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Growing the Bereas Economy from the Inside Out
Part I

By Michael H. Shuman[1]

Overview

Compared to fellow Americans who are now struggling with an unemployment rate stuck stubbornly above 9%, the residents of Berea, Kentucky, are doing relatively well. According to Workforce Kentucky (www.workforcekentucky.ky.gov), in August 2011 Madison County, where Berea is located, enjoyed an unemployment rate of 7.1%. Specifically, its labor force of 43,515 has 3,320 workers who are unemployed and seeking work. With about 29% of the total population of Madison County, Berea has an estimated 963 people unemployed right now.

These data suggest two conclusions. One is that the region is doing something right. Whether Madison County's better-than-average employment performance reflects fortuitous market forces or smart economic-development initiatives is unclear. A second conclusion, however, is that more must be done—much more. For most of the past generation, an unemployment rate of 7.1% would be considered a failure, and certainly for the 963 residents who are unemployed – some for two or three years – the problem represents a personal disaster.

This paper suggests that existing approaches to economic development, which are largely focused on the attraction and retention of outside businesses, should be supplemented by a new approach to nurture and expand the region's local businesses. It begins with an overview of the Berea economy. Next, it provides an overview of the concept of "Local Living Economies." Integral to this approach to economic development is to identify and plug dollar leakages within the economy—that is, opportunities for substituting for imports through new or expanded local businesses that meet local demand. The paper then performs two leakage analysis: a simple comparison of each sector with that of a perfectly self-reliant U.S. community (adjusted to Berea's size); and a more sophisticated analysis of the consequences of meeting all current local demand with expanded local industry.

The simple leakage analysis, performed with the online calculators (designed by the author) of the Business Alliance for Local Living Economies, suggests that through self-reliance Berea could create 5,739 direct jobs—more than enough to put every unemployed resident of Madison County back to work. Achieving just 25% of this goal

[1] Michael H. Shuman is Director of Research for Cutting Edge Capital, based in Oakland, California. He is a Stanford-educated economist, attorney, and author. His latest book is *The Small-Mart Revolution: How Local Businesses Are Beating the Global Competition* (Berrett-Koehler, 2006), and is available at www.small-mart.org For comments on this paper or to conduct similar analysis of another community, contact Michael H. Shuman by phone (202-669-1220), e-mail (shuman@igc.org), or mail (2203 Quinton Rd., Silver Spring, MD 20910).

would generate 1,435 new jobs paying about $53 million in wages annually – more than enough to put every resident back to work.

A more comprehensive leakage analysis is possible using IMPLAN, the Minnesota Input-Output Model used extensively by economic development agencies nationwide. IMPLAN corrects, unifies, and fills in gaps (like farmers and self-employed individuals) in the Economic Census data. It also can model how changes in one industry can lead to changes in other industries (indirect effects) and changes in personal consumption (induced effects). This analysis finds that realizing 25% of the potential jobs from local demand would generate 2,182 new jobs: 1,398 directly, 211 indirectly, and 572 induced. These new jobs, moreover, would lead to $92 million more in wages each year, $152 million in additional value-added production, and $11 million in indirect business taxes. This comprehensive analysis, like the more simple one, shows that a 25% shift could more than eliminate unemployment in Berea.

How can Berea realize these opportunities through new or expanded local businesses? A helpful starting place is to review strengths, weaknesses, opportunities, and threats (SWOT). In mid-September, the author spoke with several dozen key people in the community to make the SWOT analysis, including policymakers, businesspeople, economic developers, and business support agents.

The next action steps for the community will be to review, sharpen, and prioritize the list of promising sectors for expansion. The community should assess which sectors, given local assets and markets, could most easily achieve, say, a 25% localization goal. With that information, the author will proceed to prepare Part II of this paper, with specific recommendations of promising economic-development strategies and programs that could help realize the 25% shift.

The Existing Berea Economy

To understand what kinds of new jobs are possible in Berea, it's helpful to begin by reviewing what jobs exist today. Two government databases are useful for this analysis. Employer data can be found at "County Business Patterns," available from the U.S. Census Bureau (http://www.census.gov/econ/cbp/index.html). Self-employment data also can be found with the U.S. Census Bureau, in its "Nonemployer Statistics" (http://www.census.gov/econ/nonemployer/index.html). Both are organized around the North American Industrial Classification System (NAICS), which contains about 1,100 categories (with two-digit categories being the broadest categories, like manufacturing, and six-digit categories being the most narrow). Unfortunately, these data lag 2-3 years behind, so the best picture one can paint is not entirely up-to-date.

For purposes of this analysis, the Berea economy is assumed to comprise two zip codes – 40403 and 40404 – both part of Madison County. *County Business Patterns* go down to the zip code level. According to the 2009 edition, zip code 40403 has 389 establishments employing 6,025 people, receiving an annual payroll of $194 million. Zip code 40404 has just three additional establishments, and their characteristics are kept confidential.

Table 1 puts these data together. It shows that all but two of the 392 establishments in Berea have fewer than 500 employees and therefore qualify as small businesses. It's important to note, however, that many small establishments may be branch factories or branch stores of larger chains, so not all these businesses are locally owned.

Chart 1
Berea's Business Establishments with Employees
(by 2-Digit NAICS Sections and by Number of Employees)

NAICS	Industry Code Description	Total Estabs	'1-4'	'5-9'	'10-19'	'20-49'	'50-99'	'100-249'	'250-499'	'500-999'	1000+'
22----	Utilities	1	0	0	1	0	0	0	0	0	0
23----	Construction	39	31	4	2	1	1	0	0	0	0
31----	Manufacturing	26	10	5	2	1	2	4	1	1	0
42----	Wholesale trade	5	4	1	0	0	0	0	0	0	0
44----	Retail trade	80	42	26	7	3	1	0	1	0	0
48----	Transportation and warehousing	11	9	0	2	0	0	0	0	0	0
51----	Information	5	2	3	0	0	0	0	0	0	0
52----	Finance and insurance	32	18	11	1	2	0	0	0	0	0
53----	Real estate and rental and leasing	10	8	2	0	0	0	0	0	0	0
54----	Professional, scientific, and technic	27	23	4	0	0	0	0	0	0	0
56----	Administrative and Support and Wa	15	11	1	0	2	1	0	0	0	0
61----	Educational services	6	5	0	0	0	0	0	0	1	0
62----	Health care and social assistance	45	15	12	11	3	1	2	1	0	0
71----	Arts, entertainment, and recreation	5	1	3	1	0	0	0	0	0	0
72----	Accommodation and food services	38	9	8	12	6	2	1	0	0	0
81----	Other services (except public admir	46	29	14	2	1	0	0	0	0	0
99----	Industries not classified	1	1	0	0	0	0	0	0	0	0
	Total	392	218	94	41	19	8	7	3	2	0

As noted earlier, NAICS data are incomplete. One omission, for example, is self-employed individuals. These data can be found in the U.S. Census Bureau's Nonemployer Statistics, but unfortunately only are available down to the county level. The most recent such data from Madison County, find that 5,319 people have their own

businesses, most of them home based, and earn $160 million per year. Table 2, below, estimates self-employees in Berea by shrinking county statistics proportional to Berea's share (29%) of Madison County's population. An estimated 1,548 individuals have their own businesses in Berea, with sales of $47 million per year.

