

Road to Renaissance: A Collaborative Strategy for Regional Economic Growth

Final Benchmarking Report
November 2006



new economy strategies



making the complex simple

Benchmarking: Objectives

Objective:

- Determine Greater Detroit's relative position in the competitive landscape among relevant domestic and global peer regions.
- Identify best practices that are aligned with opportunities for future economic growth.
- Describe successful governance methodologies and leadership engagement for economic transformation.

Two Part Assessment:

1. **Regional Overviews:** High-level assessment of 4 domestic and 2 global regions in the areas of key assets, fundamental economic development strategies and programs, and overall successes and challenges.
2. **Best Practices Analysis:** Case studies of global and domestic best practices that address key opportunities and challenges facing the Greater Detroit Region and its relative advantages and disadvantages.

Benchmarking: Regional Overviews

Goals:

- Profile peer regions for key assets, strengths and challenges.
- Identify economic development programs and strategies.

Selection Criteria:

- Alignment with the Detroit Regional Chamber domestic benchmarking selections.
- Similar economic composition and challenges.
- An “aspirational” region due to a successful economic transformation.

Selected Regions:

- **US:** Atlanta, Boston, Houston and Philadelphia
- **Global:** Manchester, UK and the Ruhr area, Germany

Benchmarking: Regional Overview Lessons for Greater Detroit

Based on the assessment of regional development activities in US and global regions a number of general principles can be applied to Greater Detroit.

General Principles:

- The decline of traditional industry sectors in a region often leads to an initial dependence on federal resources to support workforce redevelopment and sector renewal.
- The state plays a critical role in regional development activities, specifically in regards to funding programs and tax policies.
- Successful regions have all benefited from a strong academic base and growing companies in innovation-based sectors.
- Each of the regions have recognized the importance of developing innovation-based sectors and leveraging the strengths of their traditional industries.
- Each of the regions have mobilized leadership from both the corporate and civic communities to champion development activities.
- Through consultations, regions often stressed that development activities occur over a long period of time (sometimes a generation) and that it is important to “stick with it” in order for it to succeed.

Benchmarking: Overview of Atlanta, Georgia

Basic Statistics

Population: 420,000
January 2006 Metro Area Unemployment: 4.9%
Per Capita Income:
 1995: \$24,681
 2000: \$32,445
 2003: \$32,688
Forbes 2005 Cost of Business: #37 (of 200)

Key Assets

Innovation Base: Over 40 colleges and universities; broad research base incl. nanotech, biotech, robotics, computing; ranks 4th largest research center in US with >\$731M/year.
Industry Base: High-technology incubators; headquarters for many Fortune 500 companies; hub for logistics, trade and transportation; also targeting biosciences, telecomm, software.
Workforce: Business services, trade and transportation make up approx. 45% employment; highly entrepreneurial population.
Global Recognition: Home to the National Center for Disease Control (CDC); host of 1996 Olympic Games; poised to become headquarters for Free-Trade Area of the Americas.

Successes of the Regional Economy

The economy has evolved over 40 years from a low cost, low skilled, market of small manufacturing and agricultural commodities, into a financial services center. Following the collapse and reorganization of the banking sector in the mid-80's, Atlanta sought to further diversify its economy by focusing attention on funding and commercialization activities at universities.

Challenges for Regional Development

The banking, legal, and retail services that supported the traditional economy, were uncomfortable (almost to a point of protest) around the new industries that they knew little about. It took an education and awareness initiative to turn this around. There remains a challenge going forward on leveraging several niches, such as, the conversion of the CDC into a commercialization engine.

Example Economic Development Strategies / Programs

[Workforce] Job Creation Tax Credit: The credit to corporate state income tax varies from \$1,250 to \$4,000 per job per year depending on the county. Credits are valid for a period of 5 years.

[Recruitment/Retention] Atlanta Development Authority 2005 Plan: They focused on retention and expansion of existing business by tracking leases of major employers to identify risk, and establishing a reward recognition program for long standing and growing businesses. Support for small business incl. attracting loan funding, improving infrastructure in underdeveloped areas and connecting the necessary resources.

[Innovation] Georgia Research Alliance – VentureLab: Supports technology development for university research. Pre-incubation services to help faculty advance technologies to company formation. Provides early and increased awareness among the business and investment community of university commercialization opportunities.

Role of Corporate & Civic Leadership

Using the 1996 Olympics as a rallying point to attract global attention, business and civic infrastructure came together to focus on a major research alliance, investment in infrastructure, and establishing a new brand on knowledge.

Benchmarking: Overview of Boston, Massachusetts

Basic Statistics

Population: 570,000
January 2006 Metro Area Unemployment: 4.7%
Per Capita Income:
 1995: \$28,418
 2000: \$39,550
 2003: \$41,047
Forbes 2005 Cost of Business: #149 (of 200)

Key Assets

Innovation Base: Leading research universities such as Boston U, Tufts, MIT and Harvard; commercial spin-offs in information technology, biotechnology and other high technologies.
Industry Base: Leading innovation companies and SME's; venture capital and investment base; smaller traditional "blue collar" sectors in trade, manufacturing and transportation.
Workforce: One of the highest percentages of young adults; two-thirds of workforce are highly educated and skilled for the knowledge economy; growing wage gap.
Global Recognition: One of the largest innovation clusters globally; history of academic excellence and commercial spin-offs.

Successes of the Regional Economy

Innovation based sectors (e.g. IT, biotechnology) have emerged over the past two decades from discoveries and technology development from local universities and research institutions. Economic growth in these areas has been organic and is a result of many years of investing in small emerging companies. The appearance of large established companies in these sectors have taken place in the past decade. The financial industry also has grown steadily since the early 1980's.

