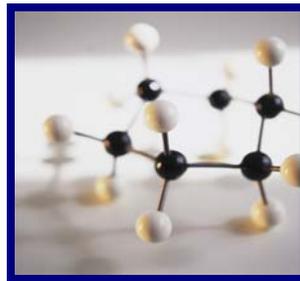




The Plastics Industry In Kentucky



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I. INTRODUCTION

Plastics Industry

Overview

The plastics industry in Kentucky consists primarily of companies engaged in processing new and recycled plastics resins into intermediate or final products using such processes as compression molding; extrusion molding; injection molding; blow molding; and film and sheet extrusion. Kentucky's plastic companies produce thousands of products that include every thing from foam containers to plastic tent pegs and automotive seats.

Kentucky is nearly equidistant from the Great Lakes, the Gulf of Mexico and the Atlantic Seaboard. That makes the state an excellent distribution point for plastics industry companies shipping to customers in both northern and southern locations.

Most of the nation's automotive production facilities are within 500 miles of central Kentucky. Since the automotive industry is a major purchaser of rubber and plastics products, Kentucky provides excellent access for just-in-time deliveries.

Plastics industry employment has grown slowly but steadily in the U. S. since 1980. From 1980 to 2006, employment in the industry grew at an average annual rate of almost 2% percent. Kentucky was ranked 17th in the country in plastics employment in 2006. (Source: Data derived from the United States Census Bureau, County Business Patterns 2006.)



Table 1: Rankings for Kentucky and Competitor States--2006 Kentucky's Plastics Industry--Plastics and Rubber Product Manufacturing (NAICS 326)

Competitor States	Total Employees (1)		Estimated Annual Wage		Total Business Establishments	
	Total Jobs	Rank	Wage	Rank	Establishments	Rank
United States	900,842	-	\$ 37,826	-	14,592	-
Alabama	17,829	18	\$ 37,595	21	205	21
Arkansas	13,319	24	\$ 36,839	29	152	29
Georgia	27,666	11	\$ 37,333	23	431	13
Illinois	53,853	4	\$ 40,882	12	758	4
Indiana	46,723	6	\$ 36,931	28	552	9
Kentucky	19,590	17	\$ 33,841	42	214	20
Michigan	55,366	3	\$ 36,129	33	755	5
Mississippi	9,918	27	\$ 32,290	43	147	31
Missouri	21,322	16	\$ 34,459	39	319	17
North Carolina	42,516	8	\$ 36,829	30	505	10
Ohio	79,904	1	\$ 37,528	22	1,074	2
South Carolina	23,194	14	\$ 42,637	6	227	19
Tennessee	32,608	9	\$ 37,019	26	383	14
Virginia	24,078	13	\$ 39,625	13	190	25
West Virginia	4,386	36	\$ 30,795	47	55	40

Source: Data derived from the United States Census Bureau, County Business Patterns 2006.

Note: A ranking of one (1) is the highest ranking nationally.

Note: All data is NAICS based (326).

Note: The Number of Employees estimate is based on survey data for the week including March 12, 2006.

II. ECONOMIC IMPACT

Kentucky's plastic exports have grown from \$212,411,176 in 2002 to \$345,262,174 in 2006 or over 62% in four years for an average growth of over 15% a year. The neighboring nations of Mexico and Canada are the Kentucky plastic industry's most important trading partners, followed by the United Kingdom, Brazil and Japan. Foreign trade is becoming increasingly important to plastics industry employment. (See Table 2)

The plastics industry in Kentucky has 204 total business establishments with 20,438 employees. Twenty-five businesses are in the resin and synthetic rubber manufacturing sector (NAICS code 32521), employing 3,036 people. There are 179 businesses in the plastics product manufacturing sector (NAICS code 3261) employing 17,402 people. (See table 3)

On May 28, 2004, the United States and five Central American nations (Costa Rica, El Salvador, Honduras, Guatemala, and Nicaragua) signed the U.S. - Central American Free Trade Agreement (CAFTA). The Dominican Republic

joined the treaty on August 5, 2005, thus creating the (CAFTA-DR) agreement. The agreement leveled the playing field for U.S. plastic products to this region, which is the 10th largest export market for the United States, with El Salvador being the 16th (2005) largest market. These countries have been exporting goods to the United States duty free for decades. The agreement lowers the barriers to U.S. goods coming into the region. Demand for plastics in this area is increasing as the trade barriers for U.S. exports begin to decrease. This combination should increase demand for Kentucky plastics. (Sources: The Society of the Plastics Industry, www.plasticsindustry.org and www.export.gov).

Although it currently is only a niche market, one of the brightest spots for growth in the plastics industry is in the area of bio-degradable products. Currently, many plastic products that are disposable have a life expectancy of nearly 100 years. Biodegradable plastics can have a shelf life of as little time as 60 days to a maximum life of 5 to 6 years. Globally, many jurisdictions have moved to either tax or ban such plastic items as thin plastic bags and foam fast-food boxes. As nations struggle to find a solution to their growing plastic disposal problem, many nations are looking to bio-degradable and compostable plastics as the solution to this dilemma. Many nations are experimenting with new production processes in order to produce plastic products that will harmlessly degrade over a short period of time. (Source: Canadian Plastics Industry Association, www.cpia.ca)

PLA or polylactic acid is a polymer (chemical chains) made from lactic acid formed in the fermentation of cornstarch. PLA polymers are used in plastics that are competitive with or superior to hydrocarbon-based polymers. PLA are completely renewable. Annually, the United States produces between 70 and 80 billion pounds of plastics, mostly from “hydrocarbon” or petroleum-based sources. If corn-based products were used instead, the process would consume 2 billion bushels of corn annually, representing a significant market for U.S. corn.

With the growth of ethanol due to America’s search for alternative energy sources to crude oil, the market for corn has risen greatly over the last two years. As a result, the price of corn has risen in direct proportion with the increased demand for ethanol. This has created an opening for plastics made of other renewable sources such as the potato, tapioca, cellulose, soy protein, lactic acid and other sources. The goal is to create products that decompose back to carbon dioxide, water, biomass etc. in the environment when discarded. (Source: World Centric, <http://www.worldcentric.org>)

PLA competes against four different hydrocarbon-based resins: 1) polyethylene; 2) polystyrene; 3) polypropylene; and 4) polyester. Compared to the others, PLA is: 1) clear; 2) glossy; 3) resistant to moisture and grease; 4) is naturally stiff; and 5) can be processed using most conventional techniques and equipment. It can be copolymerized with other materials and readily accepts fillers.

