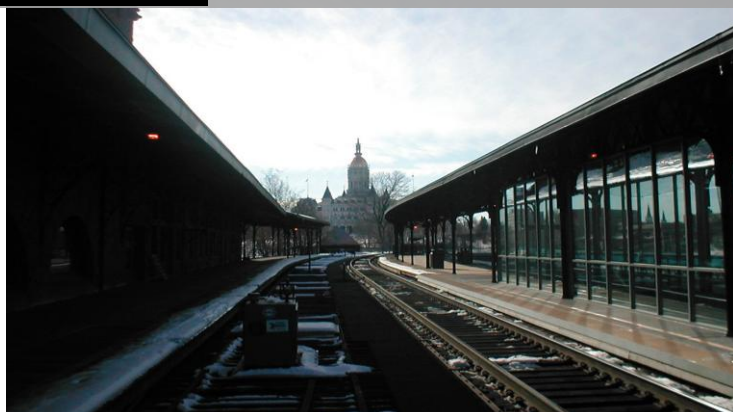




THE
METRO
HARTFORD
REGION

MOVING THE REGION FORWARD



A Comprehensive Economic Development Strategy: Part I - Initiatives
prepared by Connecticut Economic Resource Center, Inc. - October, 2012

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Vision: Why Implement this CEDS

The costs and quality of life of every household is dependent upon local and regional economic conditions, while businesses make location and investment decisions based upon local and regional attributes. A primary driver of economic activity in a region is jobs – residents look for jobs that support their quality of life while businesses need workers with specific skills to carry out their business models. It is important for the region to have a selection of jobs that support the residents of the region, and to have growth in jobs to keep residents engaged and attract new residents. With a variety of well-paying jobs and meaningful career paths, people stay and come here, bringing additional energy, enthusiasm and spending, which support all aspects of the economy.

In order for this to happen, there needs to be a focus on the cluster industries in the region so that quality jobs can be offered, and there needs to be other assets -- infrastructure and amenities in place-- so that people want to stay and thrive in the region. Healthy industries support productive workers which brings more investment into the communities and, with the right industry mix, can bring innovative cultures. This vision of a thriving economy with available jobs and career paths for residents, along with interesting assets and amenities that make the region a desirable place to live, is typically a key regional economic goal, with metro Hartford being no exception.

While this vision is not atypical, the metro Hartford region's positioning today is. A number of factors create a unique mix of opportunities that the region must latch onto by leveraging investments in key areas within the region:

- The state's new investment approach to economic development has not been this aggressive in twenty years. The Governor's Innovation Ecosystem is a revolutionary approach to support new technology based companies and entrepreneurs and stage two companies with growth potential. The Bioscience Connecticut Initiative includes over \$1 billion in investments in Farmington at the UConn Health Center and at Jackson Laboratories, which has the potential to transform the personalized medicine industry and increase the synergies between the health related and insurance companies already in the region.
- The state and federal governments are making billions of dollars of investments to improve transportation infrastructure within the region, and connecting the region to the urban centers in New York and Boston. Projects including CTfastrak¹ and the New Haven, Hartford, Springfield rail project, coupled with transit oriented development at new and existing stations have the potential to increase housing and employment options and create attractive and vibrant walkable communities for residents.
- The MetroHartford Alliance is exploring the creation of a regional investment fund to provide debt and equity financing to entrepreneurs and startup companies, which has the potential to further support an entrepreneurial and innovative culture in the region.
- Governor Malloy and the legislature passed an education reform bill to close the achievement gap, identify and intervene in school districts and schools with low academic

¹ CTfastrak is a bus rapid transit (BRT) system for the New Britain to Hartford corridor.

performance, and establish a new evaluation process for teachers. The bill also sets up programs to improve reading skills, increase access to high-quality early childhood education, and provide more financial support for school choice programs.

A CEDS plan is by definition the culmination of a host of efforts. The steps that have been undertaken to meet both the federal Economic Development Administration requirements and produce a practical strategic guideline for the region include:

- evaluating demographic, economic and fiscal trends;
- interviews with business leaders and other stakeholders;
- focus groups with municipal representatives;
- evaluating best practices from around the country;
- prioritizing strategic capital projects in the region;
- reviewing and integrating current strategic documents for the region such as the current MetroHartford Alliance strategic plan, CRCOG - Capitol Region Transportation Plan and the Capital Workforce Partners' strategy for programs and initiatives; and
- feedback and insights from the CEDS strategy and steering committees.

These efforts have led us to four main initiative areas where the region must focus economic development efforts – Clusters, Workforce and Education, Infrastructure, and Downtown Hartford. Taken together the goals and action steps can achieve the vision of a thriving economy by effectively leveraging the metro Hartford region's unique position. In order to remedy current realities that are limiting the region's ability to achieve the overall vision, the metro Hartford region needs to implement the goals and action steps.

Regional Initiatives

Cluster Initiative: Foster and grow the industry clusters with a strong presence in the region and seek current cross-regional synergies of growth and opportunity

Clusters are geographically concentrated sets of competing and complementary industries that operate in similar markets. They are a geographic concentration of firms, suppliers, support services, specialized infrastructure, producers of related products, and specialized institutions (e.g., training programs and business associations) that arise in particular fields in specific locations. They are linked by a buyer-supplier relationship and by their shared reliance on educational institutions, workforce dynamics and other resources. As a result, industries located in regions with strong clusters experience higher growth in new business formation and start-up employment and contribute to start-up firm survival.²

There is strong evidence that globalization has made clusters more important due to its impact on increasing competition. Therefore the metro Hartford region should build a regional economic development strategy around industry clusters. A focus on clusters helps a region adapt to economic change. The Hartford MSA has recovered a greater percentage of jobs that were lost due to the most recent economic recession than Connecticut and the U.S. One dynamic helping the region recover jobs faster after the recession results from having strong clusters.

The metro Hartford region must adapt policies that foster and enhance the clusters that are strengths for the region and look to build synergies across regions with similar cluster strengths creating the effect of “super clusters.” Our analysis identified the following critical regional clusters:

- **Advanced Manufacturing**
- **Financial Services**
- **Health Sciences and Services**
- **Headquarters**

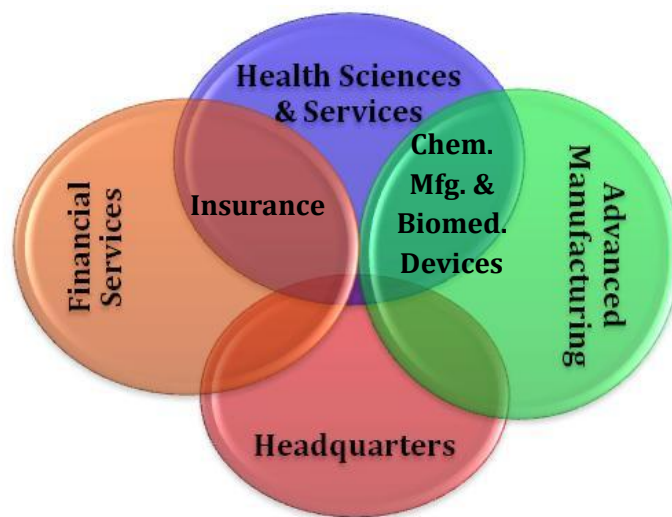
² Mercedes Delgado, Michael E. Porter, Scott Stern, “Clusters and entrepreneurship,” *Journal of Economic Geography*, May 2010.

Situational Analysis

Strengths:

The region is fortunate to have a long history of strength in the clusters of Advanced Manufacturing and Financial Services. The metro area ranks 2nd in the nation in terms of employment in the Insurance industry, behind New York City; ranks 3rd in the Aerospace Engine manufacturing industry; and ranks 1st in the manufacturing of Turbines and Turbine Generators. These are impressive rankings and show the underlying strengths of the region.

The metro Hartford region has a unique combination of industry clusters with a complementary relationship between all the identified clusters. Robust clusters have developed in the region because of their reliance on one another for talent, services, and similar functional requirements. There is a complementary industry relationship among Financial Services and Health Sciences & Services with the Insurance industry. For example, the proximity in location of the health science industry to the health insurance industry facilitates the sharing and transmission of information regarding new products and inventions in medicine, providing insurance companies the ability to work on pricing to get ahead of competition.



In addition, there are corresponding industry relationships among Health Sciences & Services with Advanced Manufacturing through its Chemical Manufacturing and Biomedical Devices industries. And Headquarters intersects with all of these clusters. The region can take advantage of its proximity with customers, suppliers and competitors to be innovative and efficient, thereby increasing global competitiveness. By strengthening these clusters, the metro Hartford vision for economic vibrancy can be achieved.

Weaknesses:

Interestingly, one of the region's key strengths can also be seen as a weakness: the region has large, established companies as innovation vehicles. Our strength in advanced manufacturing and aerospace means we have benefited from innovation in these larger internationally known companies. This is contrary to a national trend where most innovation occurs in smaller and younger firms. Because of our strength in large, innovative companies, the state may have not been as aggressive in pursuing innovation through small companies and entrepreneurs. And even though our larger industries have a strong presence in the region, as shown in the detailed industry analysis of this report, some of the industries, such as insurance, have seen relatively slow employment growth while some companies have decided to grow elsewhere.

Opportunities:

On the other hand, one of the strengths of the region and why it has been a leader in the Advanced Manufacturing, Financial Services, Health Sciences and Services, and Headquarters is the presence of a well-educated workforce that continuously innovates and leads in worker productivity. The region's competitive advantage for the future hinges on retaining and recruiting a workforce that is focused on research and development that continues to reinvent and innovate. With company's bottom lines tightening, research and development investment often is curtailed. Through collaboration on behalf of the region in research and development, and innovation and commercialization, new ideas and companies will grow. As mentioned, the state's new Innovation Ecosystem program can aid the region in leveraging its R&D activity. Additionally, the capacity of the Connecticut Center for Advanced Manufacturing should be enhanced as an R&D facility to benefit the industries in the region.

To grow new industries, institutions in the region will have to take risks and make investments. The recent investment in Jackson Labs creates new opportunities for the region and the potential to develop a robust niche with the Health Sciences and Services cluster. Further, the development of an Innovation Hub in Hartford as part of the state's Innovation Ecosystem will help the region grow new companies in new and existing industries. The Hartford Innovation Hub will help by providing physical space and business support services to both start-up and stage two companies. The hub will be open to all industries but there will be a focus on those industries that are strengths in the region. One possible component of the Hub would be a "Hartford Garage" which would serve as a place outfitted with modern technology and machinery where budding entrepreneurs and idea generators could develop their product prototypes. In addition, Hartford was one of three cities in the nation to receive a \$1 million Strong Cities, Strong Communities grant from the U.S. Economic Development Administration to identify and assist stage two companies that have the potential to grow significantly in the City through the introduction of new techniques, innovation, and other interventions.

Another opportunity for the region to leverage is the state's \$27 million tourism campaign around a "Still Revolutionary" slogan with \$3 million dedicated to a business marketing program. Almost one year ago, a consortium of business and civic organizations asked for public input for a new branding effort for Hartford to replace the decade-old "Hartford: New England's Rising Star" slogan.