Challenges for Regional Development

As one of the early center of innovation, Boston has had the advantage of time in the development of new sectors. Now that other regions are actively competing in building innovation, Boston continues to focus on building more mature industries (e.g. manufacturing and global corporations) to balance it's strong base for research discovery and start-up companies.

Example Economic Development Strategies / Programs

[Workforce] Onein3 Boston: Roughly 1 in 3 of Boston's population are 20-34 years. This program facilitates communication between members and the City of Boston to make government more responsive to their problems.

[Recruitment/Retention] Boston Local Development Corporation: Provides loans up to \$150,000 to businesses to buy new property or equipment, build a new addition on an existing plant, make leasehold improvements, or provide working capital to grow the business. Between 1998 and 2002 BLDC approved >\$4M in loans, which leveraged >\$8.5M in financing, and created or retained >1,000 jobs.

[Innovation] Knowledge Based Training: Several programs to equip one-third of workforce that aren't trained for knowledge economy. The BEST initiative partners with local companies and community colleges to provide training for biotech and health jobs. Additional programs fund basic education and career skills.

Role of Corporate & Civic Leadership

While both the corporate and civic communities have rallied behind the development of more innovation-based sectors, the role of leadership has begun to focus more on the traditional industries to address the growing wage gap and to provide retraining for the workforce.

Benchmarking: Overview of Houston, Texas

Basic Statistics

Population: 2,010,000
January 2006 Metro Area Unemployment: 5.6%
Per Capita Income:
 1995: \$24,262
 2000: \$33,717
 2003: \$34,279
Forbes 2005 Cost of Business: #41 (of 200)

Key Assets

Innovation Base: Over 300,000 students enrolled in over 60 degree granting institutions including Texas Medical Center and Rice University.
Industry Base: High growth and diverse base of manufacturing, energy, IT, telecom, biotech, aerospace and many others; headquarters for many Fortune 500 companies.
Workforce: Highly educated and skilled; over 2.6 million with median age 33; entrepreneurial culture with >85,000 small businesses.
Global Recognition: Known as the "Energy Capital" of the World because its oil sector; world-class for manufacturing; home to the NASA Johnson Space Center.

Successes of the Regional Economy

Houston's growth and success is primarily attributed to the energy demand in the 1970's, however, in the early 1980's this same sector also resulted in the region's economic decline. Due to the instability of the petrochemical sector, Houston was forced to diversify it's economy into other sectors including aerospace, IT and biotechnology. This diversification has continued to benefit the region by providing new employment opportunities against a traditionally uneven employment pattern.

Challenges for Regional Development

The legacy of a commodity-based vendor market has created a mindset that challenges the success of the emerging sectors. Value from innovation and technology development needs to be recognized as a key component of the economy, and not just a reliance on commodity prices (e.g. oil) that tend to rise and fall in response to a global market demand.

Example Economic Development Strategies / Programs

[Workforce] Skills Development Fund: A program funded through the Texas Workforce Commission. Assists businesses and labor unions by designing, financing, and implementing customized job training programs in partnership with public community and technical colleges for new or existing jobs in local businesses. Invests an average of \$20 million annually throughout the state.

[Recruitment/Retention] Strategic Investment Zones / Franchise Tax Credit: State designated zones around Greater Houston. Includes 5% credit for R&D expenses, 25% of wages paid for new jobs (min. 10 in strategic areas), and 7.5% for capital investments made in strategic areas.

[Innovation] Houston Technology Center and BioHouston: Offers free business consulting and affordable training seminars designed to help companies attract customers, improve R&D, increase links to global markets, and successfully access capital. Also match with experts in patents, financing and technology development into a formal commercial structure.

Role of Corporate & Civic Leadership

Post the 1980/90 downturns, nearly 100% of the civic leadership turned over every 3-5 years. Long standing civic institutions lost their consistent and sustainable funding and leadership base. It took a new generation of young innovative CEO's to establish networks with the top non-profit organizations and to work together on addressing priority issues (e.g. diversification of economic sectors).

Benchmarking: Overview of Philadelphia, Pennsylvania

Basic Statistics

Population: 1,470,000
January 2006 Metro Area Unemployment: 4.7%
Per Capita Income:
 1995: \$26,013
 2000: \$33,791
 2003: \$36,780
Forbes 2005 Cost of Business: #121 (of 200)

Key Assets

Innovation Base: Multiple universities in tri-state region; R&D (public & private) in high-tech and biotech sectors; investment and support programs for commercialization.

Industry Base: Over 50% service industries such as business, financial, government, health and education; 20% trade/transportation; <10% manufacturing and resource sectors.

Workforce: Educated workforce in predominantly services-based industries; >87% high school and >31% undergraduate education; nationally recognized for entrepreneurship.

Global Recognition: Traditionally known for manufacturing, the region is now recognized for its transformation to an innovation-based economy and growth potential.

Successes of the Regional Economy

In order to leverage traditional industries and support emerging sectors, a number of strategies have been implemented, including the Mid-Atlantic Nanotechnology Alliance, a biotech incubator and investment fund, federal grant writing support, and a Keystone Innovation Zone to generate job growth through technology transfer and entrepreneurship.

Challenges for Regional Development

Philadelphia's economy historically has been heavily based in manufacturing, chemicals, and financial services. Over the past 50 years, the rise of pharma, IT, and multi-media has been widely known, but rarely leveraged for increased entrepreneurship and global market development. They are also challenged with the coordination of eleven counties and three states that comprise the economic and societal landscape.

