses and institutions in the Commonwealth and counterparts in their native countries.

Of course, most foreign students and temporary foreign residents return home after their education or business in Massachusetts is completed. This also provides a benefit to the state, since they can become resources to their fellow citizens about the Commonwealth and its educational, business, and medical advantages. Many foreign companies that sponsor business trips to Massachusetts or choose to open their first US office here do so in part because an executive in that enterprise was a student or fellow in the state. These types of personal connections already provide a great benefit to our economy, but, as detailed later in this report, much more can be done to capitalize on these relationships.

3. Massachusetts has a compact, convenient geographic hub.

For many industries, especially those focused on innovative products and services, the ability to connect regularly with colleagues, researchers, partners, service providers, investors, and competitors in and around Boston and Cambridge makes business development, networking, and government relations easier than in more remote regions of the country. This physical proximity encourages collaboration as well as the development of economic clusters and collegial professional communities. For example, a 2008 survey of 140 Massachusetts life sciences leaders found that "more than half of them (51%) said that the ability to just 'run into' people has resulted in a business opportunity or research collaboration."¹⁸

Competitor states, like California, New York, and Pennsylvania, are more decentralized. Their state capitals are far removed from their largest cities, media centers, and most recognized universities. Even within the metropolitan areas of those states, distances between institutions and business concentrations are greater than in Boston.

This is an advantage that is less obvious and well-known to foreign business prospects, yet it is one that can be a significant consideration as a business makes the decision about its next location or strategic alliance. We urge the state to consider including this advantage in promotional or marketing materials and in its presentation of the Commonwealth's comparative advantages.

¹⁸ PriceWaterhouseCoopers, "New Report on Massachusetts Life Sciences Super Cluster Finds Region is Strong, but Cannot Rest on Its Laurels," press release, June 12, 2008.

Part One: The Setting for a New State Strategy

B. Building Blocks of Success: The State's Assets

On the other hand, the hub-like nature of greater Boston can sometimes impede certain beneficial business transactions. The desire of foreign-based businesses to be close to the center of action in Boston and Cambridge can make it difficult to convince them to locate in other regions of the state, even when there are strong economic reasons to do so. Lack of familiarity with the geography of the Commonwealth may obscure the ease with which one can travel from Boston to even the most distant parts of the state. This lack of knowledge imposes an obstacle to the state's efforts

to locate manufacturing or distribution facilities in lower cost areas—areas still in close proximity to centers of research and entrepreneurial activity. It makes it difficult to overcome the perception of some potential foreign businesses that the only place to locate in Massachusetts is Boston or Cambridge. Effective marketing of each of the geographic areas of the state in materials describing business advantages could go a long way towards overcoming this problem, as would close collaboration with regional economic development agencies and officials. Indeed, such collaboration is essential.

Other Building Blocks

Massachusetts has other qualities that can be leveraged to attract foreign businesses here and to build economic partnerships with other parts of the world. For example, compared to other major US cities, Boston's international airport is closer and more convenient to downtown. Logan International Airport has excellent domestic and international connections with a large number of carriers. In addition, Logan's terminals have been greatly modernized and it is recognized in aviation circles as being on the cutting edge of safety and security. These advantages combine to make Logan one of the world's leading international airports. Similarly,



Business development, networking, and government relations are easier in Massachusetts than in less compact parts of the country.

the Boston Harbor maritime facilities are an important asset for businesses interested in importing or exporting goods.

Some of Massachusetts's advantages relate particularly to Europe. For one thing, proximity is a plus. For those European cities with nonstop air service to Boston, flight times are shorter than to any other US city. And like other states along the eastern seaboard, having fewer time zones between Massachusetts and Europe means that business conversations are easier to schedule than from the Midwest or West Coast.

Greater Boston is more similar to a European city in appearance, style, and ambience than most other major American cities, and this is well-known throughout Europe. Moreover, the large number of European consulates, European foreign nationals, and European-oriented organizations helps make this a comfortable place for Europeans to live and do business.

In addition, because of our large number of excellent hospitals, Massachusetts is a magnet for European patients and for citizens of other countries. Not only does this bring significant revenue into our state, but it produces human connections and personal loyalties to Massachusetts, much like our colleges and universities.

Finally, Massachusetts allows for a good quality of life. It is a pleasant place to live in and visit. There are nice communities, many enjoyable outdoor activities, good public transportation, excellent recreational opportunities, and many athletic and cultural events. While these factors may not always be the key drivers in businesses' site selection process, they are important traits of the Commonwealth and should be promoted. The state can make a strong case to foreign business people that Massachusetts is an excellent place to spend time—it's all here.

Part One: The Setting for a New State Strategy

C. Obstacles to Overcome

When implementing an international economic development strategy, state officials must keep in mind those factors that discourage foreigners from doing business in Massachusetts. Marketing efforts, policy changes, and international programs can mitigate some of these factors, but not all of them. For example, even though some foreigners do not like how cold and snowy the winters are here, state government cannot change the weather. Here are some other impediments to increasing foreign investment in Massachusetts:

Costs

In great part because of the attractiveness of the state, certain costs in Massachusetts are sometimes higher than in most other parts of the US. Especially in greater Boston, it can be relatively expensive for companies to rent or purchase space, as well as for employees to rent or purchase homes. Construction costs can be higher because of relatively high labor costs and because limited open space sometimes leaves companies with challenging work sites.

Energy prices are higher than in most other parts of the country and the cold winters lead to greater heating use. In addition, employers need to pay higher salaries than in many other places. Moreover, some other states are able to offer foreign companies larger financial incentives.

Because Massachusetts generally does not offer the absolute lowest-cost solution for businesses seeking a location, we need to make sure that locating here offers higher value and other benefits. Nevertheless, we should acknowledge that certain types of businesses, such as energy-intensive manufacturing facilities that rely primarily on low-skilled labor, will be unlikely to settle here unless there is an unusual, compelling non-cost reason for doing so.

Culture

People coming from foreign countries to almost any place in the US sometimes find navigating here to be frustrating. Americans speak fewer foreign languages and there are fewer finding aids, such as multi-language signs and highly visible information centers. Massachusetts is not immune from these deficiencies. Although the state has taken important steps in recent years to make it easier to access business-support services, some foreign businesses that seek to do business here do not know how to get started or how to proceed.

More generally, some people continue to think of the culture of Massachusetts as being insular and parochial. Even though both the image and the reality have improved over the past two decades, some Massachusetts organizations, institutions, and individuals are perceived as stodgy and uninterested in ideas and people from beyond Massachusetts. And despite the fact that the population is ethnically diverse and multi-national, some people still have a perception that our state is less welcoming to people of color than some of our competitors. One of our key competitors, Silicon Valley, has a reputation in some industries and some parts of the world for being more dynamic, open to new ideas, and collaborative.

State officials must keep in mind those factors that discourage foreigners from doing business in Massachusetts.

Part One: The Setting for a New State Strategy

C. Obstacles to Overcome

Other Factors

Just as Massachusetts benefits from proximity to Europe, it suffers from its distance from East Asia, both physically and culturally. California and other West Coast locations are fewer times zones from China, Japan, and other East Asian countries, and they have more residents of East Asian heritage.

Massachusetts's compact nature also has two sides. We discussed the benefits above, but the downside is that the state represents a smaller market than states like California, Florida, or Texas. For that reason, Massachusetts is generally most attractive to foreign companies for which the local market is not the biggest factor.

Finally, there are some issues that are not specific to Massachusetts, but instead represent general problems with the United States from the standpoint of foreign businesses. For example, even though the public schools are better here than in most other parts of the country, a perceived lack of rigor in American public education is viewed as a problem by some foreigners.

In addition, there are some federal restrictions that impede foreign trade, investment, and other economic ties. Certain export controls prevent particular Massachusetts companies

from selling their products in promising foreign markets. Some foreigners have difficulty obtaining visas and have a hard time securing work permits. To give just one example, in the wake of Governor Patrick's 2007 mission to China, several delegations from that country have been motivated to come to Massachusetts for meetings, yet some key delegates have not been able to obtain visas in time to make the trips. Of course, there are sound security reasons for the various federal rules and restrictions, but, as we recommend later in this report, Massachusetts should work to limit the logistical problems associated with them.



Part One: The Setting for a New State Strategy

D. Competition from Other States

Although Massachusetts has enviable assets, we cannot assume the world will come to us and to no one else. We have aggressive and creative competition.

Virtually every state in the United States has an active trade and investment program. These programs take different forms and are supported by a range of resources, but no state has missed the central lesson: tapping into foreign markets presents an excellent opportunity for long-term economic growth.

Budgets, Large and Small

Budgets are one indication of a state's commitment to promoting its industries abroad. At the time of a 2008 survey conducted by the State International Development Organization (SIDO), Massachusetts, the 15th largest state in population, fell near the middle of the pack when it came to budget commitment. The survey indicates the average international development budget for states was \$2.8 million, while the median budget was \$1.23 million.¹⁹ MOITI's budget, for trade and investment combined, was about \$1.4 million. The MOITI budget for FY 2010, even with transfer payments from other agencies, was even lower at approximately \$850,000.

By way of comparison, SIDO reports that Ohio and Illinois had budgets of \$4.9 million and \$5.4 million, respectively. Even some smaller states, such as South Carolina (\$4.7 million) and Mississippi (\$3 million), had budgets greatly exceeding the international budget in Massachusetts.

Although budgets are important, states with smaller budgets have often produced the most focused and creative international programs. Nebraska, for example, had one of the nation's smallest international budgets in 2008, about \$300,000. However, with careful and sophisticated long-range planning, that state organized a comprehensive "reverse" trade mission to "bring the world to Nebraska."

The program targeted several industries and especially sought to attract visitors from countries with large business interests in Nebraska. About 130 senior-level foreign officials participated in the mission which spanned the better part of a week. They were treated to

business forums, tours, one-on-one business meetings, and receptions/dinners sponsored by Nebraska business interests. The result was a plethora of rich leads for the Nebraska Department of Economic Development to pursue; it also produced valuable publicity for a state that might not otherwise attract great attention on the world stage.

Getting the biggest bang for the buck, regardless of a state's total international budget, is surely important, particularly in the stressful economic times we are currently experiencing.

Governor as "Ambassador-in-Chief"

For many states, getting the biggest bang for the buck means directly involving the governor. This was true for Nebraska's reverse trade mission where the governor committed many hours to one-on-one meetings with visiting officials.

Having the governor as "ambassador-in-chief" for a state's international promotion activities has two important effects. First, it encourages local companies that might be considering exporting to finally take the leap. Second, some countries, such as China, place a very high value on the active participation of senior government officials, with the office of governor accorded particularly great respect. Therefore, when a governor travels to a foreign country to promote his or her state, or meets foreign officials to advance the interests of a specific company, the effect can be galvanizing.

Governors' Awards

Governors can express their commitment to international business development in many ways besides traveling overseas. For example, several states have created governors' awards focusing attention on the importance of generating international commerce. These awards come in many shapes and sizes but nearly all include a selection process organized by an independent council, an awards ceremony featuring the governor, and promotion of the award winners on the governor's website. Governors' awards provide excellent, low-cost platforms to highlight the benefits of international activity.

¹⁹ State International Development Organizations, *SIDO Survey 2008: Trends in State International Business Development* (Washington: State International Development Organizations, 2008), p. 6.

Part One: The Setting for a New State Strategy

D. Competition from Other States

Alaska's award program is notable for extending beyond trade and investment. Its North Star Award for International Excellence has several categories and therefore more than one winner. The categories include exports, education and cultural exchange, scientific exchange, and foreign investment.

In 2008, one of the award recipients was an elementary school with a successful Japanese language immersion program. Alaska's awards reinforce the broad value of international connections for all businesses and citizens.

International Trade Day

Governors' awards are often presented during a day-long trade day or summit to promote international commerce. Like the awards programs, these events take many different forms, but all emphasize the state's devotion to raising its international profile. Well over half the states host such events.

The State of Maine's fervent commitment to this concept is evidenced by the fact that it has held 29 annual trade days. In 2009, more than 200 people from 100 companies converged on the University of Maine for networking events and panel discussions examining the opportunities and challenges around international business. Representatives from 10 countries participated in one-on-one meetings with Maine companies. Maine's trade day was titled "The World Economic Outlook," and presentations were organized around the topic. Costs were defrayed by private sector sponsors.

Website Chic

Every state has a website to promote its international programs and several states have produced superb web vehicles. The best sites are visually appealing, easy to navigate, and inform visitors of the state trade office's missions and services. For some states that have investment as a major goal, their websites include dazzling efforts to promote the state's key advantages.

The high priority Mississippi places on making international connections is proudly announced on the home page of the website by an excellent video message delivered by the governor. New Hampshire makes a direct business-to-business appeal by providing

When a governor travels to a foreign country to promote his or her state, or meets foreign officials to advance the interests of a specific company, the effect can be galvanizing.

testimonials by companies who have made use of that state's trade services. Kentucky jumps into the world of social media by utilizing Facebook and LinkedIn group pages that multiply outreach while projecting an image of being technologically savvy. Many states provide content in multiple languages.

Texas's site stands out for promoting a detailed guide for potential investors. The guide not only addresses the state's advantages, but it also provides clear, comprehensive information regarding tax, legal, real estate, and other issues with which any investor must be familiar. The guide aims to make potential investors comfortable with the notion of investing in Texas, and it succeeds.

Leveraging the Private Sector

Given the current great stress on most states' international budgets it is not surprising that many look to relieve some of the pressure with financial support from the private sector. Some states saw the value in partnering closely with the private sector long before the current economic difficulties and they continue to reap the benefits.

Florida mastered this leveraging act years ago. Enterprise Florida is a not-for-profit corporation funded by both state and private sources, and serves as the State's lead trade and investment organization. Although the governor chairs the board of directors, most board members are from private industry. Dozens of companies listed on the corporation's website contribute as much as \$50,000 annually in cash or services. The private sector provides about 20 percent of Enterprise Florida's total budget and its contribution

Part One: The Setting for a New State Strategy

D. Competition from Other States

has the potential to remain steady, or even increase, when falling tax revenue reduces public funding for the agency.

Active public/private partnerships do more than just stretch budgets. They also indicate to foreign markets that a state's public services are not only well-coordinated but also supported by the private sector. This makes investment decision makers confident that doing business in the state can be relatively easy and profitable.

Many states achieve this goal by having large advisory panels. Usually, these are comprised of a diverse group of private sector individuals who provide broad strategic counsel. They also provide a ready-made network to help make specific programs more effective. Florida's Trade Partner Alliance put its shoulder to the task of filling out attendance at a trade show in Brazil; within a few days it generated the attendance of over 200 Floridian business people for the show.

Foreign Assets

Foreign offices—whether staffed by full-time state employees or part-time contractors—can be wonderful assets for a state. They gather data on potential opportunities, recruit investors, and seek buyers for the state's exporters. These offices can be relatively expensive, so it is important that they have clearly focused assignments and be carefully managed. When that happens, foreign offices can inject powerful doses of brand and influence directly into key markets.

According to a report released in 2009 by the US General Accounting Office, most states have recognized the value of such offices. Forty-five states reported a total of over 200 offices, an average of nearly five offices

per state,²⁰ although the current recession is causing some states to pull back.

In China alone, states have at least 43 offices. Ohio has exclusive representation in Beijing, Shanghai, and Hong Kong. (By contrast Massachusetts, until late in 2008, had one part-time representative in China; now there is full-time representation.)

Large states like Ohio and Florida each have paid representatives in a dozen cities around the world. Pennsylvania has contract representatives in 25 cities, while Illinois has two full-fledged state offices in China in addition to seven other offices worldwide. But even the small state of Idaho is represented in six different countries, mostly in Asia. (For comparison,

Massachusetts has two offices in China along with a full-time representative based in Germany plus shared representatives in Mexico and Brazil.)

Student Power

Increasingly, state trade offices are turning their attention to foreign students and foreign alumni. SIDO reports that about 40 percent of state trade agencies conduct foreign student recruitment.²¹

Oklahoma used its office in Vietnam to negotiate an agreement with the country's national university that permits Vietnamese students to transfer all their academic credits to Oklahoma's state schools. According to SIDO, many of Vietnam's leading petroleum industry executives studied in Oklahoma,

Foreign offices—whether staffed by full-time state employees or part-time contractors—can be wonderful assets for a state.

20 US General Accounting Office, *Export Promotion: Commerce Needs Better Information to Evaluate its Fee-Based Program and Customers*, March, 2009, p. 11.

21 *SIDO Survey*, p. 13.

Part One: The Setting for a New State Strategy

D. Competition from Other States

resulting in particularly close ties between Vietnam and Oklahoma in that sector.²²

Pennsylvania's Global Alumni Initiative is a two-pronged approach to attracting more foreign trade and investment utilizing foreign-born alumni. First, the state provides funds for international alumni events that advance Pennsylvania's international economic development agenda. In addition, an online networking tool provides foreign alumni access to business and professional connections.

Grant Programs

SIDO estimates that more than 40 percent of the states provide grants to small and medium-sized companies to encourage participation in certain international activities by reducing the cost. Depending on the state, the grants vary in size from \$500 to \$50,000.²³

Indiana has a trade show assistance program which provides grants of up to \$5,000 to companies to defray trade show expenses. The state allocates about \$100,000 annually for that program. Rhode Island provides similar-sized grants for export training. Pennsylvania provides comparable grants from an annual fund of about one million dollars. New York's grants can reach as high as \$50,000. Iowa provides funding up to \$4,000 to help local companies attend trade shows and trade missions.

Many states will help subsidize the costs for local companies to participate in the US Foreign Commercial

Service's Gold Key Program, a fee-based effort to assist US companies expand into foreign markets. The Commercial Service has a network of 124 offices around the world.

What Massachusetts Can Learn

It is not necessary, or even desirable, for Massachusetts to copy exactly what other states are doing. But it is critical to know what the competition is up to and to understand that many of our competitors have been active, innovative, and aggressive for several years.

²² Ibid.

²³ Ibid.

Part Two: Strategies for Global Success

A. A Coordinated Approach by State Agencies

All the agencies in Massachusetts that conduct international activities must strive for an unprecedented level of coordination and joint activity. Fortunately, the Governor, Senate President, House Speaker, and other leading officials from both the Executive and Legislative branches of government are currently working diligently to encourage inter-agency collaboration on economic development. In fact, the Senate introduced an economic development reorganization bill (S2345) during the current legislative session. Below, we describe some of the ways in which state agencies should work together.