However, the planning was put on hold until the new state marketing plan was released so that the city message would be consistent with the state message.³ Now that the state launched its campaign, the region is poised to move forward with a complementary marketing campaign which will help not only promote the region but also its industry clusters.

Finally, during the 2011 legislative session, the Jobs Bill added numerous benefits that are targeted to businesses in the state. For example, the bill doubled, from 50 to 100, the number of small manufacturing companies that the Department of Economic and Community Development may choose to take part in the Manufacturing Reinvestment Account program, which allows manufacturers to deposit their domestic gross receipts in tax-deferred interest bearing account for training, developing or expanding their workforce. The Connecticut Center for Advanced Manufacturing should ensure all manufacturers are aware of this change and opportunity and assist the businesses in getting approved.

Threats:

Not surprisingly, these regional strengths must be tempered by threats to future economic growth. As developing nations grow, expand, and industrialize, the region faces even more competition for businesses and jobs. One critical challenge that requires immediate attention, particularly in Advanced Manufacturing, is the need to replace the retiring baby boomer workforce with qualified workers (see page 12 for a quantitative estimation of the challenge). This means raising the skill levels of the current population and positioning the region to be successful in worker recruitment. Based on current projections, the region cannot rely on population growth to fill the vacancies. Population projections over the next twenty years predict only 2-3% growth.⁴ **Instead the region needs to immediately respond by expanding the programs available in the region that will train the region's high school students and present clear career opportunities that include filling the vacancies in the middle skill workforce.**

Although a state rather than regional issue, the cost of doing business is also seen as a threat to doing business in the state. Connecticut ranks 40th in the Tax Foundation's state ranking of business costs, with the property tax component of the overall score ranking the highest out of all 50 states.⁵

The following is a **Goal** that takes advantage of the region's unique cross cluster strength in research and development, health sciences and services and insurance: **Support innovation and entrepreneurs.**

To that end, **Actions** include:

- The MetroHartford Alliance, along with the City of Hartford, should establish a long-term plan leveraging the state's innovation ecosystem program.
- The MetroHartford Alliance should establish a regional investment fund - \$20-25 million- to support early stage and stage two entrepreneurs which would provide both debt and equity

³ Jenna Carlesso, "Hartford Branding Effort Delayed," Hartford Courant, May 11, 2012.

⁴ CT State Data Center 2010-2030 projections for Hartford and Tolland counties

⁵ <http://taxfoundation.org/article/2012-state-business-tax-climate-index>

financing. This would support industry cluster growth, infrastructure, and downtown revitalization.

Analysis of the Region's Individual Clusters

Financial Services

In 2010 the Financial Services cluster contributed \$19 billion to the regional economy in total value added (represents the increase in total wealth to the region). The insurance industry represented 77% of total value added in the cluster, or \$15 billion in value added to the regional economy.

Not only is the insurance industry the largest contributor in sales and value added in the region's Financial Services cluster, but it is also the largest cluster employer with more than 42,000 people, which is approximately 10% of the labor force. **The region's unique strength is its long-standing history of concentration in the insurance industry, leading to the moniker the "Insurance Capital."** The headquarters of Aetna, Travelers, and The Hartford are currently in the region. As a result of the Governor's First Five Initiative, Cigna moved its headquarters from Philadelphia to Bloomfield. Although employment in the Insurance industry has decreased by approximately 4,000 jobs compared to ten years ago, the number of firms has increased by 100. This trend is a result of smaller firms spinning off from the larger firms and new innovative products being developed. This is also an indication of the comparative expertise of this region's workforce.

Recent legislative changes provided more opportunities for growth in the insurance industry. During the October 2011 Special Legislative Session, legislation⁶ created three new subgroups of captives that could be domiciled in Connecticut (sponsored captive, special purpose financial captive, and branch captive) and expanded the types of insurance a captive may transact in the state.⁷ As of 2011, there were no captives domiciled in Connecticut but through these legislative changes it should open up opportunities for companies to expand in-state rather than out-of-state.

Further, the recent investment in Jackson Laboratories, a Maine-based genetic research institute, has the potential to provide insurance companies located in the region with a unique competitive advantage. If the region can develop a strong collaboration between R&D companies such as Jackson Labs, medical service providers and insurance companies, all of which are located in the region, the companies can develop new approaches of service delivery and payment within the evolving market of personalized medicine. For example, if an insurance company knows a new invention will come to market in five years, it can work on pricing to get ahead of competition. Insights gained by health insurers during the R&D phase and in collaboration with hospitals means they will have better access to information and a competitive edge.

The MetroHartford Alliance has an active Insurance and Financial Services (IFS) Cluster group that provides a point for dialogue about key issues. However, the following challenges for the Insurance and Financial Services industries that need to be addressed include:

⁶ Public Act 11-140

⁷ Captive insurance is an insurance company that is formed primarily to cover the assets and risks of its parent company or companies.

- Employment loss in the region over the past ten years while other regions such as Des Moines, Milwaukee, and others continue to see employment growth.
- Attracting and retaining a well-educated workforce to the region including insuring a sufficient supply of actuaries.

To address the challenges, one **Goal** is to: *Ensure the Insurance and Financial Services (IFS) cluster remains a leader in the country and globally competitive.*

To that end, **Actions** include:

- Support the IFS Cluster's efforts to reaffirm Connecticut as the Insurance Capital of the World through the release of an annual market forecast and statewide event of business leaders and stakeholders.
- Survey members of the Insurance and Financial Services (IFS) Cluster organization to understand the greatest challenges in the future related to global competition and competition from other regions. The IFS Cluster can use the feedback to advocate for workforce and policy solutions.
- The IFS cluster should capitalize on the recent legislative changes that expand the captive insurance market.

Health Science & Services

The metro Hartford region is in a unique position with its health-related businesses anchoring the region as it receives new investments. The investments being made in Jackson Laboratories; coupled with the state's strength in advanced manufacturing, particularly biomedical devices and research and development; state stem cell investments to the University of Connecticut Health Center of \$18 million since 2006; and the relative concentration of insurance companies – creates a **complete market where personalized medicine – medical care that is tailored to the patient's genetic profile-- and other health R&D products and services can be tested.**

The state's Connecticut Bioscience Initiative launched in 2011 will link the state's bioscience and research facilities at UConn's Storrs campus and Health Center in Farmington, and Yale University in New Haven. Several capital projects and program investments at the UConn Health Center will help position the region as a leader in biomedical research. Improving the research capabilities of the Health Center will help attract more researchers and are anticipated to double the federal research dollars flowing into the area. Various studies of research and development (R&D) spending undertaken by the National Academies of the Sciences, the Bureau of Economic Analysis, and others, suggest the research spending local multiplier may be in the range of 2.0. This means that for every federal dollar that flows into the area an additional two dollars is being invested in the local economy.

Furthermore, as part of the Connecticut Bioscience Initiative, Jackson Laboratories is building a 173,000 square-foot facility next to the UConn Health Center in Farmington with the help of \$290

million in state bond funding. This partnership hopes to create one of the most innovative genomics programs in the country. Having robust research and development facilities is essential to growing the bioscience industry. Through research and development conducted by the world's best scientists, new products and ventures will be created.

The Health Sciences & Services cluster is predominantly a service cluster with Bioscience/Health Sciences representing 12% of total value added to the region. The largest industry within the cluster is the health services sector which delivers the care – hospitals, ambulatory care services, and nursing and residential facilities. In 2010, the industry employed 62,000 people in the region representing 14% of private employment. Further, health services employment has increased each year over the past ten years and even during the latest recession.

If the region aggressively leverages the major state and federal bioscience investments it will create a region where more businesses want to start up and locate. These investments directly impact the region and foster the growth and diversification of the Health Services and Sciences cluster.

The metro Hartford region uniquely combines health service delivery, research and development, and payment and reimbursement systems. This unique cross-cluster activity, if encouraged, can provide a competitive advantage to companies based in this region.

Although the Health Sciences & Services cluster has many positive attributes, one of the potential challenges for the future of the cluster needs to be addressed:

- Many areas around the country are focusing on developing and enhancing their Health Sciences & Services cluster so the region will face competition.

To address the challenges, one **Goal** is to: *Develop a robust Health Sciences & Services consortium.*

To that end, **Actions** include:

- The MetroHartford Alliance should catalyze the creation of a Center for Medical Discovery, Delivery and Reimbursement in Hartford that will be a global thought leader on the challenges created by the growth in personalized medicine, changes in patient care protocols, and the standards necessary to appropriately reimburse care givers for services provided. The Center would be staffed by representatives from all three industry sectors that would jointly work on issues around new personalized treatment options being developed in the region, innovative patient care, and how these changes impact reimbursement for care. Further, leverage the investments being made by the state particularly in growing personalized medicine and determine a strategy for increasing opportunities for federal dollars in the healthcare industry, through enhancing research and development.
- Develop a cluster organization that coordinates and promotes the Health Sciences & Services sector. The Connecticut Health Council, founded in 2012 by the MetroHartford Alliance, will serve as the vehicle for promoting Connecticut's health sector when

formally launched at the end of October 2012. Consistent with the CEDS overriding strategic approach of tracking statewide efforts, the new CT Health Council should be coordinated with other statewide organizations (i.e. Biomedical Engineering Alliance & Consortium [BEACON] and CHF [Connecticut Health Foundation]). Combine cluster strengths in bioscience, hospitals, and insurance with all industries being represented in the consortium and connect with the proposed Center for Medical Discovery, Delivery and Reimbursement on joint initiatives.

- Assist bioscience companies in the region with competing for grant funding through Connecticut Innovation's new Connecticut Bioscience Initiative, the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program and other initiatives.

Advanced Manufacturing

The Advanced Manufacturing cluster is composed of industries involved in the design and manufacture of aerospace engines, vehicles, turbines; research and development for biotech, life science and aerospace companies; medical devices; pharmaceuticals; electrical equipment and metal. The entire Advanced Manufacturing cluster had approximately \$18 billion in sales and contributed \$7 billion in value added to the economy in 2010.

Aerospace Manufacturing: The region is home to a robust aerospace cluster - a concentration of firms, suppliers, support services, specialized infrastructure, producers of related products, and specialized institutions. The region serves as the headquarters for Pratt & Whitney which produces aerospace engines with suppliers widely dispersed across the region. Outside the region but within the state of Connecticut are General Electric and Sikorsky. The region is also home to hundreds of small to medium sized manufacturers that serve as the supply chain for these major corporations.

Also located within the region is the Connecticut Center for Advanced Technology (CCAT) which is a unique economic development organization that combines expertise in cutting-edge manufacturing technology with specialized centers of excellence in STEM education, workforce development, and alternative energy solutions. In support of its activities to sustain and grow the manufacturing sector in the region, state and nation, CCAT works to provide technology infusion for small and medium sized manufacturers, as well as, to initiate research and applied development in process improvement, product testing and prototyping to original manufacturers (OEMs) and their supply chain companies. In addition, through its comprehensive programming CCAT provides assistance to educational institutions, both K-12 and postsecondary.