Example Economic Development Strategies / Programs

[Workforce] Philadelphia Workforce Development Corporation (PWDC): In addition to job placement services, PWDC continually assesses current and future workforce needs and offers required services including wage subsidies, tax credit information and customized training.

[Recruitment/Retention] Philadelphia Industrial Development Corporation (PIDC): A not-for-profit partnership between the City and the Chamber of Commerce. They work to leverage existing financing and real estate resources, as well as coordinating tax incentives and workforce development programs. The staff of 55 is funded primarily from service fees. Since 1958, they closed 4600 transactions valued at >\$10B and >385,000 jobs.

[Innovation] Innovation Philadelphia: Public/private partnership assisting in attraction, growth and retention of technology-based businesses. Assists with workforce development capital sourcing, commercialization, and entrepreneurship.

Role of Corporate & Civic Leadership

Five years ago, a group of civic, political and academic leadership determined that their economy was no longer creating enough jobs and future opportunities to leverage the students graduating from the 40+ universities looking for work in the region. As a result, a strategy focusing on innovation, knowledge, student retention, and the creative assets was developed and heavily invested in.

Benchmarking: Overview of Manchester, United Kingdom

Basic Statistics

Population: 422,000 (2.6 million Greater Manchester)

Unemployment: Avg. 3.6%
Ranges from 2.0% to 7.9%

Per Capita Income:

Range in 2003 from
US\$ 26,900 to US\$35,700

Cost of Business: Multiplier of
1.02 versus Cambridge @ 1.06
and Outer London @ 1.15

Key Assets

Innovation Base: Home to three major universities (U Manchester largest in Britain); several colleges and institutions; research centers in computing, life sciences, engineering.

Industry Base: Traditionally textiles, but diversified after WWII; many SME's in IT sector; diverse sectors in finance, life science, creative sectors, communications, and IT.

Workforce: Entrepreneurial with 1,400 start-ups in 2003; high concentration in finance and business sectors at 20.4% vs. 12.3% nationally; draw individuals from surrounding regions.

Global Recognition: Economic and cultural capital of Northern England; major center for sport especially football (Manchester United), and host of the 2002 Commonwealth Games.

Successes of the Regional Economy

Historically, the region was dominated by one sector, but succeeded in diversifying industry base over the past 20 years. The region has prioritized future development in several areas including: business and ideas targeting emerging sectors; people and communities targeting skills development linked to opportunities and needs; investing in strategic infrastructure with a focus on culture and sport; and image and environment to redevelop and enhance the city and surrounding regions.

Challenges for Regional Development

Despite redevelopment activities of the past several decades, there are still older industrial areas and lower environmental quality. This continues to give the region a bad image to potential investors. In addition, road and rail congestion requires investment along with renewed investment in public transportation.

Example Economic Development Strategies / Programs

[Workforce] Greater Manchester Connexions: A program for teenagers to help them make the best possible transition to adulthood and working life. It helps them to make choices on what to take in school and to map out future career options. It also provides services to help teenagers with issues affecting their school, work, or personal/family life. Assistance ranges from industry mentors, to drug counselors, to support for housing.

[Recruitment/Retention] Branding Manchester: This program has focused primarily on sport and tourism, but is important for attracting business conventions, and promoting a high quality of life in the region. A positive image is seen as a crucial factor to attracting new investment and retaining a skilled workforce.

[Innovation] Manchester: Knowledge Capital: Regional development organization mobilizing partners to innovation-based sectors by increasing business knowledge and research; debating, educating and employing population in these sectors; promoting quality of life and enhancing city environment; and championing new ideas and new models to work and live.

Role of Corporate & Civic Leadership

Ten local authorities formed AGMA (Association of Greater Manchester Authorities) to collaborate and develop a 25 year plan for the region. This was done in consultation with government members of the parliament, 40 major private sector companies, 73 targeted individual stakeholders, the universities, and public forums to solicit feedback.

Benchmarking: Overview of Ruhr, Germany

Basic Statistics

Population: 5.3 million in Ruhr; State of North Rhine-Westphalia is 18 million
Unemployment: ~10% for the State but as high as 20% to 30% in areas of the Ruhr
Per Capita Income: State at US\$31,600 in 2004
Cost of Business: Not globally competitive

Key Assets

Innovation Base: Over past 35 years, built 6 universities and 8 polytechnic schools; densest research network in Europe with 63 technology center and 55 research institutes.
Industry Base: Transformed to a manufacturing base for chemicals, machinery, electronics, and automotive; many SME's in environmental management; strong communications sector.
Workforce: Re-educated and trained workers for knowledge industries (biotech, IT, media), but unemployment still high from closings of predominantly coal and steel industries.
Global Recognition: Multiple cities creating the 4th most populous region in Europe (behind Moscow, London and Paris); nominated for European Capital of Culture 2010.

Successes of the Regional Economy

Primarily coal and steel production up until early 1970's, but by 1980's less than 6% were employed in these sectors. The first university built in 1969, followed by continued investment in education and training infrastructure. The European Union invested heavily in infrastructure, the development of SME's, redeveloping industrial sites, improving environmental quality and development of human resources.

Challenges for Regional Development

The region is facing a cultural shift between shutting down older traditional sectors and bringing in new high-tech sectors. There has emerged a "North-South Divide" with new high-tech sectors growing in the south creating higher employment and wages, and the poorer northern region with traditional "blue collar" workers. As a result, related infrastructure, (e.g. transportation, roads) is much better in the south than in the north.

Example Economic Development Strategies / Programs

[Workforce] Investment in Higher Education: The region invested in the development of universities and technical schools both for the retraining of the existing workforce, and training of the next generation in other knowledge-based sectors.

