

Profile of Kentucky's Aluminum Industry



October 2009

Compiled and Edited by: Rick Hall
Kentucky Cabinet for Economic Development

Kentucky's Aluminum Industry

I.	Executive Summary	Page 3
II.	Aluminum Industry in Kentucky	Page 4
III.	Profile of Kentucky Aluminum Companies	Page 7
IV.	Economic Impact of the Primary Aluminum Industry	Page 9
V.	Business Cost Comparison	Page 9
VI.	The Aluminum - Automobile Relationship	Page 12
VII.	Location and Transportation System	Page 15
VIII.	Additional Aluminum Industry Resources	Page 17
IX.	Appendix	Page 19
	A) Kentucky's Aluminum Related Facilities	Page 20
	B) Labor Cost Comparison Report	Page 26
	C) New and Expanding Aluminum Related Industry Report	Page 27
	D) Endnotes	Page 38

I. Executive Summary

Kentucky is one of the top aluminum producing states. In fact, as measured by the value of shipments, Kentucky ranks as the number one state in the primary aluminum industry for 2005. A report sponsored by the Kentucky Science and Technology Corporation identified the aluminum industry as one of the four growing value chain clusters in the state.¹ Kentucky offers several advantages to firms in the aluminum industry, including: low utility cost, central location, quality workforce, ports along the Ohio and Mississippi rivers, and the automotive industry's significant presence.

Highlights of the Kentucky aluminum industry include:

- There are 120 aluminum-related facilities with 14,771 employees located in Kentucky.
- There are 9,244 primary aluminum industry employees located in Kentucky.
- Primary aluminum shipments totaled over \$4.3 billion in 2005.
- In 2007, the wages for primary metal industry employees in Kentucky was \$52,336/year and \$38,983 for the fabricated metal industry (See Labor Cost Table).
- The transportation and containers and packaging industries are the largest markets for Kentucky aluminum establishments.
- 29 of Kentucky's aluminum facilities are considered automobile-related suppliers.
- Gibbs Die Casting is one of the largest aluminum employers in Kentucky with 800 employees. It is located and headquartered in Henderson.
- Alcan Ingot (Henderson) and Century Aluminum of Kentucky (Hawesville) are two of only a hand full of active aluminum smelters in the U.S.
- Century Aluminum and Alcan Ingot combined have a production capacity representing around sixteen percent of active smelter production capacity in the U.S.
- The Owensboro Riverport is one of only two licensed warehouses approved by the New York Mercantile Exchange to serve as the delivery point of primary aluminum traded on its COMEX Division aluminum futures contract.

II. Aluminum Industry in Kentucky

Kentucky has a strong presence in both the primary and fabricated aluminum sectors. Primary aluminum establishments produce aluminum as their primary product. Fabricated aluminum businesses fabricate aluminum into a finished or secondary product.

Of the fourteen aluminum smelters (where aluminum is produced from alumina) in the United States, two of them are located in Kentucky. Century Aluminum² and Alcan³ Ingot combined have a production capacity of 440,000 metric tons, which represents over 16 percent of active smelter production capacity in the U.S.

As measured by value of shipments, Kentucky ranks as the number one state in the Primary aluminum industry. In 2005, the value of shipments for the primary aluminum industry in Kentucky totaled over \$4.3 billion.⁴

Table 1: Primary Aluminum Shipments (2005)

State	Value of Shipments
Kentucky	\$ 4,312,243,000
Indiana	\$ 3,529,093,000
Tennessee	\$ 3,271,237,000
New York	\$ 3,007,779,000
Ohio	\$ 2,507,250,000

Source: *Geographic Area Statistics 2005: Annual Survey of Manufactures*, U.S. Census Bureau.

Aluminum Companies

Kentucky is home to several industry-leading aluminum facilities, including:

- **Rio Tinto Alcan's** ingot plant located in Sebree is an aluminum smelter. In 2008, Alcan Ingot had 629 employees, and has the capacity to produce over 250,000 metric tons of aluminum per year.
- **Aleris International, Inc.**, operates a rolling mill in Lewisport that employs nearly 850 people. Coils, tubing and conduit are the primary products manufactured at this facility. The company's headquarters are located in the Louisville area.
- **Logan Aluminum** in Russellville is the state's largest aluminum employer in Kentucky with 1,030 employees (2008). Logan Aluminum manufactures rolled sheet for use in beverage cans.
- **Norsk Hydro's Hydro Aluminum Metal Products** located in Henderson is a revolutionary, remelt plant. Hydro recycles aluminum scrap into primary aluminum extrusion billets, and it has a production capacity of around 90,000 metric tons a year. Because of its advanced technology, Hydro uses just 5 percent of the energy that a smelter uses, which translates into significant cost savings.

