

MICHIGAN ENTREPRENEURSHIP SCORE CARD, 2009-2010

Published by the Small Business Foundation of Michigan, the Annual Michigan Entrepreneurship Score Card reflects a deeply held belief that Michigan has a creative, diverse, innovative culture and open society - assets that are at their best when enabled by innovative entrepreneurship. Each year, the Score Card benchmarks and compares Michigan against all other states on measures that relate to the relationship between entrepreneurship, community and economic recovery, diversification and development. Each year new data has been added, more examples of meritorious entrepreneurship have been highlighted, and new communities have joined in the call for enhanced innovative entrepreneurship in the state as a viable community and economic recovery, diversification and development strategy.

Because entrepreneurship is held in such high esteem by the authors and sponsors, the report takes great care to maintain a high standard of quality. The Score Card authors, sponsors and Board of Technical Advisors, acknowledge the implications of Louis Pasteur's famous quote for the study of entrepreneurship in Michigan, i.e., "The greatest derangement of the mind is to believe in something because one wishes it to be so." Within this context, we are keenly aware that, unlike physical scientists, economists and policy makers cannot run controlled experiments and thus are always looking backward in an effort to develop effective public policies for the future.

Thus, the Score Card uses only standard and objective metrics (supplied by highly respected and recognized sources), sound science and methodology, fact-based causation and outcome measurements. Most importantly, the Score Card does not weigh, and therefore bias, any of the individual metrics reported in this study. *Those who would misuse the Score Card data to draw unsubstantiated and unscientific correlations, causations and related conclusions in support partisan politics do so without the authorization, support, encouragement, cooperation or approval of the Score Card authors and sponsors.*

Conversely, the Score Card authors and sponsors sincerely invite others to use the Score Card data - in an open, transparent and scientific manner - to encourage the formation of an innovative and entrepreneurial economy in the state as a way to enable robust community and economic recovery, diversification and development. This open approach to Score Card development has resulted in improvements every year since its first release in 2004, including the 2009-10 addition of the State Entrepreneurial Dynamism Index (SEDI).

Now that seven years of updated data have been collected on all 50 states, it is possible to identify those select metrics that best capture the prevailing 'spirit of enterprise' in a given state. This Index (described more fully in the metric tables) is a combination of six metrics: three measuring different aspects of entrepreneurial job creation; two measuring business creation/growth; and, a sixth measuring proprietor income growth. During the summer of 2010, additional analysis is will be conducted to explore the causal relationships between drivers in order to better identify specific areas where the state could focus attention in order to stimulate economic recovery and development.

State Entrepreneurship Dynamism Index

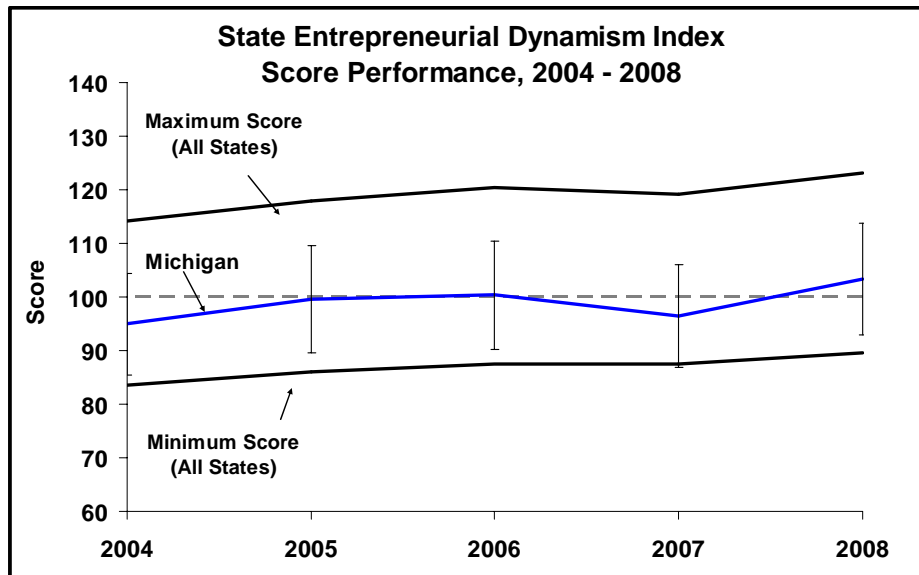
The Scorecard uses three Primary Drivers to describe trends, conditions and direction of the entrepreneurial economy of the state (i.e., Entrepreneurial Change, Entrepreneurial Vitality and Entrepreneurial Climate) with rankings and ratings (5-star scale) to measure and compare the state's performance against all other states. The following Michigan Entrepreneurship Dynamism Score Card table reflects these current measures:

Table: Michigan Entrepreneurship Dynamism Index (SEDI)

Primary Drivers	Michigan 2009-10 Rank Among all States	Michigan 2009-10 Star Rating Among all States
State Entrepreneurial Dynamism Index (SEDI)	22 : 50	***
Entrepreneurial Change - The amount of entrepreneurial growth or decline in an economy over the recent three years	48 : 50	*
Entrepreneurial Vitality - The level of entrepreneurial activity (pace and robustness of entrepreneurial activity)	31 : 50	*
Entrepreneurial Climate - The capability of an economy to foster entrepreneurship	44 : 50	*
Secondary Drivers		
Education	21 : 50	***
Workforce Preparedness	14 : 50	***
Business Costs	41 : 50	**
Productivity & Labor Supply	39 : 50	*
Legal and Regulatory Environment	21 : 50	****
Physical Infrastructure	30 : 50	***
Digital Connectivity	21 : 50	****
Quality of Life	33 : 50	**

- **Ranking** - Current rank among all states. : Rank 1 = best, Rank 50 = worst
- **Star Rating** - Once the metric scores have been calculated Star Ratings are calculated associated with average scores. For example, five stars means the state performed in the top 20 percent of the range of averaged scores, just as for the shadings on the metric pages.

This 2009-10 report uses the latest full year all-state data, primarily dated 2008. Using this report's new State Entrepreneurial Dynamism Index (SEDI) one can observe gradual but choppy improvement over the last five years. As the following chart illustrates, Michigan now scores above the 50-state mid-point.



The Score Card is clearly not the only indicator that Michigan entrepreneurs and communities are struggling in this environment. Mark Zandi, chief economist of Moody's Economy.com, noted that 2009 is "arguably the worst year for small business since the Great Depression." In February, 2009, Fortune Small Business released its report on the

top 50 towns in America to grow a small entrepreneurial business. None of these locations are in Michigan.¹ Michigan's SEDI ranked 22 with a 3 star/mid-range score.