[Recruitment/Retention] Brownfield Reinvestment: After the fall of the coal and steel industries, the region sought to attract other sectors to the region. Similar to other regions, they invested in attracting materials and communications companies and made major investments in the health and biosciences sectors. The region worked to tie in products and product design with workforce education and training programs.

[Innovation] Investment in Quality of Life: Traditionally recognized as an industrial region, the multiple governments bodies worked together on open space recreation and cultural redevelopment. They created a plan that attracted private sector investment, underwritten by public funds. This resulted in green space and cultural renewal, which helped to retain the workforce.

Role of Corporate & Civic Leadership

The municipal governments in the region came together first to mobilize the business community and convince them that action was needed, then the state and federal government to offer support, and then the European Union for funding physical improvements and social programs.

Benchmarking: Best Practices

Goals:

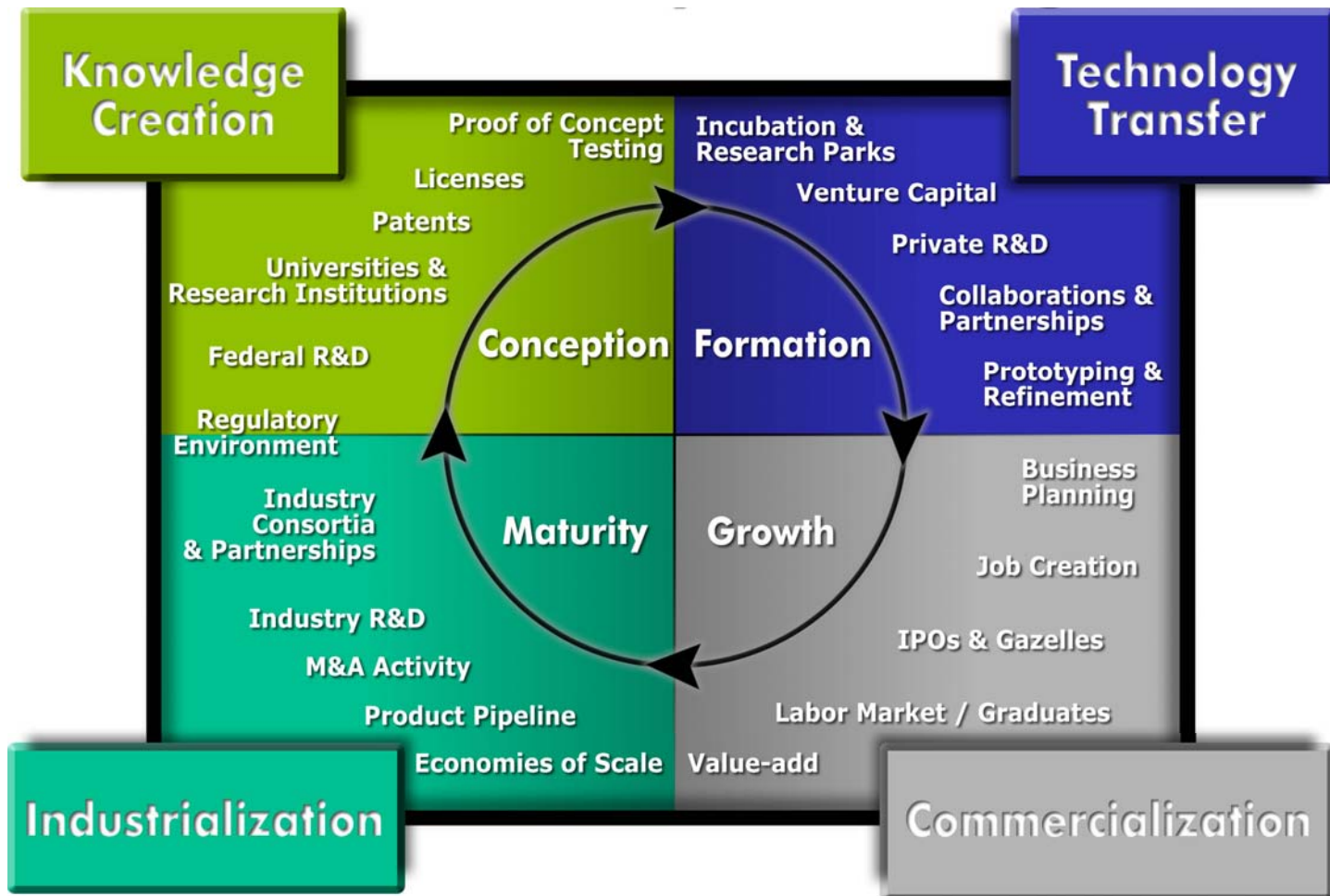
- To profile best practices and describe how they have improved development in the case study regions.
- To describe the advantages and challenges for applying each best practice to the Greater Detroit region.

Selection Criteria:

- Case studies that demonstrate long-term success.
- Approaches that address each stage of the innovation life cycle.
- Consideration of needed resources in the region to implement.

Benchmarking: Defining the Innovation Life Cycle

The Innovation Life Cycle is a model for economic development that continuously brings forward innovation in response to market demand and stimulates emerging industry sectors and high quality job growth.



Best Practice Defined

The location of a federally funded research center provides significant stimulus to the regional economy primarily through the creation of high-skilled jobs and new commercial spin offs. Related and supporting research, industries and commercial ventures typically grow.

Case Study

Region: Multiple examples across the US

Program: National Research Centers

How it works: Throughout the US, innovation-based clusters have grown around national research centers. Examples include:

- CDC in Atlanta, GA
- NIH in Bethesda, MD
- NASA in Houston, TX

Federal research centers typically have developed and grown in size over a long period of time. The Center for Disease Control (and Prevention) for example started as a small center focused on Malaria control during the Second World War, but now has grown to an annual budget of ~\$8.5 billion. The National Institutes of Health in Bethesda has been established for over 100 years, which grew from a small laboratory to employing over 18,500 people. The space race was a major impetus that fueled the growth of NASA in Houston.