Oversight from the Secretary and Coordination from MOITI

As the Commonwealth's chief economic development officer and strategist, the Secretary of the Executive Office of Housing and Economic Development (EOHED) has overall responsibility for managing the state's international business development activities. Although the Secretary should occasionally convene representatives of all the internationally oriented agencies to discuss high-level strategy, he should assign day-to-day coordination of international activities to the Massachusetts Office of International Trade and Investment (MOITI).²⁴

Under this scenario, MOITI will need to be prepared for an increased workload as it will be responsible for knowing about the international activities at all executive branch and quasi-public agencies. It will also take on a major communications role, making sure that relevant information is communicated between agencies, as well as to private sector parties interested in the state's international activities.

To foster communication and coordinated action, MOITI should convene and chair regular meetings of all the public agencies listed in Appendix A of this report. At these meetings, staff members would discuss recent and planned activities. The agencies would also share relevant information between meetings through an electronic process.

As part of its information clearinghouse function, MOITI should keep track of who in state government is traveling overseas and should help set the agenda and mission of any planned trips. MOITI should know when a top official is visiting a country where it has investment leads. For example, if Massport visits a city to meet with an airline it is targeting for route development, MOITI should know about it. If MOITI has a lead in that city, the Massport official could meet with the company to impress its leaders with how business-friendly Logan Airport can be. Conversely, before a MOITI staff member travels overseas, the agency should find out whether there is anything that person can do to advance the goals of other state agencies. Similarly, MOITI should be aware of foreign delegations that visit Massachusetts, even if another agency is going to be the primary host of a delegation.

Sealing the Deal through the Office of Business Development

Although MOITI should be responsible for coordinating general international programs and activities, when an individual foreign company considers investing or locating in Massachusetts, the Massachusetts Office of Business Development (MOBD) should continue to play the key coordinating role. MOBD, a division of EOHED, is responsible for helping domestic and foreign businesses who would like to locate or expand in Massachusetts.

MOBD provides companies with a single point of contact as they explore business development decisions. The state's international programs should be organized in a way that reinforces this single-point-of-contact concept. MOBD should therefore continue to retain responsibility for maintaining information about all the financial incentives and benefits potential Massachusetts companies can be eligible for and for

²⁴ Since 1983, the functions and operations of the Massachusetts Office of International Trade & Investment have been performed under contract by the Massachusetts International Trade Council, Inc. (MITCI), a not-for-profit corporation.

Part Two: Strategies for Global Success

A. A Coordinated Approach by State Agencies

presenting prospective investing companies with offer sheets on behalf of the Commonwealth.

That does not mean, of course, that MOITI should be left out of the process of recruiting foreign companies and finalizing deals. MOITI and MOBD have different, but complementary, skills and areas of expertise. While MOBD understands the state's financial incentive possibilities and includes industry specialists who understand key industries, MOITI staff members understand particular foreign markets and cultures and the expectations of businesspeople from those cultures. In addition, MOITI is responsible for carrying out activities locally and internationally to identify businesses that might be interested in investing in Massachusetts and for generating leads.

The Roles of Other Agencies and Organizations

Both MOITI and MOBD need to be active coordinators and communicators in their respective domains but other agencies also have important roles to play.

The Massachusetts Export Center, like MOITI, focuses exclusively on international activities, helping “companies throughout the Commonwealth achieve success in global markets, thereby contributing to economic growth in the state.”²⁵ Nearly all of its funding comes through the Massachusetts Small Business Development Center Network, a federal-state partnership in which two federal dollars are provided for each dollar from the state budget. The Export Center

sponsors training workshops and its four offices across the state offer advice to companies, including help with analyzing particular markets and identifying potential distributors in particular countries. The Export Center is highly regarded and in 2008 received the Presidential E Award for excellence in exporting.

MOITI and MOBD need to be active coordinators and communicators in their respective domains but other agencies also have important roles to play.

The other quasi-public agencies and organizations that should participate actively in a coordinated state international strategy are the Massachusetts Office of Travel and Tourism (MOTT), Massport,

the Massachusetts Technology Collaborative, the Massachusetts Life Sciences Center, the Massachusetts Clean Energy Center, MassDevelopment, the Massachusetts Convention Center Authority, and the Massachusetts Alliance for Economic Development. In addition, the state has eight regional economic development organizations that can provide guidance and expertise on opportunities in their specific regions. Although we refer to some of these entities at appropriate points in the strategy sections below, we also describe their current and potential roles in Appendix A.

²⁵ Massachusetts Export Center. www.mass.gov/export/aboutus.htm

Part Two: Strategies for Global Success

B. A Public-Private Partnership

The state should form an active, formal, well-structured partnership with the private sector on international business matters. The state should ask the private sector for program ideas, feedback, and participation in state-initiated activities, funding, and help with disseminating information. MOITI should play a coordinating role so that the many relevant groups know what each other is doing.

In addition to the obvious benefits of ensuring that state agencies are not insular and that private organizations buy into the state's international programs, there are several specific reasons for emphasizing a public-private partnership:

- Relatively few Massachusetts businesses, research centers, and nonprofit organizations are familiar with the programs of MOITI, the Massachusetts Export Center, and other internationally oriented public agencies. The private sector does not know how they can benefit from or influence these programs. A public-private partnership would increase the visibility of the various state agencies and provide them with more leads and customers.
- MOITI's current budget is not sufficient to allow it to take full advantage of many promising opportunities in the international trade and investment arena. Given the state's fiscal realities, it is unlikely that state support for MOITI will be able to grow significantly in the near term. But its budget could grow if it taps other sources of income. Like some other states, Massachusetts should ask businesses to provide some of the funding for overseas business development trips and other international activities. In addition, MOITI should explore creative ways to offer fee-for-service activities. Doing so would not only bring in additional revenue but it would be a good test: If the business community is not willing to pay for the services, it may mean that the private sector does not value the services and those services may not be necessary.
- Overlap in programs can be eliminated and efficiency increased by exchanging information with private organizations and working together.
- There is solid evidence that government trade and investment programs produce stronger results when they are based on public-private partnerships. In 2004, Jacques Morisset and Kelly Andrews-Johnson produced a report for the Foreign Investment Advisory Service of the World Bank evaluating the effectiveness of various countries' promotion agencies at attracting foreign direct investment. Based on statistical analysis of foreign direct investment numbers and a survey of 75 investment promotion agencies around the world, they found that agencies achieve more when they have "participation by the private sector through their boards or through institutional relations."²⁶ Our more impressionistic survey of programs in the 50 US states indicated that some of the programs that appear to be most effective, such as Enterprise Florida, reflect close partnerships between the public and private sectors.

A Wealth of Organizations

The range of internationally involved organizations in Massachusetts is impressive and much richer than in most other states. That alone is an important reason for building a strong public-private partnership. Among the organizations the state should connect with are industry associations, nonprofit organizations, regional development organizations, the foreign consular corps, international chambers of commerce, and universities. (These different categories of organizations are described in Appendix A.)

²⁶ Jacques Morisset and Kelly Andrews-Johnson, *The Effectiveness of Promotion Agencies at Attracting Foreign Direct Investment* (Washington: Foreign Investment Advisory Service, 2004), pp. 2, 49.

Part Two: Strategies for Global Success

B. A Public-Private Partnership

Specific Ideas for Forging a Strong Partnership

Among the collaborative activities the state could and should undertake are:

1. *Create a Massachusetts Global Advisory Council.*

Although MITCI, the organization that does business as MOITI, has a strong Board that provides that key state agency with valuable advice from the private sector, it would be desirable for the state as a whole to have a high-profile advisory group. This Council should consist of a large number of representatives, largely from the private sector, who have expertise in international development and Massachusetts business to work in partnership with the Administration. The members might have terms of two to three years. The Council would be organized into task forces assigned to come up with specific steps the state could take to expand internationally. It would consider general strategy and economic trends that affect the range of government and private organizations that work on international matters (e.g., possible changes to government policies at the state and national levels, new issues for the state to consider). The Council could also occasionally step back to help assess the success of recent state activities. Council members could reach out to their colleagues in the private sector to interest and recruit them for various international activities, including any possible foreign trips. In addition to the specific tasks the Council might undertake, the existence of such a group, with direct access to top state leaders, would demonstrate the state's commitment to being active in the international arena and its desire to work collaboratively with the private sector.²⁷

There is solid evidence that government trade and investment programs produce stronger results when they are based on public-private partnerships.

2. *Put together a short-term task force on private sector financing.* Given the especially difficult budget situation facing the Commonwealth, an important initial task force of the Global Advisory Council should address private sector financing for MOITI, including fee-for-service activities. Some states have mastered this form of partnering but MOITI currently has no broad-based private sector financial support. The task force would set guidelines to ensure that private sector funding is sought in appropriate ways and does not compromise MOITI's programs or raise potential ethics issues. The task force would also help seek funding for existing MOITI programs, as well as recommend new programs for which such funding is likely to be available. An important criterion for task force membership ought to be an ability to access funding.
3. *Develop recommendations for increasing near-term jobs.* A second important initial task of the Global Advisory Council should be to develop recommendations for how the state's new public-private partnership on international activities can increase the number of jobs in Massachusetts, especially in the manufacturing sector. The Council should review the various proposals in *An International Strategy for Massachusetts*, but also consider additional ideas. It should then recommend and prioritize the most relevant ones.
4. *Convene international business groups.* Perhaps twice a year, MOITI should convene representatives of key groups that are active in the international arena, including the AIM International Business Council, relevant trade associations (e.g., Massachusetts Biotechnology Council, Massachusetts High Tech Council), the Global Business Alliance of New England, the Coalition

²⁷ In October 2007, the Senate Committee on Post Audit and Oversight made a similar suggestion for a high-profile advisory group. That recommendation is included in the committee's insightful report, *Getting in the Game: Increasing Massachusetts's Presence in the Globalized World* (Boston: Commonwealth of Massachusetts, 2007), p. 3.

Part Two: Strategies for Global Success

B. A Public-Private Partnership

of New England Companies for Trade (CONNECT), Boston World Partnerships, a few of the most active international chambers of commerce (e.g., New England-Canada Business Council), and the most active state agencies. The groups would share notes on their individual activities and discuss ways in which they can work together on specific initiatives.

5. *Meet with the consular corps.* To demonstrate that the state values the presence of so many active consulates in Massachusetts and wants to work cooperatively with those consulates, the Governor and/or Secretary of Housing and Economic Development should meet with the consular corps at least once a year.
6. *Maintain a calendar of events.* MOITI should collect information about internationally oriented events taking place in Massachusetts and post that information on its website. This would not only help the various organizations that sponsor those events, but it would significantly increase MOITI's visibility, drive traffic to the MOITI website, and position MOITI as the hub of international economic activity in Massachusetts. It would also help ensure that MOITI knows about important relevant events before they happen.
7. *Publish an electronic newsletter.* MOITI should produce and distribute a regularly published email newsletter aimed at a Massachusetts audience to keep the various private sector parties informed of international activities in which the state is involved. The newsletter should emphasize the public-private sector partnership aspects of the state's international programs. Such a newsletter would not only improve communication and increase MOITI's visibility, but it would help the state develop a larger, more complete database of organizations and individuals interested in international business development activities.

8. *Produce an annual scorecard/report on international trade and investment in Massachusetts.* To focus on achieving concrete results and to ensure that everyone is using the same metrics to judge progress, some sort of annual scorecard or report should be produced.

Metrics might include annual exports, annual imports, annual foreign direct investment, growth in trade with specific targeted markets, growth in foreign direct investment from specific targeted countries, foreign student enrollment, foreign visitors, number of international route landings at Massport, shipping container volume, and number of foreign companies establishing a

new presence. The report would be developed as a collaborative effort between the state and private groups, especially the AIM International Business Council, which is keenly interested in working on it. Because resources for producing the report will likely be tight, it should start with only a few metrics and gradually expand in scope in future years. The findings of each year's report should be discussed by the Global Advisory Council proposed above.

A Caveat

With so many internationally oriented organizations, both private and public, jurisdictional disputes and other issues inevitably arise. The new regime of collaboration advocated for in this report will certainly diminish conflicts and confusion, but will not be able to eliminate them entirely. However, at the end of the day, having these organizations working in close proximity on similar issues, partnering while advocating for their particular points of view, is one of Massachusetts's competitive advantages.

**An important initial task
force of the Global Advisory
Council should address
private sector financing
for MOITI.**

Part Two: Strategies for Global Success

C. Communicating the Brand

For the state to be successful in the international arena, it needs to communicate effectively with potential foreign investors and business partners. This involves projecting powerful messages in clear ways through appropriate channels. Although there have been some useful individual communications activities, the overall approach has been insufficiently coordinated and not always designed with the audience in mind. This is an area where rapid improvement should be and can be made.

The Massachusetts Brand

It is useful to think about “Massachusetts” as a brand. What is the image of the state that we wish to project abroad? Which characteristics of the state are most important to feature? How can we most effectively project this brand? Asking and answering these questions will help define which marketing materials, messages, and mediums should receive attention.

We do not advocate an expensive, large-scale mass global marketing campaign. Instead, the state should start with key narrow target audiences—particular industry, professional, and affinity groups in specific countries—and decide what it would be desirable for them to know about Massachusetts. The desired state image can then be presented to them through targeted communications campaigns and the image can also be infused into more general materials that are seen through the normal course of business by broader audiences. For example, the MOITI website and any general agency informational brochures should promote the messages.

Given that tourism is the state’s third largest industry²⁸ special attention should focus on how the Massachusetts brand gets communicated to visitors to the state and through tourism promotion materials that get distributed outside the state. The Massachusetts Office of Travel and Tourism (MOTT) should therefore be an active participant in developing and promoting the state’s brand.

Developing an Effective Brand

As two Tufts university branding experts note, any state or country’s international branding should consider four areas: “public diplomacy, tourism, exports, and foreign direct investment.” In contrast, most countries and states “usually consciously brand themselves only for tourism purposes. Such tourism branding tends to be confused with overall country/state branding.” And those countries and states that consider the other dimensions “usually do not do so in a coordinated fashion, even though a multiplicity of unsynchronized approaches can lead to brand confusion and dilution.”²⁹ Of course, that does not mean that the messages conveyed about Massachusetts need to be, or should be, identical in each of the four branding areas, but all the messages should be developed intentionally in a coordinated manner.

Fortunately, a valuable public-private effort has already begun to help the state present a consistent, effective message. Spearheaded by the Secretary of Housing and Economic Development and assisted by marketing and communications experts, participating groups are promoting use of the tagline “It’s all here”.³⁰ It is important to keep in mind that the goal is not a major marketing campaign with large-scale advertising, but instead agreement on the state image to project in focused, narrow ways, including internationally.

At the same time that the state seeks out the views of experts, it should conduct research on the existing state image in different locations around the world. What do people already know about Massachusetts? What do they think are its advantages and disadvantages as a place to do business? How are the answers different for people in different industries and different countries? The answers to these questions should inform the messages the state crafts and presents, and the communications methods the state uses.

Although it would be ideal to conduct large-scale public opinion studies based on scientifically selected samples, it is not necessary. The state can gather much useful

28 According to EOHED’s Department of Business Development, tourism generates over \$13.1 billion in travel-related expenditures and \$833.3 million in state and local taxes. See “Our Agencies and Commissions” at www.mass.gov/dbd.

29 Bernard L. Simonin and Jorge De Vicente, “How to Structure and Manage the State Branding Process,” *Advertising Express*, July 2005, p. 45–57.

30 For a brief explanation, visit MassDevelopment’s website: www.massdevelopment.com/whatsnew/ma.aspx.

Part Two: Strategies for Global Success

C. Communicating the Brand

information more easily at a much lower cost. For one thing, whenever the state has an exhibit booth at a foreign conference or trade show, a survey questionnaire should be distributed. Presumably the reason that the state is present at the event is that a key target audience is in attendance. It is worth knowing what such an important audience thinks of the state. For example, wouldn't it be worth knowing what the attendees at the Chinese medical devices conference know and think about Massachusetts? Attendees can be encouraged to fill out the questionnaire by offering a raffle prize to one or more survey participants. As a side benefit, the state will collect email addresses and other contact information.

The state should also undertake a larger, cross-national survey of international students currently in Massachusetts, with special emphasis on graduate-level students and visiting fellows. These students can be good proxies for their countrymen back home. There is no reason to think that British MBA students at Massachusetts universities have wildly different views of Massachusetts than do those British businesspeople who would consider doing business in the state. Similarly, engineering students here will likely have similar views to engineers back home, at least to those engineers who would consider travelling to and doing business in Massachusetts.

There are several advantages to conducting this survey of students. First, it would be possible to get a large enough sample that comparisons can be made between survey participants from different countries and participants in different fields (e.g., Canada versus Britain, life sciences industry versus government/public policy students, Chinese engineers versus German engineers). Second, the survey participants can be asked what they thought about Massachusetts before they arrived here and how their views changed based on their experience. Finally, if the survey process is conducted well with good outreach, effective communication, and raffle prizes, it can be part of the strategy described below in section 2G to court international students and increase their loyalty to Massachusetts.

Leveraging Boston's Brand for the Benefit of the Entire State

Based on conversations with many foreign nationals as part of our research, we believe that any public opinion survey will show that "Massachusetts" is not well-known overseas. In the case of China, for example, Robert Eng, Executive Director of the Babson College Asia Institute and a MITCI Board Member, notes that only "bits and pieces of Massachusetts," like Harvard and MIT, are known. "There is no overall coherent presence. Silicon Valley is the only region that is successful in this regard."³¹

Our research suggests that "Boston" is a much better known, more salient brand overseas than "Massachusetts." That shouldn't be surprising because major cities are generally more visible and prominent globally than the provinces or states they are in. Unless one has been there, a province or state does not conjure up the same concrete physical images and seems to be more of an abstract political jurisdiction. After all, most Americans are familiar with Beijing, but do not know that it is located in Hebei Province, or that Mumbai is in Maharashtra or Cologne is in North Rhine-Westphalia. Among other things, the globalization of sports news has helped spread the Boston name worldwide in recent years as the Red Sox and Celtics have won championships.

The Boston name conjures up an area larger than the official political city limits. Foreign students who come to Bentley University in Waltham or Wellesley College in Wellesley may tell their friends and family back home that they are studying "in Boston." Residents of Acton, Framingham, or Dedham who travel overseas may tell the people they meet that they live "near Boston."

Although there may be political sensitivity at the state level to the greater international salience of "Boston" than "Massachusetts," effective communications and branding needs to start with the audience's pre-existing perceptions and build on them. Boston's considerable prominence should be recognized and then leveraged in the state's marketing efforts. In other words, if done artfully, Boston's high name recognition and positive image can be used as a magnet to attract international interest not just to Boston but to the entire state.

³¹ Interview with Robert Eng, April 1, 2009.

Part Two: Strategies for Global Success

C. Communicating the Brand

Serving the Audience

The main purpose of any website or printed material should be to serve the needs of the intended audience. Most people go to a website and publications about Massachusetts's international programs and activities to learn (1) how to do business in Massachusetts or (2) how the state can help them increase their exports or otherwise deal with the outside world. Communications materials should therefore be designed and organized to make it easy for people to find out about these things.