One of the strengths of PLA is that it can be engineered to be biodegradable in controlled compost situations. Currently, about 25 percent of the total market is appropriate for biodegradable plastics. This is expected to change due to the significant market opportunity for biodegradable plastics. The market for non-biodegradable plastics is also expected to grow in the future.

PLA has been designated as a "new generic fiber" by the Federal Trade Commission, thus, opening the door for increased uses and markets. (Source: Kentucky Corn Growers Association, www.kycorn.org)

Table 2: Kentucky's Exports of Plastic and Rubber Products
Top 15 Countries-- Annual 2006

Country of Destination	Exports	Kentucky Jobs Created by Exports			
		Direct	Indirect	Induced	Total
All Countries	\$345,262,174	1,612	716	1,228	3,556
CANADA	\$162,545,215	759	337	578	1,674
MEXICO	\$88,948,622	415	184	316	916
UNITED KINGDOM	\$14,591,764	68	30	52	150
BRAZIL	\$9,952,801	46	21	35	103
JAPAN	\$8,587,251	40	18	31	88
CHINA (MAINLAND)	\$8,027,319	37	17	29	83
GERMANY	\$4,877,506	23	10	17	50
BELGIUM	\$3,345,588	16	7	12	34
KOREA, REPUBLIC OF	\$3,335,411	16	7	12	34
IRELAND	\$3,097,883	14	6	11	32
QATAR	\$2,734,536	13	6	10	28
AUSTRALIA	\$2,728,964	13	6	10	28
REPUBLIC OF SOUTH AFRICA	\$2,639,152	12	5	9	27
ARGENTINA	\$2,473,924	12	5	9	25
FRANCE	\$1,958,021	9	4	7	20

Source: "Origin of Movement Series," Massachusetts Institute of Social and Economic Research, University of Massachusetts. Economic impact data produced by the Kentucky Cabinet for Economic Development, Division of Research.

Table 3: Kentucky's Plastics Industry

Employees (1)	20,438
Average Annual Salary (2)	\$39,763
Number of Business Establishments (3)	204

Sources: Note: All data is NAICS based (32521 and 3261).

1, 2. Data derived from the United States Census Bureau, County Business Patterns 2006.

Note: All data is NAICS based (32521 and 3261).

3. Data derived from the United States Census Bureau, County Business Patterns 2006.

**Major Plastics Industry Employers in Kentucky (250 or more employees)
September 2008 Data.**

Facility Name	Employment
Dart Container Corp.	1,200
Pella Corporation (Murray Operations)	1,000
Montaplast of North America	927
TG Kentucky LLC	900
Guardian Automotive (Div. Guardian Industries Corp.)	550
Franklin Precision Industry, Inc.	460
Niles America Wintech, Inc. (Sub. Niles Co., Ltd.)	410
Carpenter, Co. (Russellville Division)	406
International Automotive Components Group	393
American Fuji Seal, Inc.	383
Rohm and Haas Co.	375
Plastech Engineered Products	370
INOAC Automotive, LLC	325
Aristech Acrylics LLC	319
Hoffman Enclosures, Inc. (Sub. Pentair, Inc.)	315
BAE System Armor Holdings	315
Georgia Pacific Corp. (Dixie Products Div.)	300
Vinyl Window Technologies and AKS, Inc.	300
McKechnie Vehicle Components	290
Summit Polymers, Inc. (Elizabethtown)	290
Infiltrator Systems, Inc.	270
Plastech Exterior Systems, Inc.	270
Summit Polymers, Inc. (Mt. Sterling)	270
Pliant Corporation	269
Arkema, Inc.	262
Vincent Industrial Plastics, Inc.	250

Source: Kentucky Cabinet for Economic Development, Division of Research and Site Evaluation.
Note: New or expanded facilities that announced positions with more than 250 employees to take place in the future were not included. Only actual positions were included.



Table 4: Composition of Kentucky's Plastics Industry--2006

NAICS (1)	Industry Description	Number of Employees (2)	Estimated Annual Wage	Total Business Establishments
32521	Resin and synthetic rubber mfg.	3,036	\$ 73,739	25
3261	Plastics product mfg.	17,402	\$ 33,836	179
326111	Plastics bag mfg.	500-999	-	7
326112	Plastics packaging film and sheet (including laminated) mfg.	20-99	-	2
326113	Unlaminated plastics film and sheet (except packaging) mfg.	1,133	\$ 54,126	11
326121	Unlaminated plastics profile shape mfg.	250-499	-	6
326122	Plastics pipe and pipe fitting mfg.	589	\$ 38,535	9
326140	Polystyrene foam product mfg.	1,429	\$ 33,343	7
326150	Foam product (except polystyrene) mfg.	965	\$ 30,543	11
326160	Plastics bottle mfg.	1,046	\$ 37,051	10
326191	Plastics plumbing fixture mfg.	471	\$ 22,887	7
326199	All other plastics product mfg.	10,585	\$ 31,542	108

Source: Data derived from the United States Census Bureau, County Business Patterns 2006.

1. Note: All data is NAICS based. Not all data is complete.
2. Note: The Number of Employees estimate is based on survey data for the year ending December 31, 2006.

III. INDUSTRY RESOURCES

Bluegrass State Skills Corporation

The Bluegrass State Skills Corporation (BSSC), www.thinkkentucky.com/bssc/, was established in 1984 by the Kentucky General Assembly as an independent, de jure corporation to stimulate economic development through programs of skills training. The Bluegrass State Skills Corporation promotes and improves employment opportunities for Kentucky's residents. BSSC creates partnerships with businesses and industries through training grants and investment credits for skills training programs. BSSC is attached to the Cabinet for Economic Development for administrative purposes and in recognition of the relationship between economic development and skills training efforts.

Business Industry Recycling Program (BIRP) (www.birp.org) is a coalition of concerned citizens, businesses and trade associations across the Commonwealth working to promote recycling and "buy recycled programs."

D. Ray Gillespie, Executive Director. Post Office Box 1143, Frankfort, KY 40602
502-227-7481, 502-875-7536 (fax).

Canadian Plastics Industry Association (CPIA) is dedicated to advancing the prosperity and international competitiveness of the Canadian plastics industry in an environmentally and socially responsible manner (www.cpia.ca).

