

Road to Renaissance:

A Collaborative Strategy for Regional Economic Growth

November 2006

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Background: Objectives

1. Determine the strengths and weaknesses of the Greater Detroit Region by assessing the overall business and innovation environment.
2. Identify and define best practices in peer domestic and global regions that are relevant and applicable to the Greater Detroit Region.
3. Establish a small number of strategic priorities to build the region's capacity to innovate, compete, and transform its knowledge into jobs and wealth.
4. Identify actions that reflect the need to offer broad opportunities to all of Greater Detroit's residents.
5. Conduct an inclusive process to develop a plan that can be implemented by utilizing the strengths of existing organizations.

Overarching Goal: To craft a collaborative regional strategy that links and leverages resources and leadership critical to building the economy and innovation capacity of the region across geographic, commercial, and societal boundaries.

Background: Process

- Established a steering committee of key stakeholders.
- Cataloged 15+ previous economic studies and recommendations.
- Benchmarked 6 domestic and international regions with similar transformation challenges.
- Analyzed economic strengths and weaknesses of Greater Detroit by reviewing industry, patent, workforce, and R&D data.
- Solicited input from nearly 650 civic, business, entrepreneurial, and academic leaders representing over 500 organizations, institutions, and companies.
- Formed a partnership with Crain's Detroit Business around an extensive survey of innovation capacity in the region and hosted select forums.
- Formed a working group to coordinate similar efforts across the Detroit Regional Chamber, United Way for Southeastern Michigan, Detroit Metro Convention and Visitors Bureau, New Detroit, and Detroit Renaissance.



Outcome: The formation of implementation teams around a small number of initiatives critical to transforming the regional economy and entrepreneurial culture.

Background: Steering Committee

- Ann Arbor SPARK
- Automation Alley
- College for Creative Studies
- Detroit Economic Club
- Detroit Economic Growth Corporation
- Detroit Metro Convention & Visitors Bureau
- Detroit Regional Chamber
- Detroit Regional Economic Partnership
- Detroit Renaissance
- Henry Ford Community College
- Hudson-Webber Foundation
- Inforum
- Lawrence Technological University
- Macomb Community College
- Macomb County Department of Planning & Economic Development
- Michigan Economic Development Corporation
- Michigan State University
- New Detroit
- Oakland Community College
- Oakland County Community & Economic Development
- Oakland University
- Schoolcraft College
- Southeast Michigan Council of Governments
- TechTown
- The Kresge Foundation
- The University of Michigan – Dearborn
- The University of Michigan - Tech Transfer Office
- Tourism Economic Development Council
- United Way for Southeastern Michigan
- Wayne County Community College District
- Wayne County Department of Economic & Neighborhood Development
- Wayne State University

Regional Context: Greater Detroit 'Scenarios'

Traditional View

- Geopolitical divide
- Race relations
- Procurement-based growth
- Entitlement mindset
- Legacy of Leadership

If we are to FIX the region, we must CHANGE THE CULTURE.

A New Perspective

- Informal networks working across demographics and geography
- Innovation and entrepreneurship
- Creative energies (incl. design)
- New firms and growth in existing enterprises through regional investment models

If we are to BUILD our region, we will CREATE A CULTURE.

How do we go from FIXING TO BUILDING?

- *Connect the mindset, assets, and the implementation to foster immediate, near-, and long-term sustainable outputs and impacts.*
- *Identify all the types of leadership required to drive, mentor, and complete implementation, and task them with actions for success*

Regional Context: Challenges to Innovation & Competitiveness

- **Geopolitical Divide:** The urban core has been shrinking, while surrounding counties have grown significantly over the past 50 years. Leveraging assets, and acknowledging interdependencies of workforce and economic agendas require finding mutually beneficial solutions and project completion.
- **Race Relations:** Because race impacts all aspects of the community's economic, social, and human fabric, it is critical that it be addressed as part of an overall strategy for the region. Improvements in race relations and economic equity will be critical enablers to achieving this region's economic growth potential. New Detroit's work is critical to advancing this strategy.
- **Procurement-based Growth:** A fifty-plus year history of the multinational automotive vendor supply chain (with tier one and tier two suppliers) has fostered a procurement economy and does not encourage nor promote entrepreneurial growth and company formation.
- **Entitlement Mindset:** The impact of the factory town, the entrenched career pathway, the union relationships, and ultimately the false belief that jobs will be available from one generation to the next have created two significant problems: (1) low expectations for career growth beyond automotive manufacturing, and (2) low motivation for each generation's educational achievement and attainment levels.
- **Legacy of Leadership:** Because of the strong legacy leadership in Southeastern Michigan, there has not been a concerted effort to foster new, young, civic, business, and philanthropic leadership in the region.

However, a new generation of leaders is moving beyond the historical mindset and is eager to work together for the betterment of Greater Detroit. Some work outside typical organizations, while others seek platforms for their interests.

Regional Context: Words Matter

“Words Matter”: A better understanding of key phrases and words central to the Road Map will assist in building a common perspective for application and use in the implementation phase.

- **Innovation:** A process through which an organization or institution creates, extends, or transforms new knowledge or technologies into useful products, services or processes for national and global markets. “New” is defined as novel or significantly different with respect to products, services or processes in the marketplace. Innovation is as much about the social interactions among people as it is the discoveries and developments of new solutions.
- **Collaboration:** A partnership that multiplies results, divides labor, provides rewards, and coordinates/aligns goals and missions. True collaborations recognize each partners’ needs and end-goals, and thus seek to achieve mutual benefit.
- **Transformation:** A process that is truly innovative and holistic. It is about bringing big change through a systematic approach after foundational events and initiatives.
- **Mobility:** All forms of self-propelled vehicles that move people and goods, including automobiles, aircraft, aerospace craft, trucks, buses, marine, rail and intermodal machinery.

Regional Context: Words Matter (Cont.)

- **Design:** This requires 'artists' that know how things are made, as well as knowing social, market, and consumer trends. "Design is where the cultural rubber meets the commercial road"....it is the creative, the technical, and the market in combination.
- **STEM Education:** The acronym stands for *Science, Technology, Engineering, and Mathematics* and includes four-year, two-year and technical degrees, certifications and vocational training. STEM has become a measure by which students and now nations are ranked in their ability to compete in a global context as the future drivers of economic and societal benefit.
- **Regionalism:** A point of view and mindset that recognizes researchers, entrepreneurs, investors, and industries act regardless of political boundaries and thus seek to link their interests and common goals wherever and however is necessary to reach a desired outcome. While the word 'region' reflects a geographic location, a region in the innovation arena is the environment for which key stakeholders, contributors, assets, and resources collaborate.
- **Interdependence:** A simple and fundamental underpinning for regionalism are the many interdependencies identified in a regional context. People, intellectual property, and resources flow to where the need is the greatest and/or the demand occurs for increased output. People live in one location and commute to another location. The skills of graduates in one workforce area participate in occupations in still another community or county, and ideas and products created on research campus ultimately become commercialized in an incubator or test facility across the other side of 'town'. And these are just descriptions relative to a regional view; in a global scenario these same interactions occur half way around the world.

