OVERVIEW

THE CEO COUNCIL FOR GROWTH is excited to present the following summary to its report, entitled “Technology Transfer and Commercialization in Greater Philadelphia.” It provides a roadmap for capitalizing on the tremendous potential of Greater Philadelphia’s culture of innovation and entrepreneurship.

THE CEO COUNCIL FOR GROWTH (CEO COUNCIL), an initiative of the Greater Philadelphia Chamber of Commerce, commissioned Econsult Solutions, Inc. to refresh the CEO Council’s 2007 report on the gap between the region’s relatively robust science and technology research and its lagging new private sector development. This summary highlights how the Greater Philadelphia region has changed and shows how it is doing relative to other regions based on interviews, surveys, and benchmarks established in the 2007 report.

This report advances an overarching goal as well as four recommended actions that will help the region advance its commercialization potential. Such a goal should activate the manifold strengths of the region in research activity while focusing attention and resources to overcome the region’s present shortfall in large-scale commercialization success.

The Greater Philadelphia region has a tremendous opportunity to become an economic leader. It possesses a strong commercialization infrastructure, one of the nation’s largest and richest life science and health care industry clusters, and one of the world’s leading collections of colleges and universities. To that end, the findings and recommendations laid out in this report will help to leverage the region’s many assets to achieve the goals of accelerating commercialization activity and enhancing Greater Philadelphia’s considerable economic potential.

GOAL: In the next 10 years, the region’s research institutions will birth 10 companies that grow to a liquidity event (e.g. acquisition or initial public offering) of $100 million or more.

The recommendations are intended to provide multiple on-ramps for multiple actors to play their part in coordinating a regional approach to achieving this potential.

• FUND. Public and private sector participation should be recruited to fund additional pre-venture capital funds and business acceleration services.

• ADVOCATE. The region should advocate for policies at all levels of government that demonstrate a commitment to innovation as an economic driver.

• COLLABORATE. Collaboration must be encouraged, particularly through the use of shared space and shared equipment. A particular focus should be placed on elevating the work of the region’s engineering schools, given the promising intersections of engineering and health care (e.g. medical devices), engineering and energy (e.g. energy storage), and engineering and advanced manufacturing (e.g. composite materials).

• PROMOTE. The region’s leaders must work together to promote the region as an innovation hub, making particular appeals to venture capital firms seeking deals, young research and entrepreneurship talent seeking a place to learn and grow, and established entrepreneurs with regional ties who can help grow the next generation of startup ventures.

The full “Technology Transfer and Commercialization in Greater Philadelphia” report is available online at CEOCOUNCILFORGROWTH.COM.
DUE TO THE IMPORTANCE OF TECHNOLOGY TRANSFER to a region’s vitality, the CEO Council, commissioned a study in 2007 on the Greater Philadelphia region’s performance in technology transfer and commercialization. The report described a region rich in potential, but one suffering a gap between its robust science and technology research assets and its lagging private sector development track record.

A lot has happened in the past seven years. Notably, the region has seen significant leadership changes at key institutions. This has presented an opportunity for these entities to declare and enact fundamental changes in their overall objectives. Not coincidentally, many research institutions are in the midst of significant reforms in the structure and focus of their technology transfer offices, and entrepreneurship is increasingly emphasized as a way to recruit students, faculty, and researchers. Thus, it is useful to recalibrate the 2007 evaluation of the Greater Philadelphia region’s competitive position given these shifts.

This was accomplished by examining how a series of metrics have changed since 2007 and comparing Greater Philadelphia with peer regions, through interviews with over 30 leaders representing almost all of the major institutions in the region, and by surveying over a hundred organizations throughout the region. Between these primary and secondary research efforts and the results of the data analyses, a very rich sense of the region’s condition as a major technology transfer and commercialization center could be determined; this yielded a set of implications and resulting recommendations for the region.