Denis Cloutier, Senior Vice-President, 5915 Airport Road, Suite 712, Mississauga, ON L4V 1T1, Tel: (905) 678-7748, Fax: (905) 678-0774.

Mid-America Plastics Partners, Inc. (MAPP)

Formed in August 1996, the organization was created by plastics processors for plastics processors. Since its inception, MAPP has become the fastest growing processor group of its kind in the country. It has over 1,000 industry executives in member companies. MAPP, 7321 Shadeland Station Way, Suite 285, Indianapolis, IN 46256. (317) 913-2440, <http://www.mappinc.com>.

National Association for PET Container Resources

The National Association for PET (polyethylene terephthalate) Container Resources (NAPCOR) is the trade association for the PET plastic industry in the United States and Canada. NAPCOR was founded in 1987. PO Box 1327 Sonoma, CA 95476, Voice: (707) 996-4207, <http://www.napcor.com>.

Plastics Division of the American Chemistry Council

Founded in 1872, the [American Chemistry Council](http://www.americanchemistry.com) represents the companies that make products through chemical processes. It has several divisions including one devoted strictly to plastics. 1300 Wilson Blvd., Arlington VA 22209. Phone: 703-741-5000; Fax: 703-741-6050, <http://www.americanchemistry.com/plastics>.

Resource Recycling is a journal for recycling and composting professionals. It is a monthly magazine that provides the latest information about post-consumer waste recovery efforts. P.O. Box 42270, Portland, OR 97242-0270. Phone: (503) 233-1305, <http://www.resource-recycling.com/pru.html>.

The Society of the Plastics Industry, founded in 1937, is the trade association representing one of the largest manufacturing industries in the United States. SPI's members represent the entire plastics industry supply chain, including processors, machinery and equipment manufacturers, and raw materials suppliers. 1667 K St., NW Suite 1000, Washington, DC 20006, Phone (202) 974.5200, Fax (202) 296.7005, www.plasticsindustry.org.

University of Kentucky Center for Manufacturing

Established in 1986 by the Commonwealth of Kentucky as the Center for Robotics and Manufacturing Systems, the Center for Manufacturing is the premier source of manufacturing technological assistance for Kentucky's industries, providing service to approximately 350 companies, entrepreneurs, and agencies annually. The Center conducts manufacturing research, transfers manufacturing technology to industry, and supports educational efforts in manufacturing. Currently funded with an annual recurring budget of \$2.6 million, the Center generates external funding to support its research activities from federal and state agencies, foundations, and corporations. Since 1993, the Center has received \$3.65 million in grants and contracts. University of Kentucky,

College of Engineering, 220 CRMS Building, Lexington, KY 40506-0108. Phone: (859) 259-6262, Fax: (859) 323-1035, <http://www.mfg.uky.edu>.

World Centric

World Centric is a non-profit organization formed in March 2004. It focuses on environmental and economic issues and their impacts. 2121 Staunton Court, Palo Alto, CA 94306; Telephone: 650-739-0699, Fax: 866-850-9732, <http://www.worldcentric.org>.

IV. BUSINESS CLIMATE

Kentucky offers a wide range of opportunities for a profitable investment in all business sectors. Kentucky's manufacturing base has shown particularly dramatic growth during the past decade.

- Kentucky ranked 10th in the 2007 *Site Selection* Governor's Cup awarded annually to U.S. states with the most new corporate facilities and expansions. Kentucky has the smallest population of any of the states in the top 10. (*Site Selection*, March 2008).
- Kentucky ranked 4th nationally in the 2007 *Site Selection* Competitiveness Award. The award is based on 10 quantifiable criteria that measure business expansion activity that took place in the previous calendar year. The indexing system puts all states on a level playing field. (*Site Selection*, May 2008).
- Kentucky tied for 9th (tied) for 2007 Top States with Most Top Metros with 6. (*Site Selection*, March 2008).
- Six Kentucky communities ranked in *Site Selection's* 2007 Top 100 U.S. Micropolitans for new and expanded facilities expansions in 2007. The communities are Glasgow (T28), Paducah (T28), Danville (T38), Frankfort (T62), Madisonville (T62), and Mayfield (T62). (*Site Selection*, March 2008).
- Kentucky ranked 12th in the 2007 *Site Selection* magazine list of top states with expanded manufacturing facilities in 2007. (*Site Selection*, March 2008).
- Kentucky ranked 12th in the 2007 *Site Selection* magazine list of top states with the most new corporate facilities and expansions from 2005 to 2007. (*Site Selection*, March 2008).
- Due largely to its abundant coal reserves, in 2006, Kentucky ranked as the second lowest cost among its competitor states for the provision of industrial electrical power. For the previous six straight years, Kentucky had the lowest industrial electrical power costs. (Source: Energy Information Administration/Electric Power Annual 2006.)

- Kentucky received the *Silver Shovel Award* in the 3 million to 10 million population category from *Area Development* magazine for being most successful in creating new jobs and securing investments in new and expanded facilities (July, 2007). The award was based on information submitted by the state about its 10 top job-creation and investment projects in 2006. The 10 projects Kentucky submitted for consideration created more than 3,500 jobs and represented more than \$1 billion in company investment. Eight of the ten companies were also new to the state.
- Kentucky ranked 3rd in U.S. total light vehicle production for 2007 with 1,046,531 vehicles produced and about a 10% market share. (Source: *Automotive News 2008 Market Data Book*.)
- For 2006, the [Center for Digital Government](#) ranks Kentucky as the number eight most digitally–advanced state government in the nation. The [Digital States Survey](#) is a comprehensive study that examines best practices, policies, and progress of state governments in their use of digital technologies to better serve citizens and streamline operations. The survey contains more than 70 measurements in four areas: service delivery, architecture and infrastructure, collaboration, and leadership.

Kentucky’s airports can compete with any in the world. According to *Airports Council International*, the Louisville International Airport ranks as the 3rd busiest cargo airport in North America. It ranks 9th busiest in the world. (August, 2008).

Kentucky is located in the center of eastern U.S. industrial and consumer markets, with its borders within 600 miles of 60% of the nation’s population, personal income, and manufacturing business establishments.