Strategic Priorities and Recommendations Overview

- I. **Become the Global Center for Mobility:** Reposition Greater Detroit to become the dominant global mobility center leveraging its world-class automotive sector and supporting infrastructure.
- II. **Become a Global Logistics Hub:** Develop the region as a global logistics hub by integrating industrial design, advanced manufacturing, and delivery/distribution.
- III. **Grow Greater Detroit's Creative Community:** Map, organize, grow, and market the creative community as a defining economic feature of the region's new mindset.
- IV. **Expand the Region's Entrepreneurial Capacity:** Grow, diversify, and improve the entrepreneurial environment by expanding program capacity, improving gap funding and leveraging the engineering talent base.
- V. **Secure a Strong Future Talent Base:** Create programs to increase the retention of talent and the number of people with Science, Technology, Engineering, and Mathematics (STEM) skills in the region.
- VI. **Promote Globally, Communicate Locally:** Launch a series of internal and external marketing and awareness programs to leverage Greater Detroit's positive image abroad and to improve the image of itself.

Regional Analysis

- The advanced automotive cluster is the largest employer with over 130,000 employees.
- In the next five years, output in advanced manufacturing and advanced materials is expected to grow 2.4% and 5.0% respectively.
- Nearly 50% of all patents issued to inventors in the region are automotive related. Of these patents, 20% are in manufacturing related technologies.
- 10 out of 14 advanced automotive industry patent subcategories are considered top national performers.
- There has been a large increase in fuel cell patents in the last 5 years - 410% between 1997-2000 and 2001-2005
- Advanced automotive has received approx. \$8 billion in venture capital investment over the past 10 years – far exceeding other industry sectors and well above the national average.
- The region has a strong foundation in scientific consulting and technical services, professional management, and IT/software related to process improvement.

Community Input

- The global automotive industry remains a healthy and thriving sector, and Greater Detroit must position itself to take advantage of this strength.
- There is production competency in Greater Detroit along with a strong infrastructure to support production.
- The region needs mechanisms like Automation Alley for coordinating, leveraging, and diversifying the advanced automotive and related research. (e.g. materials, alternative fuels, future vehicles, smart sensors-information, etc).
- There is a consensus that alternative energy and flexible fuel vehicles should be a focus for the region. Momentum has been built through state efforts and the NextEnergy Initiative.
- The regional abundance of engineering talent is a key competitive asset that can be leveraged to diversify and build new industry sectors in advanced manufacturing and mobility as well as other sub-sectors.

Building the Case:

- Despite the tremendous past success of the advanced automotive cluster, this sector must adapt to remain an economic driver. The limited domestic brand choice among consumers in the U.S. versus the wider variety of choices consumers overseas have is one example of this.
- The strong asset base that has been established by the advanced automotive cluster remains a valuable resource for future economic growth.
- The existing advanced automotive cluster and affiliated workforce must be empowered to discover and pursue new opportunities in related and emerging clusters that will redefine automotive, other mobility sectors, and consumer products in the private and public sectors.
- Wells Fargo of the 19th and early 20th century could have gone from delivery and transportation to communication and information. A transformational trend for Greater Detroit is not just future cars, but future mobility.

Evolving the Region:

- Increase focus on related clusters such as defense, advanced motors, and alternative fuels.
- Expand workforce skills to meet the needs of emerging clusters in mobility-related technologies (logistics, sensors, Radio Frequency ID, etc.).
- Create a means to fully exploit embedded knowledge and intellectual property/patents to form new businesses and technologies that establish the region as a world-class center for mobility.

Sample Key Assets on which Greater Detroit will Transform:

- Automotive manufacturers/R&D centers
- Sophisticated supply chains (incl. tier one suppliers)
- TACOM
- NextEnergy
- Automation Alley
- Strong competencies in engineering and design

Overall Objective:

Leverage existing automotive assets, attract new resources and expand services that distinguish Greater Detroit as a global center of excellence in technologies related to moving people and goods with all types of self-propelled vehicles.

Action Steps:

- Create or expand a center to support mobility partners in basic research or new technology development. The center should evolve to include logistics research and development.
- Organize a region-wide lobbying effort for federal and state funds to support a center and key research areas such as alternative fuels, clean energy, automotive and engineering-related technologies. Support initiatives that link the mobility community through targeted projects, knowledge sharing, mentorship, and other collaborative programs.
- Encourage, recruit and retain industry investments related to mobility.
- Develop an automotive public policy and infrastructure agenda ensures long-term competitiveness in Greater Detroit.

Measures of Success:

- Increase in the number of distinguished researchers, scientists, and technologists.
- Increase in the number of R&D partnerships.
- Increase in resource commitments from federal, private, and philanthropic sectors.
- Increase in investment from international and non-automotive mobility companies.

Best Practices:

- *MaRS Discovery District:* A 1.5 million sq. ft. facility in Toronto housing academic researchers, small companies, and support service providers. The MaRS Discovery District actively promotes interaction among partners.
- *Center for Automotive Research (CAR):* A Detroit-based nonprofit focused on industry research, new methodologies, industry forecast trends, public policy advice, and multi-stakeholder communication forums in the automobile industry at the international, federal, state and local levels.
- *ACE, Australia:* The Automotive Centre of Excellence is a new facility dedicated to the changing and growing global automotive industry. Innovation within the industry as well as training around emerging mobility sectors are part of the primary goals of the center.

Regional Analysis

- 40% of the value of world trade is now transported by air.
- World air cargo traffic is expected to triple by 2020.
- By 2006, e-tailers will ship 1.1 trillion packages annually. Globally, E-Commerce approaches \$7 trillion in transactions.
- Airports are now multimodal, multifunctional enterprises generating considerable commercial development within and well beyond their boundaries
- Forrester Research predicts that e-marketplaces will account for up to two-thirds of business-to-business supply-chain transactions by 2006. Convergence of digital and physical infrastructure is now a requirement for competitiveness.
- Canadian border/bridges (Ambassador Bridge and Blue Water Bridge) handle 4.7 million truck crossings and 19.4 million passenger crossings annually.

Community Input

- In the Greater Detroit Business and Innovation Leadership Survey, respondents listed access to the Great Lakes and proximity to Canada as key assets that, if mobilized, would accelerate community and economic development.
- There is considerable momentum for building an Aerotropolis that would leverage Willow Run and the Detroit Metro airports. Wayne County has retained a national expert and has held a University of Michigan Aerotropolis Charrette on the impact of a coordinated logistics strategy.
- Northwest Airlines' global hub has created vital connections to Asian markets, tourism, and business travelers, which has not been adequately utilized.
- The regional capacities in industrial design and advanced manufacturing strengthen Greater Detroit's ability to lead the development of new ways to design, package and transport goods.

Building the Case:

- There is tremendous embedded know-how in logistics and supply chain management in the advanced automotive and manufacturing sectors.
- Greater Detroit sits at a critical geographical location with access to a majority of North American consumer market share for product transportation and logistics.
- Despite the volume of cross-border trade, waterways traffic, and air travel, a significant asset base has not been realized.
- There is an opportunity to build additional strengths and leverage existing assets to emerge as a global hub for product design and just-in-time distribution.

Evolving the Region:

- Create a means to fully exploit embedded logistics and supply chain management in the form of new businesses and technologies.
- Build on existing capabilities for cross-border trade and link together the transportation routes (waterways, air, road and rail) into one comprehensive system for product delivery.
- Establish Greater Detroit as the first fully developed Aerotropolis in the United States.