INTRODUCTION

In a knowledge-based economy, regions win when they cultivate vibrant entrepreneurial ecosystems, because these are the settings that attract intellectual and financial capital. Technology transfer, defined here as the translation of research discoveries into commercializable products, is an important component of any region’s innovation economy, a marker not only of a region’s productivity as a knowledge center but also of its capacity for and receptivity to innovation.
KEY FINDINGS

The region’s productivity, relative to that of other regions, was measured in seven categories, commensurate with the initial inputs, innovation activity, and desired outcomes that define technology transfer activity (see Table 1). The region scored well in research categories and less well in commercialization categories. Ominously, the national leaders generated several multiples more in activity than the Greater Philadelphia region.

For each of these metrics, results were indexed by category such that the Greater Philadelphia region’s levels were set at 100 and other regions’ levels were calibrated based on that scale. These categorical indices were then averaged to yield a consolidated index which provides an easy understanding of Greater Philadelphia’s overall performance levels (see Table 2). Compared to other regions, Greater Philadelphia fell one place in each categorical index while ranking 6th in the consolidated index, down one place from 5th in 2007, and trailing Boston, New York, the Tech Coast, San Francisco, and Raleigh Durham (see Table 3). The full report and additional detail on index results is available at ceocouncilforgrowth.com.

While the regions placing ahead of Greater Philadelphia are bona fide technology transfer giants, it is troubling that Greater Philadelphia’s ranking is declining across the board. It is also troubling that the highest ranked regions boast two or more times more activity than Greater Philadelphia.

Greater Philadelphia’s strong showing in degrees conferred and its middle-of-the-pack performance in academic research and development funding received is consistent with many regional leaders’ perception of the region’s strengths and shortcomings. Greater Philadelphia is dense in institutions of all sizes and disciplines, which produces an impressive number and diversity of graduates.

<table>
<thead>
<tr>
<th>Category</th>
<th>Metric</th>
<th>Rank (Change)</th>
<th>#1 Region (# Times Larger)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Inputs</td>
<td>STEM Degrees</td>
<td>3 (↑1)</td>
<td>New York 2.2x</td>
</tr>
<tr>
<td></td>
<td>Academic R&amp;D $</td>
<td>7 (↓)</td>
<td>Tech Coast 2.6x</td>
</tr>
<tr>
<td>Innovation Activity</td>
<td>Invention Disclosures</td>
<td>4 (↑2)</td>
<td>Boston 2.9x</td>
</tr>
<tr>
<td></td>
<td>Patents Granted</td>
<td>6 (↑1)</td>
<td>San Francisco 6.4x</td>
</tr>
<tr>
<td>Desired Outcomes</td>
<td>Licenses Executed</td>
<td>5 (↓1)</td>
<td>Boston 3.8x</td>
</tr>
<tr>
<td></td>
<td>Startups Formed</td>
<td>7 (↑1)</td>
<td>Boston 4.9x</td>
</tr>
<tr>
<td></td>
<td>Venture Capital</td>
<td>12 (↓)</td>
<td>Silicon Valley 18.6x</td>
</tr>
</tbody>
</table>

While the regions placing ahead of Greater Philadelphia are bona fide technology transfer giants, it is troubling that Greater Philadelphia’s ranking is declining across the board.

Greater Philadelphia’s strong showing in degrees conferred and its middle-of-the-pack performance in academic research and development funding received is consistent with many regional leaders’ perception of the region’s strengths and shortcomings. Greater Philadelphia is dense in institutions of all sizes and disciplines, which produces an impressive number and diversity of graduates.

<table>
<thead>
<tr>
<th>Index</th>
<th>2007 Rank</th>
<th>2012 Rank</th>
<th>Rank Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Inputs</td>
<td>5</td>
<td>6</td>
<td>↓1</td>
</tr>
<tr>
<td>Innovation Activity</td>
<td>5</td>
<td>6</td>
<td>↓1</td>
</tr>
<tr>
<td>Desired Outputs</td>
<td>6</td>
<td>7</td>
<td>↓1</td>
</tr>
<tr>
<td>Consolidated</td>
<td>5</td>
<td>6</td>
<td>↓1</td>
</tr>
</tbody>
</table>
Importantly, more and more are staying in the Greater Philadelphia region, thanks to the kinds of quality of life enhancements that are important to young knowledge workers.

