A Regional Engagement Strategy for MIT

Report prepared for

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I. Introduction

MIT is at the center of a vibrant innovation ecosystem in Kendall Square, Cambridge, the Greater Boston area and beyond, and uniquely positioned to offer leadership for the continued development of the region. As MIT embarks on its Innovation Initiative, now is the time to develop a strategic approach to regional engagement. There exists a confluence of interested parties within and outside of MIT; aligning and coordinating multi-sector groups to work collaboratively on areas of mutual interest can insure and enhance the vitality of the area. MIT, in the honest broker role, is uniquely positioned to take the lead as convener. In doing so, the Institute will also advance its mission of “working with others to bring knowledge to bear on the world’s great challenges.”

Project Charge, Deliverables, and Scope

The project’s executive sponsor, Provost Martin Schmidt, charged the L2L Regional Engagement team with developing a strategy for MIT to engage effectively with the region.

Key elements of the strategy were to be two-fold:

1. A plan to better connect MIT with regional entities; and
2. A plan for MIT to help enhance this region as a destination for innovation and top-notch talent.

Key deliverables were to include:

- Analysis of the regional innovation cluster and its importance to MIT, capturing work already done at MIT and elsewhere;
- Inventory of current MIT programs connected to the region or regional entities;
- Specific recommendations for an Institute level effort to better engage the region;
- Articulation of scope, goals, milestones, and desired outcomes;
- Timeline, required participants/leadership both internal and external to MIT, resources required.

Based on initial feedback from project sponsor Glen Comiso, President Reif’s Chief of Staff, the team first scoped the project as an investigation of the viability of creating a regional CEO advisory group at MIT. This would build on the concept of the Advisory Council on Regional Engagement (ACRE), an earlier effort undertaken under former president Susan Hockfield. Initial investigations included understanding what about ACRE did and did not work, why that effort did not continue, what has changed in the interim, and how an MIT-led or MIT-convened group of regional leaders could build upon that effort.

After determining answers to some of these questions, the team came to the conclusion that the scope of the project should be broadened to the following: Investigate the viability of creating an MIT-led group of regional leaders from various sectors to leverage the Institute’s strengths to benefit both MIT and the region.
The team initially identified a set of key questions that would be important to answer in order to be able to make recommendations. First and foremost was the question of "Why": What is the status quo, and why would MIT want to change it by undertaking this effort? Does MIT really need a strategy for engaging with the region -- especially since there are numerous examples of vibrant regional collaborations in which the Institute's involvement has come about organically and opportunistically? Second, since MIT is located in the center of a lively and successful innovation cluster, it would be essential to define the opportunity: What would be the benefits for MIT of becoming more strategic and intentional, especially when the current ad hoc approach seems to be productive? And conversely, what might be the opportunity costs of not becoming more strategic?

Similarly, the team posed these questions for the region, both MIT's potential regional partners and the region as a whole: What would be the advantages if MIT were to develop and implement such a regional engagement strategy, and what might be the challenges? What could be at stake for the region if such an effort to address regional issues in a more strategic and collaborative manner were not undertaken? The team also noted the need to define the "region", and to determine what would constitute a successful outcome for the project.

The overarching goals were to capture the perceived benefits for MIT and for the region of convening leaders of a set of key regional stakeholders, identify what the focus area(s) might be, propose a potential pilot project or projects, potential collaborators/stakeholders, and a possible approach to creating that engagement, and finally, recommend a set of near, medium, and longer term actions.

**Project Methodology**

The team created a project plan with a detailed timetable, including: research activities, encompassing both interviews and review of relevant written material; synthesis and analysis of the data through application of tools learned in Leader to Leader (L2L); formulating conclusions; developing recommendations; testing conclusions and recommendations with the executive and project sponsors; summarizing the process, findings, and recommendations for a poster presentation; creating and presenting the poster; and preparing a final written report for submission to the sponsors.