Chart 2
Estimate Nonemployee Firms in Berea
(By 2-Digit NAICS Sector)

NAIC Code	Description	Firms	Receipts ($1,000)
'11'	Agriculture, forestry, fishing and hunting	16	$388
'21'	Mining, quarrying, and oil and gas extraction	n/a	n/a
'22'	Utilities	n/a	n/a
'23'	Construction	306	$12,966
'31-33'	Manufacturing	15	$397
'42'	Wholesale trade	16	$1,495
'44-45'	Retail trade	182	$7,245
'48-49'	Transportation and warehousing	51	$2,586
'51'	Information	15	$413
'52'	Finance and insurance	43	$1,643
'53'	Real estate and rental and leasing	112	$5,392
'54'	Professional, scientific, and technical services	160	$3,458
'56'	Administrative and support and waste manage	164	$2,036
'61'	Educational services	46	$404
'62'	Health care and social assistance	105	$1,843
'71'	Arts, entertainment, and recreation	66	$775
'72'	Accommodation and food services	17	$545
'81'	Other services (except public administration)	234	$4,958
		1,548	$46,545

Another omission from NAICS is farmers. The USDA's *Agricultural Census of 2007* gives data at the county level, and shows that Madison County has 1,328 farms with 218,194 acres. The average farm size is 164 acres. Most of these farms are raising beef cattle, with a few also involved in fruits, vegetables, and dairy. ADD NUMBER OF FARMERS.

The IMPLAN Input-Output model attempts unify various federal databases and fill in the gaps. Table 3, below, summarizes its estimate from 2009. It shows that the total number of employees and nonemployees is 10,317. Compared to NAICS data, it includes 294 people in the farming sector and roughly 2,500 public employees (1,849 in state and local education, 202 in state and local government, and 459 in federal government). All together, this workforce is paid $413 million in wages, and generates $25 million in state and local taxes. The total value added of Berea's businesses –the local equivalent of the nation's Gross Domestic Product – is $1.9 billion per year.

Chart 3
Employees and Nonemployees in Berea
(By 3-Digit NAICS Sectors)

	Employment	Output	Wages	Proprietor Income	Other Property Income	Indirect Business Tax	Total Value Added
Farming, Ranching, and Forestry	294	10,034,116	917,570	779,092	282,325	206,342	12,219,739
Mining, Oil and Gas	0	124,267	0	32,011	35,290	8,223	199,792
Energy & Utilities	11	13,837,963	796,644	23,688	2,094,292	544,065	17,296,662
Construction	408	40,892,240	9,211,514	3,796,056	2,147,065	210,232	56,257,517
Manufacturing							
** Food Products*	0	0	0	0	0	0	0
** Textiles & Clothing*	0	0	0	0	0	0	0
** Wood Products*	4	769,705	92,933	22,240	29,985	2,987	917,854
** Printing*	2	295,680	62,986	0	16,104	1,205	375,977
** Petroleum-based Products*	0	0	0	0	0	0	0
** Rubber, Glass, Stone, Concrete Products*	129	29,135,980	7,848,616	0	2,618,035	214,784	39,817,544
** Metals*	170	161,810,640	12,184,752	199,968	10,428,286	656,345	185,280,161
** Metal Products*	34	7,174,326	1,379,373	0	694,090	33,659	9,281,483
** Arms, Machinery & Equipment Production*	540	163,999,682	32,857,195	18,046	13,443,017	729,742	211,048,221
** Computers & Electronics*	19	5,818,114	805,198	1,878	188,139	35,318	6,848,665
** Vehicles, Boats, and Planes*	779	280,970,272	47,964,812	0	16,816,206	2,838,168	348,590,237
** Furniture & Woodwork*	34	4,025,185	1,311,482	0	-122,511	24,009	5,238,197
** Health Industry Products*	3	1,585,944	545,811	1,867	369,500	11,571	2,514,696
** Other Products*	0	0	0	0	0	0	0
Wholesale Trade	15	1,778,542	626,329	40,478	232,091	244,883	2,922,338
Retail	841	39,800,401	20,014,700	1,784,358	4,918,542	6,890,202	73,409,045
Transportation	95	9,993,855	2,331,820	1,188,884	829,780	245,649	14,590,082
Warehousing & Storage	0	0	0	0	0	0	0
Services							
** Information Businesses*	30	6,180,060	1,273,263	15,137	1,037,998	174,650	8,681,136
** Banking & Financing*	199	36,710,400	7,007,275	1,640,592	7,935,656	534,282	53,828,405
** Realty, Equipment Leasing & Rentals*	64	63,995,069	737,402	287,176	34,744,948	7,494,156	107,258,814
** Professional Services*	337	26,981,871	12,012,343	1,758,293	2,926,960	389,301	44,069,105
** Private Education*	910	68,967,549	33,757,913	552,053	614,318	555,807	104,448,550
** Health & Social Services*	1,206	92,483,783	47,429,864	1,637,159	2,394,035	779,458	144,725,504
** Entertainment, Restaurants & Tourism*	866	46,054,019	14,706,312	812,000	4,273,204	2,324,992	68,171,392
** Personal Services*	765	45,426,319	19,933,713	2,357,171	-482,692	1,001,944	68,237,220
Public Sector							
** Government Enterprises*	53	9,676,656	3,396,244	0	578,800	-593,359	13,058,394
** Local Schools*	1,849	99,219,688	87,340,176	0	11,879,512	0	198,441,225
** State & Local Government*	202	10,388,181	9,144,410	0	1,243,771	0	20,776,564
** Federal*	459	43,905,306	37,509,445	0	6,395,860	0	87,811,069
TOTAL	10,317	1,322,035,810	413,200,092	16,948,146	128,562,607	25,558,616	1,906,315,588

One way to understand Berea's economy is to compare its composition to Kentucky and to the United States as a whole. Chart 4 compares the composition of Berea's employees in the year 2000 with that of the United States as a whole (excluding, again, self-employees, farmers, and public employees). The most striking distinction about Berea is that 23% of the workforce is involved in manufacturing—more than double the national average. Berea also has much greater numbers of people in education, health, and social services. Interestingly, despite its reputation, Berea has a third less than the national average of its workforce involved in arts, entertainment, and tourism. Its finance sector is about half the national average, which suggests how little capital is available for future business growth.

Chart 4
Workforce Composition
Berea vs. USA in Year 2000

	% Total Workforce	
NAICS Sector	Berea	**USA**
Agriculture, forestry, fishing and hunting, and mining	1.6	1.80%
Construction	8	7.40%
Manufacturing	23	11.20%
Wholesale trade	2	3.20%
Retail trade	11.4	11.50%
Transportation and w arehousing, and utilities	3	5.10%
Information	2	2.40%
Finance, insurance, real estate, and rental and leasing	3.5	7.10%
Professional, scientific, management, administrative, and w aste management services	4	10.30%
Educational, health and social services	27.4	21.50%
Arts, entertainment, recreation, accommodation and food services	5.5	8.80%
Other services (except public administration)	5.5	4.80%
Public administration	3	4.70%

Local Living Economies

The conventional paradigm of economic development is that a locale should attract and retain globe-trotting companies, and do so by doling out huge sums of public money. The best estimate of the annual cost of these "incentives" by state and local governments is $50 billion per year, with federal agencies contributing at least as much (and significantly more over the past two years in the name of "stimulus"). A growing body of evidence suggests, however, that this model of economic development is ineffectual at best and a huge waste of local resources and opportunities at worst. Moreover, many of the most popular concepts in economic development today – industrial parks, high-tech clusters, tax-increment financing (TIFs), business incubators, even green jobs – turn out ultimately rely on the flawed paradigm of attraction and retention.