Sample Key Assets on which Greater Detroit will Transform:

- Automotive manufacturers
- Sophisticated supply chains (incl. tier one suppliers)
- Established international trade entry point
- Location on Great Lakes and Canadian boarder
- Detroit Metro and Willow Run Airports; Aerotropolis and Pinnacle Aeropark planning
- University Transportation Center designation by the Dept. of Labor led by the University of Detroit Mercy

Overall Objective:

Leverage Greater Detroit's industry infrastructure and know-how, geographic location, and international trade entry points to establish the region as a global logistics hub (e.g. transportation, industrial design, manufacturing, packaging and delivery).

Action Steps:

- Support the development of an Aerotropolis linking Metro, Willow Run and other regional airports, including recommendations for business development strategy, a framework for regional government, and a study on the economic benefit for the Greater Detroit Region.
- Promote physical and information connectivity among all modes of transportation by creating professional forums and developing an open and neutral e-platform exchange among participants in the supply chain.
- Tap local university faculty and researchers to identify new technologies, and approaches, and possible commercial ventures.
- Establish an executive supply chain and logistics forum modeled after TLI program.
- Market and promote Greater Detroit capabilities locally, domestically, and internationally to potential customers.

Measures of Success:

- Increase in domestic and global freight volume.
- Increase in site locations of vendor supplier chains in the region.
- Reduce time in bringing manufactured products to markets.
- Increase in federal funding in logistics related technologies.

Best Practices:

- *Amsterdam Schiphol Airport:* The city airport has transformed itself into an airport city and its own destination. Within the fence, there is shopping, entertainment, eating establishments, office buildings, first class hotels, and a large cargo infrastructure. Approximately 58,000 people work in the airport city daily.
- *Long Beach Port Authority:* Linked mass infrastructure from the port through transportation logistics by investing in the development of the Long Beach airport, highway and rail infrastructure. It has become the second busiest port in the US employing 30,000 people locally and 1.4 million in the US.
- *The Logistics Institute (TLI):* Created to coordinate all logistics activities at Georgia Tech, TLI now partners with the National Science Foundation and more than 14 corporations and govt. agencies. It focuses on advancing design and application of new logistics technology and practices leveraging its engineering talent.

Grow Greater Detroit's Creative Community

Defining the State of the Greater Detroit Region

Regional Analysis

- Nationally competitive creative industries in the region are: agents/managers for artists and entertainers, specialized design services, newspapers, periodicals, books and directory publishers, other recreation activities, and related industries.
- Specialized design services (which is also part of the advanced manufacturing cluster) employment grew 83% in the past five years and is predicted to grow another 3.1% over the next five years.
- Employment in the newspaper, periodical, book, and directory industry employment grew 39% over the last five years and gross regional output is forecasted to grow 3.4% in the next five years.
- The region is forecasted to gain nearly 2,000 high-wage jobs over the next 10 years in areas such as graphic and interior design, public relations, marketing, artist/composers, multi-media artists and animators, musicians, art directors, fine artists, actors, etc.

Community Input

- The creative community is a viable economic engine of the region and is comprised of arts and entertainment, architecture and design, advertising and marketing communications, and media.
- Young people are coming to the region for opportunities in music in many genres, not just the Motown legacy.
- There is a strong architectural heritage that should be promoted and protected.
- Artists and creative people have a place in discussions about economic development. This sector can create a unified brand for Greater Detroit.
- There are several projects that have established artist incubators, but these efforts need to be connected and publicized.
- The creative community does not have an entity to support business creation. There is a need for asset mapping to better understand what the region has to offer.

Grow Greater Detroit's Creative Community

Understanding the Gap

Building the Case:

- Greater Detroit has significant creative assets, in music, the visual arts, and in design which is critical to the automotive sector and other industries as well.
- Creative industries have been well established for some time, but their growth is limited due to minimal recognition and support.
- The potential economic impact of the creative sector is NOT as well recognized as traditional industries.
- Creative communities can positively impact cities, promote talent retention, and create new opportunities stemming from traditional industries.
- The creative community is already bridging the racial divide.
- The City of Detroit has identified the development of a creative district as a means of growing its economy and as an overall benefit to the region.

Evolving the Region:

- Redefine the Detroit brand to promote the region as more than an automotive region, but one of creativity, innovation, and ultimately commercialization of ideas and discoveries.
- Recognize and support the growth of creative industries including the performing arts, music, design, sports, etc.

Sample Key Assets on which Greater Detroit will Transform:

- Strong music, fashion, and architectural heritage
- Cranbrook Academy, College for Creative Studies, Univ. of Michigan and Wayne State industrial design programs, Lawrence Technological University and other educational institutions
- Organizations like Create Detroit and Detroit Synergy, etc.
- Artist incubators
- Large Adcraft Club
- Diverse advertising, marketing and design enterprises due to automotive base
- Michigan Dept. of History, Arts and Libraries

Overall Objective:

Define, designate, and develop a formalized creative industries cluster in the downtown Detroit area. Ensure that the "Creative District" is networked to the Greater Detroit community, and is recognized nationally.

Action Steps:

- Inventory and map out creative assets in music, music production, film, design, fashion, performing arts, advertising and marketing, professional sports, etc.
- Support the City of Detroit in establishing a creative community district to encourage business attraction and development.
- Host an international exposition to showcase creative and supporting industries in the region.
- Establish a creative cluster association to connect current efforts, market the regional brand, and provide business support services and training to emerging creative entrepreneurs.

Measures of Success:

- Increase in creative community employment and business.
- Increase in international conferences and conventions.
- Increase in cultural tourism and attendance.
- Improved rankings in independent cultural assessment surveys.

Best Practices:

- *Austin:* This region has developed a strong creative brand and a mantra to "keep Austin weird." South by Southwest is a private company that builds and delivers conference and festival events for entertainment and related media industry professionals. These events attract musical acts, tech entrepreneurs, digital innovators, and filmmakers globally.
- *Orlando:* Known primarily for entertainment, the region has developed emerging sectors in modeling, simulation and digital media. Orlando now hosts one of the largest annual conferences in these sectors to promote emerging companies and attract partners and investment from outside the region.
- *Providence, RI:* Invested in the revitalization of the city's downtown, highlighted the arts and culture and promoted its design capabilities, including Rhode Island School of Design.

Expand the Region's Entrepreneurial Capacity

Defining the State of the Greater Detroit Region

Regional Analysis

- Macomb, Oakland and Wayne counties have a strong innovation engine accounting for 3.7% of U.S. patents, despite only having 1.38% of the U.S. population.
- Per capita, venture capital investment over a 10-year period has been greater in Macomb, Oakland, Wayne and Washtenaw Counties than the U.S.
- The region's venture capital portfolio is not diversified. 76% of the venture capital investments made in Macomb, Oakland and Wayne Counties are in the advanced automotive sector.
- Washtenaw County's three largest investment areas are IT (39%), entertainment/creative community (26%), and life sciences (16%).
- The region is home to well over 200+ automotive and non-automotive companies in the \$10-30 million in revenue stages with interest in becoming \$75-100 million firms.