Other large aluminum employers in Kentucky include: Century Aluminum of Kentucky, Gibbs Die Casting, Trace Die Cast, Inc., Reynolds Packaging Group, Cardinal Aluminum Company, and Aisin Automotive Casting.

Table 2: Major Aluminum Employers in Kentucky (2009)

Company	Employment
Logan Aluminum, Inc.	1,030
Aleris Rolled Products.	848
Gibbs Die Casting Corp.	800
Century Aluminum of Kentucky, LLC	771
Rio Tinto Alcan	629
Aisin Automotive Casting, LLC	582
Cardinal Aluminum Co.	525
Reynolds Packaging Group	475
Trace Die Cast, Inc.	420

Source: Kentucky Cabinet for Economic Development (July 29, 2009).

Kentucky Advantages

Aluminum companies are attracted to Kentucky for several reasons, including:

- **Ports along the Ohio and Mississippi Rivers:** Access to these river ports provides low cost transportation of bauxite (mineral of which aluminum is made) and aluminum products to national and global markets.
- **Great global position:** In a study released in April 2009, by Ball State University and titled “Manufacturing and Logistics 2009”, Kentucky was one of five states to receive the grade of an “A.” The report grades the states in six areas of the economy: 1) logistics health; 2) human capital; 3) the cost of benefits; 4) the global position of manufacturers, 5) state-level productivity and innovation; and 6) the state’s tax climate.
- **Green Incentives:** According to the July 2009 edition of *Business Facilities* magazine, Kentucky is in the top ten states for *Financial Incentives for Energy Efficiency*.
- **Low Cost of Electricity:** Due largely to its abundant coal reserves, in 2007, Kentucky ranked as the second lowest cost among its competitor states for the provision of industrial electrical power.⁵ For six out of the last eight years, Kentucky had the lowest industrial electrical power costs. Because the aluminum industry is so energy intensive, the cost of electricity is a significant cost factor. Kentucky’s energy costs ranks 4th in the nation, according to a study released by *The Small Business and Entrepreneurship Council* (April, 2009).
- **Central Location:** Kentucky is centrally located within the Eastern United States, where aluminum consumption is centered. Nearly two-thirds of the nation’s population, personal income, and manufacturing establishments are located within 600 miles of Kentucky’s borders.

- **Auto Industry:** Aluminum usage in automobiles has increased dramatically in recent years, and it is now only behind iron and steel in average vehicle content.⁶ In 2007, Kentucky ranked 3rd among the states in light vehicle production,⁷ and it is the location for nearly 450 motor vehicle-related suppliers. As more motor vehicle-related firms move to Kentucky and automobile manufacturers increase their use of aluminum, Kentucky becomes a natural home for aluminum-related companies.
- **Logistics:** Kentucky has access to 6 interstates and several US highways and state parkways. This gives the state a distinct advantage over other states. A 2006 corporate survey conducted by *Area Development Magazine* had highway accessibility as the number two factor listed by most corporations as the primary reason for selecting a site, chosen by 90.9% of respondents.⁸
- **Quality Workforce and Training:** Kentucky has an abundant labor base with *manufacturing experience*. *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 five consecutive years, 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.
- **Location Quotient Specialization:** Kentucky has a specialization in the primary metals and fabricated metals industries when compared to the rest of the nation. (See Table 3 and the Location Quotient calculations that follow.)

Table 3: Employment Totals

Employment Totals for Kentucky and the United States for the Primary Metal and Metal Fabrication Industries (2007)				
	US Industry Total	US All Industries Total	Kentucky Industry Total	Kentucky All Industries Total
Primary Metal	434,669	120,604,265	14,002	1,550,192
Fabricated Metal	1,565,816	120,604,265	25,702	1,550,192

Source: U.S. Census Bureau, 2007 County Business Pattern.

The Location Quotients (LQit) for Kentucky as compared to the United States for the following industries (primary metals manufacturing and fabricated metal products manufacturing) are listed below. All data were taken from Table 3 - shown above.

Location Quotient (LQit) Formula

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

Where:

Mi = industry employment for the region

Mt = total employment for the region

USi = industry employment for the nation

USSt = 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 Kentucky has a specialization in that industry.

LQit for Kentucky Primary Metals Manufacturing in 2006:

Mi = 14,002

Mt = 1,550,192

USi = 434,669

USSt = 120,604,265

LQit = **2.51**

LQit for Kentucky Fabricated Metals Products Manufacturing in 2006:

Mi = 25,702

Mt = 1,550,192

USi = 1,565,816

USSt = 120,604,265

LQit = **1.28**

Kentucky exhibits a specialization in both industries when compared to the nation as a whole.