My two books, *Going Local* and *The Small-Mart Revolution*, argue that economic development performs best when it is focused, laser-like, on businesses that are LOIS – that is locally owned and import-substituting. Local ownership means that working control of a company is held within a small geographic area. Import-substituting means that the company is focused first and foremost (though not exclusively) on cost-effective production for local markets.

Numerous studies in recent years suggest that locally owned businesses contribute more to economic development than do global businesses attracted. Local ownership matters in at least five ways:[2]

- *Higher Multipliers* – Locally owned businesses generally contribute more to the "economic multiplier"– typically two to four times the income, wealth, jobs, and tax payments per dollar of output. The reason is simple: local businesses spend more money locally, particularly on management, business services, and advertising, and local businesses recycle profits locally.

- *More Reliable* – While absentee-owned businesses increasingly consider moving to Mexico, China, or low-wage U.S. state, with little concern for throwing the community into an economic tailspin, businesses anchored locally produce wealth more reliably for many years, often many generations.

- *Higher Standards* – Because local businesses tend to stay put, a community with primarily local businesses can raise labor and environmental standards with confidence that its businesses will adapt rather than flee.

- *More Dynamic* – A community made up of smaller, locally owned businesses is better equipped to promote smart growth and walkable communities, draw tourists through unique stores and attractions, retain talented young people who seek entrepreneurial opportunities and a distinct sense of place, and reduce the noise, fumes, and risks of traffic. It also can save families the

[2] Extensive documentation of these points can be found in *The Small-Mart Revolution*, Chapter 2.

headache and expense of maintaining multiple vehicles (currently running $8-10,000 per vehicle per year, an expense that will rise as oil and gasoline prices rise).

- *Better Social Impacts* – Compared to economies dependent on absentee-owned enterprises, local-business economies tend to have more social stability, lower levels of welfare, and greater political participation.

Import substitution also promotes economic prosperity. Every time a community imports a good or service that it might have cost-effectively produced for itself, it "leaks" dollars and loses the critically important multipliers associated with them. Moreover, unnecessary imports – of petroleum, for example –subject a community to risks of price hikes and disruptions far beyond local control. They also deny a community a diversified base of businesses and skills needed to take advantage of unknown (and unknowable) future opportunities in the global economy.

Three examples help to illustrate the potential benefits of import substitution:

- Fifteen years ago, Güssing was a dying rural community of 4,000 in Austria. Its old industries of logging and farming had been demolished by global competition. Many of today's economic developers would have given up and encouraged the residents to move elsewhere. But the mayor of Güssing decided that the key to prosperity was to plug energy "leaks." He built a small district heating system, fueled with local wood. The local money saved by importing less energy was then reinvested in expanding the district heating system and in new energy businesses. Since then, 50 new firms have opened, creating 1,000 new jobs. And most remarkably, the town estimates that this economic expansion actually will result in a *reduction* of its carbon footprint by 90 percent.

- In autumn of 2008 Marian Burros of the *New York Times* wrote a piece about how the 3000-person community of Hardwick, Vermont, has prospered by creating a new "economic cluster" around local food. Cutting-edge restaurants, artisan cheese makers, and organic orchardists turning fruit into exquisite pies are just some of the new businesses that have added an estimated 75-100 jobs to the area in recent years. A new Vermont Food Venture Center hopes to accelerate this creation of enterprises.

- Even a single, visionary business can lead a community-wide effort at import subsitution. Take Zingerman's in Ann Arbor, Michigan. On its first day of business in a college town known globally more for its radicalism than for its food, Zingerman's Deli sold about $100 worth of sandwiches. That was 1982. It has since grown into a community of nine businesses, each independent but linked through overlapping partnerships that collectively employ 525 people and achieve annual sales of over $27 million. Over that period the proprietors conscientiously built a food cluster from scratch. They carefully assessed the

items going into the deli – bread, coffee, cheeses – and saw profitable opportunities for creating a bakery, a coffee roaster, and a creamery. They looked at the products being sold at the deli – fabulous coffee cakes and high-quality meats – and built new, value-adding businesses with these products, including a mail-order company and a restaurant called the Roadhouse.

These three case examples cast doubt on one of the principal prescriptions for rural communities given by economic developers – that rural communities should focus on expanding *existing* clusters of export-oriented business. They suggest that a smarter approach may be to create *new* clusters based, initially at least, on local demand.

Two further clarifications about LOIS are important. First, import substitution does not mean withdrawing from the global economy. To the contrary, as the late Jane Jacobs argued, an economic strategy promoting import-substituting businesses turns out to be the best way to develop exports. Suppose North Dakota wished to replace imports of electricity with local wind-electricity generators. Once it built windmills, it would be self-reliant on electricity but dependent on outside supplies of windmills. If it set up its own windmill industry, it would then become dependent on outside supplies of machine parts and metal. This process of substitution never ends, but it does leave North Dakota with several new industries – in electricity, windmills, machines parts, and metal fabrication – that are poised to meet not only local needs but also export markets. But instead of putting all of a community's enterprise eggs in one export-oriented basket that leaves the local economy vulnerable to fluctuating global markets, import substitution develops myriad small businesses, grounded (initially at least) in diversified local markets, many of which *then* becoming exporters.

Second, this perspective does not carry negative moral judgments about non-LOIS businesses. Some global, export-led companies can be terrific at creating wealth and jobs. Some of the efforts to attract these companies have paid off, as evidenced in the strong manufacturing sector in Berea. Yet evidence suggests that roughly 85% of the jobs from attracted businesses do not go to Berea residents but instead to commuters or to newcomers who move into Berea. The data also clearly show that for every dollar of sales, the typical LOIS business produces two to four times *more* benefits than the typical non-LOIS business.

The logic of LOIS suggests the importance of six kinds of questions currently minimized or overlooked by mainstream economic development:

- *Local Planning* – How can significant dollar "leaks" caused by imports be identified, and which can best be plugged with competitive LOIS enterprises?

- *Local Entrepreneurship* – How can a new generation of LOIS entrepreneurs be nurtured and trained?

- *Local Business Organizing* – How can existing LOIS businesses work together (through, for example, joint purchasing or marketing cooperatives) to improve their competitiveness?

- *Local Investing* – How can local savings, whether in banks or pension funds, be tapped to support new or expanded LOIS businesses?

- *Local Purchasing* – How can LOIS businesses achieve greater success through "Local First" purchasing by consumers, businesses, and government agencies?

- *Local Public Policymaking* – How can the myriad biases that currently exist against LOIS (the vast majority of state and local businesses subsidies, for example, target nonlocal business) be eliminated so that local businesses can compete on a level playing field?