Kentucky is at the highway crossroads of the Canada to Florida I-75 route, extending from the Great Lakes to the Gulf of Mexico, and the St. Louis to Norfolk I-64 route, which stretches from the Mississippi River to the Atlantic Seaboard.

The [Reason Foundation](#) ranked Kentucky’s highways as the 9th most efficient in the nation in its 17th *Annual Performance of State Highway Systems* report. The cost effectiveness for each state is computed by averaging its 12 performance ratios (ratio of each state’s statistic to the national average, for 5 financial measures and 7 condition measures), then ranking the states. The report was released in July 31, 2008 and compared the state highway systems from 1984 to 2006.

Kentucky has some of the most innovative business development programs in the nation to encourage business investments and expansions, including a wide range of tax exemptions and financing. *Site Selection’s* rankings of Kentucky

among the topmost states in job creation for the last several years support Kentucky's position as an attractive state for both new and expanding business.

Kentucky has one of the lowest overall costs of doing business in the United States according to Regional Financial Associates (Economy.com). Regional Financial Associates publishes the *North American Business Cost Review*, which determines the cost of doing business within a state by measuring unit labor costs, energy costs, and state and local taxes. Kentucky ranks as the 15th lowest state for the overall cost of doing business in the United States. According to this index, the overall cost of doing business is eight percent (8%) below the U.S. average, and with respect to the cost of energy, Kentucky is significantly below the national average. (Source: *North American Business Cost Review – 14th Edition*, updated in July 2008).

Inc. magazine's list of 2008 Boomtowns – 393 hot cities for entrepreneurs – includes five Kentucky communities on its Overall Best Cities for Doing Business is Bowling Green (49). The Best Small-Sized Cities for Doing Business includes Bowling Green (32) and Elizabethtown (97). The Best Medium-Sized City is Lexington-Fayette County (55), (May 2008).

In *Expansion Management* magazine's 2007 *Quality of Life Quotient Rankings*, Lexington-Fayette County and Owensboro ranked as *5-Star Quality of Life Metros* while Cincinnati-Middletown (OH-KY-IN), Bowling Green, Louisville and Henderson-Evansville (KY-IN) ranked as *4-Star Quality of Life Metros* (June 2007).

Expansion Management magazine's August 2007 issue ranked Kentucky's Workforce Training Programs, which includes the Bluegrass State Skills Corporation (BSSC), 5th in the U.S. For the 5th consecutive year, Kentucky has ranked in the Top Ten, placing 8th in 2006, 3rd in 2005, 5th in 2004 and 8th in 2003. The ranking considered the programs' efforts in facilitating customized business and industry training services for new, expanding and existing companies. Programs were judged in terms of financial value, ease of usage and applicability.

Kentucky ranked 22nd in the nation for having the lowest *Business Taxes as a Share of State, Local, and Total and Private Sector GSP, FY 2006* according to a study released in February 2007 by Ernst and Young (<http://www.ernst-young.com>) and titled: *Total State and Local Business Taxes, 50-State Estimates for Fiscal Year 2006*. Kentucky had a total share of 4.9% which was lower than the national average of 5.1%.

Table 5: Cost of Doing Business for Competitor States (2006)

	<i>Overall Cost of Doing Business</i>		<i>Unit Labor Cost</i>		<i>Energy Cost</i>		<i>State and Local Taxes</i>	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
U.S.	100		100		100		100	
Alabama	95	21	98	25	84	23	75	1
Arkansas	89	5	90	5	77	13	95	25
Georgia	96	22	99	29	86	25	90	12
Illinois	100	33	104	43	83	22	95	25
Indiana	89	5	90	5	79	15	92	16
Kentucky	93	15	97	23	69	7	91	13
Michigan	104	39	104	43	97	31	103	36
Mississippi	93	15	93	12	97	31	91	13
Missouri	93	15	98	25	68	5	86	7
North Carolina	84	2	81	2	80	18	93	18
Ohio	98	28	95	18	91	29	113	46
South Carolina	96	22	95	18	81	19	93	18
Tennessee	89	5	90	5	86	25	79	2
Virginia	94	20	98	25	70	9	87	9
West Virginia	92	12	93	12	60	2	117	49

Note: A ranking of one represents the lowest cost and ties are ranked the same.

Source: Derived from data provided by North American Business Cost Review, 2006 Edition, Prepared by Economy.com, Inc., Updated July, 2008; (Top Aluminum States Data Source: Aluminum Association; Geographic Area Statistics 2006: Annual Survey of Manufactures, U.S. Census Bureau.)



V. FACILITIES

Facility Name	Product Description	Employment
Albany		
Sun Fiberglass Products Inc.	In ground fiberglass swimming pools.	15
Annvil		
JC Tec Industries	Injection molded plastic parts, assemblies, and wire and harness boards, military tent stakes and tent lanyards, portable furniture.	42
Precision Solutions LLC	Injection molded products, printed circuit boards, control panels, ice makers, electromechanical and electrical assemblies.	46
Phillips Diversified Mfg., Inc.	Plastic injection molded components, mechanical and electronic assembly, vacuum form molding and metal fabrication.	34
Ashland		
Steele Plastics Manufacturing Co., Inc.	Metal gutter screen and custom fabricating plastics. Galvanized and copper wire gutter screens and STEELCO Gutter Screens.	3
Auburn		
Caldwell Industries, Inc.	Extruded sheet and profile plastic and die cut non-metallic materials.	54
Augusta		
Clopay Plastic Products Co. (Div. Cloplay Corp.)	Surgical supplies; polyethylene and polypropylene film, patient care products, and residential and commercial garage doors.	243
Bardstown		
American Fuji Seal, Inc.	Plastic carriers and bottle labels.	383
Hokumo America Corporation	Plastic injection molding, assembly of automobile parts.	10
INOAC Packaging Group, Inc.	Plastic cosmetic bottles.	140
Legacy Mold and Tool, Inc.	Tool and die, plastic injection molds, jigs and fixtures.	6
ORBIS Materials Handling, Inc.	Collapsible containers.	123
Polyair Corporation	Manufacture foam packaging materials.	64
Bellevue		
Kabtec Inc.	Plastic laminated sink tops, furniture and cabinets.	6
Liberty Plastics Molding Corp., Inc.	Plastic injection molds, molding and prototypes.	12
Benton		
Alcan Composites USA, Inc.	Composite aluminum and plastic foam panels and sheets.	138
Bowling Green		
AEP Industries, Inc.	Polyethylene films, plastic bags and packaging materials.	117
Berry Plastics	Injection molded plastic bottles and closures for consumer products.	161
Capitol Window and Door	Vinyl replacement windows; aluminum storm windows and doors, new vinyl construction and specialty windows.	12
Waky Sign Co., Inc.	Vinyl heat transfer sign and backlit awning faces; electrical, neon, painted, metal, wooden, plastic,	25