III. Profile of Kentucky Aluminum Companies

The aluminum industry in Kentucky consists of companies that produce aluminum as their primary product and those that fabricate aluminum into other products, such as cans or automotive parts.

Kentucky aluminum-related companies represent over twenty different industry classifications, but they are primarily concentrated in seven industries. According to data supplied by the Kentucky Cabinet for Economic Development, as of July 29, 2009, Kentucky had 44 aluminum facilities (by the seven concentrated industries) employing 9,244 people. Table 4 shows the number of facilities and employees for the 6-digit NAICS industries with a significant presence in the Kentucky economy. Aluminum extruded product manufacturing (NAICS 331316) has the largest presence in Kentucky

with 13 establishments and nearly 3,058 employees. Primary production of aluminum (NAICS 331312) and aluminum die-castings foundries (NAICS 331521) also compose a large share of Kentucky's aluminum industry with five and eight facilities and 1,990 and 2,622 employees, respectively.

Kentucky aluminum facilities manufacture several products. Common products of Kentucky aluminum establishments include rolled sheet stock, tubing, die-castings, ingots, extrusions, billets, foil, die cast automotive parts, coils, containers, gutters, windows, and several products for automobiles. The transportation and containers and packaging industries are the biggest markets for aluminum companies in Kentucky.

Table 4: NAICS Composition of Kentucky Aluminum Facilities (July 29, 2009)

NAICS Code	Description	Facilities	Employees
331312	Primary Production of Aluminum	5	1,990
331314	Secondary Smelting and Refining of Nonferrous Metals	9	823
331315	Aluminum Sheet, Plate, and Foil Manufacturing	5	1,680
331316	Aluminum Extruded Product Manufacturing	13	3,058
331319	Other Aluminum Rolling and Drawing	5	526
331521	Aluminum Die-Castings Foundries	8	2,622
331524	Aluminum Foundries, except Die Casting	1	50

Note: Since many facilities are classified into more than one NAICS code and not all NAICS codes are mentioned, the sum of the 7 industries does not equal the total of all aluminum-related facilities.

Source: Kentucky Cabinet for Economic Development.

The Kentucky aluminum industry has a very international flavor. Of the 120 aluminum-related facilities in Kentucky, 23 are foreign-owned, and these establishments have nearly 5,200 employees. Companies from nine countries have an ownership stake in the aluminum facilities in Kentucky. Canada, the UK and Japan account for much of the foreign investment in the Kentucky aluminum industry having a combined total 16 facilities located within the state and employing over 3,700 people.

Table 5: Foreign-owned Aluminum Facilities in Kentucky (September 16, 2009)

Country	Facilities	Employment
Total	21	5,179
Japan	6	1,452
Canada	5	1,304
United Kingdom	5	982
India	2	1,145
Germany	1	106
Sweden	1	57
Norway	1	52
Austria	1	50
Mexico	1	31

Source: Kentucky Cabinet for Economic Development and Hoovers.com.

IV. Economic Impact of the Primary Aluminum Industry

The aluminum industry is one of Kentucky's key industries. From 1995 to 2005, the nation as a whole experienced the loss of millions of jobs in the manufacturing industry. These losses were due to outsourcing and improved technology. During that time period, Kentucky lost 24% of its manufacturing jobs, but only 10% of its jobs in the primary metals industry.⁹

**Table 6: Economic Impact on Kentucky by the Primary Metal Industry
Calendar Year: 2005**

Impacts	Direct	Indirect	Induced	Total
Total Value Added	\$684,893,000	\$405,786,000	\$390,539,000	\$1,481,218,000
Employment	8,140	5,040	7,180	20,660
Average Annual Wage & Salary (With Benefits)	\$66,917	\$38,494	\$24,699	\$44,698
Total Employee Compensation (W/Ben.)	\$544,704,000	\$194,101,000	\$184,729,000	\$923,533,000
Proprietor's Income	\$19,101,000	\$21,972,000	\$24,143,000	\$65,216,000
Other Property Income	\$86,239,000	\$152,737,000	\$140,924,000	\$379,901,000

Sources: Kentucky Cabinet for Economic Development; Bureau of Economic Analysis; U.S. Census Bureau. Estimated benefits are derived from data obtained from Salary.com, Inc. Assumption Wages and Salary = 67% of total compensation and Employee benefits = 33% of total compensation.