However, while other regions have two or even three institutions that receive more than $500 million per year in research and development funding, the University of Pennsylvania (Penn) stands alone in Greater Philadelphia. As more and more research funding concentrates at the very large institutions, regions that have more than one such entity find themselves at a distinct advantage, in terms of scale and diversity, over regions that have one or none.

**Greater Philadelphia is dense in institutions of all sizes and disciplines, which produces an impressive number and diversity of graduates.**

A lower ranking in patents versus invention disclosures bespeaks a commonly held perception about the region, which is that its impressive cluster of research institutions and research activity does not translate into a commensurate amount of commercializable activity relative to its peer regions. And, its slide in the patent rankings from 5th in 2000–2005 to 6th in 2006–2011 describes not only a reduction in innovation production, relative to other regions, but also a potential future decline if it results in the loss of knowledge workers and knowledge activity to other, more productive regions.

Much of this disconnect can be explained through the importance of engineering and computer science to innovation activity in general and to patent activity in particular. Greater Philadelphia generates intellectual capital in the life sciences and biotechnology spaces, but its corporations are not nearly as dominant in producing technology-related innovations. In contrast, San Francisco, the Tech Coast, New York, and Boston, with their concentrations of technology ventures, are prolific in patent activity. And Seattle, also rich in information technology and software companies, saw a significant jump in patent activity between the 2000–2006 and 2007–2012 periods.

Commercialization through licensing is, all else equal, less risky than commercialization through spinoff startup ventures. Relative to other regions, the Greater Philadelphia region is more high-performing in licensing agreements (5th out of 15) than in spinoff startup ventures (7th out of 15), which is consistent with the assessment among regional leaders that the Greater Philadelphia region is more risk-averse than other regions. This fact is not unrelated to its relative underperformance in venture capital investment received (12th out of 18), since venture capital flows to high-risk and high-return startups rather than to established entities.

According to many interviewees, Greater Philadelphia continues to need to promote itself to national venture capital firms seeking attractive innovations to invest in. Greater Philadelphia’s strengths in life sciences also create a challenge for attracting early stage capital, since the lead times and funding requirements in that space are often long and prohibitive, in contrast to the diminishing turnaround times and funding needs of ventures in other sectors such as information technology and social media.

Fundamentally, capital flows to the best ideas, and is in this sense the purest form of market signal. Whereas licensing agreements and startup ventures represent institution-originating metrics, venture capital represents a market defined metric. This notion of how to translate the impressive density and productivity of the region’s research institutions into capital attracting innovations is further explored in the final two sections of this report.