In addition, among the number of state manufacturing trade associations, the region has the Aerospace Components Manufacturers (ACM) which is a network of aerospace companies that collectively offer broad capabilities than as individual companies – hoping to serve major aircraft suppliers.

Medical Device Manufacturing: The region also has a small but important medical device manufacturing cluster with a particular niche in dental instruments. Overall, the Hartford-West Hartford-East Hartford, CT metropolitan area ranks 85th in the country in terms of employment in

the medical device cluster. However, when looking at specific industries within the medical device cluster the dental instruments and supplies industry ranks 17th in the nation. A couple of examples of the employers in the region include: Coburn Technologies, headquartered in South Windsor, is an ophthalmic goods manufacturer; and Pioneer Optics which designs and manufactures fiber optic devices located in Bloomfield. The region is also home to the Biomedical Engineering Alliance & Consortium (BEACON). This nonprofit promotes the biomedical industry in the state and is committed to the development and commercialization of new medical technology.

Chemical Manufacturing: While its relative employment concentration in the region is small, it increased since 2005. Similarly, while the U.S. was losing employment in this sector the region had a slight increase in employment. This industry also commands a high average annual wage ranking in the top ten in the region – in 2010 the average annual wage was \$87,692. Two of the major employers in the area include Henkel Corporation in Rocky Hill and Ensign-Bickford Industries in Simsbury. Chemical manufacturing encompasses portions of the medical device industry which is not only a strength for the metro Hartford region but also for the I-91 corridor region.

Electrical and Computer Manufacturing: Both Electrical Equipment Manufacturing and Computer & Electronic Product Manufacturing fall under the cluster of Advanced Manufacturing. Based on Porter's Cluster Mapping Project, the Hartford MSA ranks 11th in the country for Electrical Equipment Manufacturing and has a location quotient⁸ of 3.3. In 2010, Electrical and Computer Manufacturing represented 10% of exports. The Providence-New Bedford-Fall River RI-MA MSA ranks 10th, just ahead of the metro Hartford region, presenting some opportunities for collaboration.

The location of advanced manufacturing companies, specialized institutions, and cross-industry synergies with the Health Sciences cluster give the metro Hartford region a unique and competitive edge relative to other areas of the country. For example, medical device manufacturing tends to grow in areas with strong aerospace manufacturing because of the similar precision required in manufacturing of the products. In addition, the presence of specialized institutions like CCAT and ConnSTEP further help manufacturing companies connect, compete, and grow.

Challenges for Advanced Manufacturing include:

- In manufacturing, the median age is 47 and 28,000 employees are estimated to be over that age. However, for the major manufacturer, Pratt & Whitney, the is 57. Over the next ten to twenty years, the region will need to fill approximately 1,400 openings a year to compensate for the retirees. However, the community college system is not graduating enough graduates each year – the Manufacturing Technology Program at Asnuntuck, for instance, has graduated 1,000 students since its inception in 1998.⁹

⁸ A location quotient expresses the relationship between a region's share of employment in a particular industry compared to the national share.

⁹ <http://www.asnuntuck.edu/courses-programs/manufacturing-technology-programs> accessed 7/25/12

- Research and development is critical for the continuation, growth, and innovation in the advanced manufacturing cluster yet it is an area where companies tend to under-invest.¹⁰

To address the challenges, one **Goal** is to: *Broaden and strengthen the region's level of research and development activities to support the advanced manufacturing cluster and leverage other state investments in manufacturing.*

To that end, **Actions** include:

- Expand the opportunities for federal grant awards to innovative manufacturing companies in conjunction with the Innovation Ecosystem, CCAT, and SBIR/STTR programs.
- Expand the services provided at CCAT by establishing an R&D facility to benefit all the manufacturing industries in the region.
- Continue to support effective research and development tax credits offered by the state through the public policy advocacy program at the MetroHartford Alliance.
- CCAT should inform manufacturers in the region about the increased opportunities through the Manufacturing Reinvestment Account and assist the companies in applying.
- CCAT in coordination with appropriate Connecticut and Massachusetts manufacturing organizations should collaborate on ways to market the expertise and capacity of the aerospace industry in order to demonstrate the broader multi-regional strengths of the sector.

Headquarters

Headquarters, which refers to NAICS code 55-Management of Companies, refers to headquarters and offices of holding companies, which are either banks or other holding companies. It is the smallest of the clusters in the region in terms of value added and sales contributions to the economy, although the cluster contributed \$2 billion in sales and \$1.4 billion in value added to the regional economy. In 2010, the region had more than 8,500 employees in this industry. Between 2005 and 2010, the region had a higher rate of employment growth in this cluster than the nation – with an employment compound annual growth rate of 3.5% from 2003 to 2010. When looking at the productivity of the industry as measured by gross state product (GSP), the Hartford-West Hartford-East Hartford metropolitan area in 2009 ranked 12th in the U.S. Further, the compound annual growth rate in GSP was 12% over that same time period.

By the nature of this cluster – one that encompasses many industries -- it could bolster other clusters if the region focuses on it. For example, if a printing company has two locations, one for its management level employees – chief executive, financial officer, accountants, and staff – and another location for its manufacturing facility, the location of the business operations would be classified under the NAICS code, Management of Companies. The strength of this industry in the region demonstrates the presence of a professionally trained workforce and one that has continued to grow as shown by the employment growth.

¹⁰ John Cassidy, How Markets Fail (Farrar, Straus and Giroux, 2009) 136.

The state has a long history of having a large share of corporate headquarters and this has often been attributed to quality of life attributes and the availability of a highly educated workforce. There is also a potential tax advantage whereby Connecticut has remained a separate entity state while other states have recently been changing separate entity taxation to unitary which means all subsidiaries are taxed. Therefore, now is the time to understand how the region can capitalize on this strength and potentially grow the cluster.

Since this industry captures headquarters and holding companies it encompasses a variety of industries. One challenge for this industry is:

- Determining what policies or programs would help it to grow.

To address the challenge, one **Goal** is to: *Identify policies and or programs to attract and retain headquarters.*

To that end, an **Action** includes:

- Identify and promote the region's attributes that make it an appealing place for company headquarters. The MetroHartford Alliance should convene a group of business leaders in this industry to investigate Connecticut's attributes, promote them, and also seek to fill any identified gaps through public advocacy.

**Workforce & Education Initiative: Focus on improving the workforce today
while educating, training and recruiting the pipeline for tomorrow**

If the region is successful in implementing the cluster strategy of goal one, then we must have a workforce prepared to fill the jobs that will be created. In order to meet future demand, we will need to retain and train the talented individuals currently here and attract new talented individuals to become the future leaders and entrepreneurs of the region. This workforce initiative, and the infrastructure initiative that follows, will bolster and reinforce the cluster initiative outlined above. “The indispensable asset in a knowledge economy is smart people. Talent, which we measure by educational attainment, the number of creative professionals, the migration of well-educated young adults and the number of foreign born college graduates, reveals the underlying intellectual capital a region can draw on to build its economy and to weather the inevitable shocks of competition and change (“City Vitals,” CEO for Cities).”

A productive and innovative workforce is repeatedly cited as the most important factor in industry and cluster success. Increasingly, the workers with the skills necessary are expressing a preference for communities that are dynamic, diverse and densely populated. Richard Florida has documented these trends in his book *The Rise of the Creative Class* and subsequent research. Attractive places must be open to diversity and actively working to cultivate it, and investing in the lifestyle amenities that people really want and use often, as opposed to using financial incentives to attract companies, build professional sports stadiums, or develop retail complexes.

As seen in the situation analysis below, the MetroHartford region overall has a highly educated and productive workforce, and state legislation, coupled with a number of programs throughout the region are expanding the worker pipeline and retraining residents. However, there are immediate skills challenges and disparities in educational attainment and poverty for many in the region. In addition, there are long-term demographic changes that are exacerbating the problems to near crisis proportions.

Situational Analysis:

Strengths:

In terms of the region’s educational attainment situation, the metro Hartford region is fortunate to have a highly educated workforce. For example, 38% of the population has a bachelor’s degree or more which is higher than the national average of 30%.¹¹ Further 41% of 25-34 year olds have a bachelor’s degree or more.

The metro Hartford region also has an innovative workforce. One quarter of the 1,875 patents issued in Connecticut in 2010 were to businesses or individuals living in Hartford or Tolland

¹¹ U.S. Census, Educational Attainment in the U.S., 2011

counties.¹² Further, the metropolitan statistical area that encompasses the metro Hartford region ranked #34 out of 374 areas in total number of patents produced between 2006 and 2010.¹³

Weaknesses:

The data show two different pictures in Connecticut – one Connecticut that is higher-income with high test scores and high graduation rates and another that is low-income with low test scores and low graduation rates. For example, Hartford's 4-year high school graduation rate of 60% in 2010 was the lowest in the region whereas Bolton, Cromwell, Tolland, Simsbury and Glastonbury had graduation rates greater than 94%. Further, in Connecticut the achievement gap is evident in 3rd-8th grade with 81% of non low-income student scores at or above the goal in reading compared to only 45% of low-income students.¹⁴ Low-income students in the state on average are approximately 3 grade levels behind higher-income students.¹⁵ With approximately 25-30% of the region's workforce coming from the urban areas in the next decade, these economic disparities do not bode well for the worker pipeline.¹⁶

In addition to the worker pipeline challenges that are being felt and are projected to worsen, there are immediate skills challenges. There are 100,000 people in the region's workforce that are deficient in basic skills making it virtually impossible for them to compete for middle skill job vacancies, particularly in manufacturing industries. Since the last economic recession, the number of dislocated workers has increased substantially, and many still face obstacles in finding new employment even though they have credentials, since their skills need to be updated. It is also a growing challenge to increase the workforce participation rates of special populations such as the disabled, ex-offenders, and those receiving federal assistance.¹⁷ In 2011, the region had 14,625 Temporary Family Assistance recipients, over 100,000 food stamp recipients, 10,428 probationers, and 4,365 consumers of services from the Department of Developmental Services.¹⁸ That represents a total of approximately 130,000 individuals with potential employment challenges.

Opportunities:

During the past two legislative sessions Governor Malloy and the legislature have placed a great deal of emphasis on workforce initiatives which provide opportunities that the region can leverage. During the 2011 legislative session, the "Jobs Act" established the Subsidized Training and Employment Program (STEP-UP) within the Department of Labor. This program provides eligible small businesses and small manufacturers with grants for a portion of an eligible employee's costs of employment, including training, during the first six months of employment. A total of \$20 million in general obligation bonds was authorized for Fiscal Years 2012 and 2013.

¹² U.S. Patent and Trademark Office

¹³ See the section of this report titled "Business and Real Estate"

¹⁴ "2012 CMT/CAPT Results: Achievement Shows Much Work Remains," Connecticut Council of Education Reform, 7/20/12.