Currently, the state's communication materials are not organized that way in print or online. Information is spread out between many different websites, each from a different agency. The look of the different websites is so varied that an outsider may not end up believing that they are all part of the same state infrastructure or that the agencies work together. Many of the websites focus on presenting details about the agency's internal structure rather than giving answers to the questions that the audience is seeking.

The weaknesses of the current websites are especially problematic because so many other states have excellent websites. For many foreigners, those sites are the first point of inquiry in examining what a state has to offer. It is imperative for Massachusetts, a state that promotes its high-tech expertise, to have a website that shines as bright—or brighter—than any put forward by our competition. We recommend the following:

- Work with the recently rejuvenated “It’s all here” campaign to ensure streamlined branding.
- Create one or two entry portals for anyone interested in doing international business with the state. If there are two entry points, one should be focused on foreign parties seeking to do business here and the other focused on Massachusetts businesses seeking help with their international activities.
- The entry portal(s) should be organized with the needs of the audience in the mind. People going to the site should be able to get answers easily to all their questions either on the site or through links that point directly to the answers elsewhere.
 - › For foreign businesses, a basic question has to be answered right on the homepage: why should a business invest in Massachusetts? This should be answered both on the home page and throughout the website—cleverly and artfully.
- › The website might include a comprehensive guide to assist potential foreign investors with investing in the state. All the nuts-and-bolts issues an investor would need to consider would be addressed, from taxes to incentives to legal matters.
- Some material on the entry portal should be available in multiple languages. The site could also be geo-targeted so that users in Germany, for example, would see pop-ups with Massachusetts-related events in Germany and other items of special interest.
- The internationally oriented sections of websites and printed materials of state agencies that participate in international activities should have complementary designs (not necessarily the same design) so that it is clear that they are all part of the Commonwealth's coordinated international initiatives and that all the agencies work cooperatively.
- The websites should market the state rather than the agencies. Descriptions of the internal structure of different agencies—board members, histories, lists of all activities—should be available but deemphasized for people who enter through the entry portal.
- Both the entry portal and individual agency websites should promote the state brand and those Massachusetts characteristics that are particularly attractive to international audiences. For example, there should be a major focus on the strengths of our universities, perhaps including regular updates on some of the exciting research being conducted in various fields.
- Some ideas employed by other states that are worth considering are a video message from the Governor extolling the virtues of Massachusetts, investment success stories, podcasts, and a social networking component that would have special resonance with technologically savvy entrepreneurs.

Any printed materials the state produces on international business development should follow similar principles and approaches.

Part Two: Strategies for Global Success

D. Selecting Targets

State government does not have the resources to be active in all parts of the world. And even if there were an unlimited budget, it would be not be productive to spread out the state's activities equally across countries, industries, and companies. Instead, it makes much more sense to concentrate on those targets that are most likely to yield results and are most important to the state's future economic health. But deciding which countries and industries to target is not easy.

Industries and Companies

The two separate realms of export promotion and foreign direct investment require different approaches.

When it comes to exports, the state should not target particular industries. Instead, the state should try to help any company from any industry if that company has the potential to expand its exports and the number of its employees, and has demonstrated the determination to do so. Important past export successes have sometimes come from niche companies in small industries.

The Massachusetts Export Center and MOITI should therefore make their services available across the board. To the extent that services and staff time need to be rationed, two criteria should be used: (1) the likely number of jobs at stake and (2) how the agencies can use their money and time most efficiently and effectively. For example, if two businesses ask the Massachusetts Export Center for assistance in expanding exports to two different countries, the Center should give priority to the business looking to expand into the country about which the Center knows most and with which it has the strongest connections.

In contrast, when seeking foreign direct investment and international business partnerships, the greatest

attention should go to industry clusters that are currently strong, are important to the future of the state economy, and hold the promise of remaining global leaders. As the sidebar "Targeted Recruiting" on pages 36-37 makes clear, states should build on their existing strengths and seek international investments and business partnerships that make those strong clusters more complete and robust.

Because one of Massachusetts's key current strengths is as a center of innovation, it is especially important to focus on clusters that will allow the state to maintain its status as an innovation center; this focus should include

identifying emerging clusters as well. Luckily, Massachusetts has given considerable attention to identifying and analyzing its relevant state industry clusters, in part through reports like the annual *Index of the Massachusetts Innovation Economy*.³²

Life sciences. One innovation-oriented cluster, life sciences, should receive special attention in the state's international efforts. In part, this is because the state, through its 2007 life sciences law, has already identified the industry as holding particular promise and has made it a focus of the state. The establishment of the

Massachusetts Life Sciences Center and a significant life science fund give the state special resources to promote this industry and signify a serious level of commitment to the industry.

The life sciences industry also deserves attention because it has been an important recent engine for job growth. Furthermore, it is an unusually strong and complete cluster with strengths in many areas from hospitals to biotechnology to medical devices to pharmaceutical development to stem cell research. The industry is indeed a "super cluster," as a 2008 report with that name showed.³³ In May 2009, the Milken Institute, an independent economic think tank, assessed the elite American life sciences clusters and found

The state should target those countries, industries, and companies that are most likely to yield results and are most important to the state's future economic health.

32 See, for example, John Adams Innovation Institute, *2009 Index of the Massachusetts Innovation Economy* (Westborough: John Adams Innovation Institute, 2010).

33 Massachusetts Life Sciences Center et al., *Super Cluster: Ideas, Perspectives, and Trends Shaping the Global Impact of the Massachusetts Life Sciences Industry, Volume II* (Boston: PriceWaterhouseCoopers, 2008).

Part Two: Strategies for Global Success

D. Selecting Targets

the one in greater Boston to be the strongest in the country.³⁴

When seeking to increase foreign investment and international business partnerships, four other industries should also receive priority, although not necessarily always at the same level as life sciences:

Clean energy. Although still smaller than some other clusters, it is growing fast. It has great promise, in part because of the attention and funding it is receiving from the federal and state governments, and because it is well-organized through entities such as the New England Clean Energy Council. It also fits well with the image of Massachusetts being a center of cutting-edge innovation. In August 2009 Sustainable World Capital, an investment advisory firm focused on the “green” sector, ranked Massachusetts as the third top cleantech state in the nation, after California and Texas.³⁵

Financial services. Companies often cluster around capital and, when it comes to access to capital, the financial services sector in Boston and Massachusetts is world renowned. Our broad base of mutual funds, venture capital, and private equity firms is particularly attractive to European investors drawn to Boston’s “old world” appeal and perceived conservative values. The health of the financial services industry is probably not directly dependent on state assistance. However, this industry is one of our distinct competitive advantages and must play a central role in efforts to target companies in other industries for investment.

Higher education. This industry is at least as important as life sciences to the economic health and global standing of Massachusetts, but the major universities do not need state help to secure most of the international funding and partnerships they seek. Nevertheless, there are ways the state can and should assist, such as helping recruit foreign students, as discussed below in section 2G.

Information technology. The IT industry sometimes gets overlooked in considerations of Massachusetts’s

economic future, because of the dominance of Silicon Valley and the demise of Digital and other early industry leaders. However, IT remains an important employer, with 178,000 employees, and is a key engine of innovation. In fact, a 2009 Milken Institute report ranked Cambridge/Newton/Framingham as the third strongest area for in the country for high-tech in the country, only very slightly behind Seattle/Bellevue/ Everett for second. Massachusetts placed in the top ten in nine separate high-tech industries, more than even Silicon Valley. For example, our high-tech corridor ranked third in “computer systems design and related services,” second in “software publishing,” second in “audio and video equipment manufacturing,” and fifth in “computer and peripheral equipment manufacturing.”³⁷

Even though Silicon Valley remains much stronger overall, Massachusetts has the potential to close the gap. When Michael Goodman of the University of Massachusetts’s Donahue Institute surveyed 226 IT firms last year, his respondents ranked Massachusetts and California virtually the same when asked which location presented the best opportunity for growth. Moreover, Massachusetts was perceived to have a better quality of life.³⁸

How to Target Countries and Regions

Although the ultimate goals may be clear—more jobs, investment, and economic activity in Massachusetts—it is hard to determine which geographic targets will enable the state to make the most progress towards those goals. There are many factors to consider:

- Which are currently Massachusetts’s biggest markets?
- Where can exports from Massachusetts increase fastest in the near-term?
- Which will be the most important markets in the long run?
- Which countries are the biggest sources of funding, currently and potentially, for investment into

34 Ross C. DeVol et al., *The Greater Philadelphia Life Sciences Cluster 2009: An Economic and Comparative Assessment, Executive Summary* (Santa Monica: Milken Institute, 2009), p. 6.

35 Shawn Lester, “The Top 10 U.S. States for Cleantech in 2009,” August 17, 2009. Available on the Cleantech Group website, <http://cleantech.com/news/4845/top-10-us-states-cleantech-2009>.

36 Michael Goodman et al., *The IT Industry: Hub of the Massachusetts Technology Economy* (Shrewsbury: University of Massachusetts Donahue Institute, 2009), p. 5.

37 Massachusetts Life Sciences Center et al., *Super Cluster: Ideas, Perspectives, and Trends Shaping the Global Impact of the Massachusetts Life Sciences Industry, Volume II* (Boston: PriceWaterhouseCoopers, 2008).

38 Ross C. DeVol et al., *The Greater Philadelphia Life Sciences Cluster 2009: An Economic and Comparative Assessment, Executive Summary* (Santa Monica: Milken Institute, 2009), p. 6.

Part Two: Strategies for Global Success

D. Selecting Targets

- Massachusetts and for joint business partnerships?
- Which countries can be the best sources of new technologies and technology partnerships for Massachusetts companies?
- Where does Massachusetts have the greatest competitive advantage?
- Where can the state government, as opposed to activities by the private sector, make the biggest difference?
- Where is it easiest for the state and Massachusetts companies to operate?
- Where does the state already have activities underway, including offices and sister-state agreements?
- For which countries are there the strongest partners, including Massachusetts-based consulates, binational chambers of commerce, and existing operations by Massachusetts institutions?

Once the state agrees on targets, the type of cluster analysis recommended in the sidebar on pages 36–37 should be carried out, at least for those industries and countries that will

receive the largest outreach efforts. Unfortunately, when researching this report, no clear consensus emerged about which countries to target. Different countries are important to different industries and the situation looks very different depending upon whether one is looking at exports, investments, or technology partnerships. About 20 different countries—too many for the state to focus on—were suggested as primary targets. Consider the following responses we received:

- Brazil would be a good place to target, because it is a large emerging market, it is more accessible than China or India, and there is a large Portuguese-speaking population in Massachusetts.
- UK Trade and Investment and Swissnex are unusually active, effective foreign agencies in Massachusetts that would make excellent partners

for identifying investment opportunities and potential business partnerships.

- India is a rapidly growing market that is not receiving enough attention from the state or from the Massachusetts business community.
- Oil states on the Arabian peninsula have tremendous financial resources for investment in university research and other activities.
- Proximity and cultural ties mean that Massachusetts should focus more on Europe than Asia or Latin America.³⁹
- Canada is the US's largest trading partner, it is the closest country to Massachusetts, and both the Canadian federal government and various provinces would like to work more closely with Massachusetts.

Given this diversity of opinion, which countries should Massachusetts target? We believe that China should

Europe deserves the same close attention and level of activity as China.

be the single country that gets the greatest attention. Compelling reasons for this are the size and growth of its market; the fact that Massachusetts government leaders are important to opening doors for Massachusetts companies in China;

the amount of money that the Chinese government, banks, and companies are investing in the United States; and the unusual advantage Massachusetts has because many of China's political and business leaders have studied at the Harvard Kennedy School of Government and continue to visit there. MOITI should have at least one person devoted solely to working with China. Other agencies, such as the Life Sciences Center and Clean Energy Center, should each have a staff member assigned part-time to relations with China. Governor Patrick was wise to take his first trade mission to China and vigorous efforts should continue to be made to follow up on the connections that were made at that time.

³⁹ When economist Lawrence Summers was interviewed in 2007 by the Senate Committee on Post Audit and Oversight, he "argued that there is a tendency to romanticize the Pacific, stating that Boston is the closest city in the United States to Europe and the farthest from the Pacific. Summers recommended that Massachusetts should work to make itself a gateway to Europe, stating that it should utilize its unique connections to Europe to increase transatlantic partnerships." Senate Committee on Post Audit and Oversight, *Getting in the Game*, p.5.

Part Two: Strategies for Global Success

D. Selecting Targets

On the other hand, Europe should not be ignored and it deserves the same close attention and level of activity as China. Of course, that means that no single European country will get as much attention as China. But the state should continue to have at least one office in Europe, MOITI should have at least one staff member assigned full time to Europe, and other agencies should have staff members assigned to be their main point of contact for relationships with European companies and governments.

Outside China and Europe, we suggest that the state identify the following countries for narrower, more focused initiatives:

- Brazil: export of Massachusetts products (rather than investment into Massachusetts)
- Canada: research and development partnerships between companies, as well as clean energy development activities
- India: introductory activities to familiarize Massachusetts companies with the country and to determine appropriate focuses for future state initiatives
- Israel: emphasis on Israeli life sciences, information technology, and clean energy start-ups, to encourage them to open their first US office in Massachusetts and to form partnerships with Massachusetts companies
- Japan: build on existing partnerships between universities in the two locations, between life sciences companies, and the Massachusetts-Hokkaido sister state agreement
- Mexico: export of Massachusetts products (rather than investment into Massachusetts)
- Saudi Arabia and/or the United Arab Emirates: funding for university research and joint university partnerships
- Singapore: source of investment into Massachusetts

If our recommendations are implemented, the places mentioned above would receive the greatest attention from MOITI staff and consultants. They would also be the primary locations for international events and the primary international destinations for the Governor and other state officials. But, it does not mean that the rest of the world would be ignored. Even though MOITI would not generally pursue leads elsewhere, the state should remain responsive to companies and foreign agencies that reach out to Massachusetts and express an interest in doing business here. An eager foreign partner can be the catalyst for a meaningful initiative for Massachusetts even if its country of origin is not a prime target.

In addition, some outreach activities should be organized by industry rather than country. For example, Massachusetts should identify people around the world who share a business interest (e.g., electronic health records) and try to reach them through the websites, publications, and international meetings that they frequent.

Targeted Recruiting

Time and again, regions make the mistake of attempting to recruit companies by offering an undifferentiated value proposition.

Virtually every state, country, and province advertises its well-educated and highly-skilled workforce, centers of research and innovation, entrepreneurial spirit, high quality of life, strategic location, well developed transportation infrastructure, business friendly environment, and streamlined regulations. It is clear, however, that not every place has all of these assets in equal measure, and companies know they cannot rely on these pronouncements to inform their expansion decisions. Instead, companies ask consultants to develop reliable data that enables them to make valid comparisons between different places. The result is a crucial loss of control of how regions are first presented to potential investors. By the time economic developers learn their region is under consideration, they find they are but one of several similar looking “gladiators in the ring,” and they must lean on financial incentives to stand out from the crowd.

Developers should instead identify firms that will be attracted to their region based on the unique assets and offerings they already have in place. In other words, regions need to develop a highly differentiated value proposition and identify a set of target companies to pitch it to.

Building on Strength by Identifying Competitive Clusters

The first step in the process is to identify your region’s key engines of economic growth—your large and internationally competitive clusters of industries. Regional economies are not alike. In particular, they differ in that they specialize

in specific industry clusters (e.g., chemicals in Louisiana, entertainment in Los Angeles).

This clustering is no accident. Different regions offer a better environment for different industries. Companies in those industries tend to locate in the right regions, and over time strength begets more strength. More companies in a specific economic activity means a deeper talent pool, better access to buyers and suppliers, the generation of more commercializable ideas, greater lobbying power and, hence, a better tax, regulatory, and infrastructure environment, and so forth. Firms are more likely to locate where there is an existing cluster, and they are more likely to thrive—to create jobs and grow wages—if they are surrounded by a cluster’s assets. As recruiting gets increasingly competitive, economic developers would do well to lean on their strongest clusters. It is simply too difficult and expensive to build outside of core strengths.

But strength is a relative thing. A region must therefore compare itself to others, and not just to nearby neighbors. Because everyone is competing globally, only a global comparison will give a true perspective of which are a region’s strong, competitive clusters. Recruiters can increase their chances of attracting investments, and boost the economic impact of those investments, by focusing on their region’s few strongest clusters.

Identifying Gaps in Competitive Clusters

Recruiters can further sharpen their focus by identifying the gaps within their internationally competitive clusters. No cluster is ever fully complete. Even a very strong regional cluster will have some areas of weakness; it will have some subclusters of buyers, suppliers, or other related

industries that do not have much of a presence in the region. It is desirable to find these gaps because they offer very good opportunities for business recruitment. There are several reasons for this:

- First, outside companies that could come into a region and fill in these weaker sub-clusters will tend to view the business environment as highly attractive. A generally well-developed cluster indicates that there is something about the region that makes companies in that cluster want to relocate, expand, or start up there. The fact that so many firms have succeeded in the region means that the region ought to have an inherently attractive business environment for companies in the targeted subcluster.
- Second, a company that helps fill one of the region's subcluster gaps would face few head-to-head local competitors. Because the subcluster is weak in the region, there would not be many other firms like it in the area, so the company would enter into a good environment to sell its products.
- Third, because the company would be coming into a well-established cluster, while at the same time facing few local competitors, it would be more likely to succeed. Unlike a company lured in by financial incentives, this company would come in response to existing assets and sales opportunities. Over time, it would be more likely to thrive, creating more jobs and prosperity.
- Finally, because the company would be filling in a gap in the cluster, it would help other companies in the region be more competitive since they could more efficiently access the goods and services offered by the incoming

company (goods and services that they used to access from further away).

In short, the region offers companies in these weak subclusters a compelling, highly differentiated value proposition—everything they need to compete, with little direct competition in the area. The company, in turn, offers the region help in building greater strength in one of its most important engines of economic growth.

Identifying Target Companies

It is not sufficient for a region to identify its competitive clusters and the gaps in those clusters. The region must also take action based on the analysis. Recruiters cannot recruit a generic cluster or sub-cluster; they need the names of individual companies to go after. They then need to implement a strategy for recruiting those companies. Monitor's Global Cluster Mapping Dataset can be used to identify target companies, as well as help with the competitiveness analysis of a region's clusters.

A recruitment strategy focused on specific companies which can fill in weak areas within generally strong regional clusters provides a compelling value proposition to pitch to the targeted firms. It also generates greater economic impact should a firm choose to invest in the region and supports the companies already established in the region.

This sidebar was written by Monitor Group. For further information, see www.compete.monitor.com or contact Jeff Grogan, Kurt Dassel, or Pedro Arboleda at Monitor Group.