### TABLE 3 – CONSOLIDATED INDEX RESULTS FROM THE 2007 REPORT AND THIS REPORT

<table>
<thead>
<tr>
<th>Region</th>
<th>2007 Average</th>
<th>2007 Rank</th>
<th>2014 Average</th>
<th>2014 Rank</th>
<th>Rank Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>68.5</td>
<td>9</td>
<td>76.5</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Austin</td>
<td>46.0</td>
<td>13</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Baltimore</td>
<td>83.2</td>
<td>7</td>
<td>77.3</td>
<td>8</td>
<td>↓1</td>
</tr>
<tr>
<td>Boston</td>
<td>265.3</td>
<td>1</td>
<td>265.9</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Houston</td>
<td>81.2</td>
<td>8</td>
<td>61.0</td>
<td>11</td>
<td>↓3</td>
</tr>
<tr>
<td>Nashville</td>
<td>20.9</td>
<td>15</td>
<td>23.2</td>
<td>14</td>
<td>↑1</td>
</tr>
<tr>
<td>New York</td>
<td>164.5</td>
<td>3</td>
<td>207.5</td>
<td>2</td>
<td>↑1</td>
</tr>
<tr>
<td>Greater Philadelphia</td>
<td>100.0</td>
<td>5</td>
<td>100.0</td>
<td>6</td>
<td>↓1</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>59.0</td>
<td>11</td>
<td>68.1</td>
<td>10</td>
<td>↑1</td>
</tr>
<tr>
<td>Raleigh Durham</td>
<td>94.9</td>
<td>6</td>
<td>101.0</td>
<td>5</td>
<td>↑1</td>
</tr>
<tr>
<td>San Francisco</td>
<td>160.4</td>
<td>4</td>
<td>178.1</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Seattle</td>
<td>62.4</td>
<td>10</td>
<td>93.0</td>
<td>7</td>
<td>↑3</td>
</tr>
<tr>
<td>St. Louis</td>
<td>37.5</td>
<td>14</td>
<td>32.0</td>
<td>13</td>
<td>↑1</td>
</tr>
<tr>
<td>Tech Coast</td>
<td>206.9</td>
<td>2</td>
<td>197.0</td>
<td>3</td>
<td>↓1</td>
</tr>
<tr>
<td>Tech Valley</td>
<td>N/A</td>
<td>N/A</td>
<td>19.4</td>
<td>15</td>
<td>N/A</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>58.9</td>
<td>12</td>
<td>59.6</td>
<td>12</td>
<td>-</td>
</tr>
</tbody>
</table>
INDEED, “THE RAINFOREST: THE SECRET TO BUILDING THE NEXT SILICON VALLEY,” a recent and seminal book about Silicon Valley, asserts that just as rainforests have been found to yield unexpected and innovative discoveries, so it is that ecosystems cannot predict what new innovations it will birth, but that rather they emerge as a result of the high number and wide range of random interactions that are contained within them.

Flourishing, then, comes from a rich, resilient, and multi-faceted setting in which innovation can be birthed and grown. Evaluating a region’s performance and prescribing interventions is less about identifying a singular problem or solution and more about stimulating an environment in which the necessary ingredients are in place for innovation. These were found to be the common ingredients that characterize strong technology transfer hubs:

1. Venues and entities that facilitate **COLLABORATION**
2. An open and entrepreneurial **CULTURE**
3. Sufficient **FUNDING** and related mechanisms
4. A large and engaged **PRIVATE SECTOR**
5. Strong **RESEARCH INSTITUTIONS**
6. An awareness of the **RESEARCH PRIORITIES** that make sense for a region
7. A deep **TALENT** pool.

This list of ingredients, gleaned from interviews, surveys, and best practices research, was synthesized with the analytics from the previous section into an assessment of the Greater Philadelphia region’s performance in technology transfer and commercialization. It was found that while the region is strong in research activity, it is also less effective at translating the output of this research activity into commercially viable innovations that attract venture capital. Addressing this mismatch will be crucial to leveraging the region’s research strengths and elevating the region as a technology transfer leader. This assessment, which includes affirmations of the region’s strengths, identifications of areas of shortcomings and decline, and clarifications of commonly held perceptions that may not be completely true, was used to inform the recommendations that follow.
RECOMMENDATIONS

The purpose of this section is to articulate a roster of recommendations that will move the Greater Philadelphia region to a stronger competitive position in technology transfer and commercialization. These recommendations represent the confluence of assessments, implications, strengths, and opportunities, as identified through the research process undertaken in the production of this report. They reflect the insights gleaned from interviews, surveys, and best practices research, and are advanced in light of the region’s performance in the key technology transfer metrics described above.

THE PREMISE BEHIND THE GOAL AND RECOMMENDATIONS

These recommendations are borne of an assessment of the region as relatively strong in its depth and breadth of research activity on the front end of the technology transfer pipeline, but relatively less effective at translating the output of that research activity into commercially viable innovations that attract venture capital on the back end of the pipeline. That many promising innovations languish here is no surprise and is not unique to the region—as noted in the previous section, this gap is often referred to “the valley of death” and is often where innovations cease to advance—but addressing this mismatch will be crucial to leveraging the region’s research strengths and elevating the region as a technology transfer leader.