Another example is the MaRS Discovery District in Toronto, Canada. Over \$100M from provincial, federal and philanthropic investment was used to match a \$100M bond issue to develop over 1.5M sq. ft of research space.

Impact: Each research center led to knowledge-based jobs, local investment in R&D, spin-offs technologies, and an increase in related and supporting companies in the region. It is important to note, however, that some federal research centers will have a greater regional impact than others.

Application for Greater Detroit

- There is a prime opportunity in alternative fuels given the administration's desire to reduce dependence on foreign oil.
- The advanced automotive sector and NextEnergy provide a strong foundation for development or recruitment.

Advantages

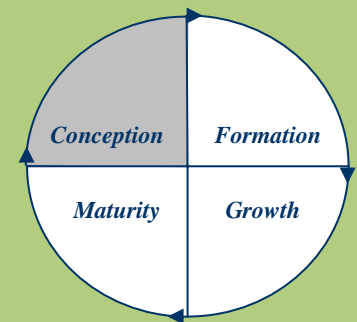
- Increase the innovation output for the region.
- Gain national and international prominence as a leading research hot spot.

Challenges

- Requires significant long-term investment that may take several years to realize the benefits.
- Counties must rally together around a common location.

Applying Best Practice to the Innovation Life Cycle

National research infrastructure will add new innovations and technologies to the sector, and attract world class researchers. This will create opportunities for product development, new company formation and industry sectors.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Shifting from a Procurement to an Innovation Model

Best Practice Defined

Large established industries can often dictate product development, entrenching a culture of innovating to meet short-term, incremental needs. By encouraging a shift in focus to multi-sector applications, new ideas and technologies are brought forward.

Case Study

Region: Kansas originally; expanded nationally

Program: NISTAC (National Institute for Strategic Technology Acquisition and Commercialization)

How it works: Started in 1995 to strengthen the regional economy in Kansas. Several programs were launched:

- NISTAC served as the marketing and licensing agent on behalf of Kansas State University, focusing on licensing of patented technologies.
- They acquired technologies, primarily unused corporate technologies, from outside the region, to expand its technology base and to promote commercialization by local companies.
- They created a support infrastructure such as a technology incubator, early stage investment capital, management, HR and financial services.

NISTAC also helped establish an angel network and created graduate intern programs for technology.

Impact: NISTAC has created hundreds of jobs, increased average wages, and attracted investment to the region. In 2004, it expanded its focus nationally.

Application for Greater Detroit

- The dominance of the automotive industry has established a culture where larger companies dictate the products that smaller companies manufacture.
- The region has a strong and under leveraged patent portfolio that can be mined for commercialization opportunities.

Advantages

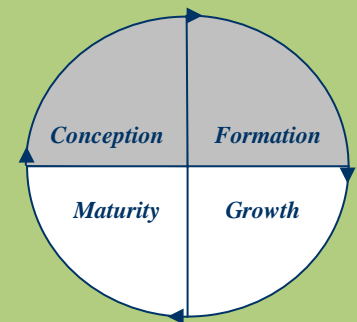
- Promoting innovation allows new and more advanced products to be advanced for development.
- Larger companies begin focusing on identifying and buying better, not just cheaper products.

Challenges

- Technologies are early in development and require additional investment and risk before they are sold commercially.

Applying Best Practice to the Innovation Life Cycle

Focus on innovative technologies brings new products into the development stage for future commercial application.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Connecting & Supporting Entrepreneurs

Best Practice Defined

Programs for training, mentoring, and matching industry sector expertise allow entrepreneurs to tap the region's capabilities. Support services including business services (legal, accounting, etc.) and angel networks are also critical to helping entrepreneurs in the region to grow.

Case Study

Region: San Diego

Program: Springboard Program (part of UCSD CONNECT)

How it works: The leading example for entrepreneurial support is the springboard program run by UCSD CONNECT. The program was established in 1993 to help small to mid-sized companies with their financial and business strategies.

Entrepreneurs accepted into the program spend 3 to 8 weeks in coaching with experienced business people. Upon completion of this process, the entrepreneur is invited to make a presentation of their business model to a select group of experts. This group will usually include a venture capitalist, seasoned entrepreneur with domain expertise, accountant, corporate and patent attorneys, marketing professional, and an executive from a successful company in the same industry. The goals of the one hour Springboard Graduation event are to provide the entrepreneur with candid recommendations for the refinement of their business plan and to help identify next steps to achieve the company's goals.

Impact: Since its inception, Springboard has assisted over 200 technology companies in starting and funding their operations. Over \$550M has been raised by these companies and 120 are still doing business in San Diego.

Application for Greater Detroit

- There is a lack of entrepreneurial support. The Small Business Admin. gave the region an "F" for entrepreneurial dynamism.
- A strong demand for entrepreneurship training and better leveraging of the professional angel networks.

Advantages

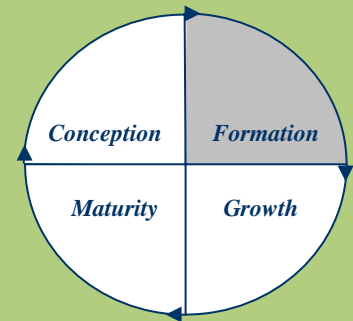
- Entrepreneurship training benefits both innovation-based and traditional service-based industries
- Builds local talent pool to help develop/grow new companies and can help diversify the economy.