The aluminum industry continues to impact the economy and people of the Commonwealth in a very positive manner with 1,000's of good paying jobs. The average weekly compensation for the primary metal industry in Kentucky was \$1,006 for the year 2007. The average compensation for all industries in Kentucky for the same year was only \$650 per week.¹⁰

In calendar year 2005, the primary metals industry is estimated to have added almost \$685 million of value to the Kentucky economy. During that same year, employers in the primary metals industry are estimated to have paid over \$544 million in wages and benefits to employees and nearly \$96 million in state and local taxes to the Commonwealth of Kentucky.¹¹

V. Business Cost Comparison

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 12th lowest state for the overall cost of doing business in the United States. According to this index, the overall cost of doing business is ten percent (10%) below the U.S. average, and with respect to the cost of energy, Kentucky is significantly below the national average.¹²

Table 7: Cost of Doing Business for Competitor States (2007)

	<i>Overall Cost of Doing Business</i>		<i>Unit Labor Cost</i>		<i>Energy Cost</i>		<i>State & Local Taxes</i>	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
U.S.	100		100		100		100	
Alabama	93	17	98	26	88	26	81	4
Arkansas	87	6	92	11	75	13	101	35
Georgia	96	27	99	31	84	23	96	21
Illinois	99	32	102	42	95	31	99	30
Indiana	89	10	91	10	76	15	102	38
Kentucky	90	12	95	21	70	7	99	30
Michigan	102	39	103	43	96	32	100	32
Mississippi	93	17	89	5	93	30	93	18
Missouri	92	16	100	37	67	4	88	11
North Carolina	81	2	78	1	80	19	96	21
Ohio	96	27	95	21	90	28	107	42
South Carolina	93	17	97	24	79	18	87	10
Tennessee	90	12	93	12	84	23	78	2
Virginia	94	22	98	26	70	7	89	12
West Virginia	85	3	93	12	60	2	107	42

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*, 2007 Edition, Prepared by Economy.com, Inc., Updated June 2009; (Top Aluminum States Data Source: Aluminum Association; *Geographic Area Statistics 2006: Annual Survey of Manufactures*, U.S. Census Bureau.)

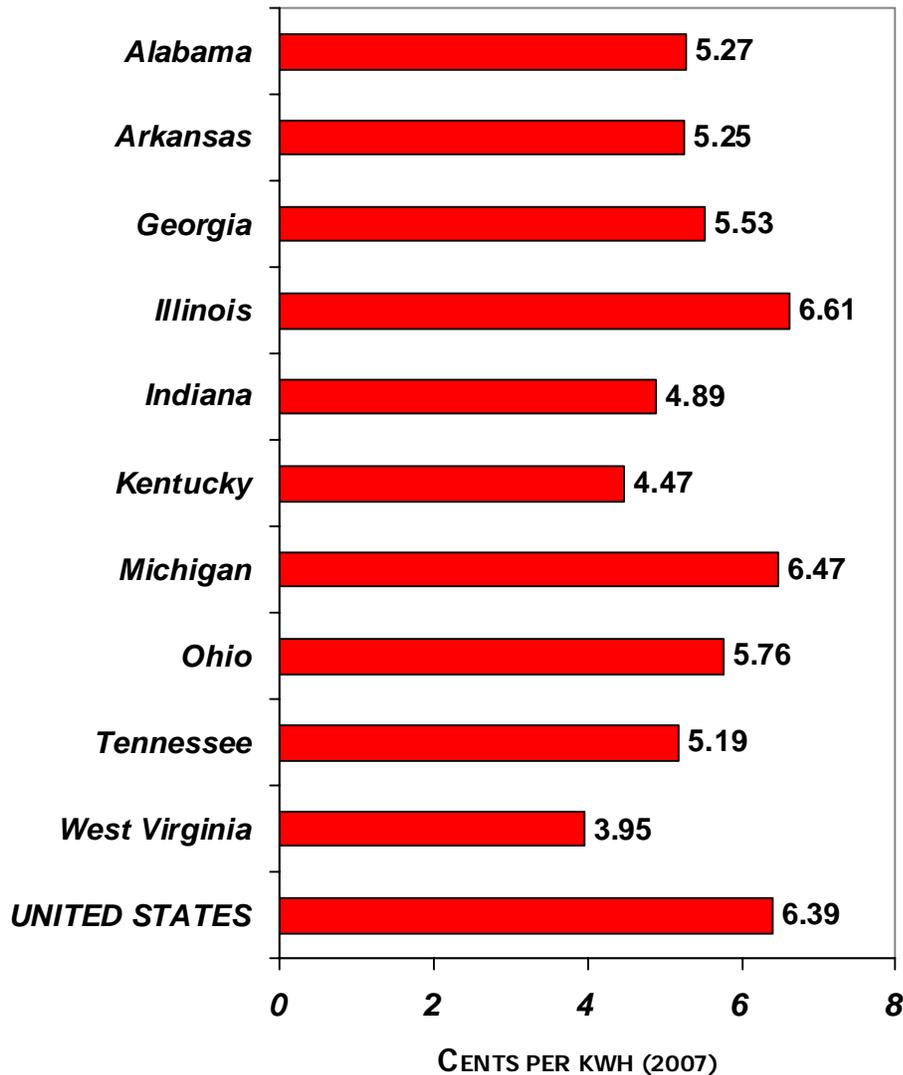
Two of the major costs for companies in the aluminum industry are energy and labor. Each represents about a third of the cost of smelting production in Kentucky.¹³ Labor is a significant cost factor for the aluminum industry as with all manufacturing industries. The following section details how Kentucky compares to the other top aluminum industry states with respect to these business costs.