	magnetic and screened signs.	
Western Kentucky Plastics, Inc.	Plastic injection thermoplastic and thermoset molding.	30
Brooks		
Prestige Plastics Tech, Inc.	Plastic injection molding service, contract manufacturing and automobile aftermarket products, complete tooling facility and manufacturing.	11
Buckner		
Hartlage Manufacturing, Inc.	Injection molded plastic parts.	14
Burkesville		
Electric Mills KY (Div. EMF Corp.)	Molded electrical connectors and wiring harnesses.	73
Burlington		
Acramold Inc.	Custom molds and plastic products.	10
Butler		
Williams Manufacturing Co., Inc.	Plastic laminated products and cabinets; counter tops – laminated and solid surface.	17
Cadiz		
Ethridge Plastics Inc.	Injection molded plastic automotive parts.	15
Stone Plastics, Inc.	Thermoformed plastic packaging.	131
Calvert City		
Arkema, Inc.	Forane refrigerants and blowing agents, Kynar PVDF polymer resin, VF2 monomer, and hydrochloric acid.	262
Estron Chemicals, Inc.	Additive and resin polymers for powder coating, UV/EB coating, liquid coating, and cosmetics.	48
North American Pipe Corporation	Manufacturer of PVC pipe.	18 (Announced)
Westlake PVC Corp. (Div. Westlake Vinyl, Inc.)	Commodity chemical (PVC).	66
Corbin		
P D F, Inc.	Custom thermoset, compression and injection molded plastics.	11
Corydon		
Tunnel Hill Plastics, Inc.	Plastic injection molded products.	39
Covington		
Silmar Resins (Div. Interplastic Corp.)	Polyester resins.	59
Danville		
AdMart International	Custom made signs.	90
Perfection Components	Plastics injection molding company.	43
Pliant Corporation	Polyethylene film and stretch wrap for commercial and medical use.	269
Dayton		
Hasco Tag Co.	Manufacturer of metal and plastic identification bands and tags for livestock, rabies, poultry, and equipment.	35
Dixon		
Pioneer Plastics, Inc.	Custom injection molding, plastic containers for the food industry, collectible critters, research/medical applications and storage.	65

Earlington		
J-Lok Corporation	Manufacture resin which is used by affiliate to make structural steel beams.	N/A
Elizabethtown		
AGI Polymatrix (MeadWestvaco Corporation)	Packing for music DVD cases.	53
Cytech Products, Inc.	Mold release agents; additives for thermal paper (i.e. labels/fax paper); anti-oxidant for ABS and PVC.	16
Dow Corning Corp.	Silicone sealants and adhesives.	230
E M B Corporation	Motor start relays; snap and slow make and break switches, molded plastic components.	53
Fischbach USA (Sub. Alfred Fischbach Products)	Plastic injection molding – plastic cartridges and accessories used to hold sealants and adhesives. Collapsible aluminum cartridges.	85
PBS Distributors	Water filter cores.	4
Summit Polymers, Inc.	Injection molded thermoplastics and auto interior components.	290
Erlanger		
Diversified Composites, Inc.	Fiberglass and carbon composites.	40
Parkway Products	Plastic, composite components, thixomold - auto parts, electronic parts.	120
Flemingsburg		
Riverside Plastics, Inc.	Plastic industrial and boat parts, agricultural materials and flower pots.	15
Florence		
Aristech Acrylics LLC	Impact acrylic, general purpose acrylic, solid surface, and acrylic ABS composite sheet.	319
Betts USA, Inc.	Plastic tubes and laminates.	150
Crane Composite LP	Fiberglass panels.	135
Firestone Building Products Co.	Insulation foam.	37
Graham Packaging	Plastic containers.	107
Graham Packaging Plastic Products	Blow molded plastic bottles.	105
Humphrey Line, Inc.	Screen printing and advertising specialties.	50
Johnson Controls, Inc. (Battery Div.)	Dry battery components, plastic battery containers and covers.	108
Military Packaging Inc.	Molded expanded polystyrene packaging materials.	3
Signode (Div. Illinois Tool Works, Inc.)	Plastic strapping.	76
Signode Plastic Recycling Alliance (Div. Illinois Tool Works, Inc.)	Plastic recycling.	45
Ticona Polymers, Inc. (Sub. Celanese AG)	Plastic materials, regional headquarters and R and D.	234
Frankfort		
Montaplast of North America	Plastic injection molding automotive wheel covers, center caps and intake manifolds.	927
RJ Industries LLC	Minority owned plastic injection molder for the auto industry. Plastic recycling, service parts production and staffing service.	65

Washington Penn Plastic Co., Inc. (Frankfort Plastic Division)	Compounder of thermoplastics.	66
Franklin		
Cumberland Molded Products	Injection molded plastics for automotive and medical industries.	10
Danafilms	Polyethylene films.	32
Franklin Precision Industry	Assembly of automotive throttle bodies and charcoal canisters, injection molding.	460
Nu-Tech Building Systems, Inc.	Produce low-cost high-strength rigid building modular wall panels.	206 - 557 (Announced)
Silgan Plastics Corp.	Plastic bottles.	130
Fulton		
Letica Corp.	Plastic shipping containers.	185
Georgetown		
ORBIS Material Handling, Inc.	Structural foam containers.	120
Greenville		
Plastic Products Co., Inc.	Plastic injection molding.	75
Harrodsburg		
Trim Masters, Inc.	Automotive plastic components.	109
Hebron		
Close the Loop, Inc.	Electronic waste recovery and manufacturing facility for the recycling and reprocessing of inkjet toner/printer cartridges from waste into new products such as E. Wood and original polymeric materials, such as pellets for production of new plastic products.	136 (Announced)
HiTech Polymers, Inc.	Compound custom resins and specialty thermoplastic resins.	18
Jackson Tool and Mold	Tool and die, CNC machining, plastic injection molding, rubber and plastic molds.	5
Henderson		
Atlantis Plastics, Inc.	Thermoplastics and plastic injection molding, finishing, fabricating and subcontract assembling.	174
Cresline Plastic Pipe Co., Inc. (Sub. Crescent Plastics, Inc.)	Plastic pipe and fittings.	120
Custom Resins, Inc.	Nylon and nylon products.	49
J-Ron, Inc.	Plastic injection molding.	25
Morris Tool and Plastics, Inc.	Building and repair of plastic injection molds, including plastic injection molding and processing parts. ISO 9001 certified.	20
Service Tool and Plastics	Injection molded plastics.	120
Vincent Industrial Plastics, Inc.	Custom plastic injection molds; plastic injection molding, decorating and finishing, product design and engineering.	250
Hopkinsville		
FP International	Polyethylene protective packaging products.	76
Melleck, LLC	Bumpers and fascias and headquarters.	2
Riken Elastomers Corporation	Elastomer compounds for automotive components.	12
Horse Cave		
Dart Container Corp.	Plastic food containers.	1,200