What is needed, then, is a coordinated regional strategy that yields more capital and more support near the front end of the technology transfer pipeline, to the end of encouraging, seeding, and growing more early stage activity while increasing opportunities for company scaling. This will have the effect of attracting more venture capital interest and will ultimately lead to more venture capital deals, providing further stimulus for successive generations of research and commercialization activity.
ONE OVERARCHING GOAL

Innovation in general and technology transfer in particular do not lend themselves to pre-ordained and centrally determined objectives. The ecosystem analogy advanced in this report reflects a fast-moving field in which nimbleness, resiliency, and initiative trump top-down mandates.

However, singular ambitious goals can have the effect of clarifying and coordinating a region’s efforts. They can represent in simple terms a preferred outcome that multiple actors at multiple levels in multiple entities can understand and contribute to. They can also serve as powerful motivators for new actors, drawn into an effort from inside and outside a region to play their role in making an extraordinary aim into a reality.

Returning to the premise articulated earlier, such a goal should activate the manifold strengths of the region in research activity while focusing attention and resources to overcome the region’s present shortfall in large-scale commercialization success. Accordingly, this report advances the following overarching goal for the region:

In the next 10 years, the region’s research institutions will birth 10 companies that grow to a liquidity event (e.g. acquisition or initial public offering) of $100 million or more.

This goal does not specify what kind of innovations will be represented by these fast-growing startup ventures, as there is too much diversity in the research priorities of institutions across the region and in the investment focuses of venture funds throughout the country to need to know or to want to limit at this juncture. What it does specify is the kind of outcome that will be considered a success for the region, which is that research discoveries birthed in the region's institutions will be grown to a point that they achieve a significant valuation level. This kind of goal is intended to be clear, aspirational, and galvanizing.

INTENDED IMPACTS FROM PURSUING THIS GOAL

Achieving, or even just pursuing, such a goal is designed to have three impactful outcomes for the region in its quest to be an innovation leader. First, it concentrates the region’s institutions, leaders, and resources in the area of technology transfer and commercialization. That focus will help stimulate as much research activity as possible in as many fields as possible. It will also highlight the need for additional early stage funding and accompanying incubation resources to support innovations from the time of initial discovery to the first rungs on the venture capital ladder. Finally, it elevates the importance of finding, growing, and funding commercially viable innovations that can scale significantly in the marketplace.

Second, it creates a virtuous cycle of more research activity leading to more entrepreneurial ventures, resulting in more potential deals, more investor attention, and more funding. This in turn creates a level of excitement throughout the region and serves as a draw for additional talent, activity, and funding. As regions grow in activity levels they become better positioned to attract and produce even more activity.

Third, it creates a growing number of extremely successful entrepreneurs who can serve as mentors, funders, guides, and draws for successive generations of entrepreneurs. This too is a characteristic of innovation hubs throughout the country. Success begets success because talent and funding seek out places of high concentration of talent and funding, but also because it yields successful entrepreneurs who directly and indirectly invest in the growth of additional entrepreneurship activity.
THIS REPORT ADVANCES FOUR RECOMMENDED ACTIONS that will help the region achieve this goal of birthing 10 $100 million+ companies in the next 10 years. These recommendations are intended to provide multiple on-ramps for multiple actors to play their part in coordinating a regional approach to achieving the proposed goal.

Recommendation #1: FUND

Public and private sector participation should be recruited to fund additional pre-venture capital funds and business acceleration services. The need to overcome the aforementioned “valley of death” is such that region-wide attention must be devoted to deploying more resources to encourage, seed, and grow more research innovations to the point at which they attract venture capital attention.