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

MOITI is responsible for coordinating and implementing an effective program to attract foreign direct investment and encourage international business partnerships. Having such a program boils down to finding a substantial number of qualified leads and then pursuing those leads.

Until recently, the MOITI staff placed its greatest emphasis on producing leads by networking among foreign trade agencies and the diplomatic corps based in Massachusetts. Those activities are important, but very often produce leads to companies that have already decided to invest in Massachusetts and are simply looking to extract the maximum in state assistance and incentives. MOITI's primary focus should instead be overseas, since the richest vein of foreign investment potential is at the source, in the foreign country. MOITI should take several steps to bolster its programs.

Redeploy Foreign Office Resources

MOITI's overseas representatives can play key roles in attracting foreign direct investment, but they are not currently ideally deployed to maximize investment. For one thing, too much of their time is currently spent on the relatively low-yield activity of helping to organize Massachusetts exhibits at trade shows.

MOITI's representative in Germany is spread far too thin, with responsibility for all of Europe and the Middle East. On the other hand, the representatives in Brazil and Mexico are in locations that are not ideal targets for potential investment in the Bay State. More importantly, during the years these representatives have been operating, they have generated little investment to Massachusetts. Given that Europe holds much greater potential for investing in Massachusetts, at least some of the funds currently spent in Latin America should be shifted to Europe—perhaps to the United Kingdom—to augment MOITI's existing European infrastructure. It should be noted that the Brazil and Mexico offices assist some potential Massachusetts exporters, and we discuss

below in section 2F how that activity can be redesigned so that it will not require significant funding from MOITI.

Massachusetts has had some form of representation in China for many years. In 2008, an individual was hired to exclusively represent Massachusetts, replacing one who represented several states. When it comes to exports, a representative can work on behalf of more than one state but, for foreign investment, a representative must be dedicated to advancing the interests of just one state.

MOITI's primary focus should be overseas, since the richest vein of foreign investment potential is at the source, in the foreign country.

The importance of the China market, the growing potential for Chinese investment into Massachusetts, the existence of the China office, and the success of the Governor's trade mission to China in 2007 puts a spotlight on our activities in that country. MOITI should therefore convene a small, short-term working group of

Massachusetts-based China experts. Their task would be to take stock of our connections and our available resources, and advise MOITI on how best to array them in China, to build on the long relationship our state has had with that country.

A caveat about foreign offices mentioned earlier needs to be re-emphasized here. While these entities can be highly productive, they can also be expensive. Given the high costs, MOITI's leadership must take strong steps to ensure the offices remain productive and viable. This requires close supervision. Even in an online age of instant communication, satellite offices far removed from central headquarters tend to spin out of orbit unless they are tightly controlled. In terms of both operating procedures and substantive programs, it is a prime MOITI responsibility to guarantee the foreign offices are doing precisely the work that is expected of them.

Establish Volunteer Overseas Ambassadors

MOITI must multiply its reach to increase its effectiveness, and the state can build on a distinct

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

Massachusetts advantage: many talented representatives of leading Bay State companies are already staffing European offices.

Within their specific industry sectors, some of these individuals informally make the case for investing in Massachusetts. But this should be broadened and formalized. By explicitly deputizing specific Massachusetts business officials as Bay State “ambassadors,” MOITI can greatly multiply its efforts to sell the state to potential investors. The importance of being vested with the position of ambassador can perhaps be magnified with a letter to each individual from the Governor, and a business card with the Massachusetts seal and the title “Honorary Ambassador.” MOITI should ask them to represent the state at specific conferences and events, and to also use their own initiative.

As industry experts, these ambassadors have their fingers on the pulse of what other companies and individuals in their particular sectors are thinking. Therefore, in addition to promoting the Bay State, they are well placed to gather useful intelligence for MOITI.

Team Up with Foreign Entities

Another way to multiply MOITI’s reach is to sign memoranda of understanding with key industry or like-minded economic development entities in other countries. MOITI currently has some arrangements of this nature, such as a pilot program with the Lombardy region of Italy that knits together the two regions’ companies, universities, and hospitals through a focus on clinical trials. Such agreements increase ties between our region and valuable industry targets overseas, ties that can expand the volume of two-way commerce.

However, the MOUs and the frameworks for cooperation they create must be well-tended. Massachusetts has signed many sister state agreements, but most of them have then lain dormant. Some may hold promise for investment purposes. The state should inventory all the existing agreements to decide which few of them deserve to be revitalized. An active sister state relationship or MOU should make it possible to get foreign officials to create events in their regions

promoting ties with Massachusetts; we may also want to create similar events here.

The investigation of additional MOUs and sister state agreements ought to be guided by very specific principles within the parameters of a broader strategy. Oklahoma has invested considerable energy in sister agreements and that state’s methods suggest principles Massachusetts should apply, including:

- Both sides must see mutual benefit and have the desire and resources to pursue that benefit over a long period;
- Massachusetts’s resources should not be drawn from current sister relationships to new ones if it would harm important existing relationships;
- All relevant government, academic, and business interests should participate in planning an agreement in order to gain wide acceptance for it and an expectation that implementation will be a joint responsibility of all involved; and
- Specific goals and objectives should be determined and agreed to in advance of signing the agreement.

MOITI must guard against the temptation to sign MOUs without a well-defined purpose and the resources to implement the agreements’ provisions. Signing an MOU for the sake of a press release is bad policy. Perhaps other quasi-public agencies can be assigned the task of assisting MOITI with the time-consuming task of researching and developing potential agreements.

Overseas Missions for Trade and Investment

The suggestions we offer here for ensuring that overseas trade missions effectively generate foreign direct investment would also help them to better promote exports and business partnerships.

In the fall of 2007, Governor Patrick reversed a long drought on trade missions. The Governor was accompanied to China by leaders from the state’s universities, businesses, and quasi-public organizations (see sidebar for more details). The Governor had well-defined goals and an overarching theme that

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

Massachusetts does not view its relationship with China as a one-way street. He not only wanted to expand exports from Massachusetts's businesses but also to encourage Chinese investment in Massachusetts and business partnerships between the two places.

During a week of meetings with Chinese leaders in government, academia, and industry, the mission's goals were advanced. Now the Administration is engaged in the unglamorous but necessary process of following up. Ultimate success depends upon maintaining the relationships developed on the mission.

The hard work of the China trade mission and its follow-up have yielded impressive results. For this reason, there has been much praise and little criticism of the China mission, but some past trade missions from Massachusetts and other states have been criticized as junkets, often unfairly. To forestall such criticism and to maximize the efficiency and effectiveness of trade missions, the state should take the following five steps.

1. *Keep them lean.* During the 1990s, Governors Weld and Cellucci led many trade missions with delegations of well more than 50 people. Any group of that size—especially when headed by a governor—requires a massive logistics operation. The planning for a trip lasting a week or ten days with visits to two or three cities is, by definition, a tremendous—and expensive—undertaking.

Most trade missions can be streamlined. For some markets, like China, a relatively large delegation may be advisable as it conforms to Chinese expectations. The mission led by Governor Patrick—large but well under 50—was precisely the right size for China; if it were much larger it would have required a far more exhaustive planning process without concomitant benefits. By simply limiting the size of a trade mission, planning is simplified and the cost is reduced.

Some markets and target industries call for a mission so focused that the Governor, Lieutenant Governor, Secretary, or other senior official can be accompanied by a mere handful of senior Massachusetts private sector leaders. The Governor could, for example, be joined by one or more university presidents and the

chairman of a Massachusetts industry association to advance a cooperative relationship with related officials in another market. He could be joined by the CEO of Massport to visit a foreign airline to close a deal on new international air service to Boston. These trips would naturally be much shorter in duration and, without large numbers of attendees, there would be no need for major public events or receptions. And the benefits can be immediate, tangible, and of great value.

During the research phase of this report many business representatives expressed a desire for missions devoted to one industry with a very small group of business delegates, many of whom might represent small or growing companies. While cost would be a consideration, there is a strong belief that a well-planned mission of this kind, led by a major state official, and containing meetings with key foreign business leaders, could be highly productive. This ought to be pursued.

MOITI should also arrange for the Governor to visit specific conferences and trade shows, either overseas or in the US. The Governor has already successfully promoted Massachusetts at the BIO International Conventions in Boston, San Diego, and Atlanta. Appearances by the Governor at such events advance his international economic agenda. If MOITI knows well ahead of time that the Governor will be in attendance, the agency will be able to attract more Massachusetts exhibitors to the shows. In addition, these events already draw government and industry leaders from the host country, making it relatively easy to schedule high-level meetings for the Governor.

2. *Plan ahead, way ahead.* In discussions between the Governor's Office and MOITI, the destination of possible future trade missions should be discussed periodically. MOITI should then immediately begin planning for those possible destinations. That is not to say that planning should be full steam ahead. But even if a mission is not going to take place for over a year, steps can be taken now, and in the months well before a mission is announced, to create an infrastructure that can be activated once mission planning becomes official. Appropriate steps would include developing

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

relationships with leading industry groups and government officials in the target country. However, such relationship building should not be driven solely by a potential mission. If the mission never occurs, the relationships have to be ones that make sense for MOITI to develop.

3. *Engage partners for planning.* The kind of long-range advance planning for trade missions envisioned here requires time and effort; relationship building cannot be done quickly. MOITI will need to access outside resources, resources it can count on and closely monitor.

In the spring of 2008, after the Governor had returned from China, the Executive Office of Housing and Economic Development asked the Massachusetts Technology Collaborative (MTC) to begin exploring possible relationships for Massachusetts high-technology industries in Israel. This was well in advance of a possible gubernatorial trade mission to Israel. The mission was ultimately postponed, but MTC's activities over the course of many months led to the development of precisely the kind of relationships in the Israeli clean tech, life sciences, and investment communities that can be quickly harnessed once this mission does finally take place. They are also relationships that can pay dividends now. This is the kind of strategy that ought to be pursued in other markets in coordination with MTC, the Massachusetts Clean Energy Center, and Massachusetts Life Sciences Center.

4. *Find partners to share costs.* In the 1990s, trade missions were conducted by governors but paid for by Massport even though Massport's agenda was rarely part of the mission agenda. For the 2007 China mission, Governor Patrick changed that model in important ways. He broadened cost sharing by introducing MTC to the process so that costs for China were equally shared by MTC and Massport. In addition, the Governor folded each quasi-public agency's agenda into the broad mission agenda. For example, the Governor made sure he locked arms with the Massport's CEO in the long-term effort to develop air service between Beijing and Boston, and to maintain Chinese ocean cargo service at the container facilities in Boston

Harbor. And the Governor tapped MTC's expertise in life sciences and clean energy, as those industries were central focuses of the mission. This kind of partnering makes sense for all parties and ought to be institutionalized. Depending on the purpose of the mission, other quasi-public partners should include the Massachusetts Clean Energy Center, Massachusetts Life Sciences Center, and MassDevelopment.

Private sector partners can also share costs. For example, private sector organizations and companies can directly sponsor certain trade mission events or receptions. To strictly conform to legal and ethical norms, this must be done within clear allowable guidelines. Finding private sector partners for sponsorship should be a central aspect of all trade mission planning right from the beginning.

It may also make sense for the state to cooperate with trade missions partially organized and funded by particular industries. MOITI should reach out to associations representing individual Massachusetts industries and determine their level of interest in missions focused on their sectors. Willingness by one of these associations to invest time and resources into organizing a foreign mission should provide justification for MOITI's involvement. It may also justify the presence of a senior Massachusetts official on the mission.

Finally, as we discuss in section 2H below, the federal government can be a valuable partner for Massachusetts when it comes to planning and funding trade missions.

5. *Change the name.* The term "trade mission" triggers strong negative reactions among some people and it can be misleading. After all, these missions long ago ceased to be about just trade or exports. During the China mission, for example, there was considerable focus on investment. The overarching theme of the mission was broad collaboration and building trust. Academic ties were stressed, as was the development of air and sea routes for the easy flow of both goods and passengers.

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

A more accurate title might be Global Commerce Mission or Business Development Mission. Other names should also be considered.

Programs and Events Right Here in Massachusetts

Activities in Massachusetts to promote international connections can be cost effective and useful. Here are some to pursue:

1. *Reverse trade missions.* Almost all states have these on one level or another. They are organized trips where business, academic, and government leaders from elsewhere come here to create links with in-state counterparts. These programs can take many forms, ranging from Nebraska's multi-industry, large-scale mission described above in section 1D, which consumed the state's entire program budget, to a small mission of foreign firms to a region of New York that would otherwise receive little international attention. Sometimes the impetus comes from sources in-state, while other times interest starts in the foreign country.

Part of what sets Massachusetts apart from most other states is the high profile of our leading academic institutions. Foreign leaders not only know about Harvard and MIT, they hold them in very high regard. In many cases, leaders would be happy to find reasons to visit these schools. Massachusetts should directly press this advantage. A series of events should be organized in collaboration with these and other universities that focus on our target industries and markets. Foreign delegations should be invited to participate in this program, part of which would include a comprehensive introduction to the benefits and ease of doing business in Massachusetts. The trips should also highlight opportunities to develop manufacturing in the lower-cost regions of the state outside greater Boston. They can include stops at international businesses successfully attracted to the state in the past few years.

Most of the costs for these missions can be charged to the foreign delegates. A recent successful MOITI-organized tour of Massachusetts was an excellent start. A template for the missions can now be developed and be repeated with different foreign markets and industries in a way that will be decreasingly labor intensive.

2. *Conferences.* Many states hold large annual events bringing together hundreds of business, government, and academic leaders for a "global commerce day" of meetings, presentations, and receptions. With the goal of focusing attention on international trade,

these events celebrate the importance of international business activity and encourage companies to pursue opportunities for growth abroad. The best of these conferences feature major policymakers and opinion leaders from around the world discussing future economic opportunities as well as looming problems.

They are excellent forums for governors to express their support for international economic development programs, and their belief that international commerce can grow local economies.

Massachusetts should therefore consider adopting the global commerce day concept. However, we should weigh that idea against other possible conference models. One possibility is to focus primarily on a foreign audience. The strengths we project in academic excellence and technology can be used to create a large event that includes elements of a reverse trade mission. It could be jointly hosted by our leading universities and could be titled the "Massachusetts International Technology Congress." If successful, it could be held every year or two.

Such an event would bring a select group of foreign business leaders to Massachusetts from our key target markets to introduce them to the advantages of doing business in Massachusetts and with Bay State companies. The draw would be an agenda created by



An October 2009 MOITI-organized road show introduced officials from many countries' consulates and other organizations to important Massachusetts-based institutions, including the Woods Hole Oceanographic Institute, pictured here.

Part Two: Strategies for Global Success

E. An Effective Program to Attract Foreign Direct Investment

our universities wrapped around our state's leading innovative technologies. Papers would be presented on the academic/entrepreneurial/technology axis, with Massachusetts as the focal point. Given the vaunted image of our academic institutions, this event should be marketed as a very exclusive occasion. After the business portion of the Massachusetts International Technology Congress, MOITI could arrange for delegates to take tours of the state, thereby engaging regions outside of Boston.

Another concept to consider is a more focused conference. This idea also relies on the state's academic strength, but would likely be less of a logistical challenge than a broad-based technology congress. A focused conference would start with the premise that key business leaders in specific industries around the world perceive great value in interacting with cutting-edge scholars and thinkers, many of whom are based in Massachusetts. In the life sciences, for example, this would include leading physicians, medical researchers, and hospital officials, as well as university faculty. The state can play a highly useful role by organizing tailored events with the world's top thought leaders in subjects critical to foreign businesses. Massachusetts can provide content that may be unattainable elsewhere.

The international business officials who would be the audience for such events would be high-value targets more than worthy of the state's efforts. There is evidence that universities, research centers, and hospitals would welcome having the state coordinate such conferences. There is also evidence from our focus groups that businesses would be interested in funding them. If the concept works in Massachusetts, it can be taken on the road with focused Massachusetts-content conferences offered overseas.

We recommend that the Massachusetts Technology Collaborative be given responsibility for implementing conferences embodying one or more of the three concepts just described.

3. *Governor's awards.* Massachusetts can, and should, draw attention in many ways to the benefits of international commerce. The governors in many states have awards programs focused on international commerce or trade. Often, there is a selection process organized jointly by the state trade office and a private sector panel.

This kind of program is an easy, inexpensive way for the Governor to declare his strong belief that Massachusetts needs to focus its gaze beyond our own borders. But the need is broader than just exports. The Governor can encourage all citizens of the Commonwealth to take an interest in global issues.

A program should therefore be designed where the Governor confers several international awards upon deserving individuals, companies, or organizations. The different categories could include exports, education, art, and science. There can even be an award for foreign companies investing and creating jobs in Massachusetts. Specific criteria would need to be developed by an independent panel in conjunction with MOITI.

Bilateral Funding Programs

Israel has a binational funding program, modeled on the work of the BIRD Foundation (Israel-US Binational Industrial Research and Development Foundation), that Massachusetts should consider emulating. Israel's Office of the Chief Scientist signs agreements with countries, states, and provinces around the world to encourage companies in those places to enter into business development arrangements with Israeli companies. Israel and its foreign partners then agree to offer grants to those companies.

If the model were adopted in Massachusetts, an agency that already provides financial support to local companies, such as the Life Sciences Center, would enter into an agreement with an appropriate government agency in a country or province with which Massachusetts seeks to forge stronger economic ties. The Life Sciences Center and its foreign counterpart would then form a joint committee to review proposals that fit one of the Center's already existing funding priorities. Companies from the two countries could join together to develop project proposals for the committee to review. When a project is approved for grant funding, the Life Sciences Center would provide a grant to the Massachusetts company while the foreign agency would provide a similar-size grant to the foreign company. If the project turns out to be financially successful for the companies, the Life Sciences Center and the foreign agency would receive royalty payments or other financial returns.

Focus on China

In the fall of 2007, Governor Patrick announced the first Governor-led trade mission in several years. He explained that: "In today's global economy, competition is worldwide, and so are the opportunities. No state can afford to sit back and wait for the benefits of foreign trade and development. We have a responsibility to partner with the private sector and market Massachusetts effectively and aggressively."⁴⁰

The Governor was accompanied to China by leaders from prominent universities, more than a dozen representatives of clean tech and life sciences companies, and the CEOs of Massport, the Massachusetts Technology Collaborative, and the Massachusetts Medical Device Industry Council (MassMEDIC). The mission had three goals: (1) pursue opportunities for partnerships between Massachusetts's clean energy and life sciences industries and their Chinese counterparts, (2) strengthen cooperation between Massachusetts and Chinese universities, and (3) enhance air route development with China.

The mission had an overarching theme of collaboration. The Governor made it clear that Massachusetts did not view its relationship with China as a one-way street. In effect, this was not a "trade" mission in the old sense of the word where the state was just looking to open markets. Instead, the Governor sought to build trust and credibility between China and Massachusetts for the purpose of two-way commerce.