Geothermal Supply Company, Inc,	Fabricator and accessories manufacturer for the geothermal industry.	24
Independence		
Advanced Insulation Concepts, Inc.	Cooler and freezer insulating panels and doors.	20
Kuttawa		
Trans Industries Plastics LLC (Kuttawa Division)	Plastic injection molding, emblems and nameplates.	19
Lebanon		
Plastic Products Co., Inc.	Plastic injection molding.	90
TG Kentucky LLC	Rubber molded and plastic interior automobile parts.	900
Wilbert Plastic Services (A Wilbert Inc.)	Plastic products, injection and molding.	160
Leitchfield		
Inplast Industries USA LLC	Plastic injection molded components for the automotive and medical markets.	10
Lexington		
Blue Star Plastics, Inc.	Custom plastic injection molding and assembly.	105
Foam Design, Inc.	Foam products, cushion packaging, military packaging, automotive packaging, custom manufacturing.	108
Georgia Pacific Corp. (Dixie Products Div.)	Paper and plastic cups, plates and bowls.	300
Imperial Tool and Manufacturing Co., Inc.	Design and builder of molds, tools, dies, fixtures, gauges as well as product development.	13
Interplex Plastics, Inc. (Div. Interplex Industries)	Custom thermo-injection molding and molding tools, disposable dental/surgery products, fluid delivery systems, vacuum pressure pumps, and electronic connectors.	72
ITW Deltar – IPAC	Injection molded interiors and exterior assemblies for the international automotive market.	20
Molding Solutions	Custom injection molded rubber and plastic products.	30
Plasticon International, Inc.	Designs, produces and distributes high-quality concrete accessories, transportation signage, lumber, and office supplies - produced from recycled/recyclable plastics and headquarters.	24
Rogers Window, Inc.	Vinyl replacement windows, new construction windows, storm windows and screens.	35
Tema Isenmann, Inc.	Polyurethane screening panels.	50
Livermore		
Advanced Drainage Systems, Inc.	Corrugated plastic pipes and fittings.	70
Louisville		
Advantage Plastics and Engineering, Inc.	Plastic injection molded and plastic parts and molds.	21
American Dispersions, Inc.	Water based dispersions for rubber and plastics industries.	13
American Synthetic Rubber Company Michelin North America	Reprocessed and synthetic rubber and liquid polymers.	350

Arkema, Inc.	Acrylic polymers, compounding productions units.	70
BJK Industries, Inc.	Polyethylene films, bags, tubing.	72
Bohn Fiberglass Industries	Fiberglass panels, scrubbers, pipes, tanks and tank linings; custom non-corrosive products and equipment.	8
Burkhart Co., Inc.	Wooden and plastic laminated cabinets and interior shutters.	16
Caldwell Industries, Inc.	Plastic injection molding service.	106
Captive Plastics, Inc. (Berry Plastics Corporation)	Plastic bottles, caps and food packing closures.	103
Color Corporation of America (Div. Valspar Corp.)	Pigments and color coatings.	46
Covenant Industries, Inc.	Manufacture and sales of acrylic whirlpool bathtubs to distributors, plumbers, builders, remodelors and retail customers.	14
Deltech Manufacturing, Inc.	Manufacture and distribute their own line of fitness equipment, conveyor bearings and utility pole components along with contract machining, metal stamping and metal fabrication.	18
Glasrite	Fiberglass fabricating.	40
Green Bull, Inc.	Industrial aluminum, fiberglass and wooden ladders; climbing scaffolding.	100
H B Molding, Inc.	Plastic injection molding and molds.	35
Hexion Specialties Chemical	Electronic resins; foundry resins; automotive resins.	200
Hi-Tech Mold and Tool, Inc.	Custom plastic molds; plastic injection molding, tooling, decorating, thermoforming and foam fabricating.	80
Interpolymer Corp.	Water-based acrylic and ethylene copolymers for the coatings, cosmetics and other industries.	17
ISCO Industries (Corporate Office)	Headquarters, manufacturing and distribution of high-density polyethylene (HDPE) pipe related products.	71
Jones Plastic and Engineering, Inc.	Plastic injection molded products, appliance, automotive containers, cabinet parts and trays.	180
Kentucky Paper Box Co., Inc.	Rigid paper and transparent vinyl boxes and lids.	26
Lubrizol Corporation	CPVC resins and compounds, PVC emulsions.	135
Nuplex Resins	Industrial resins.	90
Oxy Vinyls LP	PVC resins.	76
Plastech Engineered Products	Plastic components.	370
Plastech Exterior Systems, Inc.	Manufactures, paints, and assembles injection molded plastic automotive parts.	270
Polyone Corp.	PVC compounds.	43
PPG Architectural Finishes, Inc.	Architectural paints and high performance coatings.	225
Preferred Plastic, Inc.	Custom plastic profile extrusions.	38
Prescotech Industries, Inc.	Fiberglass, paperboard, urethane and polystyrene fabricating, polyethylene, rubber foil converting.	36
Progress Plastics, Inc.	Plastic injection molding of thermo-plastic parts.	8
Promotional Packaging, Inc. (Div Packaging Unlimited, LLC)	Folding cartons; die cutting, label and film laminating shrink wrap packaging, offset printing, thermoforming and contract packaging.	119