Community Input

- There is a consensus that small business will drive the region forward, but the region lacks adequate funding, places for entrepreneurs to start and grow their businesses, and experienced management talent.
- Local venture capitalists and a majority of regional leaders do not believe there are enough networking opportunities that bring together entrepreneurs, inventors, and investors.
- There is a challenge with matching up entrepreneurs and venture capitalists with relevant technology expertise. There could be more deals if interest and experience were better matched.
- There is a lengthy process to be invited to present a business plan to potential investors.
- The region's culture is an impediment. A majority of survey respondents feel that leaders only celebrate company size and revenue vs. growth, while new businesses, startups, and entrepreneurs are not treated as full partners by the region's leaders. They did not feel that networking opportunities for entrepreneurs, innovators, and investors are promoted.

Expand the Region's Entrepreneurial Capacity

Understanding the Gap

Building the Case:

- The entrenchment of a procurement economy, driven primarily by the powerful automotive sector, has created a culture that is responsive to the proscriptive needs of the buyer, but has little incentive for innovation.
- The region has a gap between angel, VC and traditional financing mechanisms and there are limited mechanisms available for start-up companies.
- New innovation-based sectors in IT, life sciences, alternative energy and the creative sectors have progressively emerged despite limited support and resources.
- By recognizing the value of entrepreneurship, the region will further enhance the growth of these new emerging sectors by fostering business creation and growth.

Evolving the Region:

- Encourage a culture that supports entrepreneurs and growing firms to become multi-million dollar competitors.
- Provide services to entrepreneurs and transitioning engineers to help them access mentors, networks, resources, and investments, including a regional economic stimulus fund.
- Raise the level of celebration of entrepreneurial success through targeted communications.

Sample Assets on which Greater Detroit will Transform:

- Automation Alley
- Ann Arbor Spark
- TechTown
- Ann Arbor Angels, Great Lakes Angels
- Detroit Entrepreneurship Institute
- Creative Community
- Venture Capital leadership
- NextEnergy
- Four SmartZones designations

Expand the Region's Entrepreneurial Capacity

Recommendations

Overall Objective:

Diversify the economy by creating a culture of collaboration among technology transfer and commercialization institutions in the region, and leverage the area's engineering talent.

Action Steps:

- Utilize Automation Alley, Spark, TechTown, university tech transfer offices, and other innovation focused organizations to maximize commercialization opportunities and build business incubator capacity.
- Create a regional capital formation plan to substantially increase both traditional and non-traditional sources inside and outside the region, including seed, VC, angel, SBA, SBIR, STTR and traditional bank lending.
- Serve as a pilot region for the ASME Center for Engineering Entrepreneurship and Innovation to connect transitioning engineers in the region with skills training and resource investment locally and nationally.
- Support a region-wide program to match high potential entrepreneurs and investors with similar interests and expertise.
- Increase focus on mining and translating unused technology from corporations into new ventures.
- Develop and attract experienced management talent to sustain entrepreneurial activities.

Measures of Success:

- Increase in the amount of available funding from both traditional and non-traditional capital sources.
- Increase in the number of high growth companies, incl. startups from spin-off technologies.
- Increase in the number of engineering entrepreneurs.
- Improved perception of the entrepreneurial environment.

Best Practices:

- *Springboard (UCSD CONNECT)*: Program to work with entrepreneurs to help develop their business plans and then provides opportunity for them to present in front of a panel of venture capitalists for funding.
- *Penn State Engineering Entrepreneurship Minor*: The courses are structured to be problem-based learning experiences with minimal lectures. Business, science, arts, Information, Science and Technology (IST), and engineering students are recruited to develop diverse teams. Students take courses in finance, intellectual property and marketing. Technology entrepreneurs co-teach many of the core classes.
- *NISTAC (Kansas)*: An organization focused on licensing unused patented technologies to expand the regional technology base and promote commercialization by local companies.

Regional Analysis

- The 2004 American Community Survey calculated 27.4% of Macomb, Oakland and Wayne County residents under the age of 25 have a bachelor's degree. The U.S. average is 27%.
- As expected, Washtenaw County had a higher percentage of bachelor's degrees among its residents under the age of 25 (53.3%).
- Between 2000-2004, the region's labor force declined 3.0%, with population growth of only 1.4% (less than 1/3 the national average.)
- The region has experienced significant layoffs. In Oct. 2005, the Detroit-Warren-Livonia MSA had an average unemployment rate of 7.4%, well above the national average of 5.1%.
- The Census Bureau reported that between 1995-2000, MI had the third largest out-migration of college educated young adults.

Community Input

- More than three-quarters of the survey respondents were satisfied or very satisfied with the quality of universities and community colleges in the region. Only 34.2% of the respondent gave the quality of K-12 education this high of a rating.
- Less than a quarter of respondents were satisfied with the public investment in a trained workforce that anticipated business' needs. Slightly less than one-third were satisfied with talent recruitment services in the region.
- There was a strong consensus that the region has a strong labor pool, especially in engineering.
- Many see an opportunity to retrain and redeploy the displaced workers.
- There is a culture of entitlement. Some workers believe they are entitled to good, high paying jobs and excellent benefits without a post secondary degree.

Building the Case:

- Post-secondary institutions in the region are highly regarded. However, post-secondary education is undervalued by the local population, and students with post-secondary education feel that they need to leave the region to pursue a rewarding career.
- Children have been identified as the region's most valuable asset. There is a strong desire to ensure that they are given the opportunity to pursue post-secondary education and careers in the region.
- The region is home to many highly skilled workers - particularly in engineering. Growth in emerging and related sectors offer opportunities to retrain and redeploy displaced workers, and provide engineers the platform to manage new divisions, spinouts, or operations.
- The focus on Science, Technology, Engineering and Mathematics (STEM) is critical to overall educational preparedness and future regional success, and has become a national funding priority at all levels, including high school, community college and technical schools.
- The STEM focus is part of an economic development strategy and not a comprehensive plan to fix all the education problems.

Evolving the Region:

- Promote the value of post-secondary education.
- Actively link post-secondary education to employment opportunities.
- Promote the value of STEM skills to the future economy.
- Encourage innovation and diversification of ideas to attract workers to new emerging sectors.
- Promote outreach to minority communities to ensure access to information and opportunities.

Sample Assets on which Greater Detroit will Transform:

- Four-year and community college system
- Focus: HOPE
- International Academy in Oakland County
- Detroit Regional Chamber
- US Department of Labor's virtual WIRED designation
- Workforce Investment Boards
- Apprenticeship programs

Secure a Strong Future Talent Base

Recommendations

Overall Objective:

Focus workforce development efforts on increasing and retaining graduates across all disciplines, and building the regional base of Science, Technology Engineering, and Mathematics (STEM) skills including vocational, two-year degrees and certifications.

Action Steps:

- Establish a regional internship program with college fairs, assistance for businesses interested in establishing internships, and a website that connect students, employers, and academic/training institutions.
- Encourage and support colleges and universities to expand and promote curriculum, degree programs and college credit courses at secondary educational institutions in STEM.
- Identify the current and future high demand careers and required skills sets in fields requiring STEM education.
- Support K-12 career awareness programs that expose students to positive role models (particularly women and minorities) in fields that require STEM education.
- Support apprenticeships and other programs that offer long-term career opportunities to non four-year college bound youth.