The state bettered Indiana, Illinois, Ohio and Wisconsin. This is a much improved situation from 2004 when the Score Card was first released. As reported in recent-year Score Cards Michigan's entrepreneurial dynamism has been showing signs of life with indications that now is the time to intensify and accelerate Michigan's entrepreneurial dynamism momentum. Many efforts at entrepreneurial education and development - often featured in earlier reports - deserve substantial credit.² The following summary tables provide a snapshot of Michigan's gains and losses as well as those metrics where the state ranks above the mid-point:

Summary Tables

Score Card Metrics Snapshot

Metrics with Top Competitive Gains & Losses over recent 4 years (more than 10 ranks)

Loss

ACT
Bank Industrial and Commercial Lending
Establishment Formation Rate
Establishment Turnover
FDI Growth
IPO Financing and Deals
Liability System Reputation

Local Phone competition
Net Establishment Entrants and Change in it
Tort System Efficiency
Water Systems

Gain

Airport Performance
Business Taxes
New Business Owners
High School Graduation Rate
Net Expansion Jobs
Proprietor Income Growth
Rural Internet Access
Small Business Health Care
Premiums
Venture Capital

¹ http://money.cnn.com/smallbusiness/best_places_launch/2009/faq/ - How we picked the Best Places to Launch. In partnership with the Ewing Marion Kauffman Foundation and Robert Fairlie, an economist and leading scholar of entrepreneurship at the University of California, Santa Cruz, identified the 50 most business-friendly communities in America. FSB began with the U.S. Census Bureau's 363 Metropolitan Statistical Areas. Each MSA includes at least one urbanized area of 50,000 or more inhabitants. For each MSA, the authors gathered the most up-to-date information available from the following sources: Population, Per-capita income, GDP, Median monthly rent, Housing price-to-income (HPI) ratio, Average hourly wage, Business tax climate, College-educated workers, and, Small business population.

² For example, please see the Michigan Economic Development Corporation's (MEDC) award-winning series about programs, services and special initiatives, <http://www.themedc.org/reference/publications/default.aspx?dest=goodnews>.

Metrics where Michigan ranks above midpoint of 25 (by order in report)

Self-employment Growth differential	4	Workers' Compensation Premiums	20
Net Expansion Job Gains	20	Workers' Compensation Costs	21
New Business Owners/Entrepreneurial Activity Index	23	Metro Office Rents	17
Proprietor Income Per Proprietor Growth	19	Small Business Health Care Premiums	20
Self-Employment	23	Services Gross Domestic Product per Job	23
University Spinout Businesses	19	Health Mandates	4
SBIR Awards	22	Business Liability	11
STTR Awards	20	Local Phone Competition	21
University Research and Development	15	Railway Productivity	14
Patents per Innovation Worker	8	Water Quality	14
University Licenses to Small Businesses	19	Broadband Coverage	10
NSF Proposal Funding Rate	15	Speed	22
University Royalty/License Income	17	Rural Internet Access	13
Industry Research and Development	4	Rural-Urban Disparity	1
Venture Capital Financing	24	Charitable Giving	25
SBIR Financing	22	Voter Turnout	7
Bank Commercial and Industrial Lending	23	Racial/ethnic Equity	18
Private Lending to Small Businesses	5	Skilled Immigrants	21
Fortune 500 Headquarters	7	Parkland	10
AP Overall	25	Golf Courses	10
High School Graduation Rate	19	Historical Preservation	24
SAT	11	Urban Cost of Living	23
Physical Sciences and Engineering Degrees		Urban Housing Affordability	24
Technology and Technician Degrees	11	Homeownership Rate	4
Other Innovation Degrees	19	State and Local Tax Burden	23
U.S. News Top Graduate Programs	6	Lack of Health Insurance	13
Associate Degree Attainment	4	Crime Index	24
Physical Science and Engineering Workers	16	Healthcare Access	24
Technology and Technician Workers	5		
Other Innovation Workers	22		
High-Tech Manufacturing Employment	21		
High-Tech Services Employment	14		
Adult Education	18		

Entrepreneurial Reinvention

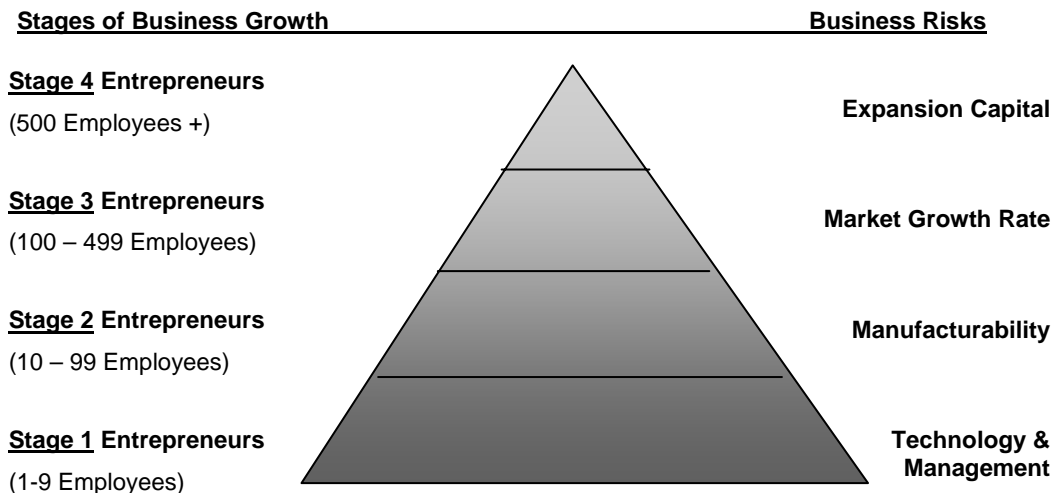
As economic conditions in Michigan (Entrepreneurial Climate Driver) clearly illustrate, the need for a new and viable economic model could not be starker. As Farooq Kathwara, C.E.O., Ethan Allen Interiors, has aptly, written “reinvention is vital to our survival”. Within this context, Michigan citizens, businesses, educators and policy makers are increasingly finding truth in the following statement from the Kauffman Foundation: “if the U.S. economy is going to have a sustained recovery, it will be up to its entrepreneurs to lead the way.”³ Indeed, the Kauffman Foundation Research Series, “Where Will the Jobs Come From?” found that in the period from 1980 to 2005, nearly all net job creation in the U.S. came from companies less than five years old. This particular data set shows that without job creation from startup companies, net job growth in the U.S. would have been negative in most of those years. An analysis of Census Bureau data shows that in 2007, two-thirds of job creation came from young companies one to five years old, averaging nearly four new jobs per year. Of the 12 million jobs created in 2007, 8 million came from new companies.⁴ And because these young companies frequently hire younger workers it comes as no surprise that the age group most unemployed by this recession is the 18-24 age group. Michigan must do better to find job opportunities for its young people.