PSC Fabricating Co. (1)	Manufacture and conversion of non-metallic products.	45
PSC Fabricating Co. (2)	Manufacture and conversion of non-metallic materials for use in acoustical, thermal, electrical and common gasket applications.	80
Rebco, Inc	Corrugated paper and interior packaging products.	27
RJF International, Inc.	Vinyl wall coverings.	69
Rohm and Haas Co.	Acrylic emulsions, PVC modifiers.	375
Scott Industries of Kentucky LLC	Custom injection molded plastic products.	54
Sealed Air Corporation	Manufactures packaging materials and equipment.	120 (Announced)
T B A LLC (1)	Distribute plastic pipe, plumbing and electrical products, cabinets, vanities and manufacturing of plastic pipe.	100
T B A LLC (2)	Plastic pipe extrusion.	125
United Graphics, Inc.	Letterpress and offset printing: business forms and labels, wearables, and advertising specialty products.	50
Universal Woods, Inc.	Performance engineered panels for flooring, store fixture and office furniture applications.	55
Vanaire	Air pollution equipment and custom plastic fabricating.	30
Zeon Chemicals LP (Div. of Zeon Corporation)	Synthetic rubber and corporate headquarters.	147
Ludlow		
Long Brothers Bag Company	Reconditioned industrial drums, plastic and paper bag distributors, steel totes, polydrums, boxes, polyethylene and bulk bags.	9
Madisonville		
International Automotive Components Group	Plastic automotive components and head liners.	393
Polyweave Packaging Co., Inc.	Plastic bags.	20
Rexam Closures and Containers	Molded plastic container closures.	98
Summitt Molding and Engineering	Injection molded thermoplastic automotive products.	34
Tri-Valley Millennium Plastics, Inc.	Plastic injection molding and blow molding.	50
UC Milk Co., LLC (Sub. National Dairy Holdings LLC)	Liquid milk, cultured buttermilk, fruit juices and plastic milk jugs.	154
Manchester		
Phillips Diversified Mfg., Inc.	Assembly.	94
Marion		
Par 4 Plastics, Inc.	Custom injection and molded plastic products.	145
McKee		
BAE System (Armor Holdings)	Military support items; helmet covers, packs, air safe vests.	315
Means		
Boneal, Inc.	Provides manufacturing solutions for the most challenging outsourcing needs. Machining, metal stamping, metal fabrication, plastics, powder coating, integration and logistics.	100

King Bag and Manufacturing Co.	Custom polypropylene bags for chemical and food industries, contract sewing, custom sewn covers.	25
Middlesboro		
Dura-Line Corporation	Gas pipe and fiber optic cable.	170
Mountain Tarp (A Wastequip Company)	Tarps and tarp systems.	119
Morehead		
Guardian Automotive (Div Guardian Industries Corp.)	Plastic exterior trim.	550
Morgantown		
Eleison Composites, LLC	Thermoformable composite plastic materials and substrates.	35
Morgantown Plastics Co. (Sub. Masco Corp.)	Custom plastic injection molding.	199
Pride Plastics of Morgantown, Inc.	Plastic injection molding and assembly for medical, automotive, industrial, appliance and government – MBE, 8A and OS-9000 certified. Also, containment work.	20
Mt. Sterling		
Carson Industries, LLC	Custom plastic molding.	44
Gateway Manufacturing, Inc.	Contract manufacturing: indoor wooden gates; contract packaging and assembly. Wooden shipping crates.	51
Grief Bros Corp	Plastic drums.	37
Hoffman Enclosures, Inc. (Sub. Pentair Inc.)	Sheet metal and fiberglass electrical and electronic enclosures.	316
Summit Polymers, Inc.	Injection molded thermoplastic automotive products.	270
Mount Vernon		
Plasticware LLC	Plastic food containers in a variety of sizes and shapes.	88
Murray		
L and P Plastics	Primary business is custom injection molding plastic products. Also, provide engineering services related to the injection molding industry.	16
Murray Mold and Die Co.	Plastic injection and die cast molds and metal stamping; wire EDM and precision CNC machining.	12
Pella Corporation (Murray Operations)	Windows and doors manufacturer.	1,000
Nicholasville		
Amcor Pet Packaging (Plastic Bottle Div.)	Plastic custom bottles, food and customer care products.	139
Atlantis Plastics, Inc.	Flexible packaging stretch film.	79
Jackson Plastics, Inc.	Plastic injection molding.	180
McKechnie Vehicle Components	Plastic injection molding – automotive components wheel trim, center caps, cladding.	290
Owensboro		
Dart Polymers, Inc. (Div. Dart Container Corp. of Kentucky)	Polystyrene pellets and EPS.	128
Omico Plastics, Inc.	Blow molded plastic parts.	185
Plastech	Plastic blow molded automotive parts.	200

Paducah		
Infiniti Plastic Technologies, Inc.	DVD and CD packaging products.	26
Syntechinics, Inc. (Sub. Trinity Industries, Inc.)	Fiberglass reinforced plastic barge covers, rail car covers, track collector pans, environmental covers (domes, arches, etc.).	45
Vinyl Window Technologies and AKS, Inc.	Headquarters. Manufacturer of vinyl windows and doors and corporate offices for manufacturing and building material distribution centers.	300
Paris		
Prime Finish LLC	Apply paint and coatings to plastic automotive components, consumer electronic components, medical devices, etc. Apply wood grain, carbon fiber, brushed aluminum and other plastics.	67
Park City		
Yahagi America Molding, Inc.	Injection molding and assembly automotive plastic parts.	35
Radcliff		
IPAK, Inc.	Manufacture and distribute foam, plastic, rubber for packaging and headquarters.	25
Standard Register Co.	Pressure sensitive labels.	118
Richmond		
Mikron Industries, Inc.	Vinyl extrusions.	200
Sherwin-Williams Automotive Finishes Corp.	Automotive coatings and finishes.	198
Richwood		
Kustom Blending, Inc.	Blended resins and solutions for graphic arts industry.	76
Russell Springs		
Bruss North America, Inc.	Automotive engine and transmission sealing systems.	155
Russellville		
Carpenter Co. (Russellville Division)	Carpet cushioning, polyester fiber, filter media and polyethylene foam for use in bedding, consumer products, home furnishings and medical furnishings.	406
Ventra Plastics (Sub. Flex-N-Gate)	Injection molded plastic automotive trim.	200
Sebree		
Scott Manufacturing, Inc. (Div. Scott Industries Inc.)	Fabricated fiberglass and insulation.	35
Shelbyville		
Alcan Packaging	Flexible packaging for food industry and pharmaceuticals.	237
Alcan Packaging Pharma Center, Inc.	Flexible packaging for pharmaceutical industry.	158
Buckhorn, Inc.	Injection molding.	82
Creative Packaging Company	Corrugated paper and protective polystyrene foam packaging.	30
Nifco, Inc.	Manufacture plastic injection molded fasteners for the automotive industry.	N/A
Omega Plastics of KY (Div. Sigma Extruding Corp.)	Plastic and high-density polyethylene bags; stretch wrap film, can liners.	73