Action here is likely to take on numerous forms. The University City Science Center, Ben Franklin Technology Partners of Southeastern PA, First State Innovation, and New Jersey Technology Partners are four examples of entities whose direct funding, assistance in accessing capital, and provision of supportive services already pay dividends in the region, in the form of more and more accelerated startup ventures in the technology transfer space. Private sectors efforts such as funds managed by Comcast and Independence Blue Cross represent another useful approach; additional private sector participation may also be in the form of in-kind contributions of intellectual property, staff, work space, or equipment. Finally, while it may seem state and local governments in the region are fiscally constrained in investing in technology transfer at this juncture, there is still a case to be made.

Recommendation #2: ADVOCATE

The region’s private and institutional leadership should advocate for policies at all levels of government that demonstrate a commitment to innovation as an economic driver. State and local governments may seem challenged to make such outlays now, but the alternative is that the region continues to slide as an innovation hub and misses out on successive waves of talent, activity, and funding.

How governments participate in stimulating innovation may be manifold. Governments may opt to emulate the State of Texas, which floated a $3 billion bond to accelerate its support of cancer research and thus facilitate the expansion of research activity in that space. Governments may also opt to ally with the growing number of technology transfer focused venture funds whose funding sources include public pension funds. In encouraging Washington, Harrisburg, Trenton, and Dover to consider some or all of these avenues, the advocacy message must be that the region’s strength in research institutions must be leveraged through the support of entrepreneurial ventures in order for that strength to translate into commercialization success, innovation clusters, and job creation.
Recommendation #4: PROMOTE

Alongside funding, advocating, and collaborating, the region’s leaders must work together to promote the region as an innovation hub, making particular appeals to venture capital firms seeking deals, young research and entrepreneurship talent seeking a place to learn and grow, and established entrepreneurs with regional ties who can help grow the next generation of startup ventures. Select Greater Philadelphia is an example of the power of private sector initiative in promoting the region, and any such efforts should be coordinated with their work.

Each of the aforementioned targeted groups would benefit from a better perception of the region as an innovation hub. While capital is mobile, investors do tend to invest in what they know, so perception matters. Regions seen as innovative are going to attract more attention. Investors choose the best deals from the ones they are aware of, so if they look at ten times more possible companies in the Boston region than in the Greater Philadelphia region, more money will flow to Boston even if the commercialization potential of Greater Philadelphia’s companies are higher. Hence, there must be a coordinated approach to conveying to the venture community the depth, breadth, and trajectory of the technology transfer activity taking place here.

Just as capital is mobile, so are many talented researcher entrepreneurs. Since there are a finite number of places with the scale of physical, financial, and human resources to accommodate this kind of research activity, many among this universe of intellectual talent are constantly aware of the opportunities available in new places to build a base of research activity and pursue potential commercialization opportunities. Research institutions in this region are fundamentally reshaping their technology transfer offices to encourage more risk-taking and higher upside potential. This message needs to be amplified so that talented young research entrepreneurs will recalibrate their perception of the region and consider it anew as a place to grow and thrive.

Finally, the region must retain and activate its base of successful entrepreneurs. They represent an invaluable source of guidance, connections, and resources to show the way for a new generation. An enthusiastic promotional campaign to encourage these success stories to reinvest in the region in which they first found success will afford them the positive affirmation they deserve for catalyzing even more innovation activity.

Recommendation #3: COLLABORATE

Collaboration must be encouraged, particularly through the use of shared space and shared equipment. A particular focus should be placed on elevating the work of the region’s engineering schools, given the promising intersections of engineering and health care (e.g., medical devices), engineering and energy (e.g., energy storage), and engineering and advanced manufacturing (e.g., composite materials).

As noted above, the field of innovation moves too fast to dictate in a centralized and pre-conceived way what discoveries will yield the most commercial success far into the future. Rather, what makes more sense is to foster a vibrant ecosystem of research activity in which collaboration is high, action is rewarded, and resources exist to advance promising breakthroughs to higher and higher levels of commercial viability.