The National Commission on Entrepreneurship report, *Embracing Innovation: Entrepreneurship & American Economic Growth*, suggests that, “If entrepreneurial companies are the source of new jobs and reinvestment in communities, failure to foster entrepreneurship... is simply an unacceptable policy choice.” Indeed, Kapila Vigas, Director of Entrepreneurship for the Michigan Economic Development Corporation (and member of the Score Card Technical Advisory Committee) notes that Michigan’s economic recovery hinges on the emergence of a new entrepreneurial culture. According to Vigas,

It’s probably happening a little bit slower than we would like to see, but I think we’re seeing a tipping point here. We aren’t going to stay in this entitlement mode. We’re shifting from entitlement to empowerment.

Second Stage Companies

A key driver of Michigan’s improving SEDI score is Second Stage Entrepreneurs. Groundbreaking work completed by the Edward Lowe Foundation has shown that second-stage businesses (firms with 10 to 99 workers with revenues between \$1- \$50 million) are one of the most important contributors to a dynamic entrepreneurial economy. Edward Lowe has found that businesses can be grouped into stages, each with a different set of challenges and opportunities. In general, entrepreneurial business stages and related risks fall into four categories as illustrated in the following diagram:



³ See: www.buildstrongeramerica.com.

⁴ Dane Stangler and Robert E. Litan, Ewing Marion Kauffman Foundation, Kauffman Foundation Research Series: *Firm Formation and Economic Growth, Where Will The Jobs Come From?*, November 2009.

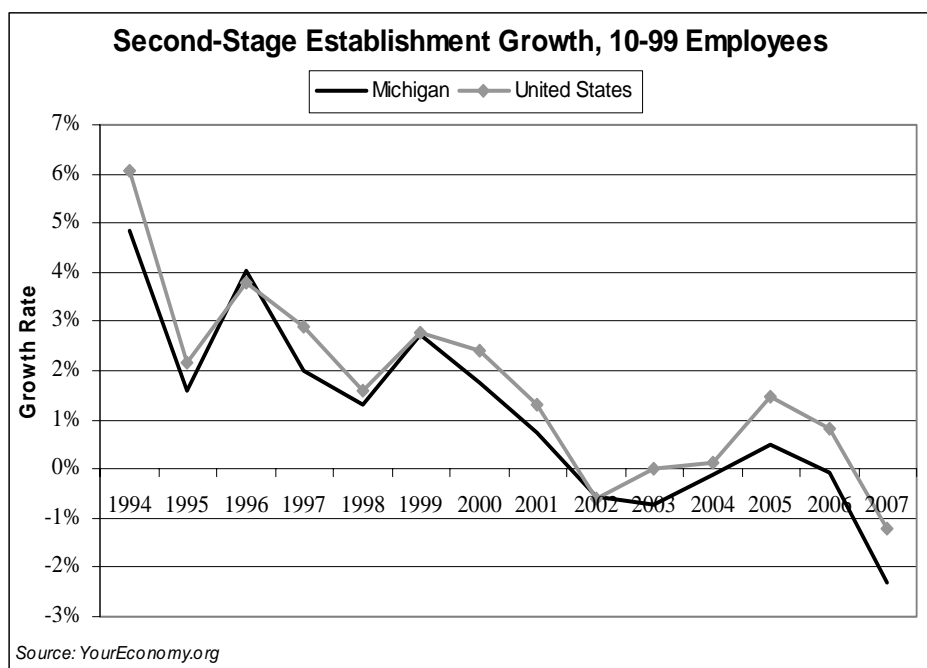
First stage is a proving ground for business ideas and entrepreneurial talent. As data from the U.S. Small Business Administration shows, the failure rate among First Stage businesses is extremely high. Second stage businesses, however, generates rapid growth, leading to even larger (third and fourth) stages. As such, these firms are a key driver of Michigan's improving SEDI score is Second Stage Entrepreneurs.

Second-stage companies have passed the volatile startup, or first stage, and face issues of growth rather than survival. Their founders, owners, or CEOs are moving from an entrepreneurial management style to a more professional approach that emphasizes formal organizational structure, specialization, delegation, process and wider market penetration. Data from www.youreconomy.org (a product of The Edward Lowe Foundation of Cassopolis, MI) demonstrates that Michigan second stage businesses (those with 10-99 employees) effectively combine innovation with intent and capacity for growth in such a way as to be more stable over time and are less impacted by the current recession, than other businesses.

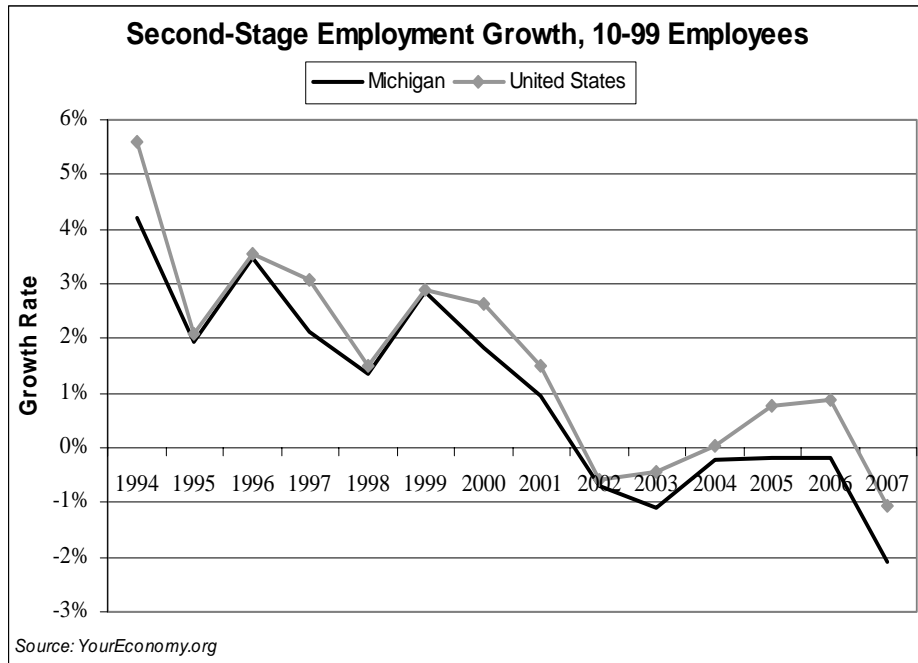
The economic potential of Second Stage entrepreneurship is aptly reflected in the performance of the 2009 "Michigan 50 Companies to Watch": \$405 million in total annual revenue; \$99 million increase in total annual revenue; 1,530 employees; and, 296 net new jobs. According to the Michigan 50 Companies to Watch sponsors,⁵