Challenges

- Will require an acceptance that entrepreneurial activities have a higher probability of failure in the "start-up" years.

Applying Best Practice to the Innovation Life Cycle

Entrepreneurs are a crucial requirement for transferring knowledge into a commercial application. These individuals will establish new companies in the region, leading to job growth and additional investment.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Enhancing Regional Image

Best Practice Defined

The branding and marketing of the region helps promote the strengths and assets of the region. Image enhancement programs are targeted towards the external community (for attraction) and the local community (for retention and self promotion).

Case Study

Region: Providence, RI

Program: Regional Image Enhancement

How it works: Once at the forefront of the industrial revolution, Providence has faced a lagging economy, deteriorating infrastructure and a poor external image. The regional response has been multi-pronged:

- Revitalized the downtown by creating a charming riverfront with water taxis, gondolas, kayaks and canoes, and heavily marketed museums, antique shops and restaurants.
- Established the Historic Preservation Tax Credit, which resulted in the entire downtown listed on the Natl. Register of Historic Places - the only city with this distinction.
- Branded itself as part of the Boston Tri-state metro, and sought to position themselves as an extension of Boston's success and capabilities. They also point out their prime geographic location - Route 128, America's technology highway, is roughly midway between Boston and Providence. New York City is a three-hour drive.
- Focused on several technology clusters that highlight the region's competencies, including design and maritime.
- Engaged their world class design school, RISD, to create welcoming and creative places in the region.

Impact: In 2005, Providence was recognized by Forbes Magazine as one of the "Top 50 Cities for Business and Careers," named one of the "100 Best Communities for Young People" by America's Promise Alliance and earned a spot on American Style's list of "Top 25 Arts Destination".

Application for Greater Detroit

- A regional perception survey has shown that Detroit has a lower than average ranking than other peer cities.
- Survey respondents in the region also convey a more negative image of Detroit than respondents in peer cities.

Advantages

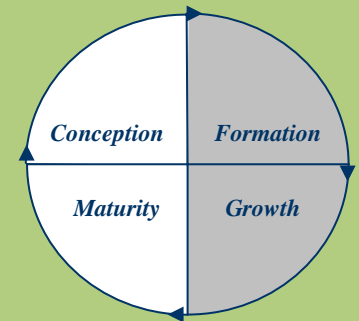
- Improves the morale of population and increases the probability that they will remain in the region. It also attracts other individuals and companies.

Challenges

- Local people primarily need to be convinced of the assets and strengths that Greater Detroit has to offer.
- Can take years to alter the regional perception.

Applying Best Practice to the Innovation Life Cycle

Although image is important throughout the life cycle, it is most critical to attracting and retaining individuals for new company formation and growth.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Innovation Awards Recognizing Growing Companies

Best Practice Defined

Awards presented to growth-oriented organizations celebrate success, and can have a positive impact on innovative product development in their sector. Awards can also promote a positive image of the region both internally and externally.

Case Study

Regions: Chattanooga, TN; Automation Alley, SE Michigan

Program: Innovation Awards Programs

How it works: Several regions host innovation awards programs, including Automation Alley. These programs are important in recognizing and showcasing leaders and capabilities in the regions.

- The **Kruesi Award** in Chattanooga, is America's first community innovation awards. This award recognizes innovation as new technologies or ways of doing things. The innovation must have been implemented in the past 5 years, demonstrate growth in the past 12 months and impact in its sector. The award is open to companies, individuals, not-for-profits, and government agencies. A national panel of judges is assembled, which gives the region and award broad positive exposure, and credibility.

- **Automation Alley** has also established awards to recognize technology-based organizations and their leaders. Somewhat unique to SE Michigan, these innovation awards also recognize educational programs.

Impact: The award events help to engage the community network and build additional support for innovation-based sectors, and promote a positive regional image

Application for Greater Detroit

- Helps to identify and create recognition for growing innovation-based companies beyond the multinational automotive and manufacturing companies.

Advantages

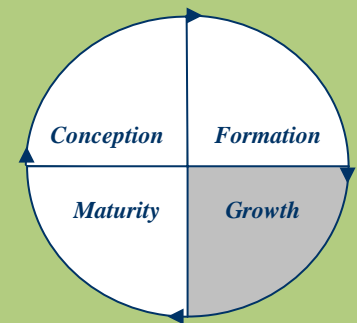
- Profiles and showcases successful companies in the region.
- Can provide some incentive for innovation-based companies to stay and grow in the region.
- Reinforces the importance of innovation.

Challenges

- Requires external champions and sponsorship.
- May take a few years to engage the corporate community and to become broadly recognized by the public and media

Applying Best Practice to the Innovation Life Cycle

These awards will provide increase recognition of companies in the growth phase, encouraging further innovation and commercial activity in the region.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Transforming \$15M Companies to \$100M Companies

Best Practice Defined

Strategies are used to help SME's identify larger domestic and foreign markets in order to grow beyond their regional client base.

Case Study

Region: Houston and Orlando

Program: Global Attraction Conferences

How it works:

- **Houston:** Due to the significant clustering of energy, drilling, oil and gas companies, Houston wanted to bring the world to their region by creating an Off-Shore Technology Conference. They showcased small growing companies and emerging technologies. The conference is followed up by the chamber and the organizing committee with the goal of developing the strategic partnerships, investments and international deals that can become part of the longer-term vendor supply chain.

- **Orlando:** The cluster focus on virtual technology, artificial intelligence, and simulation has been driven by the design and research operations at Disney. The region began to emerge as a location for small suppliers who desired to grow into other markets beyond entertainment. As a result, a number of organizations, including the Metro Chamber, determined that military and defense were emerging as major purchasers and investors, and created an annual conference to showcase the SME's and technologies.