With input from the project sponsor the team developed an initial list of relevant programs and organizations, both internal to MIT and external, as well as relevant points of contact for each. These fell into three categories: MIT faculty and staff; other academic institutions; and external organizations that are part of the regional innovation ecosystem. After the initial scope was expanded as noted above, additional organizations were added in each of those categories. Several more interviews took place after being suggested by other interviewees. A complete list of interviews is provided in Appendix A.
The primary goals for the interviews were for the team to gain an understanding of the regional innovation cluster of which MIT is a part, MIT's role in it, and related activities at or involving MIT. In addition, the team sought to learn about the reactions of those interviewed to the idea of MIT convening a set of regional leaders to address issues and engage in projects intended to advance and support the region as a hub of innovation. All of the individuals interviewed were involved with regional innovation in some way. In most cases the interviews were conducted in person, except where distance made that impossible; all included at least two members of the project team.

Initial interviews focused on MIT faculty and staff and delved into interviewees' regional engagement activities, knowledge of and insights into other specific regional engagement activities (including, where relevant, the earlier ACRE group), and thoughts about strategic regional engagement for MIT.

To learn about how other universities approached engagement with their respective regions, the team also spoke with representatives from Harvard University, Stanford University, the University of Massachusetts, and the George Washington University.

A final category of interviewees consisted of representatives from regional organizations such as the Massachusetts Competitive Partnership (MACP) and the economic development arm of the Massachusetts state government. Through these the team sought to understand the organizations' missions, how they work within the region, what regional issues and collaborations they viewed as most important, and what they thought about the merits of MIT convening such a group. And, since MIT already has close ties to some of these groups, an important goal for these interviews was to understand how an MIT-convened group comprised of regional leaders from a variety of sectors to focus strategically on issues impacting the region would (or would not) complement such existing regional efforts.

A second set of research activities entailed reviewing an extensive set of relevant documents, reports, news articles, and presentations, either sourced by the team or shared with the team by the project sponsor or interviewees [Appendix B].

Drawing from all of its research, the team catalogued a list of existing related activities, both at MIT and elsewhere in the region [Appendix C]. The team also extracted the major takeaways from the research that responded to the questions of what are the needs that a strategic approach to regional engagement would address, and what benefits it would have – for MIT, for the partners, and for the region as a whole. To aid in analyzing the data and making sense of the findings, the team applied three tools learned in L2L: the Three Lenses framework; a SWOT analysis; and a gap analysis. The team then synthesized the findings, drew conclusions, and formulated recommendations. The next section, together with related appendices, will address this in greater detail.
II. Findings and Analysis

Using the raw material from the interviews and consulted documents, the project team determined answers for why MIT should address regional engagement strategically and the benefits that could be generated from such a strategy. Three analysis tools (the Three Lenses framework, SWOT analysis, and gap analysis) were then applied, resulting in a set of robust recommendations. The interviewees also provided a set of possible activities that MIT could pursue as part of a strategic plan for regional engagement.

Need and Potential Benefits

The project team heard compelling reasons for increasing MIT's strategic involvement in the region:

- MIT is engaged regionally but efforts across the Institute are disconnected.
- MIT has increasingly coordinated engagement at the local, national, and global levels but has not addressed the regional landscape in the same way.
- MIT's success is linked with the strength of the regional economy.
- There is an increasing trend toward regional engagement among MIT's peer institutions.

The interviews and research pointed to benefits to MIT in creating a regional engagement strategy:

- Enables MIT to leverage its strengths as convener and thought leader;
- Enhances MIT's ability to identify opportunities that advance its interests (examples: Massachusetts Green High Performance Computing Center, or MGHPCC; research collaborations);
- Provides MIT's faculty and students opportunities for nearby test beds for research;
- Creates potential for synergy with campaign themes and the Innovation Initiative;
- Enhances MIT's ability to attract and retain top faculty, students, and staff;
- Expands the opportunities for the community (i.e., industry, government, alumni, unaffiliates, etc.) to engage with MIT;
- Aligns with MIT’s mission to solve the world's great challenges.

MIT would not be the only party to gain from its involvement; regional partners and the regional community would see the following benefits:

- For regional partners, MIT as a convener;
  
  - Creates a vehicle for gathering cross-sector leaders in non-partisan ways to focus on issues of mutual interest;
  - Provides greater access to MIT's resources and thought leadership;
Utilizes MIT's reputation as an honest broker to help facilitate action;
- Provides greater credibility to regional efforts.

- For the broader regional community, MIT's strategic engagement in the region:
  - Creates a vehicle for bringing MIT's expertise to bear on challenges facing the region;
  - Leads to positive action beneficial to the economy.