Utility Cost

A globally, competitive business environment compels companies to examine the long-term costs of production and distribution, and to focus on regional differences in the net costs of doing business. Among the most significant factors, having a direct influence on bottom-line costs is the annual capital that must be committed to utility consumption, which is especially true for the aluminum industry.

Kentucky enjoys a tremendous competitive advantage in the provision of energy, natural gas, and water supply. The state's large coal reserves and their resulting proximity to coal-burning utility plants, its direct location on the interstate natural gas pipeline corridor, and an abundant natural water supply derived from an extensive network of rivers, streams, and lakes, keep Kentucky's utility costs among the very lowest in the nation. Kentucky's electric power cost, in the industrial sector, has ranked the lowest among its competitor states for six out of the last eight years.

INDUSTRIAL SECTOR COSTS
AVERAGE REVENUE PER KILOWATTHOUR
FOR COMPETITOR ALUMINUM PRODUCING STATES



Source: Energy Information Administration/Electric Power Annual 2007.

Approximately, 97 percent of Kentucky's electric power is produced by coal-fired power plants, with the balance generated by hydroelectric dams, fuel oil, and natural gas. Kentucky's large coal reserves ensure abundant supplies of electric power for the future. In turn, a large number of utility providers and oversight by the Kentucky Public Service Commission continue to ensure competitive rates for industrial users. These

power distributors are allowed to negotiate lower economic incentive rate contracts. Significant discount rates can be granted to expanding operations.

Labor Cost

The cost of labor for Kentucky employers compares very favorably to other top aluminum producing states. For 2007, the weekly wages for employees in all the fabricated metals were below the U.S. average. With respect to the primary metals and fabricated metals industry sectors, average weekly wages in Kentucky are also below the U.S. average. Among its competitor states, Kentucky had the 4th lowest average weekly wages with respect to primary metals and the 3rd lowest for fabricated metals. Kentucky's cost of living is low and thus allows its citizens to maintain an exceptional quality of life at a cost lower than the national average.

Table 8: Labor Cost Comparison Competitor Aluminum Producing States

Average Weekly Wages: 2007				
State	All Industry	Manufacturing	Primary Metals	Fabricated Metals
United States	\$ 802	\$ 905	\$ 1,003	\$ 828
Alabama	\$ 650	\$ 776	\$ 1,041	\$ 778
Arkansas	\$ 622	\$ 657	\$ 980	\$ 707
Georgia	\$ 749	\$ 765	\$ 775	\$ 750
Illinois	\$ 867	\$ 949	\$ 1,052	\$ 866
Indiana	\$ 688	\$ 873	\$ 1,099	\$ 753
Kentucky	\$ 650	\$ 832	\$ 1,006	\$ 750
Michigan	\$ 787	\$ 994	\$ 1,001	\$ 831
Ohio	\$ 728	\$ 902	\$ 1,114	\$ 829
Tennessee	\$ 700	\$ 801	\$ 900	\$ 758
West Virginia	\$ 598	\$ 838	\$ 1,012	\$ 720

Sources: Derived from data provided by the U.S. Census Bureau, County Business Pattern 2007.

VI. The Aluminum - Automobile Relationship

Automobile Industry in Kentucky

Kentucky has a strong presence in the automobile industry; it ranks 3rd highest among the 50 states in the production of total light vehicles. In 2007, 1,046,531 cars and light trucks were produced in Kentucky, which is about 10 percent of all cars and trucks manufactured in the United States.¹⁴ The gross state product for the Kentucky automotive industry was over \$5.6 billion in 2006.

There are four automobile assembly plants located in Kentucky employing nearly 13,700 people. Ford has two plants in Louisville that produce the Ford Explorer, Sport

Trac and Mercury Mountaineer in one plant and the Ford Super Duty F-Series in the other plant. GM has a plant in Bowling Green that manufactures the Corvette and the Cadillac XLR. Toyota has a plant in Georgetown that makes the Camry, Avalon, Solara the Prius and Camry hybrids. In addition to the 4 assembly plants, Toyota's North American Manufacturing Headquarters are located in Erlanger. There are nearly 450 auto-related suppliers located in Kentucky employing nearly 80,000 people.