While the trip established the desired connections, it was essential to build on those relationships over time for the mission to ultimately be successful. By doing so, there has been a significant return on the investment in the mission. In the time since the mission was completed, the state has secured six foreign direct investment projects from China representing over

\$15 million in capital investment. These projects include:

- *China Education and Research Network (CERNET)*. CERNET is an educational technology network company based in China that connects over 1,500 of its universities. In

March 2009, CERNET selected Marlborough, Massachusetts as its US headquarters and the location for its first overseas cultural exchange school. MOITI and the University of Massachusetts were able to recruit this company by building off connections made on the China trade mission. CERNET's \$10 million foreign direct investment in

Massachusetts has already created 35 jobs and is projected to create nearly 100 jobs once the facility is fully operational. The program is attracting Chinese students to Massachusetts with 70 students currently enrolled and 120 expected in the fall.

- *Shanghai ChemPartner Co. Ltd.* ChemPartner is a contract research organization which provides scientific, pharmacology, and analytical services to pharmaceutical and biotech companies. MOITI actively engaged the company to encourage it to open its first US office in Massachusetts. As a result, the company invested \$2 million in 2009 in a Waltham office with the potential of creating 20 research and development jobs.
- *Insigma Hengtian Software Ltd.* Hengtian is a Hangzhou software outsourcing provider that was established as an alliance between Insigma Technology, State Street Corporation, and Zhejiang University. The company seeks to provide "top quality and highly sophisticated technology development and support services to global financial institutions." Hengtian had been looking to expand into the US but had difficulty finding a suitable partner to assist with its business plan. With the help of MOITI, the company



Governor Patrick, Nobel Laureate Craig Mello, and University of Massachusetts President Jack Wilson met with Tsinghua University officials during the China trade mission.

⁴⁰ Massachusetts Governor's Office, Press Release, "Governor Patrick to Lead Commonwealth's Trade Mission Trip to China," October 16, 2007.

made an initial investment of \$500,000 in its expansion efforts and opened an office in Cambridge in 2009, which is projected to create 10 jobs.

In addition to these achievements, a joint venture agreement between Massachusetts and Chinese companies worth an estimated \$20-\$30 million was announced in May 2009 in Boston. Fifteen companies (eleven in Massachusetts) signed letters of intent with the Shanghai Zhangjiang Hi-Tech Park. This partnership will co-develop technological products at a Massachusetts Technology Center, which the Governor officially opened at the Park. The Park will provide R&D expertise and \$20-\$30 million in capital to Massachusetts companies. This agreement will afford Massachusetts companies the opportunity to develop products with the possibility of selling and marketing those products in China.

There have been advances in other sectors as well. Organogenesis, a Canton-based company that develops regenerative medicine technology, signed an agreement with the National Tissue Engineering Center in Shanghai to share resources and open the door for Organogenesis to export its manufactured products to China. Both companies also agreed to work toward manufacturing existing cell therapies on site in Shanghai. In addition, MassMEDIC signed an agreement with the Chinese Association for Medical Device Industry to promote economic and technical development collaborations. This is an important relationship as medical device exports from Massachusetts to China have seen significant growth in recent years.

With respect to clean energy, Massachusetts signed an agreement with the Chinese Wind Energy Association to promote wind energy

research. This research will be conducted in Massachusetts by Chinese companies collaborating with Massachusetts universities. This partnership has led to an ongoing exchange of information and ideas including discussions on blade and turbine testing at the Windpower 2009 Conference in Chicago.

The mission also led to the first visit to Massachusetts by the China Investment Promotion Agency (CIPA) of the Chinese Ministry of Commerce. In June 2008, CIPA brought a 50-person delegation here as part of its annual visit to the US. The delegation was composed of CEOs, industrial park leaders, government officials, and representatives of Chinese venture capital firms. They came to learn about Massachusetts's industry sectors and investment environment. During the visit, MOITI and CIPA signed a Memorandum of Understanding to formalize the existing cooperative relationship in two-way investment promotion between Massachusetts and China.



Chinese and Massachusetts businesses signed a memorandum of understanding at the 2008 Symposium on Innovation and Collaboration in Boston. At the symposium, MOITI and the China Investment Promotion Agency also signed an MOU.

Finally, one of the key objectives of the trade mission, daily nonstop air service from Boston to Beijing, is closer to reality because of conversations Governor Patrick and Massport CEO Tom Kinton had during the mission with high-ranking Chinese business executives and government officials, including leaders from the Civil Aviation Administration of China. Although production delays with the Boeing 787 have pushed the likely start of service to 2011, these flights are highly anticipated. According to Massport, 38,000 passengers traveled out of Logan Airport last year with an ultimate destination of Beijing, proving that there is a real market for this service.⁴¹

⁴¹ Massport, Press Release, "Application for Boston/Beijing Service Filed with Chinese Government Hainan Airlines Seeks Daily Nonstop Route Connecting Boston Logan with China," April 2, 2008. http://www.massport.com/about/press_news_Hainan_Application.html

Part Two: Strategies for Global Success

F. Export Assistance for Massachusetts Companies

As we noted in section 1A above, Massachusetts businesses need to give more attention to export markets, especially those in the developing world, in order to avoid losing out to other exporters. Not only does the state have an important ongoing role to play in helping businesses expand their exports, but the current difficult economic period makes it especially desirable to provide extra near-term assistance in order to speed recovery and job growth. MOITI and the Massachusetts Export Center already have many of the elements of an effective, coherent program, but the two agencies need to promote those elements more widely and refine some of them. They should also more closely coordinate their respective activities.

Training Workshops and Seminars

The Export Center offers or co-sponsors training sessions on various topics, such as logistics management of the global supply chain and the export procedures unique to China. These events should be promoted more widely, not just by the Export Center, but by MOITI and other agencies, such as the Massachusetts Clean Energy Center and Massachusetts Life Sciences Center. Those other agencies, as well as private sector partners, should be asked to identify topics that would be appropriate for additional workshops or seminars.

Advice to Individual Companies

The Export Center devotes most of its time and resources to providing individual companies with counseling, technical assistance, and market research. Because of the nature of the center's federal funding, the services are free to companies. Companies can receive information about the size of particular export markets, trade barriers, the regulatory environment in particular countries, distribution channels, and other topics. They can also receive an assessment of their export readiness and help developing an international business plan. In some cases, they can qualify for a more detailed personalized report on how their particular company can enter a particular market, including possible distributors.

These are valuable free services, but many companies do not know about them. At the moment, a good number of clients are referred by the AIM International Business Council. Although that is a useful route, there should be much more marketing of the Export Center's services.

As with the training sessions, MOITI, in particular, and other agencies should help. Because of the Export Center's low visibility, it is likely that many of the companies that could benefit most are not participating.

Of course, more marketing would mean more companies would apply for help. The Export Center's current budget would not allow it to serve many more clients than it does already, but the staff would then be able to select those companies that are most likely to actually expand their exports, as well as those companies that the Export Center can help most efficiently and easily. At the moment, there are some companies that receive time-consuming assistance that are unlikely to actually enter the export market, but they are the companies that come to the table. If better marketing leads to much greater demand for the Export Center's services, then perhaps it will be possible to secure greater funding for the agency in the future.

The Services of the Brazil and Mexico Offices

MOITI's Brazil and Mexico offices spend most of their time assisting potential Massachusetts exporters. Many of the clients for whom they work are referred to the offices from the Export Center. Unfortunately, the work of the offices has led to few export wins for Bay State companies. For example, the Mexico office reports that out of approximately 50 Massachusetts companies it has helped in the past three years only four have begun exporting to Mexico. Because that is not a good return on the investment of public funds, funding for the offices should be reevaluated.

Since few Massachusetts companies know about the existence and availability of these offices, they have not necessarily been used by the companies that are most likely to export to Brazil and Mexico. Some businesses would probably be willing to pay fees to the offices, because the offices can provide services on the ground in a cost-effective manner. MOITI, the Export Center, and the offices should develop a list of services and fees, and then promote them widely to Massachusetts companies. This would ensure that both foreign and Boston staff are working with those companies most serious about exporting, resulting in a more efficient program.

If it turns out that only a few companies are interested in paying for the services that the offices offer, then

Part Two: Strategies for Global Success

F. Export Assistance for Massachusetts Companies

the offices should be closed. But if there is significant demand, MOITI should add a fee-for-service function to its offices in Germany and China. It should also consider opening similar offices in other locations, since that could be an effective way to help Massachusetts companies reach new markets, especially in developing countries.

Foreign Trade Shows

Massachusetts companies exhibit at foreign trade shows to introduce their products to global markets and to meet directly with potential buyers from other countries.

The Massachusetts Export Center identifies appropriate trade shows for some of its clients, but MOITI actually organizes and markets trade show exhibits. Trade shows have not been and should not be the top priority for either organization, because other activities are likely to yield better results. However, trade shows can play a role in the overall delivery of export services.

MOITI currently has only one full-time staff person to market eight MOITI-sponsored trade show exhibits around the world. By being spread so thin, it is not surprising that only 30 companies were recruited to exhibit at the shows in 2009. Of those, 18 were repeaters, companies that had figured out how to extract value from trade shows and come back year after year. That means MOITI was only able to attract a dozen new companies to exhibit. We recommend the following changes:

1. *Organize fewer shows.* Rather than increase staff resources significantly, we recommend sharply reducing the number of trade shows. MOITI's trade show staff should concentrate on doing three or four trade shows really well, rather than spreading out limited resources. That means promoting them much more actively to the Massachusetts companies that are appropriate for those shows. Fewer shows may also allow MOITI staff to travel to the show locations and meet with show organizers to handle logistics. That would relieve MOITI's foreign representatives of this burden, allowing them to focus more on matters with which they are more expert, like investment.

2. *Collaborate with industry associations and regional economic development agencies.* Show selection should

take into consideration marketing assistance MOITI receives from the private sector in Massachusetts. Private sector industry associations are well placed to know the value of a particular show to their members. If an association cannot be convinced to invest time into marketing a specific event to its members, it ought to be a signal to MOITI that that particular show is not a priority.

Regional economic development councils often already have knowledge of particular shows, so they can help in the decision-making process. Consulting with these regional agencies is also sensible because they often represent small manufacturers who have export potential and export interest but require assistance to break into new markets. As such, they become strong candidates for the kind of assistance MOITI can offer.

3. *Address investment as well as exports.* The trade shows selected for attention by MOITI ought to be ones that pack punches for both exports *and* foreign direct investment. Currently, the export component dominates Massachusetts activity at the shows, and FDI is addressed only informally. However, these shows present ready-made opportunities for advertising Massachusetts as a terrific location for foreign investment.

4. *Promote Massachusetts convention centers.* MOITI and the Massachusetts Convention Center Authority have wisely been discussing the possibility of using the overseas trade shows as vehicles for promoting Massachusetts as an excellent location for international conferences. The Authority is especially looking to attract the largest international meetings to the Boston Convention Center. At the overseas trade shows, MOITI staff can connect with international business associations and industry leaders who will be making decisions about the location of future conferences.

5. *Market all Massachusetts participants.* In the past, the Massachusetts exhibit area promoted only those companies that have contracted for space within the exhibit booth. But other Massachusetts companies, especially larger ones that need more space than is available in MOITI's exhibit area, often organize their own exhibit booths at the trade shows. The MOITI exhibit area should have materials that identify those other Massachusetts companies and direct attendees

Part Two: Strategies for Global Success

F. Export Assistance for Massachusetts Companies

to their exhibit booths. Showing a united front is important. Not only would this help those particular companies, but it would give attendees a better impression of the size and scope of the Massachusetts industry, and help signal that there is cooperation between state government and Massachusetts businesses.

6. *Senior officials should participate.* Senior-level Massachusetts officials, including the Governor, legislative leaders, and appointed officials should strongly consider attending these overseas events. For one thing, knowledge of their planned attendance can act as a lightning rod to attract more exhibitors. Second, these officials can be central players in any FDI events or meetings at the shows. To be especially useful for marketing purposes, the officials need to commit their attendance well in advance. And MOITI needs to make concrete plans to follow up on any contacts the officials develop.

7. *Continually refine the list of trade shows.* Each year, MOITI should assess whether there is enough industry interest in the three or four shows selected to continue doing them or whether other shows should be substituted. The Export Center should regularly ask its clients to identify trade shows that might be of interest to them in the future and should solicit suggestions from regional economic development agencies as well. MOITI should especially investigate whether there are one or two international trade shows for traditional industries, where Massachusetts companies are not well represented but that could lead to expanded near-term exports. In addition to substituting trade shows as appropriate, MOITI could consider adding more shows over time, but only if there is enough industry interest that the total costs of those shows, including MOITI staff time, are covered by fees paid by the participating businesses or industry associations.

Additional Services and Information

The Export Center and MOITI should seek out low-cost, time-limited ways to provide additional information to Massachusetts companies. For example, they might add to their website a listing of trade shows around the world that are especially relevant to Massachusetts companies. They could also list relevant events and activities of private sector partners, even if state

government is not directly involved in them. Not only would this be useful information for businesses to have, but it would help drive traffic to the state's international website, where the businesses would inevitably learn about other things as well.

The state can also monitor global economic trends affecting international trade in order to pass on relevant information to Massachusetts businesses. For example, the recent debt crisis involving Greece and other European countries has opened up the possibility that the euro will weaken significantly, making exports to Europe more difficult. The Export Center and MOITI could post on their website summaries of the European monetary situation, links to economists' predictions about the impact on exchange rates and exports, and any specifically Massachusetts angles on the story.

A useful service that the agencies could promote to Massachusetts companies is WISERTrade. This foreign trade database is managed by the Massachusetts-based World Institute for Strategic Economic Research and is used by businesses and governments across the country and locally, including by the Massachusetts Export Center and MOITI. Because of the local connection, Massachusetts companies should be able to make especially good use of the database. WISERTrade recently upgraded its offerings so that a company can get a personalized profile of export and import trends around the world for its narrow industry classification, including how Massachusetts companies compare with those based elsewhere.

Companies should be told about this new WISERTrade service. Some bigger, more export-oriented companies may want to receive training from WISERTrade so that they can regularly use the database on their own. But most small companies would find it sufficient to simply receive a short printout and analysis of the material most relevant to them. At least one staff member at the Export Center, MOITI, the Clean Energy Center, the Life Sciences Center, MOBD, and MTC should be trained in the new WISERTrade system so that they can provide those printouts to selected companies they work with, and can analyze larger import and export trends for the industries in which they are most interested.

Part Two: Strategies for Global Success

G. Making International Students Partners of Massachusetts

Tens of thousands of people come to Massachusetts each year from around the world to spend time at universities as fellows, students, speakers, faculty, conference attendees, visitors, and students. The state can and should do much more to take advantage of this tremendous resource. We should ensure that these temporary state residents learn more about Massachusetts and develop positive impressions about the state. We should also tap into their knowledge and connections when they are here, and maintain contact with them after they return home. To accomplish this, a staff member at MOITI should work full-time on these tasks.

Forging Ties to Current Students, Fellows, and University Visitors

When they are in Massachusetts, international students and other temporary members of university communities understandably focus most of their time and attention on on-campus activities. Even if they participate in leisure activities off-campus, their educational experience is normally not designed to give them an understanding of the Massachusetts economy, government, or society. Most return to their home country with fond feelings about the time they spent here, but their attachment is primarily to their university.

The state can provide foreigners at universities with a better understanding of the state and can make them feel that the state cares about them, wants them to develop deeper ties to Massachusetts, and wants them to maintain contact after they go home. Doing this will not immediately increase the number of jobs or the level of economic activity in the state, but it will be a sound investment that will pay off in the long-run. This is especially true given that the leading sources of foreign students in Massachusetts (i.e., India, China, South Korea, Canada, and Japan)⁴² include countries we will recommend for targeting later in this report. The state should:

1. *Establish a relationship with international student offices* at the various colleges and universities in the state, with special attention going to graduate students

in business, science, engineering, and foreign affairs. Each fall, the state should distribute via the offices a welcome packet with information about Massachusetts. It should include a letter from the Governor, encourage the students to take advantage of Massachusetts's many attractions, and provide information about the state's industries and business climate.

2. *Hold receptions for foreign students/fellows at the State House.* To make these events attractive for the students, hold them by geographic area (e.g., northern Europe, China, south Asia). In that way, students will get to meet their compatriots who are attending universities other than their own. It would be desirable to feature entertainment at the reception and offer small prizes (e.g., winners receive a gift certificate for a Massachusetts-based experience).

3. *Keep track of international-oriented events at major colleges and universities.* When appropriate, have someone from the state attend the event. For major events, ask to have a state official offer welcoming remarks or participate as a speaker.

4. *Develop a mailing list of club leaders.* Colleges and universities have many organizations for international students. For example, the University of Massachusetts at Amherst has 19 international-oriented student clubs, including ones aimed at Cape Verdean, Chinese, Korean, and Russian students. MOITI should develop an email list of these clubs and send them a newsletter with information of interest about Massachusetts several times a year.

5. *Give special attention to senior fellows and visiting scholars.* Certain university programs attract people who are already or will shortly be in positions of influence in their home countries. It is especially important to establish strong relations with these programs and find ways to interest their participants in developing ongoing ties to Massachusetts. For example, the Fellows Program at Harvard's Weatherhead Center for International Affairs brings diplomats, politicians, journalists, business leaders, and others to Massachusetts for year-long stays. Some have gone

⁴² Institute of International Education, *Open Doors 2008: Statistics on International Student Mobility, State Background: Massachusetts* (New York: Institute of International Education, 2008), p. 1.

Part Two: Strategies for Global Success

G. Making International Students Partners of Massachusetts

on to be foreign consuls or hold other key positions in Massachusetts for their country. They, along with similar groups elsewhere, can be invited for intimate receptions at the State House, and state officials can offer to come to campus to meet with them.

6. *Offer internships.* Many foreign students would embrace an opportunity to remain in Massachusetts over the summer between two years of their studies. MOITI, the Massachusetts Export Center, Massport, and other internationally oriented state agencies could offer a limited number of summer internships with priority generally going to students in graduate business programs. Not only would this strengthen the students' long-term relationship to Massachusetts but they would bring valuable international expertise to the state at a low cost. Other internships could be offered on a part-time basis during the school year. MOITI began to offer internships during the summer of 2009.

7. *Develop a post-graduate fellowship program.* Many of the people we spoke with in preparing this report indicated that foreign individuals are much more likely to develop a life-long business or personal connection to Massachusetts if they spend a year or two working in the state after graduation. By moving off-campus and participating in the economic and social life of the Commonwealth, the individuals establish permanent ties. Unfortunately, because of visa rules, it is sometimes difficult for them to get work permits. The state should explore an industry-funded, state-run fellowship program for post-docs and others who have completed graduate programs. The program would place the students in Massachusetts companies for a year. That would

provide the former students with a practical educational experience while also helping the companies.