This collaboration should be encouraged in areas of particular regional strength, in which many innovations can be birthed and allowed to grow. In health care, energy, and advanced manufacturing, the region possesses promising drivers of innovation that can yield commercially attractive discoveries. Engineering proficiency is the common denominator to multiply innovation in these fields, and shared space and shared equipment are two ways to facilitate the collaboration needed to translate this potential into actual commercialization.

Particular focus should be placed on elevating the work of the region’s engineering schools, given the promising intersections of engineering and health care, engineering and energy, and engineering and advanced manufacturing.
CONCLUSION

In the global economy as a whole and in technology transfer in particular, everything is in motion. Today’s advantages are not guaranteed tomorrow, past windows of opportunity can close, and present barriers can be overcome. As in 2007, the region has been evaluated in full and has been found to be robust, dynamic, and successful, but not without its areas of concern.

AFTER THE PUBLICATION of and subsequent discussions around the CEO Council’s technology transfer report in 2007, the region implemented numerous successful initiatives and saw significant infusions of dynamic leadership. However, other regions have also continued to build on their strengths and shore up their weaknesses.

It is therefore incumbent on the region’s leaders to choose action over inaction, to position the region for future success in technology transfer and commercialization, and to ensure that the region continues to be a draw for innovation inputs and innovation activity.

Nevertheless, while there is cause for concern, there is not cause for pessimism. The Greater Philadelphia region has numerous strengths and assets from which to build a strong case for the talent, funding, and activity that is currently in play. Macro-economic forces are creating an environment which may play to Greater Philadelphia’s strengths and characteristics. Those existing assets must be actively built upon, though, and these current opportunities seized upon.

A way forward is advanced through the recommendations contained in this report. It is anticipated that their successful implementation will move the region towards a more competitive position relative to its peer regions, creating a virtuous cycle of more innovation activity and attracting more of the innovation inputs needed to continue to thrive. It is also projected that stasis, alternatively, will result in the region continuing to slide in performance and in perception.

It is therefore incumbent on the region’s leaders to choose action over inaction, to position the region for future success in technology transfer and commercialization, and to ensure that the region continues to be a draw for innovation inputs and innovation activity. To that end, each institution must consider what it can do to help the region realize this vision and achieve this goal.
THE CEO COUNCIL, an initiative of the Greater Philadelphia Chamber of Commerce, is a devoted group of more than 55 business, higher education, and civic leaders who commit their time and efforts to enhancing economic growth and prosperity in the 11-county region across northern Delaware, southern New Jersey and southeastern Pennsylvania. The tri-state regional group leverages direct engagement of private sector and higher education research institution leadership to:

• Conduct privately funded, actionable analysis to advance large scale regional projects;
• Advocate for a multifaceted agenda focused on the federal role in innovation, regional mobility and talent;
• Develop sector-specific initiatives to leverage the region’s competitive advantages, engage CEO’s to advocate, market, retain and grow companies and jobs, and accelerate economic growth (energy and health care innovation);
• Provide strategic counsel and actively engage in the marketing and attraction work of Select Greater Philadelphia; and
• Support key initiatives of CEO Council members.

For almost a decade, the CEO Council has influenced regional and national policy through advocacy for the improvement of the region’s transportation infrastructure, availability of a top notch workforce, and expansion of investment capital to support business growth and culture of entrepreneurship.

CEO Council members provide the leadership necessary to achieve these results. Through a focused, consistent and sustained effort over time, the CEO Council works to improve the Greater Philadelphia region.

ECONSULT SOLUTIONS, INC. is a Philadelphia-based economic consulting firm. It provides businesses and public policy makers with economic consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, and planning, as well as expert witness services in support of litigation.

Its principals are nationally recognized experts in urban development, real estate, government and public policy, planning, transportation, non-profit management, and business strategy and administration, as well as litigation and commercial damages. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process, and extensive consulting experience.
As of 11/16/2014
Please go to our website at CEOCOUNCILFORGROWTH.COM to view the full report.