¹⁵ 2009 NAEP 12th grade State Achievement Gap Rankings

¹⁶ 2010 U.S. Census

¹⁷ Capital Workforce Partners

¹⁸ See the section of this report titled "Demographic Analysis"

During the 2012 legislative session, an education reform bill was passed to close the achievement gap, identify and intervene in school districts and schools with low academic performance, and establish a new evaluation process for teachers. The bill also sets up programs to improve reading skills, increase access to high-quality early childhood education, and provide more financial support for school choice programs. The bill established the Commissioner's Network which provides intensive supports and interventions on behalf of underserved students in the state's most chronically underperforming schools. In August 2012, Hartford's Core Knowledge Academy at Milner School was one of four turnaround plans to be approved for the 2012-2013 school year. The school is now eligible for a portion of \$7.5 million that was approved as part of the legislation to help implement the strategies and plan.

Another component of the education reform bill that was passed during the 2012 legislative session was increased funding for high-quality early childhood education. In the region, the following municipalities will receive increased funding to create more opportunities for pre-school: Bloomfield, East Hartford, Enfield, Hartford, Hebron, Manchester, Vernon, West Hartford, Windsor, and Windsor Locks.

There are also efforts underway to close the achievement gap. The Connecticut Board of Regent's work made possible through the College Access Grant Challenge is focusing on addressing the achievement gap, need for remediation to prepare high school graduates to perform college level work, and low graduation rates. An example of an initiative underway in the region is the collaboration between Manchester Community College and Manchester and East Hartford High Schools to address the remedial education needs of underrepresented students.

With the state's emphasis on college and career readiness the region has an opportunity to leverage these new investments. Although most of the K-12 education policies and efforts are handled by the State Department of Education, the under performance of our urban districts is a critical issue that deserves local attention and action. This means monitoring the programs and collaborating to find ways to expand upon and sustain those programs that prove to be successful.

In addition to the activities at the state level, actions are being taken to address issues in the metro Hartford region. To prepare workers who are deficient in basic skills, a team of providers has formed around adult literacy as preparation for work. The team, being led by the Hartford Foundation for Public Giving, Capital Workforce Partners, and the Capitol Region Education Council, is identifying challenges across the adult literacy education system, adding consistency among skills assessments, and building a continuum of services. A Policy Cabinet has also been formed with representation by a number of state agencies and regional organizations to align adult education resources with the community college system so that the entire system can better respond to needs and provide basic skills to those who need them.

Capital Workforce Partners recently formed an agreement with the Hartford Economic Development Division's small business center to advise trainees of services and loan funds. This

agreement should prove useful to those dislocated workers who are considering an entrepreneurial next step.

Another opportunity for the region is in attracting a young and educated workforce. Since the millennial generation continues to demand¹⁹ more urban living and is highly mobile, the region must ensure it provides spaces where the future workforce will want to live by supporting dense living near the train stations that will be built and also by supporting new residential building efforts in downtown Hartford. And as noted in the cluster initiative section, several of the clusters' challenges relate to finding a qualified workforce. The new transportation investments and focus that has been placed on transit-oriented development will help create places where the young and educated want to live and work.

Threats:

The region has a high percentage of workers in professional, managerial, technical occupations and projections are that these occupations will continue to grow which means the region needs even more skilled workers in the future. Half of the occupations that are projected to have the highest net employment growth over the next six years require a bachelor's degree.²⁰

However, at the state level, Connecticut ranks 23rd in the nation in bachelor degrees granted as a percent of 18-24 year olds, and 14th in bachelor degrees in science and engineering.²¹ Further, based on college completion rates, the region will not produce a sufficient pipeline of future workers. The most recent data on college completion rates are as follows: an 11% completion rate for two-year colleges (rank 46th in the nation), a 55% rate for four-year public universities (18th in the nation), and a 70% rate at four-year private colleges (rank 5th in the nation).²² The low completion rates in our state colleges and universities presents a crisis not only for the state but also for the region.

New research on projected job openings and on retirement trends in the workforce show that the fastest job growth in the nation is likely to come "among occupations that require an associate's degree or a post-secondary vocational award."²³ **Currently in Connecticut the largest share of jobs are in fact middle-skill jobs.**²⁴ Middle skills jobs are those that require more than a high

¹⁹ A national trend is sweeping the nation whereby people, particularly the millennial generation, who are children of the baby boomers, are seeking out urban living that provides walkable, bikable, and sustainable living options. This generation is willing to pay one-third more for housing that is within walking distance of shops, work, and entertainment; 50% or more will trade lot size for proximity to shops and work; and income constraints will drive demand for rental options. Furthermore, more than 70% of working baby boomers want to live by transit and three-quarters want to live in mixed-use areas. (May 3, 2012 presentation by Jonathan Rose Corporation for HUD Sustainable Communities Grant.)

²⁰ See section of report titled "Occupational Projections 2008-2018"

²¹ <http://www.nsf.gov/statistics/seind12/c8/interactive/table.cfm?table=17> accessed 7/24/12

²² Modestino, Alicia, "Mismatch in the Labor Market: Measuring the Supply and Demand for Skilled Labor in New England," New England Public Policy Center, Federal Reserve Bank of Boston, November 2010.

²³ Council of Economic Advisors, "Preparing the Workers of Today for the Jobs of Tomorrow," July 2009.

²⁴ "Connecticut's Forgotten Middle-Skill Jobs," October 2009.

school diploma but less than a four-year degree. In 2008, 47% of jobs were middle-skill jobs, representing almost 800,000 workers in the state. Since approximately one-third of the state's employment is in the region it means approximately 267,000 jobs in the region are middle-skill jobs.²⁵ Further, nationally, 27% of people with post-secondary licenses or certificate-credentials short of an associate's degree – earn more than the average bachelor's degree holder.²⁶ A systemic challenge is that the level of training dollars available for vocational preparation to help support skill attainment for middle skill jobs does not meet demand. Although the state established the STEP-UP program, which will help employers looking to hire and fill some of the need, there is still a greater need for economically disadvantaged groups to obtain education assistance. With cuts to financial aid, Pell grants are not sufficiently meeting the demand.

The region faces challenges both in low projected population growth coupled with a retiring workforce. The population is projected to grow by only 2% in Hartford County and 3% in Tolland County through 2030.²⁷ Connecticut's working age population is also expected to start decreasing after 2015. The state and region can expect more retirees on fixed incomes and fewer workers. Furthermore, existing demographic trends show younger, less educated, low-income workers replacing older, more educated, high-income workers in Connecticut.²⁸ By 2030, the dependency ration – number of potential non-workers per 100 people – is expected to be 82 non-workers for every 100 workers, whereas in 2010 the ratio was 66.²⁹ Due to the recession and the slump in housing prices, many baby boomers have remained in the workforce, however, when the economy and housing market increase the region will be faced with a potential workforce shortage which could hamper economic growth.

Overarching challenges for the workforce in the region include:

- Increase the skill levels and career readiness of the region's workforce to fill the middle skill jobs that are available and will become vacant upon baby boomers retiring, and will only worsen if the demographic projections hold true.
- Address the educational attainment gap among low income and minority communities to improve their access to job vacancies and new jobs.
- Attract and retain the highly educated and mobile workforce by creating places and spaces where they want to live.

To address the challenges, one **Goal** is to: *Increase college and career readiness of the region's workforce.*

To that end, **Actions** include:

²⁵ CERC calculation

²⁶ The Georgetown Center on Education and the Workforce

²⁷ Connecticut State Data Center

²⁸ Rodriguez, Orlando, "Connecticut's Changing Demographics Foreshadow Declining Workforce Income," Connecticut Voices for Children, February 2012.

²⁹ *ibid*

- The MetroHartford Alliance should convene a group of partners to determine whether programs being developed and implemented to increase college and career readiness can be scalable for the entire region and the state. Programs to review include: (1) The magnet high schools located on the campuses of the University of Hartford and Goodwin College provide an opportunity to study interaction of college faculty with high school students to determine if they provide models that could be applied more generally to address high school remediation issues. (2) The iBest model pilot with the Jobs Funnel, Capital Community College, and the Capitol Region Education Council blends remedial coursework with community college credits. (3) The Employability Task Force partnering with the Hartford public schools, Capital Workforce Partners and the Connecticut Business and Industry Association to integrate workforce exposure into capstone graduation requirements.
- Capital Workforce Partners should assess the region's workforce initiatives that are underway and determine whether they can be expanded or brought to scale including: (1) the initiative between the Capital Workforce Partners, Connecticut Business and Industry Association, Asnuntuck Community College and Learning Academy in Hartford that is increasing coordination between employers' needs for workers; (2) the initiative between CCAT and Dream-It-Do-It, including the incorporation of nationally recognized credentials; (3) the MetroHartford Alliance's initiative, Graduate!CT that encourages adults to obtain college degrees; and (4) the City of Hartford's Achieve Hartford! program, which is focused on improving the quality of education in the Hartford Public Schools.
- Capital Workforce Partners should consider accelerating the dialogue with community colleges about developmental versus credit-granting courses to see if there can be a shift to credit courses. Create more "middle college" (grades 9-14) programs that combine a high school diploma with an associate's degree, which has been successful in addressing the remediation issue in other locations (see "Cross-Cutting Initiatives" later in the report) and adding to the supply of workers with middle skills.
- Capital Workforce Partners should consider determining how the State's education reform and Jobs Bill can connect job seekers including special populations to career readiness activities and explore potential pilot program(s) for the region.
- To assist the older dislocated workers who are not in a position to retire, Capital Workforce Partners, in addition to continuing to assist in retooling their skills and partnering with community-based lenders to advise of entrepreneurial loan funds, should connect with the Hartford Innovation Ecosystem Hub to expand the services offered to those who want assistance for startups.

A second **Goal** is to: *Develop and retain an educated workforce pipeline.*

To that end, **Actions** include:

- As a way to increase the retention of college graduates in the region, the MetroHartford Alliance, with assistance from Capital Workforce Partners and CCAT (for manufacturing), should establish new partnerships between area higher education institutions and employers so that recent graduates know about internships, apprenticeships and job

opportunities. One way is to build upon the previous efforts of the InternHere program, with the MetroHartford Alliance taking the lead on populating the program with the college-level internships that are available, and Capital Workforce Partners adding high school-level internships.

- Capital Workforce Partners and CCAT (for manufacturing) should determine what additional programs can be created to fill the worker pipeline. For instance, in the region, the Hartford Job's Funnel Program run by Capital Workforce Partners is an important component for preparing participants for employment in the construction industry.

A third workforce **Goal** is to: *Attract and retain a well-educated workforce for the clusters.*

To that end, **Actions** include:

- Capital Workforce Partners and CCAT (for manufacturing) should facilitate continuous dialogue with identified cluster industries to determine needed worker skills and whether specific training programs are required.
- Cluster groups should assess whether there are enough programs that are comprehensive at local technical high schools, higher education institutions, and certificate-bearing entities to support the industry needs for the future, such as actuarial scientists for the IFS cluster, or construction workers for completing the CTfastrak and rail projects.

Infrastructure Initiative: Support infrastructure investments tied to business and job growth

Since creating private sector jobs is the first CEDS priority, any infrastructure investment should be measured by its contribution to and support of job creation. Transportation is critical to supporting a competitive economy. The metro Hartford region will benefit from critical investments that can be transformative for its targeted industry clusters, as well as many other industries and the economy in general if they receive the appropriate support from the region.