Table 9: Total Light Vehicle Production in 2007

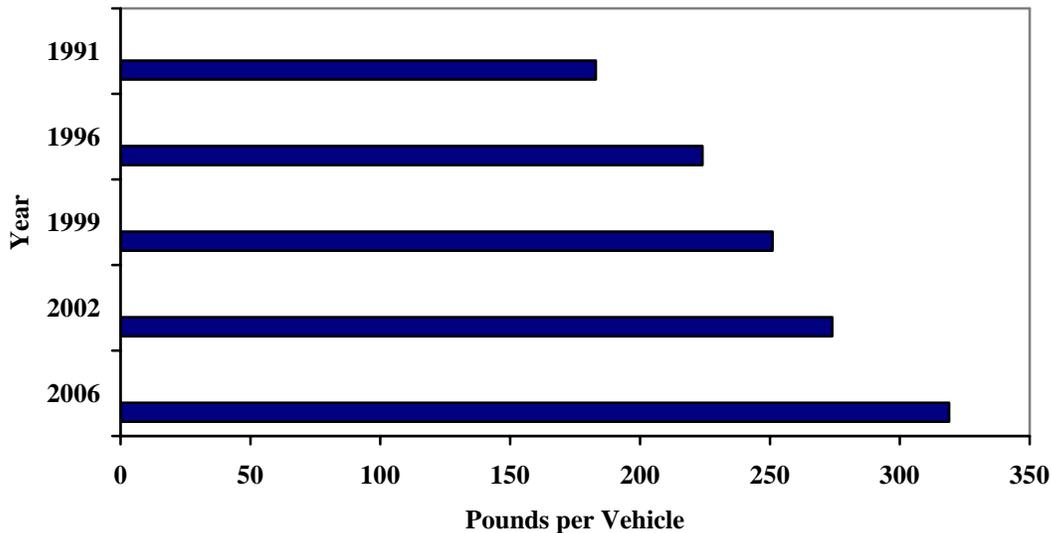
State	Total Light Vehicle Production
Michigan	2,333,271
Ohio	1,748,335
Kentucky	1,046,531
Missouri	906,270
Alabama	739,019
Indiana	692,899
Illinois	542,368
Tennessee	455,422
California	407,890
Texas	324,089

Source: *Automotive News*, <http://www.autonews.com/>.

Aluminum Usage in Automobiles

The transportation industry is the largest and fastest growing market for aluminum. Due to the new CAFÉ standards of 35.5/mpg for 2016, experts in the automotive industry state the aluminum content in automobile will continue to increase in order to meet those goals. In the last decade, aluminum usage has doubled in cars and tripled in SUVs. In 2006, its usage in vehicles was estimated at 319 pounds per unit for light vehicles made in North America (See chart below). It has surpassed plastic (2000) and iron (2005) and trails only steel as a percentage of vehicle content.¹⁵ Much of aluminum's growth in motor vehicles can be attributed to increases in aluminum engine blocks; transmission and drivelines; chassis, suspension and steering; wheels and spares; and heat exchangers.¹⁶

Aluminum Content in Automobiles



Over the last three years gasoline has gone from below two dollars (\$2.00) per gallon to a high of over four dollars (\$4.00) a gallon. This sudden spike in prices has turned the automobile industry and the world economy on its head. Economists are predicting the \$4.00 dollar to \$5.00 per gallon of gas may be here to stay once the recession has passed. As a result, heavier less fuel efficient vehicles such as pickup trucks and SUV's have seen their market share plummet. Hybrids and lighter vehicles have seen their sales increase dramatically. As a result, automakers are increasing the use of aluminum to solve design, engineering, and marketing challenges. Substituting aluminum for steel and iron allows auto manufacturers to decrease vehicle weight and improve fuel economy.

According to an article titled, *Loose Weight Fast: Auto Chiefs Look to Aluminum as Fuel Prices Spike, Climate Regulations Loom*, automakers are looking to aluminum to help them solve some of their weight problems. Ford wants to improve fuel economy on its vehicles by forty percent (40%) by 2020. During the years 2012 to 2020, Ford hopes to reduce vehicle weight from 2400 pounds to 1750 pounds - depending on the model. It plans on doing this without compromising safety. Aluminum will help it achieve its goal.¹⁷ One kilogram of aluminum can be used to replace two kilograms of iron or steel in most automotive applications.¹⁸

Aluminum also offers increased safety performance since it can be 2.5 times stronger than steel and can absorb twice as much crash energy. Increasing the use of aluminum in automobiles also offers environmental benefits. Substituting aluminum for iron and steel can significantly decrease greenhouse emissions. In 2006, 52% of the engine blocks built in North America were made of aluminum. This marks the first time that aluminum blocks surpassed the production iron engine blocks.¹⁹