In just four years, ending in 2008, these companies generated \$1.1 billion in revenue and added more than 700 employees, a 126 percent increase in revenue and 87 percent increase in jobs. That translates into a 31 percent annual revenue growth and a 23 percent annual growth in employees. These companies project continued growth in the coming year, with a 35 percent revenue increase and 24 percent growth in employees compared to 2008. If their projections hold, these companies will have generated \$1.7 billion in revenue and added 1,076 employees over the last five years – a 228 percent increase in revenue and 132 percent increase in jobs since 2005.

As the following two charts indicate, however, while second stage companies continue to be the bright spot in Michigan's economy, they also continue to be negatively impacted by the current financial crises and are not keeping up with the US growth rate.



⁵ Michigan Economic Development Corporation, Michigan Small Business & Technology Development Center, Small Business Association of Michigan, U.S. Small Business Administration - Michigan and the Edward Lowe Foundation.



Enhancing Second Stage Entrepreneurship

For Second Stage companies to break away from the forces that limit their growth, much needs to be accomplished, policy-wise, programmatically and collaboratively. Closer examination of the three Entrepreneurial drivers provides insights as to areas of strength and vulnerability. Entrepreneurial Change measures what has been happening in the most recent three years with respect to small business growth, increase in high performance firms and new business entrants. Michigan ranks 48 with a one star rating in 2008. Entrepreneurial Vitality speaks to the general level of entrepreneurial activity compared to other states, including university spin offs, IPO awards and SBIR awards. Michigan ranks 31 with a one star rating in 2008. Finally, Entrepreneurial Climate speaks to the general business conditions conducive to entrepreneurial and small/mid-size business growth. This driver includes metrics on Research and Innovation, Financial and Institutional Capital and General Business Growth. This driver has been pulling Michigan's overall scores down throughout the decade. In 2008 Michigan ranked 44 with a one star rating.

As with prior years the Entrepreneurship Score Card seeks to blend hard data with grassroots, on-the-ground interpretations of economic change happening across the state. Our observations this year fall into three buckets: (1) Michigan is at a 'tipping point' in its entrepreneurial economy renaissance; (2) Lots of experiments are going on to link entrepreneurial prosperity with the 'prosperity of place' and enhanced quality of community life (many exciting new models of 'economic gardening'); and (3) Amid the pain of economic adjustment, industry and market diversification is a process often instigated by entrepreneurial initiative (the growth of green industries a notable example). In short, the U.S. Small Business Administration reference to entrepreneurs in Michigan as the "heart of the state's economy" is becoming more of a reality.

This year, the Score Card narrative will address the theme of Entrepreneurial Culture and its relationship to Community and Economic Recovery, Diversification and Development in the state. Specifically, the report will delve into the relationship between entrepreneurship and five key areas: Entrepreneurial Culture; Economic Gardening; Sustainability and Renewable Energy; Innovation: Instrument of Entrepreneurship; and, Entrepreneurial Education.

ECONOMIC GARDENING

In the November/December 2009 issue of *The Review*, the official magazine of the Michigan Municipal League, Daniel P Gilmartin, MML Executive Director, aptly noted that today's global economy demands a different approach – growing knowledge-based jobs through "economic gardening" and entrepreneurship. In his position, Gilmartin is

uniquely qualified to understand that “sustainable economic growth Michigan desperately needs is driven largely by entrepreneurs,”⁶ and that traditional approaches to economic development often are at odds with the needs and requirements of entrepreneurship. For example, traditionally, economic development has focused primarily on three mechanisms:

- Business Attraction – Gilmartin (MML) describes this model as “hunting” where “large manufacturers and/or big box retailers” are lured to the state with incentives. The impact of this business-attraction centric model on entrepreneurship was aptly described by the National Governors Association, Center for Best Practices, in their landmark study titled, *“A Governor’s Guide to Strengthening State and Entrepreneurship Policy,”* which found a “...significant mismatch between economic development practice and the needs of entrepreneurs continues to *plague state efforts to encourage the high-growth businesses.* This mismatch reflects the longstanding focus of economic development efforts on large firms or “small business: clients, the inflexibility and inadequacy of state programs relative to entrepreneur’s needs and the need to provide support for entrepreneurship...”
- Small Business Development – Led primarily by the U.S. Small Business Administration and their research showing the economic and job impact of small firms, small business development encourages the creation of new small businesses.
- Business Retention and Expansion – This model provides incentives to existing firms to diversify and expand their capacity and related employment. Often these models fail to take into account the essential role of intrapreneurship as a pre-condition for any successful diversification.

As global competition increases communities are recognizing the limitations of these three traditional economic development mechanisms and are seeking new models to stimulate community and economic recovery, diversification and development. As suggested by Gilmartin (MML), a fourth economic development model – “Economic Gardening” - is rapidly emerging as a viable option. According to the Edward Lowe Foundation, Economic Gardening is an innovative entrepreneur-centered economic growth strategy that offers balance to the traditional economic practice of business recruitment, often referred to as “economic hunting.”

Economic Gardening⁷ is a nationally recognized reinvention model, developed by Chris Gibbons, director, Economic Gardening in Littleton Colorado and endorsed by the Edward Lowe Foundation⁸, the U.S. Small Business Administration, Small Business Association of Michigan and several communities (see below).⁹ Gibbons describes this model as “gardening” whereby incentives and programs are specifically designed to encourage the formation and growth of innovative entrepreneurs (versus generic small businesses). In discussing the Littleton program, the Edward Lowe Foundation notes,

While it was introduced as a demonstration program to deal with the sudden erosion of economic conditions following the relocation of the largest employer in the city at that time, it has emerged as a prototype for a rapidly expanding movement of like-minded economic developers looking for additional methods to generate truly sustainable economic growth for their communities, regions or states.