Massachusetts universities train some of the smartest, most talented people from around the world, but the state does not fully benefit if the students immediately return home. Even a year of work from such talented, well-trained people could help Massachusetts companies. And some of them would likely become so attached to Massachusetts that they would try to remain here permanently.

The foreign students who come to Massachusetts are a tremendous resource. The state should tap into their knowledge when they are here and maintain contact with them after they return home.

8. *Reach out to business visitors.* Business leaders from around the world come to Massachusetts to participate in university events, especially ones connected to the various business schools. For example, the 2009 MIT Venture Capital Conference featured the director of India's Tata Sons conglomerate and the founder of Spain-based Vueling Airlines. The state should establish relationships with the faculty or staff members who oversee such events in order to get early notice when relevant business leaders will be coming to Massachusetts. State officials, including the Governor or the

Secretary of Housing and Economic Development where appropriate, should invite the visitors to lunch or find other ways to meet with them.

Maintain Connections to Former Students

By keeping in touch with former students, fellows, and visiting scholars, the state can encourage these individuals to serve as informal ambassadors for Massachusetts and can utilize them as valuable sources of information. Occasional informal communication will remind them of their stay in Massachusetts and increase the likelihood that they will seek further business ties to the state. The state could:

Part Two: Strategies for Global Success

G. Making International Students Partners of Massachusetts

1. *Develop and use an international database.* This would enable state officials to keep in touch with foreign nationals whom they have direct contact. Priority should initially be given to mid-career professionals. The state can seek their advice and assistance when their country or industry is targeted for activity. These informal ambassadors can also provide general information and updates about their country, as well as help to generate and follow up on leads. As appropriate, state officials who travel overseas should connect with these contacts.

2. *Participate in and organize alumni events.* The state should have Massachusetts officials attend some of the alumni events that colleges already organize overseas. More ambitiously, when the Governor or other state officials, including MOITI Board members, travel overseas, the state should organize receptions for alumni of Massachusetts universities. Because the universities will not likely release alumni mailing lists to the state, the state can ask the universities to forward an event announcement to their alumni. Initial indications are that the universities would cooperate, especially if the events are held in locations where an individual college does not have enough alumni for its own major alumni event and if their development officers are allowed to attend. In larger cities, the events should focus on a specific industry or state initiative (e.g., an event in London for Massachusetts alumni involved or interested in the financial services industry).

3. *Work with Boston World Partnerships (BWP) to establish local networks that include alumni.* BWP is using a social networking approach to create a global community of people who have ties to Boston's economy, similar to an alumni organization.⁴³ Although this innovative initiative was started by Boston Mayor Thomas Menino and initially funded by the Boston Redevelopment Authority and P&G/The Gillette Company, it is not restricting its activities to the City of Boston, but is instead promoting greater

Boston. In March it celebrated its first anniversary and seems to be getting good traction. One potentially promising avenue of cooperation for the state is to help BWP launch groups in a few foreign cities and to focus especially on graduates of Massachusetts universities.

4. *Start with LinkedIn groups.* To get the alumni concept off the ground quickly at low cost, the state can use the professional networking website LinkedIn to organize one or more groups, perhaps focused on a particular industry or a particular part of the world. It would be instructive to monitor who signs up for the group and how they seek to use it.

Expand the Pipeline of Students

The activities just described would benefit from having more foreign students come to Massachusetts. There is also a much broader reason to expand the pipeline of foreign students: a continuing and growing influx of talent helps a knowledge-based economy such as ours.

After declining in the years after 2001 relative to the rest of the country, Massachusetts's share of foreign students in the United States is now nearly the same as it was at the beginning of this decade (5.0% versus 5.2%), and the total number of students (33,838 in 2008-09) is higher than ever.⁴⁴ But unlike some other states, Massachusetts state government does little to help recruit foreign students. By working in partnership with Massachusetts's public and private universities, the state can improve on these numbers. We have a great product to sell and there would likely be considerable public support for such a program, as a Mass Insight report indicated that about three-quarters of Massachusetts residents believe foreign students have a positive impact on the Commonwealth.⁴⁵

43 Boston World Partnerships. www.bostonworldpartnerships.com/page/about

44 Institute of International Education, *Open Doors 2008: Statistics on International Student Mobility, State Background: Massachusetts* (New York: Institute of International Education, 2008), p. 1.

45 Mass Insight Corporation, *Making Massachusetts a World Class Talent Destination: Massachusetts Foreign Student Trends and Global Policy Priorities* (Boston: Mass Insight Corporation, 2007), p. 5.

Part Two: Strategies for Global Success

H. Using the Federal Government's Resources

Over the last 17 years, as new trade agreements opened up markets around the world, the federal government developed a significant federal trade infrastructure with promotion programs and trade expertise. This makes the federal government an ideal partner for the Commonwealth of Massachusetts. MOITI, in particular, should work much more closely with the US Department of Commerce and some of the other 19 federal agencies that play a part in global trade.

Commerce Department Overview

The Commerce Department is a massive agglomeration of different government functions, including the Census, the National Oceanic and Atmospheric Administration, and the Patent and Trademark Office. However, for MOITI's purposes, the most significant section is the International Trade Administration, which has four components:

- *Manufacturing and Services* (MAS) uses strategic research and analysis to shape trade policy and enhance the global competitiveness of US companies;
- *Market Access and Compliance* addresses trade barriers, resolves trade policy issues, and ensures US trading partners meet their trade agreement obligations;
- *Import Administration* is an enforcement arm for violations of trade agreements;
- *The United States Commercial Service* (USCS) serves as the trade promotion unit.

Of these four sections MOITI can benefit from both MAS and USCS services, with the latter having the most immediate impact on state-level trade.

Manufacturing and Services

MAS employs specialists for different sectors of the economy and focuses "on the big picture of US competitiveness, grasping the industry or sector issues holistically at the domestic and global levels and influencing the policy debate on behalf of that particular sector."⁴⁶

MAS seeks to inform policy debates on both the local and federal levels. MOITI and other Massachusetts agencies can use MAS for information and targeted

analysis on industry sectors in which they are interested in. MAS currently covers over 90% of US industries and possesses in-depth understanding of the competition and needs of specific sectors.

MAS's knowledge could be especially useful when MOITI plans for trade missions that focus on specific industries. And MOITI could possibly link specific

Massachusetts businesses seeking to compete globally with the relevant MAS industry specialist so that they can benefit from MAS's intricate policy knowledge of their industry.

US Commercial Service

USCS has trade specialists in 107 US cities and over 80 countries. They provide a vast network of eyes, ears, and contacts for US businesses. USCS gives special attention to small and medium-size companies who are new to market and/or new to exporting.

USCS takes a customized approach to building cooperative export promotion strategies and seeks to leverage local resources. During 2008 USCS successfully launched and expanded a number of such efforts with individual states and cities, but had relatively limited contact with Massachusetts. The contact it did have was much more through the Massachusetts Export Center than MOITI. It is important going forward that MOITI fully engage with the Boston USCS as the two entities'

The federal government has developed trade promotion programs and trade expertise that Massachusetts should more fully utilize.

⁴⁶ International Trade Administration, *Promoting Competitiveness: Partnerships and Progress of the Office of Manufacturing and Services* (Washington: US Department of Commerce, 2008), p. 7.

Part Two: Strategies for Global Success

H. Using the Federal Government's Resources

missions are complementary and the will to cooperate is strong. There is no reason to leave the resources of the federal government on the table as MOITI seeks to increase its effectiveness.

USCS offers several programs that MOITI and the Massachusetts Export Center should promote to Massachusetts companies. Both Massachusetts agencies should advise individual companies when participation in a particular program would be especially beneficial. And, if funding is available, the Commonwealth may want to subsidize some of the costs of participation as Connecticut does through a grant program for young companies.

The *Gold Key Service* tailors individualized trade missions for companies based on criteria presented by the company. This service provides meetings with prescreened potential buyers, sales reps, and business partners; customized market and industry briefings with in-country trade experts before the business meetings; market research on the specific industry; logistics of the trip and post-meeting debriefings with trade experts to discuss results of the meetings and how to develop appropriate follow-up strategies. Finally, the program provides a video conference link when international travel is too time intensive. This service has a standardized fee of \$700 for companies under 500 employees and \$2,500 for larger companies.

The *Platinum Key Service* provides customized export services. It identifies markets and helps with market entry and sales strategy. It also assists in cutting through regulatory issues; provides advice on market entry barriers, duties, tariffs, and quotas; and provides access to in-country trade specialists. The cost of this service varies and is determined by individual contract.

The *International Company Profile* and *International Partner Search* are services that provide low-cost background reports on prospective international buyers or partners. This includes information on the company's management, banking, and financial history. Both the Profile and the Search provide expert advice on the

ability of a potential partner to meet business needs and a competition analysis of a company's product or service.

The *International Buyer Program* promotes international attendance at major US industry trade shows. In addition to courting international businesses to attend these shows, the program provides hands-on assistance to US exhibitors, including export counseling, market analysis, and matchmaking services. MOITI, working with some local trade associations, should seek to influence USCS's choice of trade shows.

Through the *Trade Fair Certification Program*, USCS evaluates and recommends foreign trade shows, thereby reducing guesswork for US companies on whether a certain show is worth the expense of attending.

USCS Trade Missions

USCS also organizes three types of larger trade missions:

1. *Trade missions organized in Washington by sector.* Often a team of business executives is assembled and the Secretary of Commerce or other high-ranking DOC official leads the mission. These missions are announced on the USCS website, www.export.gov.
2. *Certified trade missions.* These missions are put together by regional economic development corporations, such as the Eastern Trade Council, but are certified by the USCS. State-level trade missions also fall under this umbrella. For example, USCS's Boston office annually helps Maine conduct a trade mission overseas in conjunction with the Governor and key legislators. USCS arranges several meetings abroad for the delegation and assists with logistics. Massachusetts should consider running its trade missions through this program in order to benefit from USCS's network of contacts and to receive logistical help.

Part Two: Strategies for Global Success

H. Using the Federal Government's Resources

3. *Trade Winds* is a new kind of regional conference and matchmaking event. The first one was held in Turkey in 2008, attracting 150 participants including 97 US executives. It resulted in export relationships that garnered over \$30 million in profits. A Trade Winds conference was held in Poland in 2009 and its most recent forum was in Brazil in April 2010.

MOITI and the Massachusetts Export Center should closely monitor the USCS's planned trade missions, promote relevant ones in Massachusetts, and advise individual Massachusetts companies on whether it makes sense to participate.

Invest in America

In 2007 the International Trade Administration created Invest in America (IIA) as the first federal-level US investment promotion effort in a generation. It provides support for state governments' investment promotion efforts and serves as a portal into the US for foreign investment.

IIA understands US industry and answers questions from businesses abroad looking to enter the US market. It then follows up with the company two weeks later and then six months after that to measure its interest and progress in doing business in the US. The IIA also performs an ombudsman role, assisting companies that are having trouble with federal regulation issues. For example if a federal permit, such as an environmental permit, is holding up a major project, IIA is the DOC entity relied on to help solve the problem.

IIA often refers companies to industry associations rather than individual states in order to remain state-neutral. Nonetheless, it is an important entity for MOITI to understand.

IIA also facilitates *Invest in America Week* to highlight foreign direct investment for US jobs and economic growth. Last year 12 events were held in different states, including Massachusetts. MOITI can use any event that takes place here to highlight the investment that the Commonwealth has attracted.

Other Trade-Related Activities

The federal government's 20-agency Trade Promotion Coordinating Committee (TPCC) recently developed a Corporate Partners Program, in which the federal government partners with corporations that provide services to exporters. Those corporations have a strong interest in seeing exports grow, since they provide shipping, logistics, warehousing, banking, e-business solutions, internet marketing, and legal assistance. Through this program, they work with USCS to provide free webinars, podcasts, and other presentations from content experts to small and medium-size businesses just starting to export. MOITI and the Export Center already promote this program and recommend it to specific companies.

USCS participates in a series of *How to Grow Your Business Internationally* roundtables around the country held by regional chambers of commerce, local companies, and entities such as the Massachusetts Export Center. In May, four took place in Boston. In raising MOITI's public profile, it may be beneficial for the Executive Director to speak at some of these events and connect with the new-to-export companies that attend.

The Foreign Agriculture Service within the US Department of Agriculture assists in opening markets for agricultural products abroad. It teams up with four State Regional Trade Groups across the country. Massachusetts falls under the Food Export USA Northeast trade group. MOITI should reach out to this group and establish a connection.

Another useful federal program that Massachusetts should take advantage of is the TPCC Interagency Training. Seven states last year sent their trade representatives to the Commerce Department's Trade Officer Training program. Through a four-day seminar in Washington, the program helps federal and state business development staff better gauge customer need, deliver customized solutions, and learn how to leverage resources of other government agencies.

Part Two: Strategies for Global Success

H. Using the Federal Government's Resources

The Export-Import Bank, Overseas Private Investment Corporation, US Trade and Development Agency, and US Small Business Administration specialize in financial products for small and medium-size businesses seeking to do business abroad. These products include letters of credit, loan guarantees, and protections against non-payment. MOITI is currently working on echoing these models with MassDevelopment and could expand its mission along with its revenue through these instruments. Although MOITI is not a financial shop that can handle this on a large scale, MassDevelopment has relevant experience and expertise.

The State Department's Office of Visa Services

MOITI should seek to develop a close working relationship with the State Department's Office of Visa Services. There have been many times in recent years when foreign individuals seeking to attend conferences or business meetings in Massachusetts were unable to attend because they did not receive a travel visa. Although some of these individuals may have had security issues, in most cases it was simply a matter of timing; the foreign visitor did not apply soon enough to account for the extended time needed for visa processing. Massachusetts suffered when the individual excluded was someone that people here wanted to meet.

By understanding better the procedures, rules, and timeframes that the Office of Visa Services operates under, MOITI can tell potential foreign visitors about the lead time they need to obtain a visa and can advise them on how to prepare a complete visa application. Then, by developing a good working relationship with the Office, MOITI may be able to speed the process. For example, as soon as MOITI knows that a delegation from a particular country plans to visit Massachusetts for a particular conference or event, MOITI can alert the relevant people in the Office of Visa Services to

let them know that it is indeed a legitimate event and that Massachusetts has an interest in having the foreign delegation attend. This would put the delegates' visa applications into context and give the Office useful information when it comes time to screen the applications.

US Citizenship and Immigration Services (USCIS)

Massachusetts should consider developing a program to encourage foreign nationals to make major investments in the state in exchange for EB-5 visas, a program operated by USCIS under the US Department of Homeland Security. These visas are usually reserved for foreign nationals who make a major investment, normally of at least \$1 million creating at least 10 jobs. But under a pilot program, the investment amount required is only \$500,000 if it goes to certain target low employment areas. Individuals who make the investments receive conditional permanent residences status. The state could identify target areas and promote the opportunities for visa-related investment here. About ten states have done that, including South Dakota whose program is described in Appendix B.

Part Two: Strategies for Global Success

I. Government Policy

The policies that the Commonwealth implements greatly influence how attractive the state is for foreign direct investment and for the establishment of international business partnerships.

Creating an Attractive Environment

The actions the state takes to improve the business environment for existing local businesses will also make Massachusetts attractive to foreign businesses. For example, both existing and potential businesses benefit from policies that encourage innovation and entrepreneurship.

One current area of focus for the Executive Office of Housing and Economic Development—streamlining and speeding the process for permitting business development projects—has been a priority of the Massachusetts business community, but it is especially important to increasing foreign direct investment. These changes not only make it easier for new businesses to establish themselves here, they also help eliminate some of the potential confusion for newcomers discussed in section 1C.

Government policies that improve the quality of life for existing residents also make the state attractive to foreigners choosing a location for their business. Recreational opportunities, public transportation, safe streets, and good schools all make a difference. As Harvard economist Ed Glaeser argues, “The economic imperative to attract skilled, prospective entrepreneurs means that quality-of-life policies become economic development strategies. Good schools both produce well-educated students and attract well-educated parents.”⁴⁷

The public schools deserve special attention among quality-of-life issues. When researching this report, our many conversations with immigrants and foreign residents in Massachusetts indicated that they are concerned that American schools are not as rigorous as those in their former countries in Europe and Asia. They realize that the Massachusetts educational system

is stronger than in the rest of the US but they still worry that their children will not get as good an education as if they had remained at home. Massachusetts policymakers should build on our strong educational foundation to develop and implement policies that enhance our schools’ global reputation and standing.

Immigration Policy

While immigration policy is a federal responsibility, it has a significant impact on Massachusetts. The state should advocate for rules that would allow more skilled, educated foreigners to stay in this country either temporarily or for the long term. These individuals can spur economic growth, especially in a place like Massachusetts that is based on technology and innovation. A 2007 study led out of Duke University found that “25.3% of all engineering and technology companies established in the US between 1995 and 2005” had “at least one immigrant key founder.”⁴⁸ And immigrants have also played other important roles in technology companies. Yet, according to the Kauffman Foundation, “At least 50,000 workers with advanced degrees are sent out of the United States each year, although they have already passed security tests and become part of the productive fabric of the US economy.” For these reasons, the Kauffman Foundation concluded that “Of all the policies that could be changed, probably none would have a greater positive impact on long-term economic growth than removing barriers to the immigration of highly skilled and highly educated individuals.”⁴⁹

It is currently difficult for these individuals to obtain green cards and the annual supply of H-1B visas was reduced after 2001. President Obama supports increasing the cap on these visas, and the state of Massachusetts should endorse that recommendation.

In an attempt to encourage foreign-born entrepreneurs to start companies in the United States, Senator John Kerry introduced federal legislation earlier this year that would modify the EB-5 visa program to create a

47 Ed Glaeser, “From Chasing Smokestacks to Embracing Entrepreneurship: Regional Growth Through Economic Policy,” in Ewing Marion Kauffman Foundation, *Kauffman Thoughtbook 2009* (Kansas City: Ewing Marion Kauffman Foundation, 2009), p. 99.

48 Vivek Wadhwa et al., *New Immigrant Entrepreneurs, Part I* (January 4, 2007), Duke Science, Technology & Innovation Paper No. 23. Available at SSRN: <http://ssrn.com/abstract=990152>.

49 Tim Kane and Robert E. Litan, *Knowledge Economy Immigration: A Priority for U.S. Economic Growth* (Kansas City: Ewing Marion Kauffman Foundation, 2009), p. 4.

Part Two: Strategies for Global Success

I. Government Policy

new EB-6 visa category for entrepreneurs who have raised capital and are building start-up companies. The Massachusetts Technology Leadership Council has endorsed this bill. Massachusetts should examine the proposal carefully and consider whether it makes sense to advocate for it.