As the demand for aluminum increases, companies are becoming more innovative as to how they process and forge aluminum and aluminum related products. Bodine Aluminum, a subsidiary of Toyota, has taken major steps to improve the engine on the Toyota Camry. The 2007 Camry engine now costs almost 50% less to make than it did only three years ago thanks to the use of new technology and redesigned molds. The redesigned process cut 55 pounds from the engine and increased its capacity by 3.5 liters and increased the car's acceleration by 40%.²⁰

One of the new innovations is a software program titled, *Virtual Aluminum Castings* (VAC). It allows the engineers to pinpoint potential stress points in engine blocks and cylinder heads while they are still in the developmental state. It helps to eliminate the need for costly and time-consuming trial-and-error testing. Computer models using VAC software helped to create the 3.5 liter V-6 engine head that is being used in the *Ford Edge* crossover. The software is now being used by Ford Motor Company to develop ten engine programs and is estimated to save the company over \$90 million. The program is now being used to design non-engine parts such as drive trains and metal body components.²¹

Auto-related Aluminum Facilities

The migration of the automobile industry southward and the increasing use of aluminum in motor vehicles have resulted in a number of aluminum-related facilities in Kentucky being auto suppliers. There are 29 aluminum-related facilities that are considered auto-related, and these establishments have nearly 5,750 employees. Aluminum wheels, aluminum heat exchanger tubing, aluminum ingots and castings, alloys, and aluminum die-cast automotive parts are some of the common products of Kentucky aluminum-related facilities sold to automotive assembly plants and automotive parts manufacturers.

VII. Location and Transportation System

Kentucky's location in the geographical center of the Eastern United States and its extensive highway, air, rail, and waterways transportation systems place the Commonwealth of Kentucky in a strong position to compete in the global marketplace. Over 60% of the nation's population, personal income, and manufacturing business establishments are located within 600 miles of Kentucky's borders. Kentucky's intermodal freight and passenger transportation systems have reached out to provide safe, efficient, and cost-effective access to all points of the globe.

Kentucky is located at the heart of both the aluminum and automobile producing regions in the United States. Over the last thirty plus years, manufacturers in the auto industry have steadily moved southward. As a result, a new auto corridor has been created that runs southward from Michigan to Alabama. Kentucky is located in the center of this corridor.²² According to a December 2004 report issued by the Bureau of Labor Statistics, located within a 500 mile radius of Central Kentucky are 4,829 motor vehicle-related manufacturers. They account for 62 percent of all the motor vehicle-related manufacturers in the United States. Included in these firms are 69 auto assembly plants.²³

Transportation

A freight distribution network that is efficient, safe, and technologically competitive makes Kentucky an ideal location for businesses needing just-in-time delivery and reliable access to markets and suppliers. Geographically located within a day or two of highway travel to nearly two-third's of the nation's buying power, Kentucky maintains a continuing six year highway construction and improvement plan that ensures necessary structured growth and regular maintenance.

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 2008 and compared the state highway systems from 1984 to 2006.²⁴

Kentucky's railroads – the CSX, Norfolk Southern, and Canadian National Railroads - ensure direct service from Kentucky to the major rail centers of the Great Lakes, Gulf of Mexico, and Atlantic Seaboard.

Kentucky is at the center of a port and waterways system that offers globally competitive, inexpensive transport for bulk materials and containerized freight. Kentucky has 1,100 miles of navigable waterway. With its access to the junction of the Upper and Lower Mississippi, Ohio, and Tennessee-Tombigbee navigation corridors, Kentucky has a waterway link to the Great Lakes and Canada, to Mexican and South American markets, and to the deep-draft ports of New Orleans and Mobile for overseas shipments.

The Owensboro Riverport is one of the leading ports nationally in the handling and storage of primary and secondary aluminum. It is the only site in the United States to handle aluminum for both the New York Mercantile Exchange and the London Metal Exchange.²⁵

Accessibility to major airport services, and safe, efficient air travel for business purposes are well addressed by Kentucky's statewide system of commercial and general aviation airports. Non-stop international flights depart from the Cincinnati/Northern Kentucky International Airport and from the Louisville International Airport.

Kentucky's airports can compete with any in the world. The Louisville International Airport ranked 9th largest airport in the world based on tonnage for cargo according to *Airports Council International* (July 2009). In North America, Louisville International was ranked 3rd. This is true despite the global recession taking place over the past year.

According to *Expansion Management* magazine, Louisville, KY-IN and Cincinnati-Middletown, OH-KY-IN received the *5-Star Logistics Metros* ranking reserved for the most logistics-friendly metros in the U.S. Evansville, IN-KY and Lexington-Fayette, KY received a 4-Star ranking. In the same study, the Louisville MSA ranked as having the second best *Transportation & Warehousing Workforce* (October 2006).