Economic Gardening goes directly to the heart of the question posed by Scott A. Shane, Professor of Entrepreneurial Studies at Case Western University: If only some entrepreneurs expect to create jobs, and those who expect to create jobs are more likely to do so, should governments focus their attention on entrepreneurs who expect to create jobs? Or should they treat all entrepreneurs equally?¹⁰ Economic Gardening is an economic development model that answers this question with a resounding “no”, not all entrepreneurs should be treated equally – entrepreneurs that combine innovation with intent and capacity to grow should be given priority for economic and small business development incentives.

In an October, 2008 paper released by the U.S. Small Business Administration, Office of Advocacy titled, “Look Ahead: Opportunities and Challenges for Entrepreneurship and Small Business Owners,” Economic Gardening is highlighted as one of five “opportunities” for economic development and job creation.¹¹ In its simplest terms,

⁶ Daniel P Gilmartin, MML Executive Director, Michigan Municipal League, “A Community’s Role in Entrepreneurship,” in, *The Review* (official magazine of the Michigan Municipal League), November/December 2009, pp 4.

⁷ Economic hunting is the traditional business attraction approach to economic development. Under this model, significant resources are invested in the form of business incentives to lure large employers to the state. “Economic gardening” is a business creation, retention and expansion approach to economic development. Under this model, resources are invested in helping high-growth potential firm’s form and grow.

⁸ The Edward Lowe Foundation strongly endorses Economic Gardening and offers related training at their Michigan facility.

⁹ <http://www.littleton.gov/bia/economicgardening/>. In Michigan the Edward Lowe Foundation has also been on the forefront in advocating for “Entrepreneur Gardening Centers” (as a part of a [Balanced Portfolio Approach to Economic Growth](#)) that develop and deliver high quality growth-oriented programs, products and services to steady and high growth entrepreneurs.

¹⁰ *Should Policy Makers Focus Their Support on Growth-Oriented Entrepreneurs?* [Scott A. Shane](#), August 27, 2009.

¹¹ Moultray, Chad, Office of Advocacy, U.S. Small Business Administration, “Look Ahead: Opportunities and Challenges for Entrepreneurship and Small Business Owners,” (October 2008), pp 8.

Economic Gardening is a grow-from-within community development model that consciously¹² applies entrepreneur support resources to the entrepreneurial segment of the small businesses sector, providing them with a highly specialized set of creation, retention and expansion services. Gibbons notes, however, that economic gardening is not just a business development effort, but an integrated economic and community development effort that engenders an entrepreneurial culture. According to Gibbons, "Economic development and community development are two sides of the same coin. A community without many amenities is going to have a hard time being an environment for entrepreneurs -- especially as their wealth starts to grow." Within this context, in a National League of Cities article titled, "A Local Perspective: Littleton's Economic Gardening Strategy," Chris further noted,

Economic Gardening's objective is to provide a nurturing environment to entrepreneurial companies. Information is a major component of that environment, but it also includes infrastructure and connections. Infrastructure extends beyond roads and sewer to include quality of life and intellectual infrastructure. Connections between the CEOs of growth companies as well as to academic resources improves the bottom line. The program has helped entrepreneurs double the job base in Littleton from 15,000 to 30,000 and triple the retail sales tax from \$6 million to \$21 million over the past 20 years. The population only grew 23 percent during that same time period. Perhaps even more telling, it has generated enthusiastic support from Littleton's business community. The staff has received abundant praise over the years stressing the invaluable service we provide to local businesses.¹³

While economic gardening can take different forms, there are five common features of all programs that incorporate economic gardening principles:

- **Entrepreneur vs Small Business Development** – Economic Gardening programs service ventures that combine innovation with intent and capacity for growth and impact in markets that have high economic-multiplier potential.
- **Second-Stage Businesses** – Economic Gardening programs are keenly aware of the community and economic recovery, diversification and development capacity of Second Stage businesses and work to harmonize business development incentives and programs in order to enhance Second Stage ventures. For example Stage One businesses whose business plan is to become Second Stage firms are given special incentives over traditional Lifestyle small businesses. (see below)
- **Community vs Economy** – Economic Gardening programs combine community and economic development (i.e., According to Gibbons, "Economic development and community development are two sides of the same coin).
- **Blended Economic Hunting and Gardening** – Economic Gardening effectively blends traditional business attraction ("Hunting") with business creation, retention and attraction ("Gardening") into a comprehensive community and economic development strategy. Gardening thus becomes part of the business attraction package.
- **Market Research** – A cornerstone of Economic Gardening programs is the subsidized the delivery of high-quality market research services to clients in order to significantly augment the marketing section of their business plan. It is assumed that such an augmentation will allow clients to better target and pursue growth opportunities and a greater local economic development return on investments will occur when applied to such firms.¹⁴ Within this context, economic gardening programs typically provide their clients with preferred access to highly specialized market research and related researchers (e.g., MBA with expertise in Market Research and Business Librarianship) as well as highly qualified business development counselors that specialize in the creation, retention and expansion of entrepreneurial ventures.

In addition to the five basic elements listed above, there are also a number of additional variations in how communities integrate economic gardening principles in to their entrepreneur development programs. For example, Economic Gardening PLUS programs (see below) expand the definition of "entrepreneur" to include small business entrepreneurs, intrapreneurs and social entre/intrapreneurs as well.

Entrepreneurship Development Models

As the Michigan economy grapples with the twin impacts of globalization and economic restructuring many communities, economic development specialists and public policy makers have become interested in Economic Gardening as a viable economic recovery, diversification and development - and jobs strategy¹⁵ - for their communities. Several organizations are responding in kind. For example, the Michigan Economic Developers

¹² The "conscious" application means that a community makes a formal decision to align their assets to stimulate the formation and growth of innovative entrepreneurs. Towards this end, Chris notes the critical role of "community" in economic development as follows: "Economic development and community development are two sides of the same coin. A community without many amenities is going to have a hard time being an environment for entrepreneurs -- especially as their wealth starts to grow."

¹³ Chris Gibbons, *A Local Perspective: Littleton's Economic Gardening Strategy*, in, National League of Cities, National Cities Weekly,

http://www.nlc.org/articles/articleItems/NCW011110/gibbonslocalperspective.aspx?utm_source=delivra&utm_medium=email&utm_campaign=NCW+1/11/2010.

¹⁴ In 2009, the Small Business Association of Michigan led a project to determine the business support service needs of entrepreneurs in the state. Market research was rated as one of areas most desired by firms.