Beyond advocating for policy change, the state can provide information and advice to help foreign students in Massachusetts and local businesses. Both the students and their prospective employers need to be aware of visa policies and procedures that are in place. After consulting with the federal government, the state could create educational materials for distribution through local universities and businesses.

Tax Policy

The Executive Office of Housing and Economic Development, Executive Office of Administration and Finance, and the Massachusetts Department of Revenue should review existing tax laws relating to doing business in the Commonwealth and determine whether there are appropriate revisions or other tax policy changes that could make it even more appealing for foreign companies to establish businesses here.

Patent Reform

Reform of federal patent procedures should be considered a priority by Massachusetts. In an innovation economy such as ours, it is vital that patentable ideas and products move efficiently through the bureaucratic process and quickly get to market. This not only protects inventors and provides the building blocks on which new companies are built, but investor-friendly predictability sends important signals to the market. During a visit last year to the Commonwealth, US Secretary of Commerce Gary Locke called for a drastic overhaul of the US Patent and Trademark Office. The State should join him in advocating for these much-needed changes.

Federal Trade Policy

Federal trade policy has a significant impact on both state government and the Massachusetts business community. But because this is ultimately a federal responsibility, there are obvious limitations on what

The Commonwealth should especially make its voice heard on intellectual property protection.

the Commonwealth's policymakers can change on their own. Nevertheless, state government advocacy can play an important role at the federal level.

The Commonwealth should especially make its voice heard on intellectual property protection. In an innovation economy like ours, much of the "product" is intellectual property. Yet it is not uncommon for a US company to invest a considerable sum in a foreign market only to have that investment and potential profit expropriated, or defaulted upon. In order to provide a stable and prosperous trade arena, the federal government should take steps to protect businesses' intellectual property when they operate overseas.

Additionally, the state's trade arms should encourage the reexamination of trade model agreements. Currently, the US Model Bilateral Investment Treaty (BIT) is being reassessed to ensure consistency with the changing pace of global trade and the overall US economic agenda. Last updated five years ago, the BIT model is the base document under which the US enters into trade agreements with foreign countries. These treaties allow Massachusetts companies to have access to foreign customers and high growth markets, but they also can limit state sovereignty. During the public comment period a host of concerns were heard from labor unions, environmental groups, large corporations, and trade lawyers. But the Commonwealth should also make its voice heard. Of particular interest to the Commonwealth are BIT provisions that vest trade dispute power in an international arbitration panel that could find that a Massachusetts law violates a BIT

Part Two: Strategies for Global Success

I. Government Policy

requirement, leading the federal government to sue the state for damages.

Because weighty issues of federalism and international law are involved in federal trade policy, some states have set up trade policy councils to monitor, comment upon, and seek to influence those federal trade issues that could seriously impact the businesses in their state. A dynamic state economy like Massachusetts's with \$28 billion in exports a year, should not ignore federal trade issues that can significantly harm or improve this output. Currently, Massachusetts does not have an International Trade and State Sovereignty Council. The Legislature has held hearings on H341 which, if passed, would create a special commission to examine foreign trade issues. In the short term before the legislation passes and a commission carries out this assignment, the state should consider whether there are any stop-gap ways for a partnership with the business community to monitor and influence development in Washington on trade policy.

Finally, an avenue for direct state influence on trade agreements and policy with the Office of the United States Trade Representative (USTR) is the Intergovernmental Policy Advisory Committee, but it is far from an ideal mechanism. This committee serves in an advisory role to the USTR and its advice is non-binding. The USTR picks the members of the committee

and due to security clearance issues the information that the committee works with is not discussed with state trade operations.

The House Ways and Means Subcommittee on Trade held hearings last summer on how to increase transparency and public participation in the development of US trade policy. In calling the hearing, the chairman of the committee stated: "The new Administration is committed, and properly so, to making sure our international trade discussion is open to new perspectives. Now is a good time to look at how the trade advisory committees can be part of developing better trade policies."⁵⁰

This is an important development as securing a new venue for state concerns to be heard and incorporated in trade agreements could protect Massachusetts and its businesses from unnecessary restrictions and possible penalties in the trade arena. Other states have put forth proposals to the committee and Massachusetts should weigh in.

In this age of globalization, expanding markets, and complex trade agreements, it is increasingly important that the Commonwealth have a loud and clear voice in federal trade policy discussions.

50 Committee on Ways and Means, Subcommittee on Trade, "Chairman Levin Announces Hearing on Trade Advisory Committee System", July 21, 2009.

Appendix A: Key Organizations for a Public–Private Partnership

This report places great emphasis on nurturing a strong, coordinated partnership between key state agencies, quasi-public organizations, and the private sector. In addition to MOITI, MOBD, and the Massachusetts Export Center, which are discussed at length in the report above, here are potential key players in such a partnership:

Public Agencies and Programs

1. *The Massachusetts Office of Travel and Tourism (MOTT)*, an economic development agency under the aegis of EOHED, promotes the Commonwealth's many natural and historic resources in order to increase tourism, business incentive travel, and convention-related travel. The effect of international tourism programs is similar to the effect of trade and investment programs: both draw foreign money to boost business in the state.

Because MOTT plays an important role in shaping the state's image, gives special attention to business travel, and markets the state overseas, MOITI and MOTT need to communicate regularly. Both agencies have overseas offices and participate in international trade shows, so they should exchange leads and intelligence.

2. *Massport* should continue to help fund the Governor's trade missions, but there should also be other areas of joint international activity. One of Massport's most important activities, developing new air routes, perfectly complements MOITI's goal to build international connections. Non-stop flights to major international cities make business activities with those cities easier.

New international air routes are highly sought prizes, and Massport has excelled in this area. Logan International Airport currently serves 30 international destinations (including 14 in Europe); Massport is actively engaged in attracting new service—to Europe, Asia, and the Mideast—and to expanding existing service. Each time a new route is developed, the economic impact is immediate and substantial. For example, if a long sought non-stop route between Boston and Tokyo is established, the estimated annual economic impact would be almost \$200 million.⁵¹

MOITI can and should help. It can promote possible new routes at trade shows and on trade missions, and ensure that Administration officials advance the route development agenda as part of any international trips they take. Working with MOBD and the other economic development agencies listed below, MOITI can generate business support, both in Massachusetts and abroad, for a proposed route. The bottom line is that airline route development needs to be as much a part of MOITI's agenda as it is a part of Massport's.

While the airport is Massport's most visible operation, the seaport is an essential transportation link allowing hundreds of Massachusetts companies to ship goods efficiently to and from locations around the world. Massport's maritime facilities are by far the largest such facilities in New England, although Fall River, Gloucester, New Bedford, and Salem also have useful working ports. Still, with sturdy competition from New York, Montreal, and Halifax, only about a third of New England's ocean-going cargo moves through Boston. Massport has been moving aggressively to increase that percentage. Recently, the Authority spent about \$40 million on port infrastructure, including crane modernization, dredging studies, IT upgrades, and other facility improvements.

Geographically, Boston is well-positioned to compete for more cargo, since the volume of cargo moving to and from the East Coast of the US through both the Panama and Suez Canals is expected to greatly expand in the coming years. But more than just Massport's infrastructure improvements will be necessary for Boston to attract this cargo. Improved road and rail lines would help facilitate the swift movement of cargo to and from Boston Harbor. Dredging of key Harbor channels would ensure that the next generation of large cargo ships can navigate the port. Those steps are largely beyond the scope of Massport's operations, and a full discussion of this topic is beyond the scope of this report.

Getting and holding ocean-going freighter service is a tough business. MOITI should be fully informed about Massport's efforts to market its container terminals

51 Simat, Heliessen & Eichner, Inc., *Economic Impact of New International Air Service* (Boston: Massachusetts Port Authority, 2009).

Appendix A: Key Organizations for a Public-Private Partnership

to international shipping lines and should use its international contacts to advance those marketing efforts.

3. *The Massachusetts Technology Collaborative (MTC)* is the state's development agency for the innovation economy, operating at the intersection of government, business, and academia. Because of its understanding of all those three sectors and its involvement with key industries, Governor Patrick asked MTC to help plan the 2007 China trade mission and follow-on activities. MTC has provided strategic advice on international matters to MOITI and has played a lead role in preparing *An International Strategy for Massachusetts*. Going forward, MTC should continue to serve as a strategic advisor and assist with specific international assignments, including trade missions. MTC is also the most logical agency to carry out one of the report's recommendations—to organize conferences in Massachusetts and overseas that would be aimed at international audiences and highlight the work of Massachusetts's universities, research centers, and businesses in innovation industries.

4. *The Massachusetts Life Sciences Center* was created by the Massachusetts Legislature in 2006 as the focal point for Governor Patrick's \$1 billion life sciences initiative. It invests in life sciences research and business development, offering tax incentives, grants, and matching funds to individuals and businesses. Because the life sciences industry will likely feature in many of the state's international activities, the Life Sciences Center needs to be an active player. It should work with MOBD and MOITI to recruit foreign life sciences companies and it should help fund trade missions and events that feature the life sciences industry. The Life Sciences Center can help bring to bear the great weight of life sciences companies in Massachusetts to help Massport entice foreign carriers to establish Boston as a new route.

5. *The Massachusetts Clean Energy Center* was created by the Massachusetts Legislature in 2008 to aid clean energy economic development. It is a parallel agency to the Life Sciences Center. It seeks to build the state's clean energy cluster and offers financial incentives to

businesses. Because clean energy will be a focus of international activity for the state, recommendations for it in this report parallel those suggested above for the Life Sciences Center. It should work with MOBD and MOITI to recruit foreign companies and should fund relevant international activities.

6. *The Massachusetts Development Finance Agency (MassDevelopment)* provides financing and expertise to businesses and officials seeking economic development projects in Massachusetts. Last year, the agency financed or managed more than 200 projects representing an investment of more than \$2 billion to the Massachusetts economy. The agency also offers an export financing loan program and other loan guarantees that would prove beneficial to Massachusetts companies looking to export into other markets.

7. *The Massachusetts Convention Center Authority* operates the Boston Convention & Exhibition Center, the Hynes Convention Center in Boston, and the MassMutual Center in Springfield. It seeks to make Boston the number one destination for international corporations and associations to hold meetings, conferences, and exhibits. In order to meet that goal, several challenges would need to be overcome, most notably the paucity of hotel rooms within an easy walk of the Boston Convention Center. Still, with cooperation and support from city and state officials, the goal is reachable. And, in the near term, the number of international events can certainly be increased.

The economic impact of a single event can be huge. The World Transplant Congress, which brought visitors to Boston from around the world, absorbed over 20,000 hotel room nights. But it's not just the impact on the hotel and restaurant community that is attractive. The benefits of Massachusetts as a place to do business can be promoted to the large numbers of international business visitors who attend the events. MOITI needs to use the platforms of these conventions and meetings as launching pads for its own purposes. In return, MOITI's overseas offices can assist the Convention Center Authority's international marketing efforts.

Appendix A: Key Organizations for a Public-Private Partnership

8. *The Massachusetts Alliance for Economic Development.* The Massachusetts Alliance for Economic Development (MassEcon) is a public-private partnership of MOBD and business and industry leaders. Founded in 1993, it offers a wide range of site finding services for businesses looking to locate or expand in Massachusetts. For example, its staff provides customized site research and it maintains a network of executives “who serve as peer contacts for companies evaluating Massachusetts as an expansion location.” These services are clearly relevant to foreign companies looking to establish offices here. MassEcon is a member of MOBD’s Business Resource Team and is working with the Secretary for Housing and Economic Development on the “It’s all here” branding effort.

The Private Sector

1. *Industry Associations.* Massachusetts is home to dozens of industry trade associations. The state should closely engage with these important organizations, since they afford a focal point of contact for an industry, allowing the state to nimbly gauge the pulse of a particular area or sector. In addition, the associations bring valuable financial and human resources to a partnership with the state.

The state currently involves several business organizations in the Massachusetts Business Resource Team, including the Massachusetts Biotechnology Council, the Massachusetts Manufacturing Extension Partnership (MassMEP), the Massachusetts Medical Device Industry Council (MassMEDIC), and the Mass Technology Leadership Council. However, other associations have a specific focus on the international business arena. Most notably, the Associated Industries of Massachusetts (AIM), the largest nonprofit association of employers in the state, has a division, the AIM International Business Council (AIM-IBC), geared toward international enterprise. The Global Business Alliance of New England (GBANE), an association to promote international business and trade relations, is also active and co-sponsors an annual international business forum in Boston.

2. *Nonprofit Organizations.* Boston World Partnerships is an interesting, relatively new nonprofit organization, started by Boston Mayor Thomas Menino and initially funded by the Boston Redevelopment Authority and P&G/The Gillette Company, to “raise global awareness of Boston as one of the world’s foremost centers of intellectual capital and innovation.” Because it is in its early stages, it is hard to know exactly how the state should interact with it, but we suggest one possibility above in section 2G of this report.

WorldBoston and the World Affairs Council of Western Massachusetts are members of the World Affairs Councils of America, a nonpartisan association which promotes discourse on international affairs and foreign policy throughout the United States.

Although it is a research and consulting firm, the Mass Insight Corporation is worth mentioning because of the important conference it held in December 2008 on US-China-India Innovation Partnerships and its follow-on initiative building on that event.

3. *Regional Development Organizations.* While the Executive Office of Housing and Economic Development operates as the business development arm for the state, there are regional economic development organizations throughout the Commonwealth. Some of them serve as Business Resource Team partners, including the 495/MetroWest Corridor Partnership, the Berkshire Economic Development Corporation, the Boston Redevelopment Authority, the Economic Development Council of Western Massachusetts, the Merrimack Valley Economic Development Council, the North Central Massachusetts Economic Development Council, and the SouthCoast Development Partnership. These organizations know which opportunities exist in their specific regions. Their knowledge should be tapped, deeply and consistently, to maximize the economic development potential of the entire state.

In addition to economic development councils, regions and municipalities have chambers of commerce to advocate for the business community, with the most well-known being the Greater Boston Chamber of Commerce. According to the Massachusetts Export

Appendix A: Key Organizations for a Public-Private Partnership

Center, there are 95 local and regional chambers of commerce throughout the state,⁵² suggesting a large and widespread network to assist the state and businesses both here and abroad.

4. Foreign Consular Corps. The Commonwealth hosts over 40 foreign consulates and honorary consuls, serving as strong, built-in pipelines to other countries. Corps members play an important role diplomatically between host and home states and can be experienced brokers in country-specific endeavors. In many cases, the Massachusetts-based consulate serves all of New England, affording the state the advantage over its neighboring states of physical presence and proximity for face-to-face meetings. For example, the consulate of Switzerland – or Swissnex as its known – covers New England and Eastern Canada. It is located in Cambridge and hosts over 60 events a year mostly in Massachusetts to help foster business connections with Switzerland. It is one of Swissnex’s only two locations in the entire United States, the other being in San Francisco.

As another example, the British Consulate-General, one of the biggest foreign consulates in the state, represents all of the New England states but is headquartered in Cambridge. It also houses the UK Trade & Investment Office, affording the state and in-state businesses the opportunity to meet in person with officials to develop business relationships and an understanding of the economic landscape of the United Kingdom.

5. International Chambers of Commerce. Entities based in Massachusetts, such as the British American Business Council of New England, the German-American Business Council of Boston, the New England-Canada Business Council, and the Swedish American Chamber of Commerce of New England, encourage networking and develop business connections.

6. Universities. The Commonwealth is home to the University of Massachusetts, nine state colleges, 15 community colleges, and over 80 private accredited colleges and universities. Many of them play an active role on the international stage. For example, Boston University’s International Incubator Program offers businesses looking to grow globally “a comprehensive portfolio of customized facilities, services, and educational opportunities designed to prepare (companies) for rapid, efficient, and targeted market entry”. The University of Massachusetts China Institute, among other things, sponsors business roundtable discussions on China affairs as well as Chinese business and government relations strategy sessions. (For more on universities, see section 2G in the main body of the report.)

52 Massachusetts Export Center, Export Services Guide, *Chambers of Commerce*, <http://www.msdbc.org/publications/esg/chambers.pdf>.

Appendix B: Trade and Investment Programs in Other States

Here are descriptions of a few of the interesting programs being carried out by other states:

Delaware: Multiple Small Trade Missions

During the last few years, the international trade department for the State of Delaware has organized eight to ten trade missions per year. These are mostly small missions with about a dozen companies plus elected and appointed state officials.

In March of 2007, Delaware's Secretary of Agriculture led such a mission to Cuba. There were both long and short-term goals for the project. In the short term, Delaware hoped to open the door to Cuba for the state's poultry exporters. This was achieved, as contracts were signed during the mission and Delaware poultry companies subsequently had great success selling chickens to Cuba.

The long-term goal was to develop contacts in Cuba that will be useful if that country is opened to more trade with the US. Trade is currently limited mostly to agricultural products but Delaware officials envision a time when restrictions are eased. At that point, they believe Delaware seaport facilities will provide a competitive alternative to larger east coast ports for trade with the island nation. In order to position the state for the future, Delaware port authority officials were on the 2007 mission to introduce and promote their seaport capabilities.

The total public sector cost for the four state officials on the mission was modest, about \$6,800. The private sector members paid for themselves, and those costs were about \$2,000 per participant, also reasonable.

Strong follow-up to the Cuba mission has been important to Delaware. Much of this activity concerns the trade director's efforts to win additional contracts for the state's poultry industry.

Florida: Strong Coordination with the Private Sector

Every state faces the challenge of coordinating the activities of many agencies, quasi-public corporations, and not-for-profits, all of whom have international development as part of their portfolio. Successful coordination can greatly multiply the state's own efforts, redounding to the benefit of local businesses. Florida is one state that seems to have found a highly effective solution to this problem.

The Florida Trade Partners Alliance (FTPA) is a statewide strategic alliance of trade and economic development entities providing a network of programs and services to Florida exporters. Currently, the Alliance comprises 22 organizations including the World Trade Centers Association of Florida (representing six organizations,) the Florida District Export Council, the Florida Small Business Development Center Network, various federal agencies with Florida offices, and an assortment of chambers of commerce from across the state.

FTPA has two goals: to use members' networks to market events designed to build Florida exports and to make certain all FTPA members are fully informed of each others' activities so as to avoid overlap and duplication. While the group meets several times a year, an important element that helps to ensure success is a binding written agreement that all members have to sign. The agreement clearly delineates tasks and responsibilities for each constituent member.

A 2008 event demonstrates the robust nature of FTPA. The state's trade and investment agency, Enterprise Florida, decided in August to hold a "Florida Trade Show" in early November in Sao Paulo for the purpose of showcasing Florida companies. Usually, Enterprise Florida would want far more than three months to organize such an event, but that was not possible in this case. The FTPA was quickly mobilized to aggressively promote the program to all of its individual member firms. The result was that over 50 Florida companies attended and exhibited at the event.