Another needed shift in economic development is from a pork-barrel consumer of public dollars to a self-financing producer of public and private wealth. It's ironic that those promoting entrepreneurship do not demand that they themselves operate in an entrepreneurial capacity. Advocates of LOIS, in contrast, are increasingly designing, testing, and deploying models for self-financing economic development, everything from local gift and debit cards to business-to-business contract facilitators. These programs are called "meta-businesses," since they are designed to operate profitably like other businesses, but benefit not just shareholders but all LOIS businesses.

The LOIS perspective, once deemed on the fringe, is now becoming increasingly mainstream. Just in the last decade has emerged a worldwide movement for local living economies. Around the country, and increasingly throughout the world, community-based initiatives are springing up that are challenging the conventional economic development paradigm. At the forefront has been the Business Alliance for Local Living Economies (BALLE), which since its founding in 2001 has grown into coalition of 80 networks across North America formally representing 22,000 local business members (and informally representing millions of local businesses that operate in these networks' regions). In fact, these numbers represent only a small fraction of the movement. Other organizations involving local businesses, including the American Independent Business Alliance (AMIBA), the Post-Carbon Institute, and Transition Towns, are bringing hundreds of other communities into this movement. And to this list should be added the growing roster of organizations promoting local food, local banking, and local energy.

A Simple Leakage Analysis

Leakage analysis identifies all those sectors in the economy where a community is unnecessarily importing goods and services. Every unnecessary import represents a loss of dollars and a loss of the "multiplier" impacts those dollars could have locally. It also represents a loss of other documented benefits local business brings, like knowledge, skills, tax payments, charitable giving, revitalized downtowns, tourists, stronger civil society, and more political participation.

Two tools can help to measure dollar leakages. One – a "jobs leakage calculator" -- was created by the author for the Business Alliance for Local Living Economies (BALLE) (www.livingeconomies.org). The calculator basically constructs an employment profile for a self-reliant United States by adjusting each NAICS sector's actual employment by the nation's trade balance in that sector. It then creates a jobs composite of a self-reliant Berea by shrinking the jobs composite of a self-reliant United States down to the town's population. Each sector then compares the actual employment in Berea with the expected self-reliant employment. The year of the data is 2009. The calculator shows that 5,739 jobs are possible in Berea and they would pay $210,607,739.

It's worth noting that this analysis is conservative in one significant respect. In any category where Berea is deemed 100% self-reliant, no additional jobs from import substitution are considered possible. In fact, some of those "self-reliance" jobs in fact may be oriented to exports, which means there are still opportunities for further job creation through import substitution.

Levels of self-reliance greater than 100% mark export industries. Chart 5 shows the top 40 export industries in Berea. Among the things that the data show are:

- industries manufacturing parts for automobiles, some undoubtedly supplying the assemble plant in Georgetown, Kentucky;
- the important role of Berea College, and the spinoffs of many nonprofits promoting human rights and environmental protection;
- the presence of a largely retirement population, which requires a greater presence of nursing homes, funeral parlors, and cemetaries;
- a large arts sector linked with the production of musical instruments and many art dealers; and
- a major services sector that is providing residents throughout the region (some of whom may be coming to work in Berea) with child care, taxis, limited service restaurants (often lunch and breakfast food), and vending machines.

Chart 5
Top 40 Export Industries in Berea

NAICS Code	Industry Name	Percent Se
336370	Motor Vehicle Metal Stamping	2,999
813311	Human Rights Organizations	1,373
485310	Taxi Service	1,317
453991	Tobacco Stores	1,079
331111	Iron and Steel Mills	758
611310	Colleges, Universities, and Professional S	700
333514	Special Die and Tool, Die Set, Jig, and Fi	692
238140	Masonry Contractors	597
721211	RV (Recreational Vehicle) Parks and Cam	425
238160	Roofing Contractors	333
451140	Musical Instrument and Supplies Stores	303
337110	Wood Kitchen Cabinet and Countertop Ma	283
623110	Nursing Care Facilities	263
453920	Art Dealers	246
812220	Cemeteries and Crematories	242
624190	Other Individual and Family Services	241
221210	Natural Gas Distribution	239
336322	Other Motor Vehicle Electrical and Electro	237
454210	Vending Machine Operators	211
813312	Environment, Conservation and Wildlife Or	198
624410	Child Day Care Services	198
446191	Food (Health) Supplement Stores	195
722211	Limited-Service Restaurants	189
812210	Funeral Homes and Funeral Services	186
452990	All Other General Merchandise Stores	185
811211	Consumer Electronics Repair and Mainter	174
812910	Pet Care (except Veterinary) Services	163
441310	Automotive Parts and Accessories Stores	159
522292	Real Estate Credit	157
236117	New Housing Operative Builders	157
453310	Used Merchandise Stores	157
447110	Gasoline Stations with Convenience Store	152
541370	Surveying and Mapping (except Geophysi	149
532230	Video Tape and Disc Rental	145
484230	Specialized Freight (except Used Goods)	144
562910	Remediation Services	137
444130	Hardware Stores	128
621310	Offices of Chiropractors	120
621320	Offices of Optometrists	116
446110	Pharmacies and Drug Stores	113

Mainstream economic development looks at these industries as the indicators of the region's competitive advantages. That is, whatever is exported is, by definition, what the region can produce well. Clusters of these industries can be ascertained, and expansion of these clusters is often viewed as the most promising strategy for economic development.

But leakage analysis suggests another approach for economic development. By focusing on areas of weakness, where few or no local businesses are meeting local demand, the region can diversity itself and create new clusters. And that Berea is producing less than it consumes in more than 90% (CK) of its NAICS industries suggests how many opportunities it has.

Chart 6 on the next page shows the 40 leaky sectors that, with new local businesses meeting local demand, could produce the most new jobs. Chart 7 shows the 40 leaky sectors that could produce the highest new earnings (new jobs times average state wage in that sector). Among the most important leakages revealed by this analysis are.

- *Global Companies* – Most of the larger companies in Berea are branch factories or offices, not headquarters. Hence two of the largest job gaps are managers and professional-employer organizations.

- *Professional Services* – Companies within Berea are outsourcing their needs for engineers, lawyers, janitors, security guards, computer programmers, data processors, and payroll specialists.

- *Intermediaries* – Even though Berea has a greater-than-average manufacturing sector, that sector is outsourcing its needs for warehouses, distribution, couriers, and trucking.

- *Tourism* – Berea is trying to be a tourist magnet, but currently lacks hotels, full-service restaurants, and bars. Even residents and students common go elsewhere for entertainment.

- *Food & Retail* – In addition to the tourist gaps above, Berea is not capturing its fair share of shoppers (including tourist shoppers) because it lacks grocery stores, department stores, clothing stores, and car dealers. It also lacks other food contracting infrastructure to connect farmers with consumers.

- *Finance* – While Berea has a number of important local banks, it lacks insurance and securities brokers.

- *Health Care* – There are important gaps in health services, such as physicians offices and mental-health-care facilities. There is also a need more full-service retirement communities.