¹⁵ For example, [The Global Entrepreneurship Monitor](#) is an effort by a consortium of academics around the world to survey a representative sample of the adult age population to study entrepreneurs. One of the topics examined by the GEM is growth expectations and their research shows that only about 7 percent of all start-up attempts expected to create 20 or more jobs. While just expecting to create jobs won't result in job creation, research shows that entrepreneurs are more likely to create jobs if they expect to create jobs.

Association (MEDA) now includes Economic Gardening training in their Certified Economic Developer (CEcD) Training. The Michigan Municipal League also includes Economic Gardening training in their meetings, seminars and annual conference. The Michigan State Housing Development Authority "Sense of Place" Council broadly supports economic gardening as a community development strategy. The Edward Lowe Foundation provides Economic Gardening training at their corporate facilities in Cassopolis, Michigan. Lastly, Saginaw Valley State University includes Economic Gardening training in their Michigan Certified Public Managers curriculum.

Within this context, Score Card authors have researched this issue and have identified the following six entrepreneurship development models that utilize various elements of Economic Gardening: (1) Rural, (2) Ground-Zero, (3) Blended, (4) Open-Source, (5) Recovery Accelerator, and (6) Economic Gardening Plus. These models are briefly discussed below.

Rural Model

The Land Policy Institute at Michigan State University operates a rural entrepreneurship program called, Creating Entrepreneurial Communities (CEC). The CEC project works with small community leadership teams, drawn from across Michigan, to learn about and execute tailored local approaches to encourage business start-ups and support entrepreneurs through all phases of business development. The Phase I CEC project was piloted with nine Michigan communities and is currently moving into a Phase II statewide expansion. The Phase II project is expected to involve a three-year National Research Initiative grant to assist with Phase II implementation.

Ground-Zero Model

	1997/8 – 2007 Average Establishments	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	530,998	8 - 6.7%	12.4%	0.8%	0.1%
Ground-Zero Model:					
• Tuscola County	3,370	91.4%	7.9%	0.7%	0.0%
	1997/8 – 2007 Average Jobs	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	5,397,818	27.1%	35.1%	16.7%	21.0%
Ground-Zero Model					
• Tuscola County	21,046	41.7%	35.3%	23.0%	0.0%

Stage 4 Entrepreneurs (500 Employees +), Stage 3 Entrepreneurs (100 – 499 Employees), Stage 2 Entrepreneurs, (10 – 99 Employees, \$1-\$50 Million in Sales), Stage 1 Entrepreneurs, (1-9 Employees)

The Ground-Zero Model is based, in part, on the Sirolli Institute Model of business development for communities experiencing severe economic stress.¹⁶ The model essentially creates a cadre of community specialists ("facilitators") that actively focus on the creation of new small businesses. It is anticipated that some of these new startups will grow and be the beneficiaries of traditional economic development incentives that will accelerate their growth and result in economic development in the community. In collaboration with the Small Business Association of Michigan, Saginaw Valley State University and Shepherd Advisors, the Tuscola County Economic Development program successfully secured several U.S. Department of Agriculture grants to fund a program that blends the Sirolli Institute Model with a traditional economic gardening effort.

¹⁶ See: Sirolli Institute, <http://www.sirolli.com/Home/tabid/36/Default.aspx>.

Blended Model

	1997/8 – 2007 Average Establishments	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	530,998	86.7%	12.4%	0.8%	0.1%
Midland County (<i>Blended Model</i>)	4,043	87.2%	11.4%	1.0%	0.3%
	1997/8 – 2007 Average Jobs	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	5,397,818	27.1%	35.1%	16.7%	21.0%
Midland County (<i>Blended Model</i>)	52,572	19.2%	23.4%	15.3%	42.1%

Stage 4 Entrepreneurs (500 Employees +), Stage 3 Entrepreneurs (100 – 499 Employees), Stage 2 Entrepreneurs, (10 – 99 Employees, \$1-\$50 Million in Sales), Stage 1 Entrepreneurs, (1-9 Employees)

As a key member of the Great Lakes Bay Regional Alliance¹⁷, Midland, Michigan is at the epicenter of a fundamental, alternative energy-related economic recovery, diversification and development effort. Its key anchor employers – the Dow Chemical Company, Dow Corning Corporation and Hemlock Semiconductor – are keenly interested in market leadership positions in the rapidly emerging global alternative energy market. As raw materials suppliers, these firms seek to enable relationships with innovative, entrepreneurial firms in diverse and growing industries.

Midland Tomorrow - Midland's premier economic development arm – capitalizes on its anchor tenants business strategy by operating a Blended Economic Gardening program based on the Bakersville, California model. This model blends a traditional business attraction approach (“hunting”) with a strong business creation, retention and expansion effort (“gardening”). Under this model, a vibrant entrepreneurial culture is an essential part of the business attraction effort.

For example, in 2009, Midland Tomorrow formed a PeerSpectives¹⁸ program centered around local companies that received the Michigan 50 Companies To Watch¹⁹ designation. Midland Tomorrow also collaborates with the regional Michigan Manufacturing Technology Center – Northeast Region, to help existing manufacturers effectively utilize intrapreneurship principles and practices to facilitate diversification. Midland's Community Foundation and United Way also collaborate with regional interests to foster a regional entrepreneurship culture by encouraging social entrepreneurship.

Open-Source Model

	1997/8 – 2007 Average Establishments	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	530,998	86.7%	12.4%	0.8%	0.1%
Washtenaw County (SPARK) (<i>Open-Source Model</i>)	17,936	86%	13.0%	0.9%	0.2%
	1997/8 – 2007 Average Jobs	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	5,397,818	27.1%	35.1%	16.7%	21.0%
Washtenaw County (SPARK) (<i>Open-Source Model</i>)	224,436	23.0%	32.4%	16.1%	28.5%

Stage 4 Entrepreneurs (500 Employees +), Stage 3 Entrepreneurs (100 – 499 Employees), Stage 2 Entrepreneurs, (10 – 99 Employees, \$1-\$50 Million in Sales), Stage 1 Entrepreneurs, (1-9 Employees)

From humble beginnings in the early 1980s as a traditional small business incubator (located in the basement of the Ann Arbor Chamber of Commerce building), Ann Arbor SPARK²⁰ - a private-public partnership - has become a powerhouse for innovation-based business development in Washtenaw County and beyond. (see:

¹⁷ Key members of the Great Lakes Bay Regional Alliance include Bay, Midland and Saginaw Counties.