Measures of Success:

- Increase in the number of internships & apprenticeships.
- Increase in the percentage of college graduates that remain in Greater Detroit.
- Increase in the number of graduates with STEM degrees (particularly women and minorities).

Best Practices:

- *The Collegiate Consortium*: This non-profit is a partnership of Drexel Univ. and five area community colleges that meets business' needs with approx. 4,000 faculty supporting over 470 certificate, assoc., bachelor's, master's and doctoral programs. The institutions also work with local high schools and vocational schools in adopting college credit courses.
- *CareerPhilly*: As a part of the "One Big Campus" initiative, CareerPhilly hosts internship fairs, a website, and guide to help organizations create meaningful internship positions.
- *North Carolina School of Science and Mathematics*: Immerses high-performing high school juniors and seniors in science and math education. The school has served as a testing ground for curricula and materials and provided in-class training for K-12 teachers. It is affiliated with the Univ. of NC system.

Regional Analysis

- In a regional perception survey, respondents were asked to rank themselves and other cities on whether it is a great place to live and work. Participants in Atlanta, Boston, Chicago, Houston and Indianapolis rank themselves at the top of the list. Greater Detroit participants ranked themselves last.
- Within the U.S., Greater Detroit has a largely negative image, but outside of the U.S., Greater Detroit has a largely positive image.
- In the leadership survey, only 28% were very satisfied or satisfied with their access to new domestic and global marketplaces.
- 40.1% rate the innovation environment fair or poor. Slightly less than half (44.9%) expect it to improve. Only one-third said they were very likely or likely to start a business in the region.
- There are 1600 exporting companies and 856 foreign-owned firms with offices in the region.
- Detroit's airport is one of the highest regarded passenger service locations in the U.S. based on recent tourism and business travel surveys.

Community Input

- Greater Detroit business leaders tend to talk down the region to outside colleagues. There is little self-promotion.
- There is no cohesive regional brand beyond the automotive legacy or positioning the automotive embedded talents and knowledge.
- Leaders should leverage and highlight cultural assets and the creative community to promote the region's quality of life.
- The region should be a top business and tourist destination given the assets it has, but the messages are not coordinated.
- There is a need to think regionally by highlighting commonalities and celebrating the uniqueness of the inherent culture, neighborhoods, and population.
- The focus is more on how something works than on how it looks, i.e. design – that is why there are 900 small automotive companies and suppliers in Southern California versus Greater Detroit.

Building the Case:

- Internally, individuals in Greater Detroit do not recognize the strong and diverse asset base that exists in the region. Citizens consistently score the Greater Detroit region much lower in image studies than other counterpart regions.
- In the United States, individuals remain negative about the region's image largely because they are unaware of Greater Detroit's assets.
- There is a significant need to redefine the Greater Detroit brand, both locally and globally, in order to promote the strong asset base and to improve Greater Detroit's image.

Evolving the Region:

- Rebrand the region to acknowledge the diversification of its globally respected strengths and assets.
- Engage the community to help build the region's positive image and to promote it both locally and globally.

Sample Assets on which Greater Detroit will Transform:

- Detroit Metro Convention and Visitors Bureau
- Tourism and Economic Development Council
- International Auto Show and Society of Automotive Engineers and similar conferences
- Automation Alley
- Detroit Regional Chamber/Detroit Regional Economic Partnership
- Model D/TIDE (Talent Innovation Diversity Environment)
- Cultural Assets (e.g. music, museums, theaters, etc.)

Promote Globally; Communicate Locally

Recommendations

Overall Objective:

Raise awareness within Greater Detroit about the unique assets and strengths of the region. Market business and social qualities of Greater Detroit internationally.

Action Steps:

- Form a collaboration to support a common virtual gateway to Greater Detroit building upon existing websites that help businesses and individuals get demographics, industry analysis, business resource guide, image gallery, and comprehensive fact sheets.
- Develop a coordinated brand and marketing strategy to promote the region as a convention, tourism, conference and business destination.
- Launch an internal communication strategy to raise awareness of local business success stories, job opportunities, and regional assets through op-eds, regular communications to the media, an e-newsletter, and broadly publicized awards.
- Market the region to targeted industry sectors outside the U.S. in addition to the trade mission approach.
- Build upon and identify additional cost effective and creative tactics for opening new markets for small/medium enterprises.
- Market the region as a destination for foreign talent to relocate or remain after graduation from local academic institutions.

Measures of Success:

- Increase in foreign and domestic inward investments.
- Improved regional perceptions internally and domestically.
- Attraction and retention of workforce.
- Increase in business attraction and tourism.

Best Practices:

- *Greater Washington Initiative (GWI)*: Positioned as a regional marketing cooperative, GWI serves as a one-stop shop for corporate clients and site selection consultants by providing confidential client services, and a virtual gateway to the region providing demographics, regional economic overviews, industry analysis, and image gallery. GWI has aggressively marketed the region through advertising, direct mail, and trade missions.
- *Orlando/Houston*: Both regions, typically known for one dominant industry, launched international expositions to showcase emerging strengths in other innovation related sectors.
- *Regional Innovation Awards*: Programs like Chattanooga's Kruesi award and Automation Alley can raise the visibility of small, innovative organizations and individuals with local residents and media. Kruesi's national judging panel also brings a positive national spotlight to their region.

Strategic Priorities: Potential Implementation Timeline

Implementation Team	Action Steps	Timeline
Become the Global Center for Mobility	<ol style="list-style-type: none"> 1. Create or expand a center. 2. Organize a region-wide lobbying effort for additional resources. 3. Encourage, recruit and retain industry investments. 4. Develop an automotive public policy and infrastructure agenda 	<p>3-5 yrs.</p> <p>0-1 yr.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p>
Become a Global Logistics Hub	<ol style="list-style-type: none"> 1. Support the development of an Aerotropolis. 2. Develop an e-platform exchange around intermodal assets. 3. Organize a regional forum for long-term logistics needs by sector. 	<p>3-5 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p>
Grow Greater Detroit's Creative Community	<ol style="list-style-type: none"> 1. Inventory and map out creative assets. 2. Support the City of Detroit in the designation of a creative community district. 3. Host an international exposition. 4. Establish a creative cluster association. 	<p>0-1 yr.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p>
Expand the Region's Entrepreneurial Capacity	<ol style="list-style-type: none"> 1. Utilize Automation Alley, Spark, TechTown, university tech transfer offices, and like organizations to maximize commercialization opportunities and build incubator capacity 2. Create a regional capital formation plan 3. Serve as a pilot region for the ASME Center for Engineering Entrepreneurship and Innovation 4. Support a regional entrepreneur/investor match program 5. Increase focus on mining and translating unused technology from corporations into new ventures. 6. Develop and attract experienced management talent 	<p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>3-5 yrs.</p> <p>1-3 yrs.</p>