Situational Analysis

Strengths:

The metro Hartford region's development patterns reflect the economic mix and transportation technology realities of the 17th and 18th centuries. The pattern is indicative of a multi-nodal region – where a number of towns play important and distinct roles. As a result the region has many village centers that are quintessentially New England, a desired archetype that is being recreated by new urbanist architects and developers elsewhere. These town centers are an important strength of the region.

Why is this significant? For one thing, this development pattern results in the well-known balkanization of the region, with over 30 separate political jurisdictions in a land area that could typically be one if it had been developed elsewhere in the country in a later period. Hartford County covers approximately 735 square miles and has a population of almost 895,000.³⁰ Compare this to the City of Jacksonville at 747 square miles and a population of 822,000.

This is also significant as we think about the role of Hartford going forward. Any strategy needs to recognize our unique geographic assets while also concentrating attention on Hartford because of the economic disparities between it and the rest of the region, as seen later in this section.

Weaknesses:

The metro Hartford region is part of what Michael Gallis described as the “New Atlantic Triangle,” an economic region including the area between New York City, Albany and Boston. This region includes the largest and tenth largest urban centers in the country, and positions the metro Hartford region as an important player in a key global geography. The critical infrastructure problem for Connecticut and particularly the metro Hartford region – is the inadequacy of transportation infrastructure investment to service the region's need for job growth. We have

³⁰ U.S. Census

underinvested in transportation for years – particularly in rail and other mass transit. Here is what Gallis had to say about this in his 1999 report “Connecticut: Strategic Economic Framework:”

The area east of the Hudson is in danger of becoming a giant cull-de-sac, or dead end, in the global network. There is a lack of adequate cross-Hudson connections...to support efficient flows of people and goods ...the area east of the Hudson is losing connectivity to the global network and becoming increasingly isolated.

Opportunities:

However, the tide has changed from Gallis’ report, and more recently, the region has placed greater emphasis on the importance of transportation. The 2011 Regional Transportation Plan developed by the Capital Region Council of Governments set forth a plan that provided general policy guidance and specific recommendations on how the region could invest its limited funding. Recently, the region has been the recipient of significant funding to improve the transportation infrastructure which includes the following:

- Overall the region is receiving \$1.5 billion in transportation investments that have the potential to change commuting patterns over the next 15 years.
- Last year the State Bond Commission approved the purchase of 25 additional railcars for the New Haven line, bringing the total order to 405.
- Rail investments will increase the number of trains to New York City from 4 to 25 per day.
- Starting in October 2012, MetroNorth will add 28 weekend trains from New Haven to New York City, reducing the wait time to 30 minutes between trains.³¹
- The New Haven- Hartford-Springfield Commuter Rail project will offer travelers at New Haven, Wallingford, Meriden, Berlin, Hartford, Windsor, and Windsor Locks service every 30 minutes during the peak morning and evening rush hours and hourly during the rest of the day. Within the metro Hartford region, new train stations are planned at Newington, West Hartford, and Enfield.
- CTfastrak, the bus rapid transit system that is under construction between New Britain and Hartford, will ease congestion on I-84, have 11 new stations, and a five mile multi-use trail for pedestrians and cyclists.
- \$10 million TIGER grant to implement some of the projects in the iQuilt plan such as improving access to Union Station, adding bike lanes, improving signage, and adding a shuttle from Union Station to the Convention Center.

Not only have there been significant investments in transportation infrastructure but the state also received \$93.8 million to increase broadband infrastructure across the state through the federal Broadband Technology Opportunities Program (BTOP) of the American Recovery and Reinvestment Act.³² The project will bring broadband service to every town in Connecticut and will

³¹ Shelton, Jim, “Metro-North’s New Haven schedule to gain 28 weekend trains in fall,” New Haven Register, August 12, 2012.

³² Connecticut Academy of Science and Engineering, “Guidelines for the Development of a Strategic Plan for Accessibility to and Adoption of Broadband Services in Connecticut,” December 2011.

have the ability to service educational institutions and libraries at speeds up to 1 Gbps³³. Given that broadband enables residents, businesses, and organizations to communicate, learn, work, create, consume, access services, and innovate, it merits the region's attention as an economic development priority.

Finally, Bradley International Airport should be the region's gateway to the world for its businesses and residents. In a global economy and 'flat world,' businesses need to move goods, services and people quickly and efficiently. Air transit must serve the needs of the region's industry clusters in order to gain a competitive advantage. In 2010, the state legislature created a development zone around Bradley and extended enterprise zone property tax exemptions and corporate business tax credits to manufacturers and other businesses. The region must ensure the airport is meeting the needs of its businesses and leverage the foreign-trade zone designations.

Threats:

Traffic congestion and aging roadway infrastructure – Eastbound (S. Main St Exit 41 through I-91 exits 51&52) on I-84 ranked as America's #35th worst commute³⁴; costing residents and businesses \$203 million annually with each commuter wasting 26 hours a year.³⁵

Additional overarching transportation challenges in the region include:

- The automobile has remained the mode of choice when commuting - 80% of workers commute to work alone by car.³⁶ Without integrated public transportation service, the public relies heavily on the car and has historically not demanded transit oriented development.
- As noted by Gallis, a lack of connectivity with the major global trading centers on the East Coast – Boston and New York – means a loss of connectivity to the global network and the possibility of becoming increasingly isolated.
- Although the Legislature created a development zone around Bradley, the airport itself needs to be expanded and updated to serve both business and resident needs. For example, it currently lacks a gate for wide body aircraft which is needed for international flights. A new plan for airport expansion was issued in June 2012 but demand must increase for some of the projects to come to fruition.
- Broadband has enabled innovations across all aspects of the economy and is a necessity to compete in today's global economy. However, many low-income Connecticut residents do not have access further increasing the digital literacy divide.³⁷
- Places with lots of well-educated young workers today are likely to have lots of well-educated workers in the years ahead.³⁸ Yet they are among the most mobile people in our

³³ Gigabytes per second

³⁴ The Daily Beast's "America's 50 Worst Commutes" for 2011.

³⁵ Texas Transportation Institute, "2011 Urban Mobility Report."

³⁶ U.S. American Community Survey 5-year estimates

³⁷ Connecticut Academy of Science and Engineering, "Guidelines for the Development of a Strategic Plan for Accessibility to and Adoption of Broadband Services in Connecticut," December 2011.

³⁸ City Vitals, CEOs for Cities

nation. Therefore, dense and mixed-use living and public transit options are needed in order to attract them to the region and to keep this group from moving out.

To address the challenges, one **Goal** is to: *Harness the demand of people and businesses seeking to locate in densely populated, vibrant communities.*

To that end, **Actions** include:

- The CRCOG should facilitate coordination of transit oriented development planning efforts within the bus rapid transit and rail corridors in order to bring a corridor level perspective to the extensive planning work that is already underway at the state and municipal level.
- The CRCOG and the State should continue to assist municipalities in developing land use regulations and master plans that support denser, compact, mixed-use, transit-supportive development around rail and CTfastrak stations.
- Increase connectivity between existing development, new development, CTfastrak, and rail stations through planning and implementing improvements to the region's on-street bus, bicycle and pedestrian networks.
- The iQuilt Partnership should integrate the downtown's biking routes with the city-wide, regional, and even national bike networks, including the East Coast Greenway as proposed in the iQuilt plan.

A second **Goal** is to: *Ensure that Bradley International Airport serves the needs of the clusters in the region in order to gain a competitive advantage.*

To that end, one **Action** includes:

- The MetroHartford Alliance should coordinate with representatives from Bradley International Airport and local business leaders, particularly in targeted clusters, to see how the airport can further support the needs of the clusters in the region (in terms of route development and expected travel budgets, among others) and what will be necessary to get expansion plans for the airport completed.

A third infrastructure **Goal** is that: *All residents, organizations and businesses should have access to affordable broadband service.*

To that end, one **Action** includes:

- The MetroHartford Alliance should look to the Connecticut Academy of Science and Engineering's (CASE) broadband recommendations for regional tactics on achieving universal broadband for residents and businesses.³⁹

³⁹ <http://ctcase.org/reports/broadband.pdf>

Aggressively leveraging the progress and infrastructure investments will not only benefit the industry clusters identified in the region, but will also support the metro Hartford region as the center of an economic region between Princeton and Boston. Further, these infrastructure projects not only create densely populated places in which people want to live but also enable the region to serve as a gateway to the world.

Downtown Hartford Initiative: Transform Downtown Hartford into a dynamic urban environment that is the epicenter of culture, entertainment, and innovation

The U.S. Economic Development Administration (EDA) provides funding to regions to facilitate the development, implementation and revision of comprehensive economic development strategies. EDA funding stipulates that economic development programs should be designed to have positive economic development impacts within economically distressed regions. The metro Hartford region qualifies because the City of Hartford meets the EDA's distress criteria. Therefore, a key component of this CEDS must address the issues causing economic distress, and lead Hartford to become a net economic contributor to the region, and not a burden. An economically strong central city is a regional asset in promoting cluster growth, creating an environment for emerging and growing companies, and attracting talented people.

Hartford's role in the region is different from other regions where there is an urban core and suburbs surrounding the central city. Employment for the region is not concentrated in Hartford and in fact, only about one-fourth of employment is in Hartford with an even smaller number in Downtown Hartford. Further, the population that actually lives and works in Hartford is only 13,000.⁴⁰ This means that 24,000 are commuting out of the city and 98,000 are commuting into the city. Although the hub-and-spoke model does not currently apply to the region, the increased demand for urban living means the region must realize the potential the city will play in the future and if not cultivated and strengthened, the region will lose out to other areas that are enhancing urban living environments. This demand can also be met in part by creating vibrant downtowns in other communities within the metro Hartford region.

Hartford's resurgence will ultimately lead to the accelerated advancement of the region. As noted by Markus Berensson, "Suburbs benefit when their core cities are viable – that is, densely populated and prosperous – since they are part of the same economic region." The social and economic lines between city and suburb and country have faded as people within a region such as Greater Hartford or Greater Chicago or Greater Los Angeles move in intricate patterns across jurisdictional lines on a daily basis.⁴¹

Focusing on small and medium-sized efforts that are achievable and provide connectivity instead of using a mega-project "silver bullet" approach to economic development is strategic. In 1998, as an implementation step of the MetroHartford Millenium Project, international planner Ken Greenberg presented his comprehensive view of what Hartford needed to be more successful. The plan

⁴⁰ <http://onthemap.ces.census.gov/> 2010 data for Hartford

⁴¹ Berensson, Markus, "Government Fragmentation is Holding Back America's Metropolitan Regions," City Mayors, April 1, 2011.

centered on Bushnell Park and recommended steps to take full advantage of Hartford's compact downtown. In 2010 urban planner Doug Suisman described the challenge as: "Downtown Hartford is an unusually compact historic downtown packed with more than 45 cultural assets and destinations within a 15-minute walk: museums, performance spaces, historic landmarks, modern architecture, and public art. The iQuilt plan links those assets with a vibrant and innovative pedestrian network."