Chart 6
Top 40 Leak-Plugging Opportunities in Berea (by Jobs)

NAICS Code	Industry Name	New Jobs	New Earnings ($)
551114	Corporate, Subsidiary, and Regional Managir	189	$15,035,305
561330	Professional Employer Organizations	143	$3,088,288
445110	Supermarkets and Other Grocery (except Co	138	$2,506,719
722110	Full-Service Restaurants	132	$1,605,649
561320	Temporary Help Services	129	$2,013,615
452910	Warehouse Clubs and Supercenters	95	$2,124,645
541330	Engineering Services	69	$3,035,722
541110	Offices of Lawyers	64	$2,909,206
238210	Electrical Contractors	59	$2,405,110
561720	Janitorial Services	59	$869,782
611110	Elementary and Secondary Schools	58	$1,339,165
721110	Hotels (except Casino Hotels) and Motels	49	$795,361
238220	Plumbing, Heating, and Air-Conditioning Cont	49	$2,090,412
813110	Religious Organizations	48	$780,790
517110	Wired Telecommunications Carriers	48	$2,376,670
624120	Services for the Elderly and Persons with Dis	46	$1,725,214
448140	Family Clothing Stores	46	$1,033,307
561612	Security Guards and Patrol Services	44	$952,754
541710	Research and Development in the Physical, E	44	$1,921,419
541511	Custom Computer Programming Services	40	$1,781,757
493110	General Warehousing and Storage	40	$1,749,301
492110	Couriers	39	$1,692,630
452111	Department Stores (except Discount Departn	38	$858,903
524126	Direct Property and Casualty Insurance Carri	38	$1,824,646
722310	Food Service Contractors	36	$437,798
541512	Computer Systems Design Services	34	$1,517,528
524114	Direct Health and Medical Insurance Carriers	32	$1,558,448
623311	Continuing Care Retirement Communities	32	$1,204,962
484121	General Freight Trucking, Long-Distance, Tru	32	$1,130,214
623210	Residential Mental Retardation Facilities	32	$1,176,309
561110	Office Administrative Services	31	$669,345
541214	Payroll Services	31	$1,359,755
621111	Offices of Physicians (except Mental Health S	30	$2,060,918
722213	Snack and Nonalcoholic Beverage Bars	30	$321,018
481111	Scheduled Passenger Air Transportation	29	$1,280,839
721120	Casino Hotels	29	$350,139
441110	New Car Dealers	28	$1,020,711
524113	Direct Life Insurance Carriers	28	$1,325,499
326199	All Other Plastics Product Manufacturing	27	$1,171,164
518210	Data Processing, Hosting, and Related Servi	27	$1,053,901

Chart 7
Top 40 Leak-Plugging Opportunities in Berea (by Earnings)

NAICS Code	Industry Name	New Jobs	New Earnings ($)
551114	Corporate, Subsidiary, and Regional Mana	189	$15,035,305
523120	Securities Brokerage	26	$3,716,429
561330	Professional Employer Organizations	143	$3,088,288
541330	Engineering Services	69	$3,035,722
541110	Offices of Lawyers	64	$2,909,206
445110	Supermarkets and Other Grocery (except	138	$2,506,719
238210	Electrical Contractors	59	$2,405,110
517110	Wired Telecommunications Carriers	48	$2,376,670
452910	Warehouse Clubs and Supercenters	95	$2,124,645
238220	Plumbing, Heating, and Air-Conditioning C	49	$2,090,412
621111	Offices of Physicians (except Mental Healt	30	$2,060,918
561320	Temporary Help Services	129	$2,013,615
541710	Research and Development in the Physica	44	$1,921,419
221122	Electric Power Distribution	26	$1,914,050
524126	Direct Property and Casualty Insurance Ca	38	$1,824,646
541511	Custom Computer Programming Services	40	$1,781,757
493110	General Warehousing and Storage	40	$1,749,301
624120	Services for the Elderly and Persons with D	46	$1,725,214
492110	Couriers	39	$1,692,630
722110	Full-Service Restaurants	132	$1,605,649
524114	Direct Health and Medical Insurance Carrie	32	$1,558,448
541512	Computer Systems Design Services	34	$1,517,528
541214	Payroll Services	31	$1,359,755
611110	Elementary and Secondary Schools	58	$1,339,165
524113	Direct Life Insurance Carriers	28	$1,325,499
541611	Administrative Management and General M	24	$1,290,091
481111	Scheduled Passenger Air Transportation	29	$1,280,839
541211	Offices of Certified Public Accountants	27	$1,221,942
623311	Continuing Care Retirement Communities	32	$1,204,962
236220	Commercial and Institutional Building Cons	27	$1,193,688
237310	Highway, Street, and Bridge Construction	22	$1,186,291
623210	Residential Mental Retardation Facilities	32	$1,176,309
326199	All Other Plastics Product Manufacturing	27	$1,171,164
484121	General Freight Trucking, Long-Distance, T	32	$1,130,214
518210	Data Processing, Hosting, and Related Se	27	$1,053,901
511210	Software Publishers	27	$1,038,981
448140	Family Clothing Stores	46	$1,033,307
441110	New Car Dealers	28	$1,020,711
424490	Other Grocery and Related Products Merc	20	$991,222
423430	Computer and Computer Peripheral Equipr	20	$979,475

Note that there are very few large-job manuafacturing opportunities on the top-40 list. This is because local demand for any given manufacturer is small. Most manufacturers must serve a broader population, regionally or globally, to achieve competitive scale. The exceptions, where local production could generate a significant number of new jobs, include computers, software, and plastics. The people who would fill these jobs tend to be well-educated and well-paid.

IMPLAN Leakage Analysis

A more comprehensive leakage analysis is possible using IMPLAN, the Minnesota Input-Output Model used extensively by economic development agencies nationwide. IMPLAN corrects, unifies, and fills in gaps (like farmers and self-employed individuals) in the Economic Census data. It also can model how changes in one industry can lead to changes in other industries (indirect effects) and changes in personal consumption (induced effects).

IMPLAN combines the 1,100 NAICS sectors into about 460 model-specific sectors. For example, multiple wholesale sectors in NAICS are reduced to one wholesale sector in IMPLAN. It's possible to model local self-reliance by looking at the value of the Regional Purchasing Coefficient (RPC), which estimates how much of Total Gross Demand is currently met by local industry. The demand figure includes both local and nonlocal consumption. Multiplying Total Gross Demand by 1-RPC shows how much additional industry is possible to meet local demand (without reducing production for export).

When IMPLAN is used to study very small areas, as is the case in this study, the model has many zero-activity sectors. To model a self-reliant economy, these sectors – most in manufacturing – need to be created with a minimum of one worker. "Production functions" based on national composites of industries are then imported to show the linkage of new sector's expenditures with other local industries.

Chart 8 shows the total impact of ramping up industry in Berea to go 25% of the way to meet total *existing* local demand. Specifically, 25% localization would generate 2,182 new jobs: 1,398 directly, 211 indirectly, and 572 induced. Note that the estimate of 1,398 direct jobs is very close to the 1,435 jobs new predicted with the BALLE calculator. IMPLAN predicts, moreover, that these new jobs will lead to $92 million more in wages each year, $152 million in additional annual value-added production, and $11 million in indirect business taxes.