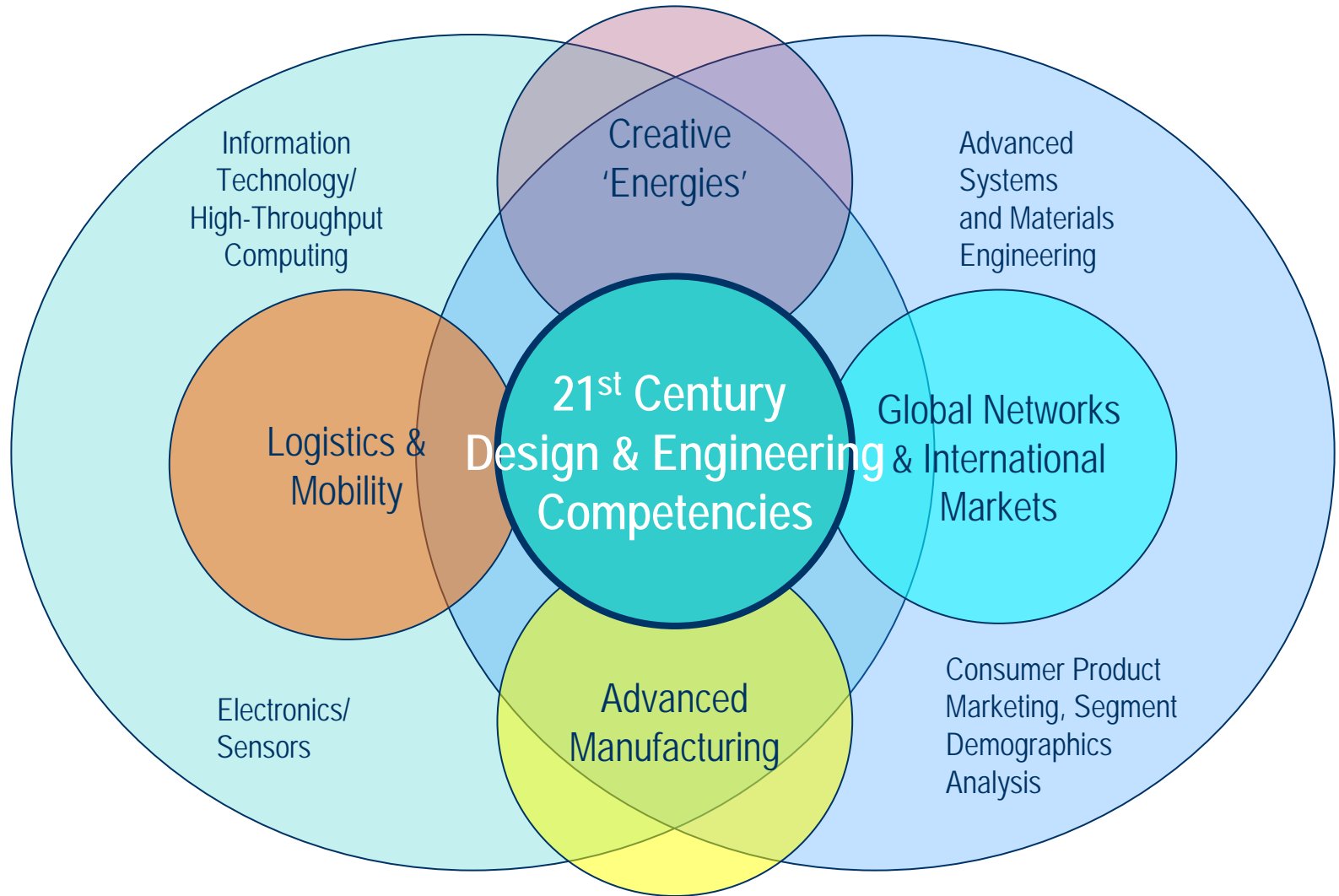
Strategic Priorities: Potential Implementation Timeline

Implementation Team	Action Steps	Timeline
Secure a Strong Future Talent Base	<ol style="list-style-type: none"> 1. Establish a regional internship program. 2. Encourage and support colleges and universities to expand and promote STEM curriculum. 3. Identify high demand careers and required skills sets in fields requiring STEM education. 4. Support K-12 career awareness programs. 5. Support apprenticeships and other programs that offer long-term career opportunities to non four-year college bound youth. 	<p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p>
Promote Globally; Communicate Locally	<ol style="list-style-type: none"> 1. Form a collaboration to support a common virtual gateway to Greater Detroit building upon existed websites. 2. Develop a coordinated brand and marketing strategy. 3. Launch an internal communication strategy. 4. Market the region to targeted industry sectors outside the U.S. in addition to the trade mission approach. 5. Build upon and identify additional cost effective and creative tactics for opening new markets for small/medium enterprises. 6. Market the region as a destination for foreign talent to relocate or remain after graduation from local academic institutions. 	<p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>0-1 yr.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p> <p>1-3 yrs.</p>

Greater Detroit's Innovation Advantage in Design & Engineering: Linking Scientific, Technical, Creative and Manufacturing Skills

- In this phase of the Road Map process, several assets and institutional resources were identified as an overarching strategic and competitive advantage for Greater Detroit in the global arena.
- While elements of this advantage have long-been recognized by a number of individuals and organizations, rarely has any one region in the U.S. been in a position to align and coordinate current skills and competencies to transform its economy so dramatically.
- For example, in locations such as San Diego, Houston, Orlando, it has taken regional leaders and economic stakeholders a decade or more to foster transformation, and re-brand and revise their futures. In other regions and communities, the recognition of global markets and trends have become the de facto benchmarks and best principles by which an aligned system of alliances, tactics, and investments have been created.
- The following graphic depicts the overarching competitive advantage for the Greater Detroit region and impacts several sectors, including mobility, product development and delivery, information and software applications.
- *It suggests that various niche opportunities, once woven into a "grand idea" could reposition people, assets, and infrastructure.* It encourages a new perspective: that no one entity in the region and no one organization has all the pieces nor competencies to complete the tasks for creating a 21st Century Global Model in Design and Engineering.
- And finally, it fosters a simple belief: every citizen in the region has a place and role to build a new culture, a new economic base on which to compete globally in the new century.

Greater Detroit's Innovation Advantage in Design & Engineering: Linking Scientific, Technical, Creative and Manufacturing Skills



Greater Detroit's success will be realized through the application of proven technologies, process engineering and supplier chain discipline from the advanced automotive cluster to a broad range of industries.

Implementation Phase: Process of Implementation Teams

4th Quarter 2006



*First Quarter
2007*

Define the Opportunities

- Orient team members
- Define Desired Outcomes
- Present Strategic Recommendations
- Begin Prioritization

Form Business Plan(s)

- Select priorities
- Identify resources/ timeframes
- Identify cross-cutting business and social issues

Finalize & Execute

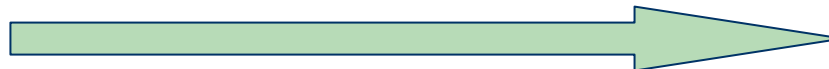
- Gain consensus on each element of plan(s)
- Select performance metrics
- Finalize implementation strategy

Steering Committee member org. implements

Non-Steering Committee member org. implements

Cross-cutting partnership implements

Interim Meeting Assignments



Implementation Teams present business plans to Steering Committee.

Implementation Phase: Next Steps from Report to Results

1. Utilize Road to Renaissance Steering Committee and Regional Development Alliance to oversee implementation phase.
2. Form an implementation team for each strategic priority comprised of key regional stakeholders and Road to Renaissance participants.
3. Develop short, medium and long-term action steps as part of the implementation teams in the format of a two-page 'business plan' detailing milestones, resources, roles, and responsibilities.
4. Develop overall goals and performance metrics to guide ongoing implementation, and report progress on a regular basis.