Impact: The conferences showcased a consistent flow of growth companies, investments, and employment opportunities. The conference helped SME's get access to global markets, investors, long-term contracts, and in some instances acquisitions.

Application for Greater Detroit

- The region has struggled in growing SME's in sectors other than automotive into large multinational corporations.
- International strategies has been limited to trade missions.

Advantages

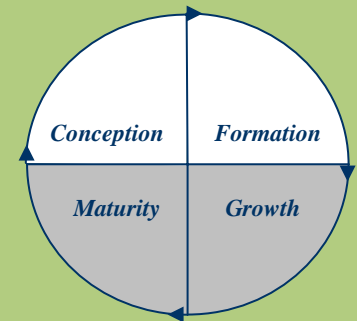
- Will assist in the growth and development of new industry sectors.
- Can expand business networks beyond regional boundaries.

Challenges

- As companies mature, operations may need to be relocated in order to gain a net profit from future growth.
- In order to benefit from the potential sales of companies, incentives are needed to ensure the capital is reinvested in the local economy.

Applying Best Practice to the Innovation Life Cycle

Transformational strategies help companies to understand what they need in order to move from being a small growing company to a larger multinational one.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Mobilizing Mass Infrastructure

Best Practice Defined

Bringing together mass infrastructure assets such as transportation, communications, manufacturing, etc. will enable a region to build considerable strength and capacity in logistics. This strategy is used to improve the efficiencies of established industries.

Case Study

Region: Los Angeles, California

Program: Mass transit development

How it works: In the 1980's, the transit system was primarily used by lower income workers who could not afford to drive. In the early 1990's Greater Los Angeles budgeted \$140 billion over 30 years for the construction of a regional mass transit system to alleviate highway congestion and prepare for a projected 6.3 million new inhabitants by 2030. Attitudes toward mass transit began to change. One contributing factor was the development of new housing along transit lines attracting a younger generation of middle class workers, who were buying property in the surrounding regions. The Long Beach Port Authority is a specific example of linking mass infrastructure from the port (trade by sea) through transportation logistics. By investing in the development of the Long Beach airport and the highway and rail infrastructure in the region, Long Beach has become the second busiest port in the US directly employing 30,000 people and 1.4 million throughout the US.

Impact: Los Angeles is already becoming a national leader in mass transit. Transit stations are not only helping to relieve congestion on the freeways, but they are attracting additional investment from developers into the surrounding regions. Although the number of riders is increasing slowly, it continues to grow each time new stations are added.

Application for Greater Detroit

- There are many assets that can be leveraged to develop a regional logistics strategy (e.g. airport, rail, trucking, customs, manufacturing facilities, etc.).
- There are benefits to linking Ann Arbor to the city.

Advantages

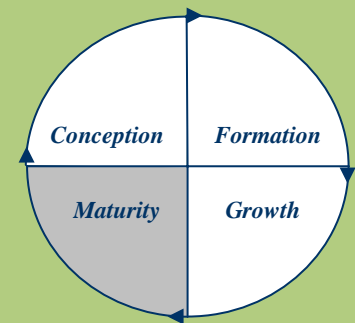
- Mobilization will benefit all sectors throughout SE Michigan linking workers and employers throughout the region.

Challenges

- Significant time and investment will be required to mobilize existing assets.
- Additional investment will be required to build capacity in areas that may be currently underdeveloped.

Applying Best Practice to the Innovation Life Cycle

The availability and utilization of mass infrastructure will have the greatest impact on the mature companies in the region.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Bringing Existing Technologies Into Other Sectors

Best Practice Defined

Innovation can be stimulated through active identification of industrial technologies for application in other sectors. This typically leads to adapted technologies, new products, processes and services, and in some cases new industry sectors.

Case Study

Region: Honolulu, Hawaii

Program: Defense & Dual Use Technologies Development

How it works: The defense industry in Hawaii has been one of the largest sectors next to tourism in the region for over 50 years. Over the past 10 years, defense has invested \$4 billion in R&D, and as of 2005 there were 97 defense related organizations in Hawaii with >11,000 employees. Enterprise Honolulu, a regional development organization, works with industry stakeholders to identify novel technologies with potential applications in other sectors. Multiple partners created programs to finance dual use technologies. For example:

- **University Connections** at the University of Hawaii financed new economy research grants and new product development grants to take existing research or technologies and develop new products and dual uses.
- **CEROS** created through a \$5M grant from the Defense Advanced Research Projects Agency (DARPA) facilitates collaborative R&D with defense and ocean sciences.

Impact: By leveraging significant infrastructure and facilities assets, the defense sector has also contributed to the growth of other sectors including: information technology, autonomous vehicles (water and aerial), sustainable technologies (energy, environmental), and the life sciences.

Application for Greater Detroit

- With a strong portfolio of industrial technologies in the region, there is an opportunity to further develop these technologies for applications in other sectors.

Advantages

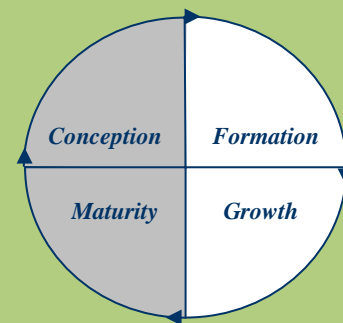
- This strategy can expand, diversify and/or create industry sectors.
- Leverages technology being underutilized or shelved.

Challenges

- Corporate patents and technologies need to be protected from competition, so it may be difficult to convince industry to engage in collaborative research and development.
- Technology portfolios need to be actively mined in order to identify opportunities for new technologies and products.