In our CEDS interviews with both planners, what did Ken and Doug both say is most important? Do the small and mid-sized things that will take advantage of Hartford's compact downtown to create a vibrant urban environment where people will want to live. Emphasize the natural center of downtown – Bushnell Park – and knit the downtown together around it. The metro Hartford region has seen heavy investments in large capital projects. We need to take advantage of these investments by knitting them together with other attractions throughout the region.

Situational Analysis

Strengths:

Hartford's assets include a compact downtown that is walkable, abundant public green space, riverfront attractions, and a variety of cultural amenities. Further downtown Hartford has a concentration of corporate and financial services. It is also the seat of state government and therefore has an employment concentration in the public sector.

Weaknesses:

As noted in Hartford's "One City, One Plan," the "most important ingredient for a vibrant Downtown Hartford is population." The city has reached a point where it needs more housing and people on the street to create the vibe and pulse to feel like a city again. The addition of housing – townhomes, condos, and apartment buildings - will help attract the talented, creative and educated young people which will in turn create demand for more restaurants and retail, put more feet on the street, and add a pulse to the city at night and on the weekends.

Further, although there is a large presence of colleges and universities in Hartford and the surrounding municipalities, there is a lack of a presence of college students in downtown Hartford. Creating spaces and activities for college students in the downtown area would help create a vibrant atmosphere and could further help spawn additional retail growth. Total enrollment for the area colleges is nearly 16,000 students.⁴² Therefore, a critical mass of students exists, and it is just a matter of creating venues and attractions to draw them into the downtown area.

Another element to making Hartford vibrant is ensuring people feel safe. All the business leaders that were interviewed for this project expressed concern about public safety downtown. If people do not feel safe, they will not go to the city and subsequently businesses do not want to locate in an

⁴² Source: National Center for Education Statistics, Fall 2011 enrollment for Goodwin College, Trinity College, University of Hartford, Capital Community College, and Rensselaer Hartford Graduate Center.

area where its employees do not feel safe. Therefore, the community must support the Police Chief's efforts to help combat violence and address quality-of-life issues citywide.⁴³

One disparity involves poverty, where all towns in the metro Hartford region had poverty rates of less than 10% except Hartford (32%) and East Hartford (15%).⁴⁴ Similarly, Hartford's grand list, or the overall measure of the assets in the municipality, on a per capita basis was \$27,500 between 2008 and 2010, compared to an average of \$85,252 for the other towns in the region.⁴⁵ These examples show that there is a stark contrast between urban poverty and suburban wealth in the region.

Opportunities:

The state and the City of Hartford have already made several large-scale investments in the city such as: the Science Center, Convention Center and major hotels. Now the city needs to integrate these amenities. The focus must shift to the smaller and mid-sized projects that have the potential to have a big impact when coordinated and integrated together. For example, when residents and visitors go to the Science Center or the ice rink in Bushnell Park, they need amenities within close proximity to the major attractions to make a day of their visit to Hartford – such as shops, restaurants and cafes. The iQuilt project presents a plan for connecting the assets of the city such as making the space between Union Station and Downtown walkable. These changes will make the city more inviting and will change residents' and visitors' perceptions of the city.

Further, the city needs to expand the Hartford Business Improvement District (HBID) so that it encompasses the entire downtown. By expanding the HBID, the assets in downtown Hartford can be more easily coordinated.

In addition, during the 2012 legislative session, the Capital Region Development Authority was created, a quasi-public, with the responsibility of stimulating new investment and diversifying the economy in and around Hartford. It also has the authority to pursue development and redevelopment of property and housing. The CRDA is comprised of several committees. One is focused on the relocation of state agencies into Hartford and another committee is focused on expanding the physical presence of colleges in Hartford. In addition, the housing committee of the (CRDA) has \$60 million allocated for housing initiatives, and the authority is looking to the City to set the vision on how that should be spent.

Threats:

During the interviews, it was noted that the property tax structure for businesses is a factor that drives businesses out of the city. The current lack of parity in the rates poses a threat to the economic competitiveness of the city. By law, across the state, property must be assessed at 70% of

⁴³ Carlesso, Jenna, and Goode, Steven, "Acting Hartford Police Chief Has New Plan To Fight Violent Crime: Multi-Pronged Initiative Would Also Focus On Quality-Of-Life Issues, Recidivism," Hartford Courant, May 6, 2012.

⁴⁴ U.S. Census, American Community Survey 5-year estimates, 2006-2010

⁴⁵ CT Office of Policy and Management

its fair market value. However, in Hartford only commercial property is assessed at that rate.⁴⁶ As a result, the city has the highest mill rate in the state and there is a need to create parity among the different types of property yet it is politically difficult. The difference in assessments has resulted in residential properties having an effective tax rate of 2.2%, commercial 5%, and personal property 5% whereas in West Hartford, for example, the effective tax rate for all types of property is 2.6%.⁴⁷ Further, in the fourth quarter of 2011, 30% of the office space was vacant.

Overarching challenges for Hartford include:

- A lack of housing options in downtown Hartford
- Safety concerns in downtown Hartford
- The Hartford Business Improvement District (HBID) that does not encompass the entire downtown area
- A need to focus on the small to medium size projects that will link the assets of downtown Hartford
- Inequity in the property tax structure for assessing different property types

To address the challenges, one **Goal** is to: *Create a housing strategy that will increase the housing stock to respond to the increased demand for urban living.*

To that end, one **Action** step is:

- With the recent establishment of the CRDA and the funding provided to increase housing in Hartford, the City of Hartford should set a goal of increasing the number of residents living downtown to between 8,000 and 10,000 over the next five to ten years as recommended in the One City, One Plan. This would require approximately an additional 4,000 to 5,000 units of residential space. One way to implement the goal is to convert vacant downtown office buildings into residential buildings.

Another **Goal** is to: *Increase public safety measures.*

To that end, **Action** steps are:

- The City of Hartford should continue and expand their efforts to ensure greater public safety.

⁴⁶ During the 2006 revaluation, office space remained relatively flat but low-end real estate increased the most. However, the low-end real estate was mostly residential and stand-alone commercial/retail space. Creating parity in the assessment of residential and commercial property would have raised the taxes on residents by 80% - not politically feasible. Instead, the legislation permitted a 3.5% increase on residents and phased out the 15% surcharge on commercial property. The 2011 revaluation also required legislation. Now the apartment and mixed used property assessment ratio will increase 5% a year and in five years be at 70% - same as commercial. However, the residential assessment ratio adjustment depends on the amount of taxes the city levied in the current and prior fiscal years. In 2011, commercial property was assessed at 70%, residential property 29%, and apartments at 50%.

⁴⁷ Effective tax rate calculated by multiplying the assessment ratio by the mill rate – for Hartford residential it is: $.0292 \times .7429 = 2.2\%$

- The City of Hartford should create a “Community Service Representative” program modeled after Philadelphia’s BID or New Haven’s Town Green Special Services District for the downtown area.

Another **Goal** for the City is: *To be competitive, seek parity in the property tax structure and determine ways to overcome the political barriers of increasing taxes.*

To that end, one **Action** step is:

- The City of Hartford should evaluate conditions, development agreements, code, policy and review processes and consider approaches to promote occupancy of existing empty retail frontage, particularly in high profile locations. This evaluation should include exploring ways to address the variation in tax assessment rates of residential, apartments, and commercial property.

Another **Goal** is: *Connect the assets of the city which will make the city more inviting and will change residents’ and visitors’ perceptions of the city.*

To that end, **Action** steps include:

- The MetroHartford Alliance should continue its efforts in supporting the iQuilt Partnership’s implementation of the iQuilt plan and coordinate the nearby development opportunities.
- The City of Hartford and the HBID should ensure reauthorization of the BID in 2014 and seek ways to expand the Downtown Improvement District to encompass the entirety of Downtown Hartford so that assets can more easily be coordinated.
- The MetroHartford Alliance, in coordination with the City of Hartford, the area’s colleges and universities, and the CRDA should determine how to expand the physical footprint and activities of the higher education institutions into the downtown area to attract more students, visitors and retail businesses.
- The City of Hartford should work with the CRDA to promote economic development efforts underway in the City, such as the Downtown North Plan and Parkville MDP, that will enhance the neighborhoods and connect the all the assets of the city.

Further, the focus on improving the downtown epicenter of Hartford will impact not only the city but more broadly the metro Hartford region. The 31 municipalities of the metro Hartford region engage in an economic interdependence, and by addressing these urban core issues, the entire region will be able to take advantage of the positive results.

Cross-Cutting Initiatives

Below are three areas that have the potential to cut-across multiple initiatives. These big and bold ideas have shown much promise in other areas across the nation and if the metro Hartford region decided to focus some energy on implementing these ‘game changers’ it too could serve as a model for the nation and state.

The *Goal* for these cross-cutting initiatives is to: *Springboard the metro Hartford region into the national spotlight for achieving ‘game changing’ economic development initiatives.*

Regional Tax Sharing

As municipalities in the region continue to struggle to recover from the most recent economic recession it has made it even more evident that structural municipal fiscal reform is needed at the local level. Even though the economic recession has ended, municipalities will continue to encounter tough financial times as property values have not recovered and reassessments could bring in lower values. As seen in this last recession, municipalities cannot rely on the state for assistance in tough financial times as the state has struggled and is in need of structural financial reform as well. Therefore, all the municipalities in the region need to consider ways in which they can better weather economic recessions.

One idea that has repeatedly been discussed and bantered about is the idea of regional tax sharing. Some municipalities in the region have worked out arrangements to regionalize services in an attempt to reduce costs but these have all been on a one-off basis. The region should seek to implement a larger scale effort that spans the region and could serve as a model for the state.

Other regions in the country have been able to successfully implement regional tax sharing arrangements which could serve as models for the metro Hartford region. For example, since 1970 the New Jersey Meadowlands Commission has overseen a program that collects 40 percent of the growth in property-tax revenues in portions of 14 Bergen and Hudson County communities. Revenues are distributed annually based on the share of the Meadowland district that falls in each community.

Another successful example is known as the Twin Cities Fiscal Disparities program which places 40 percent of property tax growth in commercial-industrial tax base in each municipality in each year into a seven-county, regional pool. Taxes are then redistributed back to participating municipalities and school districts based on tax base and population. This model reduces the incentive for the inefficient competition for tax base; encourages joint economic development efforts; and

complements regional land-use planning. Further, the program has reduced overall property tax base inequality in the region by about 20 percent.⁴⁸

To that end, one **Action** step includes:

- Within the metro Hartford region, the Hartford Innovation Hub could serve as the first project where a regional cost and tax sharing arrangement could be developed. Such an arrangement would mean the region would share the costs of the Hub but then share the revenues generated from those companies. Therefore, all towns would benefit from the property taxes collected wherever the new company decided to eventually locate in the region. Building off this project, the region could more aggressively seek to expand the program and mimic what has been done in New Jersey or Minnesota.

Universal Pre-School for Low-Income Students in the Region

There is increasing evidence of the importance of early brain development and the implications it has for long-term success. Policymakers have started to listen to the neuroscientists and academics that have been espousing the importance of early-childhood intervention starting before birth and the long-term benefits that can be reaped. The longer society waits to intervene in the life cycle of a disadvantaged child, the more costly it will be to remediate, and the less likely to see results.