**The Three Lenses Framework: Strategic Design, Political, Cultural**

Through the first lens, Strategic Design, the project team examined the structures and systems that enable an organization to reach a defined goal. Findings related to this lens are as follows:

- While MIT is involved in many regional activities [Appendix C], there is room for increased communication, coordination, organizational structure, and dedicated support.
- There is a large alumni network in the region that could be brought into play.
- Participation with several kinds of organizations beyond industry, such as government, non-profits, and other universities, would lead to richer outcomes. MIT can act as a neutral party in convening a multi-sector group.
- MIT is the leading university for corporate investment.
- Over time as federal funding for research continues to decrease, MIT must develop new sources of support for its education and research agendas.
- The definition of "region" should be driven by participants and topics.
- It is important to have some faculty and staff time devoted to this strategy.
- An MIT-convened group can be complementary to other regional development groups. However, it is important that this group have a specific niche that distinguishes it from existing regional development groups.
- In order to generate action and sustainable outcomes it will be useful to charge smaller sub-groups to act on specific ideas and projects. The larger, overarching group will be best used for setting direction and reacting to specific ideas.
- Potential topics of regional importance that match MIT's strengths and could fuel regional collaboration include:
  - Advanced manufacturing capacity
  - Workforce development
  - Digital learning
  - Transportation
  - Robotics
  - Big Data
  - Healthcare
  - Supporting companies throughout their lifecycle
The Political Lens allows us to understand a system by determining where power and influence are located, social networks, and the interests of various stakeholders. Findings that fell in this realm include:

- Many players in the region are eager for MIT to take a leadership position and believe there would be much support for MIT to convene regional leaders. The world-class caliber of MIT will always draw interest.
- Engagement in the region should speak not only to MIT’s areas of expertise, but must also be matched to critical regional needs.
- Faculty engagement and involvement in regional strategy is critical to creating a sustainable effort. A regional engagement strategy should be affiliated with a faculty driven effort, like the Innovation Initiative or a regional engagement research group.
- Regional collaboration is more politically viable with the current state and local government administrations and has created useful initiatives for the region, such as the MGHPC.
- Industry brings challenges that MIT can work on and contribute to.
- It is important to consider whether direct industrial competitors should be included in a group that MIT convenes.
- Small companies may not have the critical mass of capital to fund research at MIT scale, but they are an important part of the regional ecosystem. Additionally, corporations are not always interested in working with start-ups.
- Conversations between leaders often catalyze action and lead to implementation of collaborative efforts.
- It is important to have senior leadership involved in any new effort in this area to generate interest from industry, government, etc.
- Partners can be chosen based on common strengths and existing regional networks and strategies, such as UMass and MACP.
- Many states have multi-sector groups that convene to foster innovation and economic growth in a specific geographic region.

The project team applied the Cultural Lens to gather intelligence on the values and assumptions, traditions, and practices of the various stakeholders in the regional ecosystem. The following findings provided insights on the cultural dimension in determining a potential regional engagement strategy for MIT:

- MIT is viewed as a thought leader, honest broker, and a problem-solving organization and has great potential to generate action in the region.
- A regional engagement strategy aligns with MIT’s mission of advancing knowledge to serve the nation and the world.
• MIT has historically been more focused on producing rather than promoting its work in the region. There is an appetite, both internally and externally, for MIT to take on a more visible role.
• Participants in a multi-sector group may have different expectations regarding speed of action.
• MIT is sometimes seen as “out of reach” for local and regional individuals and groups. Strategic regional engagement can enhance the perception of MIT’s approachability.
• While many regionally focused groups exist, they often focus on near term objectives. Universities such as MIT can help the region to focus on longer term challenges and solutions.

**Strength, Weakness, Opportunity, Threat/Challenge (SWOT) Analysis**

By assessing the current state of MIT’s engagement in the region, a SWOT analysis enables further work to leverage strengths, minimize the impact of weaknesses, capitalize on opportunities, and mitigate threats and challenges. The project team examined MIT’s current regional approaches and environment using this tool. The analysis is included in Appendix D.

**Gap Analysis**

Using the understanding gained via the SWOT analysis, the project team then examined the gaps between the current state without a unified regional strategy and the desired future state to create one. This analysis is included in Appendix E.