Applying Best Practice to the Innovation Life Cycle

Interaction among established industry and researchers is essential to driving innovation forward. Identifying applications in other sectors further enhances the growth of innovation in a region.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Talent Attraction & Retention

Best Practice Defined

Talent is the single greatest asset in the knowledge economy. Successful regions have aggressively created programs and marketing campaigns that attract and retain the best and brightest through collaborative partnerships between economic dev. organizations and higher education.

Case Study

Region: Putnam County, IN; Philadelphia, PA

Program: Lilly Endowment Fund; KIP and CareerPhilly

How it works:

- **Indiana:** The Lilly Endowment Fund established multiple programs including: seed funding of up to \$20,000/year to create new businesses or job opportunities; stipends of \$1,000/month for summer studentships and post-Graduate stipends of \$8,000-\$12,000 to be 100% matched for students working in target sectors; and an Internet-based employment system linking graduates, alumni and employers state-wide (IndianaLink Partnership).

- **Philadelphia:** The Knowledge Industry Partnership launched the "One Big Campus" initiative to position Philly as the premier education destination. Programs were created to give students experiences that connect them to the region personally and professionally. This included: festivals and student discounts, targeted magazines, internship fairs, an internship website, and a guide to help organizations create meaningful internship positions.

Impact: The programs have increased the graduate retention rate, the skills base of the workforce, and entrepreneurial activities.

Application for Greater Detroit

- The population has been declining with many of the younger generation relocating to other cities (e.g. Chicago).
- There is a mindset that jobs are primarily low wage, manufacturing with little promotion of entrepreneurship and small business growth opportunities for graduating students.

Advantages

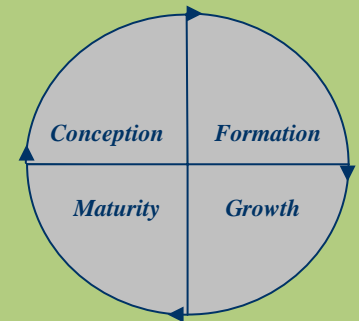
- Can increase the skilled workforce base.
- Growing talent will help to showcase the increasing opportunities for gainful employment in the region.

Challenges

- Initial attraction and retention will be difficult and costly, but can become self-sustaining with success.

Applying Best Practice to the Innovation Life Cycle

Talent impacts all stages of the life cycle. It is important to address the unique needs for skilled personnel at each stage of the cycle.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

Benchmarking: Rallying Corporate and Civic Leadership

Best Practice Defined

The most successful development projects have resulted from the active participation of both the corporate and civic communities. Rallying the leadership from both sides is fundamental for advancing large projects in a timely manner.

Case Study

Region: Chicago and Greater Washington DC

Program: Metropolis 2010; Potomac KnowledgeWay

How it works:

- **Greater Washington DC:** The Potomac KnowledgeWay rallied influential leadership to catalyze and incubate ideas to achieve global leadership in IT, telecom and other emerging sectors. It redefined the region and raised broader awareness through high-level meetings, studies and “report cards.” It established a regional workforce coalition and published the skills, attitudes and attributes needed for success. It sparked the creation of Netpreneurs, which jumpstarted the region’s entrepreneurial community.

- **Chicago:** The Metropolis 2010 project rallied the Economic Club of Chicago and the MacArthur Foundation around investment. Forty CEO’s of major companies commissioned a quiet internal examination of the region focusing on the regional school system and physical infrastructure currently and in the future. The CEO’s went public with a nearly \$50 million, 5-year co-investment with the MacArthur Foundation to engage all demographics and multi-generations in addressing several of the challenges.

Impact: Successful programs have been dependent on the participation of both the corporate and civic leadership.

Application for Greater Detroit

- Regional leadership is divided geographically and lacks a common voice.
- Companies at all stages of development need to be engaged in development. It cannot be mandated by larger companies.

Advantages

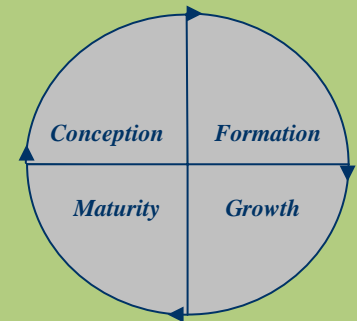
- Having all parties working together will allow projects to advance more quickly.
- Investment of time and resources can be leveraged/shared.

Challenges

- Project champions need to be encouraged and supported.
- Not all parties will agree to all projects and the selection of priorities will require some negotiations.

Applying Best Practice to the Innovation Life Cycle

Stakeholders at all stages of the life cycle, from both the corporate and civic communities, all have a role to play in the development of the regional economy.



Investment:

\$1-5M

\$5-20M

>\$20M

Implementation:

0-2 Yrs.

3-5 Yrs.

>5 Yrs.

About Detroit Renaissance

Detroit Renaissance is a civic organization comprised of CEOs of Southeast Michigan's largest companies. The organization focuses its efforts on regional economic growth while also addressing the redevelopment of the core city by serving as a *catalyst* for developing plans and strategies, *advocating* for public policies that advance development and *championing* initiatives that accelerate results.

About New Economy Strategies

New Economy Strategies (NES): NES is a strategic implementation firm focused on answering the question 'What do we do on Monday?' We work with community, academic, and entrepreneurial leadership to develop and help implement strategies to support regional development of technology-based economies.

We have a strong focus and proven track record; collectively our team has more than 60 years of experience working on the national, state and regional level. The NES team crafts tailor-made strategies – avoiding the “one size fits all” trap common in economic development - and have established a process for engaging leadership that ensures implementation of recommendations – avoiding the shelf-sitting report epidemic.