Revere Packaging LLC	Aluminum foil containers and plastic dome food covers.	55
Shepherdsville		
D G Industries, Inc.	Custom metal, steel and plastic fabricating.	6
Sabert Corporation	Manufactures disposable plastic food packaging.	32
Somerset		
Crane/FIAT/Sanymetal (Sub. Crane Plumbing LLC)	Steel restroom partitions and plastic bathtubs, showers, shower floors and bathroom fixtures.	118
Fiberglass Concepts, Inc.	Fiberglass fabricating and houseboat parts.	19
Play Mart, Inc.	Wooden, plastic, metal outdoor and indoor playground equipment.	42
Somerset Recycling Service, Inc.	Cardboard and plastic recycling, waste reduction programs, recycling equipment, and colorant.	97
Whitis Cabinets, Inc.	Custom wooden and laminated cabinets and counter tops.	13
Springfield		
INOAC Automotive LLC	Automobile armrests and interior plastic parts, seat trim components, instrument panel components	325
North American Pipe Corporation	Industrial and construction plastic pipe.	66
Vanceburg		
Superior Fibers LLC	Fiberglass automobile door panels, cotton ironing board pads.	130
Walton		
Zotefoams Fabrications	Block foam; plastic foam.	30
West Paducah		
American Beverage Corp.	Fruit juice and plastic bottles.	110
Williamsburg		
Williamsburg Plastics (Div. Jones Plastic/Engineering)	Plastic injection molded products.	202
Williamstown		
Performance Pipe (Div. of Phillips Chemical Co., LP)	Industrial gas and water line polyethylene conduits and natural gas distribution pipes.	74
Winchester		
Infiltrator Systems, Inc.	Plastic injection molding.	270
Niles America Wintech, Inc. (Sub. Niles Co., Ltd.)	Plastic injection molded automotive parts and electrical switches.	410
Sonoco	Plastic caulking tubes.	95
Wurtland		
Pregis Corp.	Plastic materials and flexible sheeting.	120

Source: Kentucky Cabinet for Economic Development, Division of Research and Site Evaluation. October 2008 Data.

VI. AREAS OF GROWTH FOR THE INDUSTRY

According to the *Society of the Plastics Industry* (<http://www.plasticsindustry.org>), five areas of plastic manufacturing offer the opportunity for significant growth in the plastic industry and Kentucky is poised to take advantage of these opportunities.

Those industries are:

1. Aerospace;
2. Building and construction;
3. Electronics;
4. Plastics for packaging; and
5. Transportation.

Each one of these areas has the potential to grow significantly in the coming years. Kentucky is one of a handful of states that has the industrial know how and skilled employees to take advantage of this growth potential.

As shown below, Kentucky has a specialization, when compared to the nation as a whole, in the resin and synthetic rubber and plastic products manufacturing industries. A specialization is defined as an area or region with a location quotient (LQit) of one (1) or greater when compared to the rest of the nation. That means that region has a workforce with the necessary skills to allow expansion and growth in a particular industry. Kentucky has this necessary specialization in the plastics industry.

Table 6: Location Quotient (LQit) Formula for Kentucky's Plastics Industry - 2006

NAICS (1)	Industry Description (1)	Regional Industry Employment	Total Regional Employment	National Industry Employment	Total National Employment	Location Quotient (LQit) Formula
32521	Resin and synthetic rubber mfg	3,036	1,552,012	69,461	119,917,165	3.37
3261	Plastics product mfg	17,402	1,552,012	740,254	119,917,165	1.82

Source: Data derived from the United States Census Bureau, County Business Patterns 2006.

1. NAICS Codes 32521 and 3261 cover the same codes as listed on TABLE 4 above.
2. Note: All data is NAICS based.
3. Note: The Number of Employees estimate is based on survey data for the year ending December 31, 2006.

The Location Quotient (LQIT) for Kentucky as compared to the United States for the following industries (manufacturing and advanced manufacturing) is listed below. All data were taken from Table 6 shown above.

Location Quotient (LQit) Formula

$$LQit = (Mi/Mt) / (USi/USt)$$

Where:

Mi = industry employment for the region

Mt = total employment for the region

USi = industry employment for the nation

USt = total employment for the nation

An LQ of 1.0 for an industry indicates that there is an average concentration for a particular region. An LQ below 1.0 indicates that the industry is relatively under represented in that region. An LQ above 1.0 indicates a concentration for that industry in the region. AN LQ of 1.2 or greater illustrates that the industry has a specialization in that industry.

LQit for Kentucky Resin and Synthetic Rubber Manufacturing in 2006:

$$Mi = 3,036$$

$$Mt = 1,552,012$$

$$USi = 69,461$$

$$USt = 119,917,165$$

$$LQit (\text{Manufacturing}) = (3,036/1,552,012) \div (69,461/119,917,165)$$

$$LQit (\text{Manufacturing}) = (0.001956) \div (0.0005807)$$

$$LQit (\text{Manufacturing}) = \mathbf{3.37}$$

LQit for Kentucky Plastic Products Manufacturing in 2006:

$$Mi = 17,402$$

$$Mt = 1,552,012$$

$$USi = 740,254$$

$$USt = 119,917,165$$

$$LQit (\text{Adv. Manu.}) = (17,402/1,552,012) \div (740,254/119,917,165)$$

$$LQit (\text{Adv. Manu.}) = (0.01121) \div (0.00617)$$

$$LQit (\text{Adv. Manu.}) = \mathbf{1.82}$$

Kentucky exhibits a specialization in the area of plastic manufacturing when compared to the nation as a whole.