**Potential Regional Engagement Activities Identified By Interviewees**

Interviewees offered many compelling ideas to consider for inclusion in a regional engagement strategy, included below.

• Interviewees observed that while the region has strength in creating new businesses, as those businesses grow many move to other locations outside of this region. They suggested that a study be done to analyze the factors that contribute to driving manufacturing companies away from the region.
• Create a South by Southwest (SXSW)-like event in the Boston area to attract individuals and businesses to MIT and the region.
• Conduct a study focused on a specific regional challenge to serve as a catalyst for action.
• Examine Institute intellectual property (IP) policies and determine what changes might promote innovation in the region.
• Co-write editorials with partners to support regional development.
• Meet with the Massachusetts governor-elect to share MIT’s strengths and the possibilities for collaboration to drive innovation and generate economic impact.
• Launch a task force to develop a concept paper about MIT’s role in regional engagement in order to engage a broad set of faculty.
• Offer workshops and seminars to regional leaders to provide inspiration and awareness to develop the region.
• Establish a research program at MIT focused on regional engagement and development.

III. Recommended Strategies

Based on the analysis above the project team identified a multifaceted set of recommendations to create a sustainable regional strategy for MIT. Appendix F captures an overall summary of these strategies.

A. Primary Strategy

Recommendation: MIT should convene a group of multi-sector, regional leaders to advance the region as a center of innovation and growth.

The purpose of this strategy is to create an engine for regional development leveraging the strengths of universities, industry, non-profits and state and local government to address mutual interests in regional challenges.

The project team recommends that in order to be successful and sustainable over the long term, the group will need to be:

• Convened by MIT senior leadership (President and/or Provost).
• Supported by a faculty lead to work with MIT leadership to develop the vision and identify potential topics for the regional group. The faculty lead should have regional engagement as part of their research focus or agenda. (Possible leads could include Richard Lester, whose research has been focused on regional engagement strategies for many years, or Fiona Murray, who is a lead of the Innovation Initiative.)
• Supported by a dedicated MIT staff position that works with the faculty lead, administration, and regional partners to coordinate activities of the group. This position could start out as part of an existing role and may develop into a full-time position as work progresses.
• Based on topics of mutual interest to MIT and the region with a particular focus on areas that leverage MIT’s expertise.
• Housed within a high-level, faculty-driven home at MIT, such as the Innovation Initiative.

Core members of the group should include:
• Representation from Massachusetts higher education institutions, both public and private, such as UMass, Harvard, Northeastern, BU, and community colleges.
• Senior leaders from companies of all sizes and stages of maturity as well as organizations comprised of key industry leaders such as the Mass Competitive Partnership (MACP), Mass Biotech Council and the Chamber of Commerce.
• High-level state and local government leaders.
• Senior leaders from large non-profit organizations such as hospitals and foundations.
• Additional involvement will depend upon the specific topics and projects selected by the group.

Topics that may be of mutual interest for the group to explore include:

• Institute campaign themes: Innovation, Digital Learning, Environment, Health, Basic Research
• Building regional capacity for: Big Data, Transportation, Manufacturing, Workforce Development, Cybersecurity, Robotics, Biotech, etc.

The faculty lead will source and propose to the core team potential projects and initiatives that reflect member strengths and regional needs. The core team would meet regularly, perhaps twice a year, to vet, prioritize, and supply resources and funding to support these projects and initiatives. Task force sub-groups can be initiated with additional appointees (VP and Director level) as appropriate to pursue topics identified by the core team and make them actionable. It will be important to monitor the progress of the initiatives and maintain a focus on the future. A communications strategy should also be developed to create awareness and sustain the impact of the group and specific initiatives.

B. Additional Strategies

Pursuing the primary strategy alone would certainly have an impact on the region. In addition, the effectiveness of the group of leaders may be further enhanced if MIT also pursues a range of near and longer term strategies.

Near Term

• Brief the Governor-Elect

With the upcoming change in state leadership, there is an opportunity for MIT to brief the new governor. This could help inform the new administration of current and potential opportunities to advance the state as a center of innovation and growth.

Given the time-sensitive nature of this recommendation, Appendix G is the memo that was delivered to the L2L project sponsors on November 14, 2014 ahead of this
report. The memo details the full recommendation for the governor briefing, including a suggested agenda, topics to cover, and attendees.