¹⁸ See: Edward Lowe Foundation, PeerSpectives Program, <http://www.edwardlowe.org/index.elf?page=wwd&function=PRS>.

¹⁹ See: Michigan 50 Companies to Watch, <http://companiestowatch.org/index.ctw?aff=Michigan&page=home>.

²⁰ Ann Arbor SPARK, 201 S. Division St., Suite 430, Ann Arbor, MI 48104, (734) 761-9317. <http://www.annarborusa.org/about-us/>

<http://www.annarborusa.org/>.²¹ SPARK benefits greatly from its close collaboration with the University of Michigan, a market leader in university technology transfer.²²

For example, CleanTech is a rapidly expanding global market and the University of Michigan has been listed among the top 10 CleanTech universities in the U.S. for 2010.²³ According to Shawn Lesser, CleanTech Group, LLC, student engagement in CleanTech Entrepreneurship at the University of Michigan is at a all-time high, driven by the Zell Lurie Institute for Entrepreneurial Studies in the Business School, the Center for Entrepreneurship in the College of Engineering, and the student organization, MPowered. Ann Arbor SPARK also provides one of the most comprehensive service packages in the nation to area businesses through an “Open Source Economic Development” model, similar to a model developed by Edward Morrison, Purdue University.²⁴

Recovery Accelerator Model

	1997/8 – 2007 Average Establishments	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	530,998	86.7%	12.4%	0.8%	0.1%
Houghton County (<i>Recovery Accelerator Model</i>)	1,692	85.2%	14.2%	0.6%	0.0%
	1997/8 – 2007 Average Jobs	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	5,397,818	27.1%	35.1%	16.7%	21.0%
Houghton County (<i>Accelerator Model</i>)	14,601	35.8%	46.8%	17.5%	0.0%

Stage 4 Entrepreneurs (500 Employees +), Stage 3 Entrepreneurs (100 – 499 Employees), Stage 2 Entrepreneurs, (10 – 99 Employees, \$1-\$50 Million in Sales), Stage 1 Entrepreneurs, (1-9 Employees)

The Keweenaw Economic Development Alliance (KEDA) (Houghton, Michigan) is Michigan’s longest running example of a successful economic gardening in the state. KEDA was created by community leaders in 1969, following the closure of the area’s copper mines, to promote diversification and expansion of the manufacturing, tourism, service and technology sectors in the Houghton, Keweenaw and Baraga County area. KEDA’s efforts have significantly diversified the local economy, reduced its susceptibility to economic downturns and helped foster the creation and growth of innovative entrepreneurial businesses.

KEDA also has demonstrated how universities and industry can effectively create economic change and development by forging strong collaborations with the Michigan Technological University entrepreneurship program (i.e., School of Business and Economics, Center for Technology, Innovation, Leadership and Entrepreneurship). In 2008, KEDA also teamed with the Small Business Association of Michigan on a U.S. Department of Agriculture Rural Business Enterprise Grant (RBEG) to implement an Economic Gardening accelerator program that augmented their business expansion efforts with a new high quality market research capability.

²¹ For example, in 2009, Ann Arbor was listed as 7th in the nation in the 2009 Next Cities™ list, which includes the 80 best cities for young professionals in the United States and Canada.²¹ BusinessWeek also listed Ann Arbor as the number 1 city in Michigan for small business startups.

²² For information on technology transfer programs at the University of Michigan please see: Michigan Venture Center, <http://www.techtransfer.umich.edu/>

²³ See: <http://cleantech.com/news/print/5384>.

²⁴ See the work of Edward Morrison, Purdue University, <http://egeconomies.net/news>. The main characteristics of the Open Source model are: (a) Strengthening civic habits of purposeful dialogue - Prosperous communities have civic habits of thinking and acting together. Building collaboration and trust carries real competitive advantages: the communities that collaborate will spot opportunities and move more quickly than communities that do not. The temperament of a community drives its ability to collaborate and follow enlightened leadership that arises from an Open Source process. It seeks diversity of opinion and inclusion of community members in strategic planning and operations under a flat versus hierarchical organizational model; (b) Strengthening Brainpower - In today’s global economy, brainpower provides the only basis for sustainable competitive advantage. Communities create, retain and attract educated workers by actively focusing resources on the creation, retention and attraction of knowledge workers; (c) Connecting innovation and entrepreneurship networks - These networks convert brainpower into wealth through new products, new services, new markets. Innovation provides the process and entrepreneurship provides the skills to translate ideas into prosperity. Economic Gardening is a strategy for building these networks to support innovative entrepreneurship in high economic multiplier industries; (d) Building quality, connected places - Smart people can live anywhere. They will choose to live in regions that respect sound principles of physical development. Equally important, quality places have thick connections to other people, other markets; and, (e) Promoting an effective brand - Prosperous communities have positive stories to tell. These stories create a unique experience, a special identity, a common understanding of core strengths, a shared view of future opportunities. This vision can energize a roadmap for how the community will create this positive future.

Economic Gardening PLUS

	1997/8 – 2007 Average Establishments	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	530,998	86.7%	12.4%	0.8%	0.1%
• Gladwin County (<i>EG PLUS Model</i>)	1,205	89.8%	9.6%	0.6%	0.0%
• Huron County (<i>EG PLUS Model</i>)	2,577	91.0%	9.3%	0.7%	0.1%
	1997/8 – 2007 Average Jobs	Stage 1	Stage 2	Stage 3	Stage 4
Michigan	5,397,818	27.1%	35.1%	16.7%	21.0%
• Gladwin County (<i>EG PLUS Model</i>)	7,114	42.9%	38.8%	18.3%	0.0%
• Huron County (<i>EG PLUS Model</i>)	17,236	37.7%	31.3%	23.4%	7.7%

^a Stage 4 Entrepreneurs (500 Employees +), Stage 3 Entrepreneurs (100 – 499 Employees), Stage 2 Entrepreneurs, (10 – 99 Employees, \$1-\$50 Million in Sales), Stage 1 Entrepreneurs, (1-9 Employees)

Economic Gardening PLUS²⁵ (EG PLUS) is a program developed by Saginaw Valley State University, Center for Business and Economic Development. EG PLUS is based on the premise that an entrepreneurial culture is a necessary condition for the creation, retention, expansion and attraction of small business entrepreneurs that combine innovation with intent and capacity to grow.²⁶ Moreover, such a culture is one where three distinct types of entrepreneurs are prevalent: small business entrepreneurs; intrapreneurs; and, social entre/intrapreneurs (both non-profit and private sector). EG PLUS is designed to nurture the synergy between these three forms of innovative entrepreneurship by concentrating talent and resources on growth and impact, creating a “virtuous cycle” (a greater number of innovative people leads to shared ideas which leads to growth in institutions that foster innovation that in turn attract more innovative people from less fertile communities and so on). Such a community has, what the Michigan State Housing Development Authority and Michigan Municipal League aptly call, a “Sense of Place.”²⁷

Under a U.S. Department of Agriculture grant (RBEG), Gladwin and Huron Counties are currently collaborating with SVSU and Shepherd Advisors, LLC, to launch an EG PLUS model. Based on the success of this effort, in 2009 Gladwin and Huron joined with SVSU to launch a regional Economic Gardening effort under the auspices of the East Michigan Council of Governments (EMCOG). The Michigan Municipal League and the Michigan State Housing Development Authority have also provided resources to fund the EG + project in Gladwin County.