Idaho: Clear, Compelling Website

The website for the Department of Commerce in Idaho has a single-minded devotion to assisting businesses become familiar with that state. It is both user-friendly and informative, focusing on introducing Idaho's strengths and available services.

On the export side, one click from the homepage opens a clear and comprehensive menu of available resources, basic export information, Idaho's strongest export markets, and export financing opportunities. There is also important information for Idaho's exporters on how the state's three foreign offices can assist them.

The website presents Idaho for foreign direct investment in a clear appealing manner blending attractive photos

Appendix B: Trade and Investment Programs in Other States

of Idaho with hard facts, including that Idaho has the second lowest cost of living among the eleven western states. After much research, state officials concluded that when foreign companies – or the site-selection firms with whom they contract—investigate various US states, they often already know many basic facts, such as the cost of energy. However, they are less familiar with certain intangibles, including quality-of-life issues. The website excels in combining information about these intangibles with data projecting Idaho as globally competitive.

All marketing efforts for Idaho aim to drive people to the website. For example, the state places ads about the website in site selection and economic development magazines.

Indiana: Trade Show Assistance for Small Companies

Indiana provides generous grants to companies to make it easy for them to participate in foreign trade shows. The Trade Show Assistance Program (TSAP) was created by the state legislature in 2005 and focuses on financial assistance for small Indiana businesses. TSAP is designed to promote Indiana exports by encouraging companies to explore overseas markets.

TSAP's funding for trade shows is limited to one trade show per company per fiscal year. The maximum amount of funding is \$5000 and funds must be used to cover the cost of exhibit space. Although companies cannot receive repeated TSAP funding for the same trade show, they can receive funding for a different show each year.

Companies must meet several eligibility requirements before they can receive funding under the TSAP program. First, they must use the trade show to market company product. Second, at least 51 percent of the product must be manufactured in Indiana. Third, the company must send at least one staff member to the trade show, and that person needs to be present at the exhibit space during the entire show. Fourth, the company has to have fewer than 500 employees. Fifth, to ensure the company has a grasp of market potential, it must present market research that demonstrates such potential. Finally, companies must provide the state with formal trade show evaluations. Companies failing to submit their evaluation become ineligible to receive future trade show funding.

Maryland: Long-Term Economic Development Partnership with Israel

The Maryland Office of Business and Economic Development is part of an alliance of Maryland entities that helped found and support the Maryland/Israel Development Center (MIDC).

The MIDC was created in 1992. It is a public/private partnership that grew out of a declaration of cooperation signed by the Governor and the Israeli Ambassador to the US to promote economic development between Maryland and Israeli business and research institutions. Often, agreements that states sign with other countries fail to receive adequate follow-up attention. This was not the case with Maryland.

The MIDC is physically located within Maryland's international trade office and has received annual grants since 1997, reaching as much as \$175,000. But about 90 percent of MIDC's funding is from the combined efforts of the state and supportive local Jewish organizations.

Staffed by professionals in both Maryland and Israel, the MIDC identifies market and technology opportunities, and introduces Maryland and Israeli executives, entrepreneurs and investors to each other, to negotiate mutually beneficial business agreements. The representative of MIDC in Israel also helps Maryland companies identify appropriate trade shows and provides expertise relating to proper export documentation. That representative effectively serves as Maryland's Israeli office.

An annual corporate and investment partnering conference led by leading Maryland business development officials focused last year on the life sciences and medical device industry and took place at Johns Hopkins University. Over the years, MIDC has had successes in diverse industries including aquaculture, education technology, medical devices, and software.

Minnesota: Multi-Faceted Partnership with China

The Minnesota-China Partnership reflects the State of Minnesota's judgment that China is such an important market it deserves unique attention. The Partnership is a multi-pronged effort to strengthen Minnesota's connections with China along a broad front. Mobilizing the energy and resources of both public and private

Appendix B: Trade and Investment Programs in Other States

organizations, the Partnership strives to promote efforts in trade and investment, science and academia, art and culture.

The goal of increasing economic activity between Minnesota and China is pursued explicitly within a much wider context. That context is the desire to boost understanding and learning about China within Minnesota. A spirit of friendship and collaboration is woven through all the Partnership programs.

The value of the Partnership to Minnesota is made clear by the prominence it receives on Export Minnesota's website. A very attractive logo for the Partnership on the home page of the website serves as the link to all Partnership activity and programs. For example, one can learn about the Minnesota Department of Education's ambitious Mandarin Language Initiative that is designed to greatly expand Chinese language skills among students throughout Minnesota. In addition, the Governor's 2005 trade mission to China is highlighted with descriptions of specific activities, such as a program funded by the Best Buy Children's Foundation which provided technology to seven "student ambassadors" who accompanied the Governor. The technology allowed these students to share their experiences with teachers and students statewide through an educational website.

The website also contains considerable information about export assistance for Minnesota companies seeking to export to China, and about investing in Minnesota for Chinese businesses and entrepreneurs. There is Chinese language capability on the site.

Oklahoma: Recruiting Students from Vietnam with a Focus on the Oil Industry

Oklahoma has an active foreign student recruitment program focused on one market and largely on one industry.

In 1996, the state hosted a national conference for the energy industry at the University of Oklahoma. The conference drew the attention of Vietnam's national oil and gas company, Petro Vietnam, which sent a large delegation, including many students.

Oklahoma officials in the state, including leaders in the state legislature, quickly recognized the value of attracting international students to the state. They also

saw that Vietnam's oil and gas industry matched up well with Oklahoma's economic strengths.

To seize this opportunity and to prime the pump for a continuous flow of Vietnamese students to Oklahoma, the state became the first in the US to open an office in Vietnam. A central focus of the office has been to promote Oklahoma's colleges and universities, and to help develop academic partnerships with Vietnamese higher education institutions. To spur recruitment, an agreement was signed allowing Vietnamese students with two years of undergraduate studies to transfer all their credits to Oklahoma colleges.

As a result, Oklahoma, despite its relatively small population, is routinely at or near the top among states for matriculating Vietnamese students. State officials also indicate that numerous successful partnerships have developed between Vietnam and Oklahoma in oil and gas and agricultural industries.

Pennsylvania: Programs for Foreign Alumni of Local Universities

Pennsylvania's Global Alumni Network was started three years ago after the state legislature increased funding for business development initiatives. The state views this comprehensive program as one that will produce strong results in the long term. Its goal is to stimulate additional exports and investment for Pennsylvania by accessing foreign-born alumni of local colleges and universities.

There have been three components of the Network. First, a website was developed to serve a social and business networking function for Pennsylvania's alumni. Second, the state's international trade office organizes events overseas for alumni. These have been most successful in Asia where, at some events, over 250 alumni have attended. While these events, which are often evening receptions, are sometimes attended by officials from Pennsylvania, they are usually organized by the state's foreign office in that particular market. In these cases, the individual in charge of the office is the top state official at the event.

Finally, an ambitious grants program was created. Colleges and universities could apply for grants for foreign alumni programs that have a strong state economic development component. Some of the grants have exceeded \$100,000. Although recent budget

Appendix B: Interesting Trade and Investment Programs in Other States

constraints have greatly curtailed the grants program, a few have still have been awarded, including one to Carnegie Mellon University to connect its alumni in India with business opportunities in Pennsylvania.

South Dakota: Using a Visa Program to Attract Foreign Investment

South Dakota has taken advantage of EB-5, a federal program established in 1990 and operated by the US Citizenship and Immigration Services (USCIS). Basically, this is a “visas for foreign investment” program.

For investments that range between \$500,000 and \$1 million that create at least 10 local jobs, individual investors can obtain temporary green cards for themselves and their immediate family members. The required amount of the investment depends on whether the investment is in an area designated as a low population zone or is a Targeted Employment Area (TEA.) Under the EB-5 Program, USCIS is authorized to provide up to 10,000 visas per year.

In 2004, South Dakota made the EB-5 program the centerpiece of its foreign direct investment effort. That year, the South Dakota International Business Institute (SDIBI) received designation by USCIS as an EB-5 Regional Center. By pooling investment from foreign individuals, the Regional Center helps create bigger projects and more local jobs.

Focusing primarily on the dairy industry but also on meat processing and power plants, South Dakota’s EB-5 Regional Center has had a considerable impact on state job growth. Last year, it combined investment from 60 immigrant investors totalling \$30 million. Those funds were used by the Center to leverage \$90 million in bank financing for projects that created 240 direct jobs and over 600 indirect jobs.

Originally, the SDIBI was designated to cover 12 counties in eastern South Dakota, but application has been made to USCIS to extend the designation to most of the state. SDIBI officials are active abroad, particularly in China and Korea, spreading word about the advantages of the EB-5 program, seeking to attract potential investors.

Tennessee: Strong Emphasis on Foreign Direct Investment

About four years ago, Tennessee made a major strategic decision affecting its international economic development activities. State officials found that a large majority of companies in Tennessee fell into one of two categories when it came to export assistance. One group was companies that did not need export assistance from the state because they already had sophisticated export operations. The other group was companies that needed far more assistance than the state could reasonably provide, given budget realities. As a result, state officials decided to greatly de-emphasize export assistance and, instead, to focus almost exclusively on foreign direct investment.

In making this decision, Tennessee understood a key potential downside: exports help small companies grow, and cutting back on assistance programs might stunt such growth. However, state officials had an excellent relationship with the local US Department of Commerce and with Small Business Development Corporation in the state. They believed that those organizations were well-placed to offer assistance occasioned by the state’s decision to reduce export assistance.

On the FDI side, Tennessee has a small in-state staff, but relies heavily on representatives abroad in Canada, Germany, China, and Japan. These representatives actively market Tennessee on the ground, in-country, where the leads are richest. Furthermore, while the local international recruitment team is small, it coordinates seamlessly with a national recruitment team and regional specialists, all working together to sell Tennessee.

The results seem to bear out the wisdom of Tennessee’s decision. First, export numbers for the state have not declined. Second, Tennessee has been quite successful in attracting high-impact foreign investment, including billion dollar projects from both Wacker Chemie AG and Volkswagen.

Appendix C: People and Organizations Consulted

In preparing this report, we received ideas and information from many people. Some of them participated in focus groups on the clean energy, financial services, and life sciences industries, as well as on university and other research institutions. We met with other people in individual and group meetings. We thank all of them for sharing their time and knowledge.

Peter Abair, Massachusetts Biotechnology Council

Bruce Anderson, Wilson TurboPower

Robert Anderson, Massachusetts Alliance for Economic Development

Pedro Arboleda, Monitor Group

Abigail Barrow, Massachusetts Technology Transfer Center

Daniel Behr, Harvard University

Patrick Bench, Massachusetts Office of International Trade and Investment

Tanya Bodell, CRA International

The Honorable Daniel E. Bosley, State Representative, Massachusetts

Chad Bown, Brandeis University

Catherine Bray, State International Development Organizations

Kenneth Brissette, Massachusetts Office of Travel and Tourism

Thomas Burton, Mintz Levin

David Callahan, US Saudi Arabian Business Council

Leo Casey, Satcon Technology Corporation

Mark Chalek, Beth Israel Deaconess Medical Center

Kirsten Chambers, Consul and Head of Trade & Investment, British Consulate-General Boston

Amy Cheng, Boci Asia Limited

Victoria Cimino, Massachusetts Office of Travel and Tourism

William Clifford, WorldBoston

Patrick Cloney, Massachusetts Clean Energy Center

James Cox, US Commercial Service, Department of Commerce

Robert Culver, MassDevelopment

Nicholas d'Arbeloff, New England Clean Energy Council

Kurt Dassel, Monitor Group

William Davis, Ze-gen

Nelson de Castro, RBS Citizens

Anthony del Campo, Dana-Farber Cancer Institute

Meg Delorier, MassDevelopment

John DiNapoli, Massachusetts Alliance for Economic Development

Priscilla Douglas, Vertex Pharmaceuticals

David Driver, Northeast Utilities System

Robert Eng, Babson College

Mark Farber, Photon Consulting

David Fleming, Genzyme

Jonathan Fleming, Oxford Bioscience Partners

Peter Forman, South Shore Chamber of Commerce

Edward Freni, Massport

Jeffrey Fuhrer, Federal Reserve Bank of Boston

Yvonne Garcia, Liberty Mutual Personal Markets

Brian Gilmore, Associated Industries of Massachusetts

Daniel Goldman, GreatPoint Energy, Inc.

Brian Goldstein, Goulston & Storrs

Armando Goncalves, Boston Redevelopment Authority

Michael Goodman, UMass Dartmouth

Tom Gradel, Massachusetts Office of International Trade and Investment

Michael Graney, EDC of Western Mass

Barry Greene, Alnylam Pharmaceuticals

Nina Greene, Tufts University

Jeffrey Grogan, Monitor Group

William Guenther, Mass Insight Corporation

Robert Halpin, Merrimack Valley Economic Development Council

Alain Hanover, Navigator Technology Ventures

Matthew Harris, Village Ventures

Jack Healy, MassMEP

Marie Hladikova, Massachusetts Export Center

Susan Houston, Massachusetts Alliance for Economic Development

Tito Jackson, Massachusetts Office of Business Development

Radha Jalan, ElectroChem, Inc.

Karl Jessen, Massachusetts Clean Energy Center

Graham Jones, Northeastern University

John Joyce, US Export Assistance Center

Douglas Kehlhem, Massachusetts Alliance for Economic Development

Melanie Kenderdine, MIT Energy Initiative

James Klocke, Boston Chamber of Commerce

Appendix C: People and Organizations Consulted

Leonard Kopelman, Consul General of Finland
The Honorable Peter J. Koutoujian, State Representative, Massachusetts
Michelle Lampa, Massachusetts Office of International Trade and Investment
Diana La Muraglia, Massachusetts Office of International Trade and Investment
Michael Leone, Massport
Mark Leuchtenberger, Targanta Therapeutics
Anke Lischeid, Office of the German Consulate General, Boston
Lisa Lopez, Haemonetics
Wei Lu, Cybernaut Investment
Bruce Magid, Brandeis University International Business School
Pascal Marmier, Consul at Swissnex Boston, Consulate of Switzerland
Charles McDermott, RockPort Capital Partners
David McKeegan, North Central Massachusetts Economic Development Council
Catherine McLaughlin, Harvard University Institute of Politics
David McLaughlin, Boston World Partnerships
Michael McNally, Harvard School of Public Health
Kathleen Molony, Weatherhead Center for International Affairs
Julian Munnich, Massachusetts Office of International Trade and Investment
Paula Murphy, Massachusetts Export Center
The Honorable Marc R. Pacheco, State Senator, Massachusetts
Georgianna Parkin, Massachusetts Small Business Development Center
Richard Pellagrini, Massachusetts Office of Business Development
Linda Plano, SignedOn
Adam Ploetz, 495/MetroWest Partnership
Bernd Rinnert, Deputy Consul General, German Consulate General, Boston
Arthur Robert, Massachusetts Office of Business Development
David Rooney, Berkshire Economic Development Corporation
James Rooney, Massachusetts Convention Center Authority
The Honorable Stanley C. Rosenberg, State Senator, Massachusetts
Bob Ross, Office of Senate President Therese Murray
Kristen Rupert, AIM International Business Council
Una Ryan, Waltham Technologies, Inc.
Bernhard Sabel, Otto-von-Guericke University of Magdeburg
Anthony Saich, Harvard Kennedy School
Thomas Samoluk, John Hancock Financial Services
Leon Sandler, Deshpande Center for Technological Innovation
Roland Schindler, MIT-Fraunhofer Center for Sustainable Energy Systems
Don Schjeldahl, Austin Consulting
Eric Schoenfeld, Boston World Partnerships
Bennett Schwartz, TD Banknorth
Semil Shah, India Strategy Consulting
Anuprenda Sharma, Siemens Venture Capital
Rudi Scheiber-Kurtz, Next Stage Solutions
Gregg Simon, Atlanta Development Authority
Bernard Simonin, Tufts Fletcher School
Nancy Snyder, Commonwealth Corporation
Thomas Sommer, MassMEDIC
Elizabeth Steele, Massachusetts Office of International Trade and Investment
Yil Surehan, Massport
Michael Tamasi, AccuRounds
Stuart Taylor, Cisco
Heikki Topi, Bentley College
Mary Beth Totten, Massachusetts Office of International Trade and Investment
Mitchell Tyson, Advanced Electron Beams
Martin Walsh, Massachusetts Office of Business Development
Melissa Walsh, Massachusetts Life Sciences Center
Carlton Williams, RBS Citizens
Anita Worden, Solectria Renewables
Xylina Wu, Massachusetts Office of International Trade and Investment
James Yoder, Woods Hole Oceanographic Institution
Leonard Zon, Children's Hospital

The Project Team

This report is the result of collaborative work and input from many people.

The Massachusetts Technology Collaborative coordinated the research, writing, and production of the report. **Warren Leon, Charles A. Anderson,** and **Charles Yelen** were the lead authors and researchers, and Leon also served as project coordinator. **Stephen Coelen, Carlos Martinez-Vela,** and **Daniel Triggs** each wrote material for a specific chapter. **Christopher A. Kealey** and **Philip F. Holahan** provided review and overall project guidance. **Joseph Alviani** conducted focus groups and helped with project conceptualization. **Christine Raisig** and **Emily Dahl** designed and produced the report.

Ted Carr, the Executive Director of the Massachusetts Office of International Trade and Investment, provided valuable assistance and input. **Jeff Grogan, Kurt Dassel,** and **Pedro Arboleda** of the Monitor Group contributed the sidebar on targeted recruiting.

Secretary of Housing and Economic Development Gregory Bialecki encouraged us to produce this report and offered essential guidance along the way. Others in the Executive Office of Housing and Economic Development reviewed drafts of the report, provided feedback, and contributed ideas: **Michael Hunter, Kofi Jones, Stan McGee, Eric Nakajima,** and **Enrique Perez.**

We consulted and received important input from many other people. They are listed on the previous pages.

This report is available online at www.masstech.org. Paper copies are available at \$20.00 per copy for individuals and businesses (\$15.00 per copy for quantities over 20), and \$10.00 per copy for government agencies and nonprofit organizations (\$7.50 per copy for quantities over 20). To purchase copies or for questions related to the report, contact Charles A. Anderson at 617.371.3999 or via email: canderson@masstech.org.



MASSACHUSETTS
TECHNOLOGY
COLLABORATIVE

75 North Drive
Westborough, Massachusetts 01581-3340
tel: 508.870.0312
fax: 508.898.2275

2 Center Plaza, Suite 440
Boston, Massachusetts 02108-1904
tel: 617.371.3999
fax: 617.725.8938

www.masstech.org

© Copyright 2010