- **Develop a Communications Strategy**

Another important near term effort is for MIT to develop a communications strategy that highlights all of the various activities it is participating in and their impact on the region. It should also include joint communications with MIT's regional partners. A consistent communications strategy is an area that the interviewees agreed that MIT could improve upon, and it will become even more important to the work that will be done by the regional leadership group.

- **Coordinate with Regional Events**

MIT hosts many events each year that could be incorporated into its overall regional strategy. In particular, the inaugural SOLVE event in October 2015, presents an opportunity to establish a parallel track for regional projects with the global focus of the event. The same approach could be taken for other events in the region, such as the upcoming HUB event.

- **Launch a Faculty-Led Task Force**

One of the keys to a successful regional engagement strategy at MIT is faculty involvement. Many MIT faculty members are already doing a great deal of work individually in the region and have existing relationships with regional partners. As such, in order to tap into this expertise and garner faculty interest in an overarching strategy, MIT should establish a faculty-led task force to prepare a concept paper on the regional economy and MIT's impact and potential future directions.

**Mid to Longer Term**

- **Educate and Develop Workforce**

One of the topics most prevalent in the research and interviews performed was workforce development. MIT has a great opportunity to engage faculty and students to raise the knowledge and skill level around innovation and inspire action. This could be done through providing workshops or events focused on innovation in the region. These efforts should be coordinated with or through the Innovation Initiative to educate leaders and members of the regional workforce.

- **Establish an Interdisciplinary Research Program**

A longer term strategy is to establish an interdisciplinary research program at MIT focused on regional development. This would serve as a supporting infrastructure for all of MIT's current and future regional work. It could be housed under the Department of Urban Studies and Planning or the Sloan School of Management.
IV. Conclusion

It is clear that members of both the MIT and the regional communities are eager for the Institute to take an active role in organizing around the future of the region and its economy. As MIT is a global leader in tackling the future of education and mobilizing around innovation, these and other efforts could be aligned to serve the needs of the regional community while also illuminating and advancing MIT’s strengths and expertise. For all of the reasons highlighted in this report, now is the time for MIT to take action. Whether all or some of the recommended strategies are employed, this is an opportunity that should not be missed.
V. L2L Leadership Lessons

Intentionally considering leadership and applying L2L learnings shaped the approach and outcome of our group in three ways. First, we considered leadership as we planned and structured the group’s work over the 6-month project period. Second, applying leadership skills, in particular L2L tools, was key to the team’s ability to understand, analyze and make recommendations on a broad, complex topic in a set time frame. Third, building leadership skills deepened understandings of social dynamics across the team and fostered self-reflection.

At our first project meeting in March 2014, we discussed how we would work together as a team. How would five professionals with different backgrounds, other work obligations and limited exposure to the topic work together fruitfully? Our first step was to schedule a recurring weekly meeting. We discussed and agreed on a distributed leadership style, with a rotation of the role of meeting facilitator and note taker. As the work of the project shifted to interviews and longer working sessions, there was a balance of flexibility and adjustment to schedules. A base assumption of good will, shared commitment and enthusiasm for the project existed among team members.

We moved from how we would work to how we would approach the topic of a regional engagement strategy for MIT. From our first discussion with our project sponsor, we came to appreciate that this was a broad topic, and one that has been considered and, is actively being considered, by many across the Institute. We narrowed the scope early on and later expanded the topic based on feedback from our sponsors at the July meeting. Each interview conducted and report read led to other suggested interviews and reports. Applying the tools of gap analysis, SWOT analysis, and the Three Lenses framework helped synthesize the information we were gathering.

Gaining insights about listening was an important part of our learning. Throughout the project we found the power of listening more and talking less. Over the course of more than a dozen project interviews, we observed that many of our best learning experiences came when we had posed a few thoughtful questions and then spent the majority of the time listening. The team continually checked in with each other as the project progressed, building consensus and trust along the way. Listening to our process coach, Blanche, and the feedback from Glen, Marty and Karen gave us insights, direction and the benefit of their experiences.