Each business plan should reflect the need to positively impact regionalism as a fundamental operating model around innovation and the economy, as well as the community's racial and geopolitical divides. Examples of possible outcomes include reducing the income gap, poverty levels and geopolitical divisions.

Implementation Phase: Example of Current & Emerging Regional Activities Addressing “How to go to the next level?”

Global Mobility and Logistics

- Integrated logistics focus by TACOM and the National Automotive Center
- NextEnergy laboratory & exhibition space, Microgrid Power Pavilion, Alternative Fuel Testing Platform
- Federal Fund Strategy for the Regional Development Alliance
- Automation Alley Member Consortium
- NextEnergy Affiliated Industry Groups
- Automotive Industry Action Groups
- Wayne County Aerotropolis

Creative Community

- Create Detroit network
- Mayor’s Next Detroit Initiative
- College for Creative Studies
- Art Incubation by 4731 Gallery
- Fashion Design and Merchandising Program at Wayne State University
- Design Lab at Pure Detroit
- Cranbrook Academy of Art
- Motor City Music Foundation Annual Award Show

Future Talent

- NextEnergy curriculum development
- Oakland County apprenticeship guide
- Workforce Preparedness team at DRC
- Focus: Hope Center of Opportunities
- Detroit Area Pre-College Engineering Program
- TechTown’s programs for preparing students for technology jobs and entrepreneurship
- Selection as a US Department of Labor WIRED project participant

Entrepreneurial Capacity

- NextEnergy commercialization of Alternative Energy Technology
- Automation Alley’s Tech. Bus. Accelerator
- Automation Alley CRADA /w National Automotive Center
- Ann Arbor Spark Entrepreneur Boot Camp
- TechTown’s Frontline Accelerator for Science and Technology, Detroit-Based Initiative, TechOne business Incubator, and Corporate IP Mining Program
- State of Michigan’s 21st Century Initiative
- University of Michigan, Wayne State Offices of Technology Transfer

Promote Globally; Communicate Locally

- Glima Network
- CreateDetroit network and blog
- DRC Future 50 and Bizzy Awards
- Automation Alley’s trade missions
- Technology Marketing Program Committee at the Detroit Regional Partnership
- International Business Development at the Detroit Regional Partnership
- Oakland County Business Development Team
- Detroit Orientation Institute at WSU
- Detroit Synergy project groups
- Tourism Economic Development Council’s Image Action Group
- New Detroit’s Community Investment Tours

Implementation Phase: Cross-Cutting Opportunities

To address the strategic priorities, the six implementation teams will identify and recommend solutions to cross-cutting issues that impact the success of Road to Renaissance. These issues, referred to as the “traditional perspective”, were identified in the initial analysis and feedback from the Steering Committee and the larger community of stakeholders through interviews, roundtables and surveys.

- **Geopolitical divide** (e.g. mitigate city vs. suburb mentality; promote greater local government coordination; develop a multi-county economic development focus, etc.)
- **Race relations** (e.g. shrink the income gap; ensure a greater inclusion of the minority population, etc.)
- **Procurement-based growth** (e.g. encourage entrepreneurialism and new business growth; expand and diversify the region’s traditional and non-traditional capital sources; increase the federal, state, industry, and philanthropic funding portfolio, etc.)
- **Entitlement mindset** (e.g. highlight career opportunities beyond automotive manufacturing and other diminishing professions in the region; reinforce the value of education and training as a means of securing economic prosperity, etc.)
- **Legacy of leadership** (e.g. refocus and leverage current leadership; engage the emerging generation of leaders, etc.)

In the course of their business plan development, Implementation Team Co-Chairs will meet with the Steering Committee to advise and formulate directions and immediate assignments that will lead to regional transformation in the areas of sustainable innovation and societal benefit through accelerated job creation.

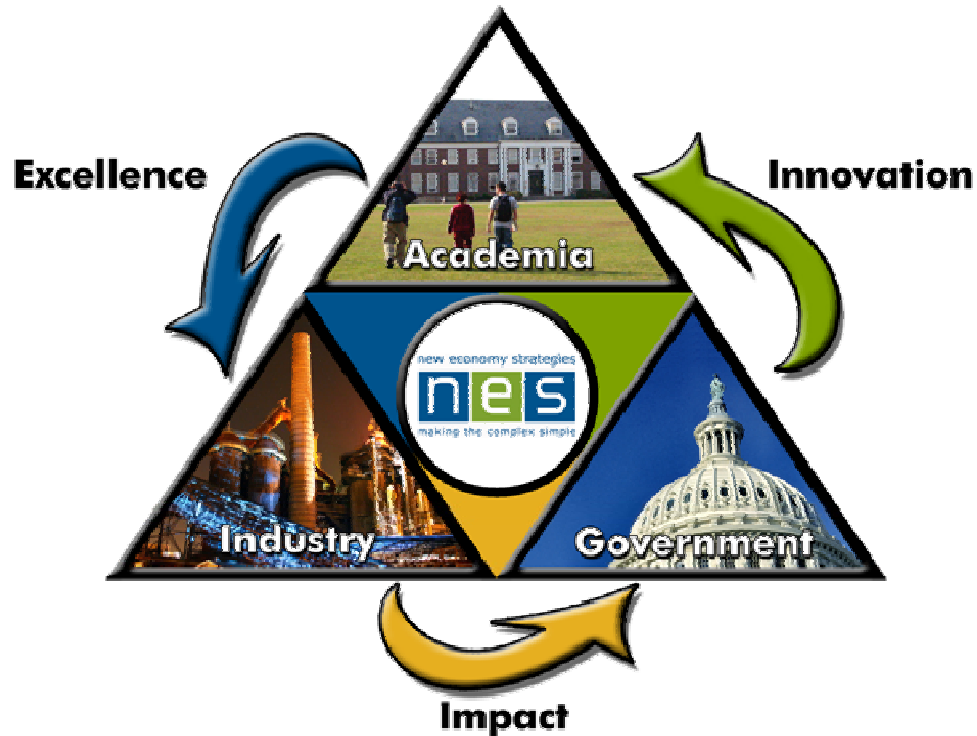
Implementation Phase: Guiding Questions for Cross-Cutting Opportunities

Cross-Cutting Opportunities	Guiding Questions for Team Consideration
Geopolitical divide	<ul style="list-style-type: none"> • In what ways will the plan benefit and link multiple counties? • What types of political and financial support from each county will the plan require for success? • In what ways does the plan economically and socially benefit and link the suburbs and city?
Race relations	<ul style="list-style-type: none"> • What are the specific mechanisms/strategies to include minority organizations and businesses in the plan? • In what ways will the plan engage the minority youth population? • Will the plan help diminish the income gap and poverty concentrations in the region?
Procurement-based growth	<ul style="list-style-type: none"> • Does the plan encourage entrepreneurialism, and particularly new business start-ups? • Is there a strategy to attract traditional and non-traditional funding, i.e. VC, seed, angel, SBIR, SBA, etc.? • Does the plan have strategies to increase specific federal funding sources, and by how much? • In what ways does the plan align and leverage current state, county and industry resources? • What are the strategies to secure philanthropic support and leadership? • In what ways does the plan engage and increase traditional lending sources?