Chart 8
Economic Impacts of a 25% Shift to Self-Reliance – 2009
(IMPLAN Input-Output Model Summary)

ImpactType	Employment	Labor Income	Total Value Added	Output	Business Taxes
Direct Effect	1,398	$62,550,859	$106,126,161	$238,574,731	$8,149,448
Indirect Effect	211	$7,573,769	$12,369,883	$30,264,978	$611,148
Induced Effect	572	$22,322,497	$33,479,746	$51,498,370	$2,186,218
Total Effect	2,182	$92,447,124	$151,975,790	$320,338,078	$10,946,814

A more detailed sector-by-sector view of the results, alongside existing jobs in Berea, is presented in Chart 9. The three sectors where the largest number of new jobs are possible are professional services (317), wholesale trade (198), and tourism (168)—all sectors identified as especially leaky in the simple leakage analysis.

Charts 10 and 11 show the top 40 leak-plugging sectors by jobs and earnings again, as we did with the simple leakage analysis. A few of the job opportunities here are probably not possible, given the assets of the community. For example:

- *Monetary Authorities* – This category, which could provide 16 jobs administering the nation's monetary and reserve system, is the most centralized, and unlikely to have local potential.

- *Extraction of Oil and Natural Gas* – This category (9 jobs) would only be relevant if there were local oil and natural gas deposits, which there are not.

- *Metal Processing* – Certain metallic processing industries for ferrous metals (11 jobs), nonferrous metals (11), and steel product manufacturing (14) all would probably require close proximate sources of metal, which is currently not the case for Berea (though this could change).

Totalling the above, just over 100 jobs may not be plausible. But that still means about 1,300 direct jobs are.

The jobs ranking is done by direct jobs. Putting the sectors together, we can identify five clusters that account for more than 800 of the 1,300 direct jobs (summarized in Chart 12):

- goods distribution, warehousing, and trucking (232 direct jobs);

- professional services (247);

- finance, insurance, and real estate (167);

- local food (103)

- tourism (60);

Chart 9
Economic Impacts of Self-Reliance– 2009
(IMPLAN Input-Output Model – Details)

	Current Jobs	25% Shift
Farming, Ranching, and Forestry	294	119
Mining, Oil and Gas	0	10
Energy & Utilities	11	7
Construction	408	51
Manufacturing	0	
** Food Products*	0	22
** Textiles & Clothing*	0	17
** Wood Products*	4	12
** Printing*	2	7
** Petroleum-based Products*	0	22
** Rubber, Glass, Stone, Concrete Product*	129	16
** Metals*	170	56
** Metal Products*	34	22
** Arms, Machinery & Equipment Productio*	540	74
** Computers & Electronics*	19	34
** Vehicles, Boats, and Planes*	779	25
** Furniture & Woodwork*	34	6
** Health Industry Products*	3	3
** Other Products*	0	9
Wholesale Trade	15	198
Retail	841	117
Transportation	95	73
Warehousing & Storage	0	9
Services	0	
** Information Businesses*	30	43
** Banking & Financing*	199	105
** Realty, Equipment Leasing & Rentals*	64	132
** Professional Services*	337	317
** Private Education*	910	32
** Health & Social Services*	1,206	134
** Entertainment, Restaurants & Tourism*	866	168
** Personal Services*	765	124
Public Sector	0	
** Government Enterprises*	53	33
** Local Schools*	1,849	147
** State & Local Government*	202	16
** Federal*	459	71
TOTAL	10,317	2,229

Chart 10
Top 40 Job-Producing Sectors
(IMPLAN Input-Output Model)

Sector	Description	Direct	Indirect	Induced	Total
319	Wholesale trade businesses	196.4	1.4	0.5	198.3
360	Real estate establishments	118.8	3.7	3.5	126.0
2	Grain farming	45.1	0.7	0.1	45.9
367	Legal services	36.6	1.8	1.3	39.8
381	Management of companies and enterpris	33.9	0.2	0.0	34.1
382	Employment services	31.6	16.7	4.4	52.7
335	Transport by truck	27.2	4.1	1.1	32.4
388	Services to buildings and dwellings	22.7	5.5	1.7	29.9
374	Management, scientific, and technical co	21.3	2.1	0.4	23.8
368	Accounting, tax preparation, bookkeepin	20.3	2.5	0.6	23.4
356	Securities, commodity contracts, investr	19.5	5.2	2.7	27.4
394	Offices of physicians, dentists, and othe	18.5	0.0	30.1	48.6
357	Insurance carriers	17.1	0.1	0.1	17.3
411	Hotels and motels, including casino hote	17.1	4.8	4.4	26.2
376	Scientific research and development serv	16.6	0.1	0.0	16.7
354	Monetary authorities and depository cred	16.5	8.3	6.6	31.4
432	Other state and local government enterpr	16.3	1.6	2.5	20.4
195	Machine shops	15.3	0.3	0.0	15.6
413	Food services and drinking places	15.1	21.2	65.9	102.1
171	Steel product manufacturing from purcha	13.6	1.3	0.0	14.9
283	Motor vehicle parts manufacturing	13.3	3.3	0.8	17.4
389	Other support services	12.9	4.7	0.8	18.4
327	Retail Stores - Clothing and clothing acc	12.3	0.0	0.3	12.6
414	Automotive repair and maintenance, exc	11.2	4.9	4.4	20.5
387	Investigation and security services	11.1	0.2	0.1	11.4
421	Dry-cleaning and laundry services	11.0	0.6	0.8	12.4
179	Ferrous metal foundries	10.9	0.0	0.0	10.9
351	Telecommunications	10.8	0.8	0.4	12.0
180	Nonferrous metal foundries	10.5	0.0	0.0	10.5
425	Civic, social, professional, and similar or	10.2	3.4	6.4	20.0
393	Other private educational services	10.1	0.1	1.2	11.4
324	Retail Stores - Food and beverage	10.1	0.3	4.9	15.3
336	Transit and ground passenger transporta	10.0	2.0	3.6	15.5
419	Personal care services	9.4	0.1	4.3	13.8
20	Extraction of oil and natural gas	9.1	0.2	0.0	9.3
186	Plate work and fabricated structural prod	9.0	0.0	0.0	9.0
36	Construction of other new nonresidential	8.7	0.0	4.4	13.1
340	Warehousing and storage	8.4	0.3	0.0	8.7
372	Computer systems design services	8.3	0.1	0.1	8.5

Chart 11
Top 40 Wage-Producing Sectors
(IMPLAN Input-Output Model)