We worked as a team of equals using the opportunity to build leadership skills to develop understanding of social dynamics of the group and our own self-reflections. Candid discussions of self-assessments, interests and experiences created an environment where individual differences could be leveraged, and different learning styles tried. For example, at an early meeting a team member reflected how she was a visual learner. Going forward, the team incorporated the use of a white board and found this helpful in moving the
discussion forward. Discussing our plus/deltas at the conclusion of a meeting and reflecting on our leadership journeys were particularly compelling. Taking the time to know each other both personally and professionally made the experience more rewarding and there is no doubt that these relationships will continue beyond L2L graduation.

We are grateful for this opportunity to contribute to the thinking of the Institute and to practice leadership through this project over the past six months. A special thanks to Blanche Staton, Glen Comiso, Karen Gleason and Martin Schmidt for their guidance. Thank you to Margaret Ann Gray, David Hosmer, Brian McDonald and Elizabeth Hawley for their invaluable instruction and organization.
Appendices
Appendix A: Interviews

Internal:

• **Sarah Gallop**, Co-Director, MIT Office of Government and Community Relations. Interviewed May 29th, 2014.
• **Professor Fiona Murray**, Associate Dean of Innovation; Alvin J. Siteman (1948) Professor of Entrepreneurship, Faculty Director, Martin Trust Center for MIT Entrepreneurship; and **Philip Budden**, MIT Sloan Senior Lecturer. Interviewed June 20th, 2014.
• **Glen Comiso**, Chief of Staff, MIT Office of the President. Interviewed June 26th, 2014.
• **Elisabeth Reynolds**, Executive Director, MIT Industrial Performance Center and Research and Policy Advisor to Massachusetts Competitive Partnership. Interviewed July 9th, 2014.
• **Paul Parravano**, Co-Director, MIT Office of Government and Community Relations. Interviewed August 26th, 2014.
• **Professor Richard Lester**, Japan Steel Industry Professor, Department Head, Nuclear Science and Engineering. Interviewed September 3rd, 2014.

External:

• **Steve Lerman**, Provost and Executive Vice President for Academic Affairs, The George Washington University. Formerly Dean for Graduate Education and Professor of Civil Engineering at MIT. Interviewed August 1st, 2014.
• **Bryan Jamele**, Executive Vice President, Massachusetts Competitive Partnership; and **Kelsey Cintolo**, Vice President for Research & Policy, Massachusetts Competitive Partnership. Interviewed August 7th, 2014.
• **Kevin Casey**, Associate Vice President (and Acting Vice President) for Public Affairs and Communications, Harvard University; and **Morgan Day Harris**, Public Affairs Associate, Harvard University. Interviewed September 17th, 2014.
Appendix B: Bibliography


Lester, Richard and Graham, Leigh, *MIT in the Local Economy: A paper prepared for the President’s Advisory Council on Regional Engagement*, October 2009 (Confidential)


Reynolds, Liz, *ACRE Assessment*, December 2012 (slides)


Appendix C: Existing Efforts & Initiatives with Regional Impact

Through the interviews and documents reviewed we created this partial list of existing regional efforts at MIT as well as initiatives that are convened external to MIT that bring together multiple organizations to initiate collective action in the region.

At MIT:

• Industrial Liaison Program (ILP)
• Industrial Performance Center (IPC)
• Office of Community and Government Relations
• Public Service Center (PSC)
• Innovation Initiative
• Martin Trust Center for MIT Entrepreneurship
• Enterprise Forum
• Venture Mentoring Service (VMS)
• BioMAN biomanufacturing research program
• Advisory Council on Regional Engagement (ACRE; past)
• Presidential CEO Advisory Board
• Technology Licensing Office (TLO)
• Deshpande Center (includes MIT IdeaStream [conference])
• Undergraduate Practice Opportunities Program (UPOP)
• Sandbox Program – helping students develop business ideas
• Numerous individual relationships/collaborations between faculty and local companies

In the Region:

• Cambridge Innovation Center (CIC) – innovation, incubator spaces
• Massachusetts Competitive Partnership (MACP) – CEOs, industry only; economic development
• Mass Biotech Council – large network of biotech companies, universities, government; workforce development, economic development
• Mass Life Science Initiative/Mass Life Sciences Center
• MGHPCC – university partnership to provide high performance computing
• Kendall Square Association
• MassTech – Massachusetts Technology Collaborative
• MassChallenge – startup competition
• AICUM – state government lobbying group for Massachusetts universities
• Clean Energy Center
• Massachusetts Manufacturing Collaborative
**Appendix D: SWOT Analysis**