Implementation Phase: Guiding Questions for Cross-Cutting Opportunities (Cont.)

Cross-Cutting Opportunities	Guiding Questions for Team Consideration
Entitlement mindset	<ul style="list-style-type: none"> • Does the plan identify viable career paths for generations that have depended on automotive manufacturing and other diminishing professions? • Does the plan highlight the value of education and training as a critical step to securing economic prosperity? • Are there strategies to leverage educational institutions and programs already in place, e.g. universities, community colleges, Focus: HOPE, apprenticeships, etc.?
Legacy of leadership	<ul style="list-style-type: none"> • Does the plan refocus the time, energy and resources of the current leadership? • Is there a strategy to engage new, emerging leadership in the region? • How will the plan keep the established and emerging regional leadership engaged?

New Economy Strategies



New Economy Strategies

1250 24th Street, N.W. Suite 300

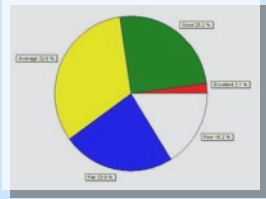




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Appendix

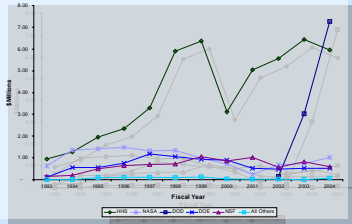
Methodology: Qualitative Data Overview

Data	Description
<p>Surveys</p> 	<p>A tool to understand the motivation and dynamics of the regional leadership and current assets, as well as strengths and weaknesses in the business and innovation environment; 381 regional leaders completed a survey</p>
<p>Interviews</p> 	<p>Focused interviews to identify 3-5 key priorities emerging as drivers to the regional economy; validation of emerging findings; 25 interviews were conducted</p>
<p>Roundtables/ DR Director Dinners</p> 	<p>A group of key stakeholders focused on understanding their sector's challenges, future demands and vision; convened 75 leaders in business support services, creative community, technology, research and science, civic and philanthropic, workforce and econ. dev.; 50 leaders participated in DR hosted dinners</p>
<p>Literature Review</p> 	<p>Reviewed 15+ previous studies, benchmarking and PowerPoint presentations over the past 7 yrs.</p>
<p>Crain's Forums</p> 	<p>Facilitated events of Crain's 40 under 40 and 20 in their 20s alumni that convened 100 individuals.</p>

Methodology: Quantitative Data Overview

Data

Federal R&D Funding
1993-2004



Source

RAND RADIUS

Description

Federal funding portfolio aggregated by individual awards and by sector on multiple geographic levels

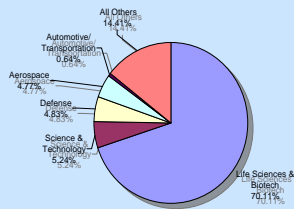
Private R&D
2002-04

Company Name	2002	2003	2004	2005	2006	2007
General Motors Corp.	5009.40	4575.40	4213.78	4048.85	4497.35	-2.66
Ford Motor Co.	5161.20	5461.00	5594.16	5327.44	5120.06	-0.2
Bojiac Corp.	1310.80	1336.12	1377.12	1466.29	1426.11	2.17
Visteon Corp.	909.28	825.82	655.31	641.42	113.77	4.69
Advanced Technology Center	10.67	11.58	12.58	13.46	14.24	7.48
Autosport Inc.	10.23	8.48	4.91	6.25	3.84	-21.71
Advanced Materials Plant	5.17	5.34	5.57	5.75	5.90	3.27
Plastics Holdings Inc.	8.13	8.83	9.06	9.48	9.84	4.9
ECG Dynamics	1.70	1.50	1.33	1.16	0.99	-12.54
Vista-Tek Corp.	77.84	76.91	76.91	76.36	75.53	-0.75
Computer Corp.	2.50	2.27	5.25	4.41	21.06	70.068
Curaco Pharmaceutical Development, Science & Vaccine Company	3.11	2.83	2.84	1.76	1.84	-16.12
Amurapion Inc.						

Shonfield

Private R&D funding by company and industry sector at the state level

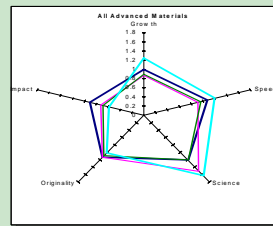
SBIR
1993-2004



RAND RADIUS

Small Business Innovation Research provides funding for startup and development stages to encourage commercialization of the technology, products, or services

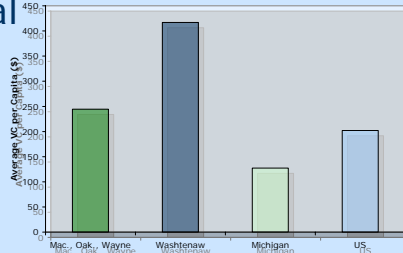
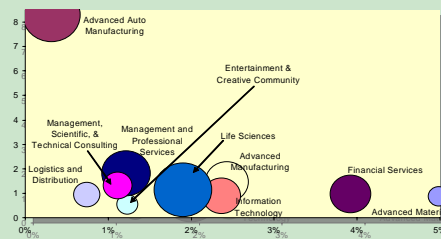
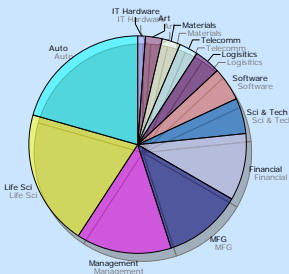
Patents
1990-2004



1790 Analytics;
USPTO

Patents categorized by cluster, relative strength measured by citations, scientific grounding, and innovation speed

Methodology: Quantitative Data Overview

Data	Source	Description																																
<p>Venture Capital 1994-2004</p>  <table border="1"> <caption>Average VC per County (\$)</caption> <thead> <tr> <th>Region</th> <th>Average VC per County (\$)</th> </tr> </thead> <tbody> <tr> <td>Mac, Oak, Wayne</td> <td>~250</td> </tr> <tr> <td>Washtenaw</td> <td>~420</td> </tr> <tr> <td>Michigan</td> <td>~150</td> </tr> <tr> <td>US '05</td> <td>~200</td> </tr> </tbody> </table>	Region	Average VC per County (\$)	Mac, Oak, Wayne	~250	Washtenaw	~420	Michigan	~150	US '05	~200	<p>PWC MoneyTree Thomson</p>	<p>venture capital by sector on a county, state and national level</p>																						
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Methodology: Previous Studies Reviewed

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2. "Moving Michigan Forward." PowerPoint Presentation, MEDC, James C. Epolito, Nov. 18, 2005.
3. "Business Growth Efforts through the Detroit Regional Economic Partnership." PowerPoint Presentation, The Detroit Regional Economic Partnership, Nov. 18, 2005.
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9. "Metropolitan Michigan Knowledge Economy Indicators." Michigan State University Community and Economic Development Program Rex LaMore, Ph.D. et al., Jun. 2005.
10. "Recommendations for Adapting Planning Practice to the Knowledge Economy" - Excerpts from the Michigan Knowledge Economy Index Michigan State University Community and Economic Development Program, Nov. 2004.
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