Description	Direct	Indirect	Induced	Total
Wholesale trade businesses	$9,160,177	$67,143	$23,599	$9,250,919
Management of companies and enterprises	$3,737,239	$19,735	$1,800	$3,758,774
Legal services	$1,429,250	$71,750	$51,342	$1,552,342
Insurance carriers	$1,375,287	$5,767	$10,273	$1,391,328
Steel product manufacturing from purchased steel	$1,160,745	$111,092	$792	$1,272,628
Scientific research and development services	$1,160,228	$3,821	$1,470	$1,165,519
Real estate establishments	$1,076,217	$33,160	$31,497	$1,140,873
Offices of physicians, dentists, and other health practitio	$1,071,674	$490	$1,738,970	$2,811,133
Transport by truck	$1,056,128	$158,318	$41,447	$1,255,894
Other state and local government enterprises	$1,020,961	$102,057	$154,850	$1,277,868
Motor vehicle parts manufacturing	$850,378	$211,894	$53,904	$1,116,176
Monetary authorities and depository credit intermediation	$839,465	$419,566	$337,444	$1,596,475
Telecommunications	$836,265	$59,823	$28,830	$924,918
Management, scientific, and technical consulting service	$828,143	$81,166	$17,455	$926,763
Accounting, tax preparation, bookkeeping, and payroll se	$768,867	$95,071	$24,299	$888,237
Computer systems design services	$727,919	$9,419	$4,686	$742,023
Machine shops	$723,828	$11,904	$424	$736,156
Ferrous metal foundries	$699,792	$168	$3	$699,962
Extraction of oil and natural gas	$681,898	$12,935	$1,949	$696,781
Nonferrous metal foundries	$638,005	$2,639	$75	$640,719
Employment services	$618,396	$327,263	$86,539	$1,032,198
Architectural, engineering, and related services	$609,479	$655,016	$150,823	$1,415,317
Semiconductor and related device manufacturing	$578,574	$23,566	$1,017	$603,157
Services to buildings and dwellings	$528,581	$128,775	$40,806	$698,163
Custom computer programming services	$525,572	$4,929	$1,768	$532,269
Copper rolling, drawing, extruding and alloying	$507,417	$46,211	$1,860	$555,487
Plate work and fabricated structural product manufacturi	$459,340	$46	$4	$459,390
Securities, commodity contracts, investments, and relat	$447,327	$119,256	$62,171	$628,754
Nondepository credit intermediation and related activities	$427,544	$188,545	$150,940	$767,029
Pharmaceutical preparation manufacturing	$412,301	$3,445	$20,467	$436,213
Secondary smelting and alloying of aluminum	$402,347	$23,111	$70	$425,528
Hotels and motels, including casino hotels	$401,432	$112,057	$102,931	$616,421
Warehousing and storage	$393,086	$12,996	$1,341	$407,422
Scenic and sightseeing transportation and support activi	$378,935	$88,124	$16,521	$483,580
Turned product and screw, nut, and bolt manufacturing	$375,505	$4,171	$126	$379,803
Other general purpose machinery manufacturing	$367,804	$4,895	$1,052	$373,751
Fluid power process machinery manufacturing	$359,142	$408	$37	$359,587
Office administrative services	$347,202	$13,276	$4,133	$364,611
Civic, social, professional, and similar organizations	$345,618	$114,690	$218,440	$678,749
Commercial and industrial machinery and equipment rep	$330,957	$11,280	$2,052	$344,289

Chart 12
Top Leaky Clusters

Description	Direct	Indirect	Induced	Total
Goods Distributions				
Wholesale trade businesses	196.4	1.4	0.5	198.3
Transport by truck	27.2	4.1	1.1	32.4
Warehousing and storage	8.4	0.3	0.0	8.7
	232.0	5.8	1.6	239.4
FIRE				
Real estate establishments	118.8	3.7	3.5	126.0
Securities, commodity contracts, investn	19.5	5.2	2.7	27.4
Insurance carriers	17.1	0.1	0.1	17.3
Nondepository credit intermediation and	8.1	3.6	2.9	14.5
Funds, trusts, and other financial vehicles	3.5	0.0	0.2	3.6
Insurance agencies, brokerages, and rela	2.0	7.9	0.6	10.5
	169.0	20.4	9.9	199.3
Local Food				
Grain farming	45.1	0.7	0.1	45.9
Food services and drinking places	15.1	21.2	65.9	102.1
Retail Stores - Food and beverage	10.1	0.3	4.9	15.3
Oilseed farming	7.9	0.1	0.0	8.1
Animal production, except cattle and pou	3.8	20.4	4.5	28.8
All other crop farming	3.8	2.8	0.3	6.8
Animal (except poultry) slaughtering, ren	3.0	0.1	0.1	3.2
Bread and bakery product manufacturing	2.8	0.0	0.1	2.9
Fruit farming	2.7	0.0	0.0	2.7
Vegetable and melon farming	2.6	0.0	0.1	2.8
Commercial Fishing	2.5	0.0	0.0	2.5
Poultry processing	2.4	0.0	0.1	2.6
Wineries	0.7	0.0	0.0	0.7
	102.5	45.8	76.1	224.4
Professional Services				
Legal services	36.6	1.8	1.3	39.8
Employment services	31.6	16.7	4.4	52.7
Management of companies and enterpris	33.9	0.2	0.0	34.1
Services to buildings and dwellings	22.7	5.5	1.7	29.9
Management, scientific, and technical co	21.3	2.1	0.4	23.8
Accounting, tax preparation, bookkeepin	20.3	2.5	0.6	23.4
Scientific research and development serv	16.6	0.1	0.0	16.7
Machine shops	15.3	0.3	0.0	15.6
Other support services	12.9	4.7	0.8	18.4
Investigation and security services	11.1	0.2	0.1	11.4
Printing	5.9	0.4	0.1	6.4
Architectural, engineering, and related se	5.7	6.1	1.4	13.2
Office administrative services	4.9	0.2	0.1	5.1
Couriers and messengers	4.4	0.5	0.0	4.9
All other miscellaneous professional, sci	4.2	0.3	0.0	4.5
Business support services	2.8	0.3	0.0	3.1
	247.3	41.5	11.1	300.0
Tourism				
Hotels and motels, including casino hote	17.1	4.8	4.4	26.2
Civic, social, professional, and similar org	10.2	3.4	6.4	20.0
Scenic and sightseeing transportation an	7.6	1.8	0.3	9.8
Amusement parks, arcades, and gamblin	7.5	0.0	0.6	8.1
Fitness and recreational sports centers	6.9	0.4	0.9	8.2
Other amusement and recreation industri	5.9	0.1	0.3	6.3
Performing arts companies	4.9	0.1	0.1	5.2
Spectator sports companies	3.8	0.1	0.1	4.1
	60.3	10.5	13.0	83.8

Realizing the 25% Shift

What are the most promising assets Berea has for realizing the 25% shift? The most formidable obstacles? To grasp these questions, the author conducted a series of interviews with key observers of Berea. A complete list of those spoken with are included in Appendix I. Here is a preliminary list of the town's strengths, weaknesses, opportunities, and threats.

Before proceeding, we offer one caveat. Almost every strength can be rephrased as a weakness ("we have significant financial capital" vs. "we need more financial capital"), or even as an opportunity or a threat. In the recitation below, we try not to repeat points and instead to place each point in the one category that made the most sense.

A SWOT ANALYSIS OF BEREA

STRENGTHS are issues or characteristics of a town that local leaders can use to advance economic growth. Among the key strengths Berea has are:

- *Location* – The city is easily accessible on I-75, connected to rail, and located near many US population centers. It's close to the Madison County Airport, and a short drive from Lexington's transportation hubs.

- *Manufacturing* – City has more than double the national rate of manufacturing jobs, successfully recruiting businesses for its industrial park and creating 3,200 manufacturing jobs. These jobs, while many are non-unionized, pay relatively well.

- *Education* – The public school system is strong. Berea College creates a strong intellectual community, as well as provides the community with a large endowment and outstanding students. Many local educational opportunities. Many segments of the workforce universe are available. The city enjoys the presence of the Madison County Public library and public access to Berea College library.

- *Public Sector* – The city has sound finances. It entered the recession with a cushion that provided stability. It has developed a diversified revenue base.