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<th>Strengths:</th>
<th>Weaknesses:</th>
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<tr>
<td>• Viewed as honest broker</td>
<td>• Most MIT students are not from the region</td>
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<td>• Stature and reputation</td>
<td>• No strategy for retaining grads in the region</td>
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<td>• Variety and depth of experience</td>
<td>• Not self-promotional</td>
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<td>• Problem solving orientation</td>
<td>• Decentralized and complex institution</td>
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<td>• Proven thought leader</td>
<td>• Can appear intimidating to outsiders</td>
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<td>• Roots in industry/regional engagement</td>
<td>• Limited bandwidth of faculty</td>
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<td>• Mission is to improve lives</td>
<td>• Difficulty of gaining sustained faculty interest given many competing</td>
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<td>• Educational institution</td>
<td>opportunities</td>
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<td>• Produces future leaders</td>
<td>• Funding sources drive/restrict scope of faculty research</td>
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<td>• Inclusive, open and sharing culture</td>
<td>• Well-funded faculty may not be interested in pursuing regional over global</td>
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<td>• Leader in innovation</td>
<td>activities</td>
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<td>• Leader in digital education</td>
<td>• Lack of coordination of MIT’s existing regional activities</td>
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<td>• Regional alumni network</td>
<td>• Students are interested in global opportunities</td>
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<td>• Entrepreneurial culture</td>
<td>• Strict/inflexible IP policies</td>
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<td>• Ability to attract funding</td>
<td>• Need to diversify funding sources</td>
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<td>• Already actively engaged in region</td>
<td>• Focus on digital education may destabilize aspects of higher education</td>
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<td>• Greater interest in innovation</td>
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<td>• Other organizations could take leadership role first</td>
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<td>• High cost of living in region</td>
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<td>• Transportation issues</td>
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<td>• Aging infrastructure (region and MIT)</td>
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<td>• MIT’s existing involvement in existing regional groups: is there more</td>
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<td>room/bandwidth?</td>
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<th>Opportunities:</th>
<th>Threats/Challenges:</th>
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<td>• Viewed as honest broker</td>
<td>• Need to diversify funding sources</td>
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<td>• Upcoming change in state leadership</td>
<td>• Focus on digital education may destabilize aspects of higher education</td>
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<td>• Change in MIT senior leadership</td>
<td>• Greater interest in innovation</td>
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<td>• Strong (internal and external) desire for MIT to be engaged in region</td>
<td>• Other organizations could take leadership role first</td>
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<td>• Broad range of potential topics for MIT involvement</td>
<td>• High cost of living in region</td>
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<td>• Region as a nearby test-bed for MIT for research projects</td>
<td>• Transportation issues</td>
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<td>• Geographic proximity is more efficient/attainable regionally than</td>
<td>• Aging infrastructure (region and MIT)</td>
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<td>globally</td>
<td>• MIT’s existing involvement in existing regional groups: is there more</td>
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<td>• Challenges for students in pursuing global experience mean that many</td>
<td>room/bandwidth?</td>
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<td>students may find regional opportunities attractive</td>
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<td>• Raising MIT’s profile in the region</td>
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<td>• Build on existing MIT collaborations in intentional/coordinated manner</td>
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<tr>
<td>• Raising MIT’s awareness of regional activities</td>
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<td>• Ability to leverage existing regional groups</td>
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Appendix E: Gap Analysis

Reflecting on MIT's current engagement in the region:

- Regional engagement activities are diffuse and uncoordinated at MIT.
- There is no identified ownership in the organization.
- There are many potential players.
- There is no vetting process for ideas or topics for regional partners/collaborators (learned from ACRE).
- There is no process in place to leverage faculty interest in regional activities in a unified way.
- There are no funding sources specifically targeted to regional activities.
- There is no defined roadmap or vision.
- Conflict often exists between open culture and restrictive intellectual property (IP) policies.
Appendix F: Summary of Recommended Strategies

Multi-sector group of regional leaders convened by MIT leadership

*Goal: Advance the vibrancy of the regional economy*

- MIT Faculty Lead
- MIT Staff Member
- Topic Based Sub-Groups

**Near Term**
- Brief new governor
- Develop communications strategy
- Coordinate with regional events
- Establish faculty-led task force