Research by Jack P. Shonkoff, Director of the Center for the Developing Child at Harvard University, indicates that age four may already be too late in a child's development to fully realize the benefit of a public investment. Dr. Shonkoff's research shows that 80% of a child's brain is developed by age five.

Further, the Nobel laureate James Heckman shows that on average, when behind in kindergarten, the child never has a chance to catch up. He demonstrated that investments focused on birth to age five produce a higher per-dollar return than k-12 schooling and later job training. Further they reduce the need for special education, and cut juvenile delinquency, teenage pregnancy and dropout rates. In Heckman's report, *The Productivity Argument for Investing in Young Children*, the key findings include:⁴⁹

1. Cognitive and noncognitive abilities are important for a productive workforce, and gaps that emerge early are difficult to change.
2. "Skill begets skill and learning begets more learning." Because skills are accumulated, starting early and over time, investing in young children is an investment in future productivity and public safety.
3. Family environments are important in determining education and skills. Growing numbers of children face adverse environments that restrict the development of these skills. Early education and other early interventions such as home visits can mitigate

⁴⁸ Montgomery, Carleton. *Regional Planning for a Sustainable America: How Creative Programs are Promoting Prosperity and Saving the Environment*, Rutgers University Press, October 2011.

⁴⁹ Heckman and Masterov, "The Productivity Argument for Investing in Young Children," October 2004

the effects of poor family environments. Key workforce skills such as motivation, persistence and self-control are developed early.

Several longitudinal evaluations all reach essentially the same conclusion: The return on early-childhood-development programs that focus on at-risk families far exceeds the return on other projects that are funded as economic development. Cost-benefit analyses of the Perry Preschool Program, the Abecedarian Project, the Chicago Child-Parent Centers, and the Elmira Prenatal/Early Infancy Project showed returns ranging from \$3 to \$17 for every dollar invested. This implies an annual rate of return, adjusted for inflation, of between 7 percent and 18 percent; the highest public return that can be found today.⁵⁰

In Minnesota, several large Minneapolis-based businesses raised \$20 million to pilot a pre-natal to early learning initiative. The program included three major interventions: 1) parent mentoring through home visiting to provide parents with information and resources; 2) scholarships for three to four year-old children to attend high-quality early childhood education programs; and 3) an early childhood education quality rating system to rate and monitor program performance. The scholarship program served approximately 650 children. As a result of the increased funding available, the region saw an increase in the number of high-quality preschools in order to compete for the children who were participating in the program. Early results from this project demonstrated that children on scholarships significantly better outcomes on measures of social competence and anxiety compared to a control group. The program was also able to successfully increase the school readiness of the children. Due to the success of this program, Minnesota was one of nine states to receive Federal “Race to the Top – Early Learning Challenge” funding to expand statewide (Connecticut did not receive funding).

Early childhood education is critical to the future of the region and its workforce. It is the best investment the region can make. However, the investment must be tied directly to quality – promoting quality, improving quality, and ensuring access to quality. Given the increased focused nationally on high quality preschool programs and the federal governments interest in funding preschool programs, this program in the region could serve as a model for the state and help it compete more effectively for federal funding.

Providing pre-school for all low-income three and four year olds in the region would mean an additional 1,300 spaces for East Hartford and Hartford in addition to the current unmet demand in the other municipalities in the region.⁵¹ These figures do not take into account the additional 94 slots (out of a total of 1,000 new slots in the state) that were added as a result of the 2012 Education Reform.

To that end, one **Action** step includes:

- Create a pre-school scholarship program based on Minneapolis model that provides universal pre-school for low-income children.

⁵⁰ http://minneapolisfed.org/publications_papers/pub_display.cfm?id=3832

⁵¹ <http://blog.ctnews.com/education/2012/09/06/the-cost-of-preschool/#.UFtdQ4z0XFA.email>

Not Only a High School Degree

With nearly flat population projections for the next twenty years in the metro Hartford region with projected population growth occurring only in the urban areas, the region must focus on ways to increase the achievement levels of our future workers. High quality preschool education is a policy solution with benefits that will not accrue for many years. However, the region is facing an immediate crisis of needing to fill middle skill jobs that will be vacated by retiring baby-boomers. The Bureau of Labor Statistics reports that 14 million jobs are set to be created over the next ten years for students who have associate's degree skills.

In Brooklyn, New York, Pathways in Technology Early College High School (P-Tech) is an example of a technology-based high school program that started in 2011 with 130 ninth-graders, about 80% from low-income homes, and will add a grade each year for the next five years. The New York City Department of Education and the City University of New York partnered with IBM to create a high school that runs from grades 9-14, with students receiving at the end of six years a free associate's degree in applied science from a nearby technical college. In addition, students are first in line at IBM for job openings.⁵² IBM also spent \$500,000 to help develop the school's website, provide software support at the school, and pay for a project manager to help create curriculum and coordinate mentoring and internships. For the 2012 school-year, Bloomberg announced the opening of three more schools in the city that will be modeled after P-Tech. Further, Chicago was recently awarded money from IBM's nationwide \$50 million dollar Smarter Cities Challenge grant to develop five high schools that will follow the six-year model.

To that end, one **Action** step includes:

- As recommended, in the Workforce Initiative, Capital Workforce Partners should consider accelerating the dialogue with community colleges about developmental versus credit-granting courses to see if there can be a shift to credit courses. Create more "middle college" (grades 9-14) programs that combine a high school diploma with an associate's degree, which could help address the low graduation rates among the region's low-income municipalities.

⁵² <http://www.educationnews.org/technology/6-year-technology-high-school-launched-in-brooklyn/>

Implementation

The goals and action steps taken together are designed to improve the economic performance of the entire metro Hartford region. They have the potential to solidify the regional approach to economic development; promote the region as an economic engine of growth; and efficiently utilize scant resources that will help the region compete globally. Where is the metro Hartford region now on the continuum of moving toward real regional approaches to these issues? Since the Millennium project in 1997 a number of actions have strengthened regional approaches:

- The Chamber of Commerce and the Growth Council were combined to create the Alliance – the clear regional business and economic leader.
- The Capital City Economic Development Authority (CCEDA) was created to manage the “Six Pillars of Progress” plan developed by the Rowland Administration and the Legislature. In 2012, the Capital Region Development Authority (CRDA) was created to stimulate new investment and diversify the economy in and around Hartford, replacing CCEDA.
- The Hartford Springfield Economic Partnership was created, recognizing the economic ties of two metros that cross state boundaries. The bi-state region received a Sustainable Communities grant that is providing renewed impetus to work regionally.
- Many existing regional organizations will have responsibility for implementation of certain recommendations like the Capitol Region Council of Governments (CRCOG), Capital Workforce Partners, Connecticut Center for Advanced Manufacturing (CCAT), and the iQuilt Public/Private Partnership. This coordination will be critical going forward.

The region needs to consider ways that existing organizations can increase coordination and strengthen regional ties to encourage economic growth. Businesses do not see municipal boundaries when deciding where to locate but rather look at the regional assets such as education, workforce, and infrastructure. Therefore, successful economic development requires a regional approach. Attracting businesses requires cooperating and coordinating with organizational entities that cross town lines with the ultimate goal of improving the larger region. Combining and coordinating the various initiatives occurring in the region and creating a cohesive vision that promotes the region and markets its attributes requires effective leadership.

A number of entities contribute to economic development efforts in and around the region: for example the State’s economic development agency, the regional Council of Governments, the Workforce Investment Board, multiple quasi-public and nonprofit organizations, businesses, and municipalities all have their own structures and approaches to economic development. There needs to be a way for various stakeholders to coordinate efforts, market the region, and implement in a truly regional way. **A committee with a mix of private and public participants to move the regional agenda forward needs to be utilized, under the leadership of the MetroHartford Alliance and the CRCOG. The existing Capitol Region Partnership could form the base of such a public-private committee.** Where known, the action items have been assigned to a particular entity. However, some of the action steps will require efforts from an array of leaders. It will be

important for a committee to meet on a somewhat regular basis to implement with the region's best interests in mind.

At a Glance: Metro Hartford Region Initiatives, Goals and Action Steps

Healthy industries support productive workers which brings more investment into the communities and, with the right industry mix, can bring innovative cultures. This CEDS envisions creating a thriving economy with available jobs and career paths for residents, along with interesting assets and amenities that make the region a desirable place to live. The goals and action steps (in the left-hand columns) can achieve the vision of a thriving economy by effectively leveraging the metro Hartford region's unique position. The right-hand columns describe the metrics and timeframe (short-term, within a year; mid-term, one to three years; and long-term, three to five years) that can track progress.

Cluster Initiative: Foster and grow the industry clusters with a strong presence in the region and seek current cross-regional synergies of growth and opportunity

Goal: Support innovation and entrepreneurs.

Action Step	The MetroHartford Alliance, along with the City of Hartford, should establish a long-term plan leveraging the state's innovation ecosystem program.	Plan developed	Short-term
Action Step	The MetroHartford Alliance should establish a regional investment fund - \$20-25 million- to support early stage and stage two entrepreneurs which would provide both debt and equity financing. This would support industry cluster growth, infrastructure, and downtown revitalization.	Create an investment fund	Mid-term

Goal: Ensure the Insurance and Financial Services cluster remains a leader in the country and globally competitive.

Action Step	Support the IFS Cluster's efforts to reaffirm Connecticut as the Insurance Capital of the World through the release of an annual market forecast and statewide event of business leaders and stakeholders.	Market forecast released annually	Short-term
Action Step	Survey members of the Insurance and Financial Services (IFS) Cluster organization to understand the greatest challenges in the future related to global competition and competition from other regions. The IFS Cluster can use the feedback to advocate for workforce and policy solutions.	Develop survey and results incorporated into advocacy efforts	Short-term
Action Step	The IFS cluster should capitalize on the recent legislative changes that expand the captive insurance market.	Develop marketing plan	Short-term

Goal: Develop a robust Health Sciences and Services consortium.