- *Infrastructure* – The city owns, operates, and controls its own water, electric and sewer utilities. The roads are good. Land with water and sewer connections is available for industrial development. High-speed internet is widely available.

- *Civic Culture* – The city has a cosmopolitan culture that has produced many of strong leaders, voices, and thinkers.

- *Tourism* – The city has a cosmopolitan local culture that is interesting for outside visitors. It has numerous studio artists and crafts products. The rtisan Center Designation, as long as the city's designation as the as the Folk Arts and Crafts Capital of Kentucky, has given this community greater visibility. A well-coordinated tourism effort with adequate funding, successful expansion of online Kentucky goods promotion;

- *Local Businesses* – The city has several healthy sectors of local business. It is the expansion of the local food movement. It has strong local banks and credit unions. And it has nationally respected nonprofits like MACED.

- *Quality of Life* – The city is scenic and environmentally rich. Taxes are low (9.9 cents per $100 valuation compared to state average of 22 cents). The crime rate is low. High-quality health care is available. There are many recreational facilities, including pools, athletic fields, golf course, and ahandicapped-accessible play ground.

WEAKNESSES are issues or characteristics that, if not addressed effectively, could limit economic growth. For example, some of the following might be listed as weaknesses:

- *Limits to Manufacturing* – The manufacturing base of the city is not locally owned or controlled. It is overly dependent on the automotive sector. It has many employees who do not live in Berea, which means that property taxes are paid to other communities.

- *Finance Gaps* – There is limited available investment capital for local businesses, especially for start-ups.

- *Empty Storefronts* – Local retailers have had a particularly difficult time succeeding in Berea. This, despite the absence of local retail outlets for clothing and groceries. Arts businesses not capable of filling these spaces. Many Berea residents are not shopping "local first." Some retail areas lack adequate parking.

- *No Fun* – The city has limited entertainment opportunities: no movie theaters, no skating rinks, no bars, early-closing and limited restaurants. This, along with limited hotels, contributes to the city's underperforming tourism sector.

- *Limited Entrepreneurship* – Financing gaps, coupled with the absence of a single place where entrepreneurs can go for assistance, has stunted the growth of new local business.

- *Youth Out-Migration* – The absence of fun and entrepreneurship opportunities convinces many young people – especially the best and brightest – to leave the community after being graduated from high school.

- *Tourism Deficits* – Despite the city's efforts to ramp up tourism, there are odd shortcomings. The Artisan Center is disconnected from downtown Berea, and this is not remedied by existing signs or roads. Small meeting spaces, like those in the Artisan Center, are undersubscribed. Large meeting spaces, like a conference center sought by the Chamber of Commerce, do not exist. The artisan population that lies at the center of local tourism efforts is aging.

- *Workforce Shortcomings* – The local workforce that often lacks basic job skills (balance checkbook; arrive on time).

OPPORTUNITIES are assets, events, or trends that offer Berea the potential for economic growth. For example, some of the following might be listed as opportunities:

- *Physical Assets* – Berea has land in its industrial park and throughout the city to facilitate all kinds of business growth, including more manufacturing. Existing state-funded infra-structure improvement projects already designed and budgeted. The Bluegrass Army Depot also provides opportunities for economic development.

- *Regional Growth* -- Significant growth in the I-75 corridor is expected. The Madison County Airport may well expand.

- *Industrial Park* – Existing companies could attract similar or supplier companies to the area. Hitachi's contract to produce an electric engine for Hitachi's contract to produce an electric engine for General Motors starting in 2012

- *Entrepreneurship Innovations* – One proposal that would add to the entrepreneurship resources of the region is a vocational school. Another is a proposed partnership between EKU and Berea College for worker- retraining programs. Others have proposed life-skill programs for unemployed workers and new entrepreneurship programs. Yet another is to expand youth entrepreneurship and mentorship programs.

- *Arts & Crafts* – Berea's existing reputation as an arts center could be built upon. The Artisan Center's role could be ramped up, tours of working-artist studios could be created, and arts-in-the-curriculum programs for school children could be expanded. The Chestnut Street connector proposal as a way to fill empty lease space between the Old Town and College Square arts districts with galleries and working-artist studios. The Arts Council could be retained in one of Berea's arts district.

- *Broader Approach to Tourism* –But there is interest in the area to focus on much more than folk arts and crafts. Tourism could emphasize local scenery, sports tournaments, recreational activities like biking, music, and dance, local history and culture, and local examples of sustainable living. Many fairs and festivals throughout the year that support this definition, including a proposal to combine workshops with festivals starting later this year.

- *Other Approaches to Economic Development* – Wherever a critical mass of excitement exists around an approach to economic development, it can and should be seized. Currently, for example, substantial numbers of Berea residents are eager to do all the following: create a new conference center; expand the Boone Tavern; create (through United Church Homes) a retirement community in Berea to augment existing skilled-nursing and long-term care facilities; integrate Berea College more thoroughly into the city's economic growth (through more local investment, for example); promote "think local first" campaigns and expand existing efforts around buy-local and local currencies; expand the local food system through more farming, farmers markets, and vineyards; formalize and empower the vast network of home-based businesses in the community. The surest path to consensus in the city might be for the government to support ALL these efforts equally.

- *Partners* – Many partners exist in the region to help realize the opportunities above. These include SKEN, Kentucky Ventures Corp., Kentucky Science and Tech Corporation, Eastern Kentucky University, Kentucky Highlands, KEAN, Coaches Institute, UK Appalachian Center, etc.

THREATS are obstacles, events, or trends that, if not addressed effectively, could diminish Berea's economic potential and its ability to create jobs. For example, some of the following might be listed as threats:

- *Traffic Patterns* – The Berea bypass could divert traffic from downtown areas, threatening local retailers even further.

- *Aging Population* – Like the rest of the country, Berea's population is getting older. The exit of young people, however, is accelerating this trend.

- *Infrastructure* -- Water might become limited, as might energy. Roads need upgrading and repair.

- *Globalization* – Major companies in Berea might continue to offshore some manufacturing jobs. Because the city's revenue streams, while more diversified than they one were, still depend heavily on payroll taxes, offshoring could be particularly devastating to the city's budget.

- *Over-focus on Corporate Attraction* – The city's focus on attracting outside manufacturers, while successful thus far, could, if continued, prevent the deployment of other economic-development strategies.

- *Investment Capital* – Capital gaps facing local businesses could get worse. Outside corporations might lose interest in Berea. Pension funds and other investment institutions might continue to invest nonlocally.

- *Disasters* – Close proximity to storage depots with old nerve gas is fraught with danger.

- *Unplanned Growth* – The city's small-town character could be lost through unplanned growth and development. Contributing to poor planning is the absence of regional cooperation in economic development.

- *Poor Public Policies* – Public policy choices made outside the city could adversely impact the community. The Kentucky tax structure inhibits regional cooperation on economic development. Enlargement of FEMA flood area could limit development. State and federal funding for special projects is likely to decline.

- *Divisions* – Deep divisions within the community on some issues could continue to prevent a more consensual, multi-strategy approach to economic development. These divisions currently include whether to change alcohol laws, whether to embrace gay and lesbian rights, whether to use public money to build a convention center, whether to continue the tourism tax, and how closely to work with Berea College.