**Mid/Long Term**
- Offer workshops to raise knowledge and skill level around innovation
- Establish research program focused on regional development

*Future Work*
Appendix G: Recommendations for a Meeting with the Governor

Prepared for: Martin Schmidt, Karen Gleason, Glen Comiso
November 13, 2014

Thank you for the opportunity to suggest an approach for MIT to meet with the governor-elect, Charlie Baker. The upcoming change in state government presents a timely opportunity to advance and strengthen MIT’s contributions in the state. Below we offer an approach for shaping that meeting based on our knowledge of the needs in the region and Charlie Baker’s campaign platform. We believe that there is significant overlap between the governor-elect’s agenda and MIT’s strengths.

Reaching out as soon as possible before his inauguration is key, as this may help inform Baker’s initial actions as governor. Ideally a two-hour meeting would enable MIT to cover a robust agenda, but even a one-hour session would be useful for establishing a relationship with the new administration.

MIT’s goals for this meeting are to:

- Establish a relationship with the new administration;
- Show support for collaboration for the betterment of the state;
- Learn more about Baker’s economic development agenda;
- Share MIT’s strengths and possibilities for collaboration.

Proposed meeting agenda

Introductions
Context Setting

1. Universities drive innovation and generate economic impact
2. Reflect on the power of collaboration and give examples of how MIT is advancing state interests
   a. SOLVE/HUB – raising the profile of Massachusetts as a powerhouse of innovation
   b. Center for Microbiome Informatics and Therapeutics – collaboration between MIT and MGH to foster a regional ecosystem with other hospitals, universities, and research institutions
   c. MGHPCC – collaboration in western Massachusetts with other universities, government, and industry
   d. Bunker Hill Community College and MITx – collaboration addressing education and workforce development needs
3. MIT can help Massachusetts become a global leader in a variety of areas
4. MIT is committed to and dependent on the success of the region
Questions related to Baker’s platforms and priorities

1. What are his views on innovation and state economic development?
2. What are his thoughts about collaboration with universities and MIT specifically?

Sharing MIT’s strengths in innovation

1. Innovation in Digital Education - Baker has expressed concern about the affordability of education and workforce development and the potential of digital learning to enable progress.
2. Innovation in Energy – Baker clearly stated clean energy innovation is an area of interest

Discuss areas of common interest and how MIT and the state government can partner

Summary and Wrap Up

Suggested MIT Attendees:

- Rafael Reif
- Marty Schmidt
- Karen Gleason
- Fiona Murray or Vladimir Bulovic (innovation)
- Sanjay Sarma or Anant Agarwal (digital learning)
- Martha Broad or Robert Armstrong (energy)
- Glen Comiso
- Paul Parravano

Additional considerations and suggestions

The agenda topics were developed based on interests highlighted during Baker’s campaign. Here we pose additional thoughts on what might be considered ahead of the meeting or included in the agenda.

- Since MIT has strengths in multiple areas beyond those suggested above that match potential state needs, are there other topics, such as health, healthcare systems, or transportation, which might also be relevant to discuss?
- Is creating an action plan a priority for MIT at this first meeting in addition to information sharing and relationship building?
- Are there ready-to-share collaborative proposals that MIT would like to introduce at this meeting?
- Recommend sharing this agenda with Richard Lester, Liz Reynolds, and Paul Parravano for further input.
Another approach to this meeting would be to include regional partners in briefing the governor-elect. This could have the benefit of jump starting the creation of a multi-sector group of regional leaders, convened by MIT.

- The goals for the meeting would shift to include those from the partner organizations. For instance, the group could support the advancement of MACP’s proposed Technology Industry Strategy. UMass is also interested in digital learning, workforce development, and advanced manufacturing.

- The participants could include leaders from UMass (Robert Caret, Thomas Chmura, Douglas Banks) and MACP (Daniel O’Connell, Bryan Jamele). In this scenario the MIT participants could be reduced to Raphael Reif, Marty Schmidt, Karen Gleason, Glen Comiso, and Paul Parravano.

- Possible agenda:
  - Introductions
  - Context setting
  - Questions related to Baker’s platforms and priorities
  - Sharing the participants’ strengths for promoting growth in the region
  - Discuss areas of common interest and how universities, industry, and the state government can partner
  - Wrap Up