Action Step	The MetroHartford Alliance should create a Center for Medical Discovery, Delivery and Reimbursement in Hartford that will be a global thought leader on the challenges created by the growth in personalized medicine, changes in patient care	Center created	Mid-term
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	protocols, and the standards necessary to appropriately reimburse care givers for services provided. The Center would be staffed by representatives from all three industry sectors that would jointly work on issues around new personalized treatment options being developed in the region, innovative patient care, and how these changes impact reimbursement for care. Further, leverage the investments being made by the state particularly in growing personalized medicine and determine a strategy for increasing opportunities for federal dollars in the healthcare industry, through enhancing research and development.		
Action Step	Develop a cluster organization that coordinates and promotes the Health Sciences & Services sector. The Connecticut Health Council, founded in 2012 by the MetroHartford Alliance, will serve as the vehicle for promoting Connecticut's health sector when formally launched at the end of October 2012. Consistent with the CEDS overriding strategic approach of tracking statewide efforts, the new CT Health Council should be coordinated with other statewide organizations (i.e. Biomedical Engineering Alliance & Consortium [BEACON] and CHF [Connecticut Health Foundation]). Combine cluster strengths in bioscience, hospitals, and insurance with all industries being represented in the consortium and connect with the proposed Center for Medical Discovery, Delivery and Reimbursement on joint initiatives.	Cluster organization formed	Mid-term
Action Step	Assist bioscience companies in the region with competing for grant funding through Connecticut Innovation's new Connecticut Bioscience Initiative, the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program and other initiatives.	Increase number of bioscience companies competing for funding	Mid-term
<i>Goal: Broaden and strengthen the region's level of research and development activities to support the advanced manufacturing cluster and leverage other state investments in manufacturing.</i>			
Action Step	Expand the opportunities for federal grant awards to innovative manufacturing companies in conjunction with the Innovation Ecosystem, CCAT, and SBIR/STTR programs.	Increase number of federal grant awards	Mid-term
Action Step	Expand the services provided at CCAT by establishing an R&D facility to benefit all the manufacturing industries in the region.	R&D facility established	Long-term
Action Step	Continue to support effective research and development tax credits offered by the state through the public policy advocacy program at the MetroHartford Alliance.	Continuation of R&D tax credits	Ongoing
Action Step	CCAT should inform manufacturers in the region about the increased opportunities through the Manufacturing Reinvestment Account and assist the companies in applying.	Increase number of companies applying	Short-term

Action Step	CCAT in coordination with appropriate Connecticut and Massachusetts manufacturing organizations should collaborate on ways to market the expertise and capacity of the aerospace industry in order to demonstrate the broader multi-regional strengths of the sector.	Increase the number of companies or employment in the aerospace industry	Long-term
<i>Goal: Identify policies and or programs to attract and retain headquarters.</i>			
Action Step	Identify and promote the region's attributes that make it an appealing place for company headquarters. The MetroHartford Alliance should convene a group of business leaders in this industry to investigate Connecticut's attributes, promote them, and also seek to fill any identified gaps through public advocacy.	Businesses convened and marketing materials developed	Short-term
<i>Workforce & Education Initiative: Focus on improving the workforce today while educating, training and recruiting the pipeline for tomorrow</i>			
<i>Goal: Increase college and career readiness of the region's workforce.</i>			
Action Step	The MetroHartford Alliance should convene a group of partners to determine whether programs being developed and implemented to increase college and career readiness can be scalable for the entire region and the state. Programs to review include: (1) The magnet high schools located on the campuses of the University of Hartford and Goodwin College provide an opportunity to study interaction of college faculty with high school students to determine if they provide models that could be applied more generally to address high school remediation issues. (2) The iBest model pilot with the Jobs Funnel, Capital Community College, and the Capitol Region Education Council blends remedial coursework with community college credits. (3) The Employability Task Force partnering with the Hartford public schools, Capital Workforce Partners and the Connecticut Business and Industry Association to integrate workforce exposure into capstone graduation requirements.	Partners convened and strategy developed	Mid-term
Action Step	Capital Workforce Partners should assess the region's workforce initiatives that are underway and determine whether they can be expanded or brought to scale including: (1) the initiative between the Capital Workforce Partners, Connecticut Business and Industry Association, Asnuntuck Community College and Learning Academy in Hartford that is increasing coordination between employers' needs for workers; (2) the initiative between CCAT and Dream-It-Do-It, including the incorporation of nationally recognized credentials; (3) the MetroHartford Alliance's	Assessment developed	Mid-term

	initiative, Graduate!CT that encourages adults to obtain college degrees; and (4) the City of Hartford's Achieve Hartford! program, which is focused on improving the quality of education in the Hartford Public Schools.		
Action Step	Capital Workforce Partners should accelerate the dialogue with community colleges about developmental versus credit-granting courses to see if there can be a shift to credit courses. Create more "middle college" (grades 9-14) programs that combine a high school diploma with an associate's degree, which has been successful in addressing the remediation issue in other locations and adding to the supply of workers with middle skills.	Middle college program created	Mid-term
Action Step	Capital Workforce Partners should consider determining how the State's education reform and Jobs Bill can connect job seekers including special populations to career readiness activities and explore potential pilot program(s) for the region.	Development of pilot program(s)	Mid-term
Action Step	To assist the older dislocated workers who are not in a position to retire, the Capital Workforce Partners, in addition to continuing to assist in retooling their skills and partnering with community-based lenders to advise of entrepreneurial loan funds, should connect with the Hartford Innovation Ecosystem Hub to expand the services offered to those who want assistance for startups.	Formal linkage between CWP and Hartford Hub created	Mid-term
<i>Goal: Develop and retain an educated workforce pipeline.</i>			
Action Step	As a way to increase the retention of college graduates in the region, the MetroHartford Alliance, with assistance from Capital Workforce Partners and CCAT (for manufacturing), should establish new partnerships between area higher education institutions and employers so that recent graduates know about internships, apprenticeships and job opportunities. One way is to build upon the previous efforts of the InternHere program, with the MetroHartford Alliance taking the lead on populating the program with the college-level internships that are available, and Capital Workforce Partners adding high school-level internships.	Partnerships created and reactivate InternHere	Mid-term
Action Step	Capital Workforce Partners and CCAT (for manufacturing) should determine what additional programs can be created to fill the worker pipeline. For instance, in the region, the Hartford Job's Funnel Program run by Capital Workforce Partners is an important component for preparing participants for employment in the construction industry.	Create a list of potential programs	Short-term
<i>Goal: Attract and retain a well-educated workforce for the clusters.</i>			
Action Step	Capital Workforce Partners and CCAT (for manufacturing) should facilitate continuous dialogue with identified cluster industries to determine needed worker skills and whether specific training programs are required.	Formal dialogue established	Ongoing

Action Step	Cluster groups should assess whether there are enough programs that are comprehensive at local technical high schools, higher education institutions, and certificate-bearing entities to support the industry needs for the future, such as actuarial scientists for the IFS cluster, or construction workers for completing the CTfastrak and rail projects.	Conduct needs analysis	Mid-term
<i>Infrastructure Initiative: Support infrastructure investments tied to business and job growth</i>			
<i>Goal: Harness the demand of people and businesses seeking to locate in densely populated, vibrant communities.</i>			
Action Step	The CRCOG should facilitate coordination of transit oriented development (TOD) planning efforts within the bus rapid transit and rail corridors in order to bring a corridor level perspective to the extensive planning work that is already underway at the state and municipal level.	Coordinate TOD efforts	Ongoing
Action Step	The CRCOG and the State should continue to assist municipalities in developing land use regulations and master plans that support denser, compact, mixed-use, transit-supportive development around rail and CTfastrak stations.	Development of land use regulations	Ongoing
Action Step	Increase connectivity between existing development, new development, CTfastrak, and rail stations through planning and implementing improvements to the region's on-street bus, bicycle and pedestrian networks.	Increase bus, bicycle and pedestrian networks	Long-term
Action Step	The iQuilt Partnership should integrate the downtown's biking routes with the city-wide, regional, and even national bike networks, including the East Coast Greenway as proposed in the iQuilt plan.	Biking routes integrated throughout region	Long-term
<i>Goal: Ensure that Bradley International Airport serves the needs of the clusters in the region in order to gain a competitive advantage.</i>			
Action Step	The MetroHartford Alliance should coordinate with representatives from Bradley International Airport and local business leaders, particularly in targeted clusters, to see how the airport can further support the needs of the clusters in the region (in terms of route development and expected travel budgets, among others) and what will be necessary to get expansion plans for the airport completed.	Meeting convened	Short-term
<i>Goal: All residents, organizations and businesses should have access to affordable broadband service.</i>			
Action Step	The MetroHartford Alliance should look to the Connecticut Academy of Science and Engineering's (CASE) broadband recommendations for regional tactics on achieving universal broadband for residents and businesses.	Regional tactics established	Mid-term

Downtown Hartford Initiative: Transform Downtown Hartford into a dynamic urban environment that is the epicenter of culture, entertainment, and innovation

Goal: Create a housing strategy that will increase the housing stock to respond to the increased demand for urban living.

Action Step	With the recent establishment of the CRDA and the funding provided to increase housing in Hartford, the City of Hartford should set a goal of increasing the number of residents living downtown to between 8,000 and 10,000 over the next five to ten years as recommended in the One City, One Plan. This would require approximately an additional 4,000 to 5,000 units of residential space. One way to implement the goal is to convert vacant downtown office buildings into residential buildings.	Housing development commenced	Long-term
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Goal: Increase public safety measures.

Action Step	The City of Hartford should continue and expand their efforts to ensure greater public safety.	Public safety efforts expanded	Mid-term
Action Step	The City of Hartford should create a “Community Service Representative” program modeled after Philadelphia’s BID or New Haven’s Town Green Special Services District for the downtown area.	Community Serve Representative program created	Mid-term

Goal: To be competitive, seek parity in the property tax structure and determine ways to overcome the political barriers of increasing taxes.

Action Step	The City of Hartford should evaluate conditions, development agreements, code, policy and review processes and consider approaches to promote occupancy of existing empty retail frontage, particularly in high profile locations. This evaluation should include exploring ways to address the variation in tax assessment rates of residential, apartments, and commercial property.	Evaluation of property tax completed	Mid-term
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Goal: Connect the assets of the city which will make the city more inviting and will change residents’ and visitors’ perceptions of the city.

Action Step	The MetroHartford Alliance should continue its efforts in supporting the iQuilt Partnership’s implementation of the iQuilt plan and coordinate the nearby development opportunities.	Coordinate appropriate marketing tactics with iQuilt	Ongoing
Action Step	The City of Hartford and the HBID should ensure reauthorization of the BID in 2014 and seek ways to expand the Downtown Improvement District to encompass the entirety of Downtown Hartford so that assets can more easily be coordinated.	Reauthorization of the HBID	Mid-term

Action Step	The MetroHartford Alliance, in coordination with the City of Hartford, the area's colleges and universities, and the CRDA should determine how to expand the physical footprint and activities of the higher education institutions into the downtown area to attract more students, visitors and retail businesses.	Recruit state colleges to open campuses downtown	Mid-term
Action Step	The City of Hartford should work with the CRDA to promote economic development efforts underway in the City, such as the Downtown North Plan and Parkville MDP, that will enhance the neighborhoods and connect the all the assets of the city.	Coordinate promotion efforts	Ongoing
<i>Cross-Cutting Initiatives</i>			
<i>Goal: Springboard the metro Hartford region into the national spotlight for achieving 'game changing' economic development initiatives</i>			
Action Step	Within the metro Hartford region, the Hartford Innovation Hub could serve as the first project where a regional cost and tax sharing arrangement could be developed. Such an arrangement would mean the region would share the costs of the Hub but then share the revenues generated from those companies. Therefore, all towns would benefit from the property taxes collected wherever the new company decided to eventually locate in the region. Building off this project, the region could more aggressively seek to expand the program and mimic what has been done in New Jersey or Minnesota.	Implement regional tax sharing	Long-term
Action Step	Create a pre-school scholarship program based on Minneapolis model that provides universal pre-school for low-income children.	Implement universal pre-school	Long-term
Action Step	See action step above under the Workforce Initiative goal to "increase career and college readiness for the region's workforce."	Middle college program created	Mid-term