For More Information and Assistance

Communities interested in more information and/or assistance in Economic Gardening as a catalyst for community and economic recovery, diversification and development can contact:

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²⁵ Founded in 2008, the SVSU Economic Gardening PLUS Institute helps local communities develop the capacity to launch and operate programs designed to encourage local entrepreneurial cultures that include small business entrepreneurs, intrapreneurs and social entrepreneurs as a community and economic recovery, diversification and development strategy.

²⁶ Economic Gardening PLUS is an approach developed by Mark H. Clevey, Director, Entrepreneurship and Commercialization, Saginaw Valley State University and Primary Author, Michigan Entrepreneurship Score Card.

²⁷ Both the Michigan Housing Development Authority (MSHDA) and the Michigan Municipal League (MML) are keenly interested in robust entrepreneurship as a catalyst for enhancing Sense of Community. MSHDA, in collaboration with MML, is leading an important effort to stimulate a stronger “Sense of Community” among Michigan communities as an economic development strategy. The goal of the Sense of Place Council is to create new programs or change existing programs that will serve to meet the development needs of Michigan’s communities by creating vibrant communities, including entrepreneurial economies.

About the Authors

Mark H. Clevey, MPA, Primary Author, Entrepreneurship Score Card - Mark is an entrepreneur, public policy advocate, educator and specialist in cutting-edge entrepreneurial business and related community and economic development. He currently serves as the Director, Entrepreneurship and Commercialization, with Saginaw Valley State University, Center for Business and Economic Development (CBED) and an Adjunct Professor of Entrepreneurship with SVSU College of Business and Management and Central Michigan University, Labelle Entrepreneur Center. Prior to this position, Mark served as the Executive Director, Small Business Foundation of Michigan (SBFM) and Vice President for Entrepreneurship, Small Business Association of Michigan where he directed a series of initiatives designed to foster an innovative and entrepreneurial economy in Michigan.

Mark is a veteran of the U.S. Air Force and a Western Michigan University Honors College Graduate where he received two academic scholarships. He holds a Masters Degree in Public Administration (MPA), with emphasis in new industry development and public-private partnerships. He also holds an Advanced Business Counselor Certification from the Michigan Small Business Development Center Network (MI-SBDC) and an Economic Gardening Professional Practitioner Certification from the Edward Lowe Foundation. Mark has over 35 years of successful experience in both the public, private and educational sectors and is a nationally recognized and award-winning specialist in entrepreneurship, with particular expertise in Alternative Energy and Clean Technology.

In 1989, as the MERRA Vice President and Director of the Michigan SBIR Support Program, Mark gained national recognition for the Michigan "Winners Program" (first program in the nation to focus on robust commercialization of federal SBIR grants as an innovative economic development strategy). While granting Mark a "Tibbett's Award" for this effort, Roland Tibbett's, National Science Foundation SBIR Program Manager, referred to the "Winners" program as a "model for the entire nation" and "one of the most important events in the entire history of the SBIR program." In addition to the Tibbett's Award, Mark has received a number of state and national awards for his work,

In recognition of his expertise, Mark serves as a Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) Phase II Commercialization Plan Reviewer for a number of important federal agencies that provide R&D funding for technologies directly related to the Michigan economy (i.e., National Science Foundation, Environmental Protection Agency and U.S. Department's of Agriculture and Energy). He has also served as a Business Plan Reviewer for the National Institute of Standards and Technology (NIST), Advanced Technology Program (ATP). Finally, he is also a member of the Michigan Economic Development Corporation, Emerging Technology Fund (ETF) Advisory Board and a member of the prestigious National Science Foundation SBIR/STTR Advisory Committee (AdCom) and their Commercialization Assistance Program (CAP) Subcommittee.

Dr. Graham Toft (Technical Consultant, Analysis and Support) – Graham Toft is founder and president of GrowthEconomics, of Sarasota, Florida, and Indianapolis Indiana, focused on the growth dynamics of states and regions. The firm seeks to understand how good pay jobs grow, growth companies multiply, and self-reliant families prosper in today's super-charged, disruptive economy. He likes to describe this fast-paced, open, green-conscious, global economy, as the 'flex-economy'. He spends much of his time with business and government leaders striving to grow their economies through entrepreneurship, innovation development, and pro-growth strategies. GrowthEconomics has a bias toward the measurement and monitoring of competitive position as a means to grab attention and focus on actionable strategies. To that end, Graham prepares annual state Competitiveness ScoreCards for several state Chambers of Commerce. In these circles, he has become known as 'Dr. Benchmark'. Also, annually GrowthEconomics prepares the Michigan Entrepreneurship Score Card in collaboration with the Small Business Foundation of Michigan. Other specialty benchmarking reports include a Technology Index on Indiana and Kansas. Graham has strong Midwest ties and familiarity, including service as President of the Indiana Economic Development Council for 13 years from 1989 to 2002. Along with team member, Dr. Nadine Jeserich, resident in Ireland, he draws on state-of-the-art methods from both the U.S. and Europe.

GrowthEconomics has taken care to build a comprehensive set of over 200 metrics measuring all 50 U.S. states over the past seven years. These files are routinely updated and revised when back data become available. This 'live' dataset now makes it possible for the GrowthEconomics team to undertake sophisticated statistical analyses to determine 'Key Indicators to Watch' and 'Super -Drivers' which prove to be highly correlated with state economic growth. GrowthEconomics is now in the process of developing causal models for use in growth planning and policy development. Empirical work of this type will transform the practice of economic development over the next 10 years, offering decision-makers and practitioners greater confidence that the actions they take will have higher probabilities of success. The GrowthEconomics team works out of Florida, Indiana and Ireland.