VIII. Additional Aluminum Industry Resources

Bluegrass State Skills Corporation

The Bluegrass State Skills Corporation (BSSC), www.thinkkentucky.com/bssc, was established in 1984 by the General Assembly as an independent, de jure corporation to stimulate economic development through programs of skills training. BSSC provides training grants for the training of workers of Kentucky's new and expanding companies and for skills and occupational upgrade training of workers of Kentucky's existing companies. BSSC acts as a broker by coordinating the resources of providers of skills training and employment services. BSSC also administers any special state appropriation for industry specific training. 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.²⁶

Center for Aluminum Technology (CAT)

The Center for Aluminum Technology (CAT) was established in 1999 within the College of Engineering at the University of Kentucky. CAT is a multidisciplinary center providing research and educational services to the aluminum industry. Aluminum industry leaders, local officials, University of Kentucky, and the Kentucky Cabinet for Economic Development collaborated to form the nation's only aluminum research laboratory supported by such a partnership.²⁷

Center for Manufacturing

The Center for Manufacturing (CRMS), located in Lexington at the University of Kentucky - <http://www.mfg.uky.edu> is renowned worldwide for its research, education, and technical assistance in manufacturing. CRMS provides engineering assistance to approximately 15,000 people in North America and Europe with its staff of professional engineers with extensive industrial experience. CRMS also conducts research on manufacturing systems and provides a wide range of educational opportunities for students and industrial professionals. CRMS has earned praise from organizations such as the Society of Manufacturing Engineers in recent years for its strong emphasis on manufacturing research and education.

Because of CRMS' capabilities, Toyota Motor Manufacturing selected CRMS to develop a working model of the Toyota production system. CRMS' efforts with Toyota resulted in the Lean Manufacturing program, which is an integrated research, education, and technology transfer effort. The CRMS Lean Manufacturing program has trained thousands of people from hundreds of companies throughout the world on the concepts of lean manufacturing. The Lean Manufacturing program includes courses for operating managers and first-line supervisors, customized in-plant training, the International Lean Manufacturing Conference, Lean Manufacturing Network (users group for groups practicing lean manufacturing principles), and a simulation that demonstrates the effect of lean manufacturing implementation.²⁸

Earth 911

Earth 911 is an organization with a mission to empower the public with community-specific resources to improve their quality of life. Its goal is to achieve a partnership between the public and private sectors to protect the environment in cost effective and

sustainable methods through the use of a user-friendly network. 14646 North Kierland Boulevard, Ste. 100, Scottsdale, AZ 85254, Phone: (480) 889-2650, Fax: (480) 889-2660. (www.earth911.org)

Secat, Inc.

Secat, www.secat.net, is a cooperative effort involving the aluminum industry, University of Kentucky, Kentucky Cabinet for Economic Development, and the U.S. Department of Energy. Secat is a for-profit business dedicated to facilitating research and development of innovative technology, processes, and products for the aluminum industry. Secat was formed in response to the megatrend of the disappearance of company-sponsored research and development facilities in the aluminum industry. Secat offers an alternative to companies who want to embark on research efforts but lack the necessary resources. Secat is located at the University of Kentucky Coldstream Research Campus, where it provides the space, hardware, and support services for individual companies and university researchers to work together on collaborative projects.

Secat performs proprietary and general research for individual companies, joint efforts by two or more companies, and industry-wide research projects. It also acts as a broker for aluminum companies identifying research needs, coordinating funding for projects, and allocating the funding to the lowest cost research provider. By working with universities and the Department of Energy, Secat is able to provide aluminum companies access to the intellectual resources at national and university laboratories. Because Secat recognizes the importance of attracting and training students for science and engineering occupations, it aids the education of multidisciplinary undergraduate, graduate, and postgraduate programs to develop future leadership in aluminum technology.²⁹

APPENDIX

Kentucky's Aluminum-Related Facilities (September 10, 2009)

Facility Name	Product Description	Employment
Albany		
Thoroughbred Houseboats	Custom manufacturer of aluminum houseboats.	52
Benton		
Alcan Composites USA, Inc.	Composite aluminum & plastic foam panels & sheets.	138
Berea		
Novelis Corporation	Ingots made from recycled aluminum cans.	115
Bowling Green		
Bowling Green Machine and Welding	Machine shop: general machining; drilling; boring; cutting; honing; grinding; arc and gas welding.	16
C G S Machine and Tool, Inc.*	Specialty machinery, tool and die, spare part and production runs.	40
Capitol Window & Door	Vinyl replacement windows; aluminum storm windows & doors; vinyl new construction & specialty windows.	12
Kobe Aluminum Automotive Products, LLC*	Aluminum forging plant.	200
Owl's Head Alloys, Inc.	Melt recycled aluminum products.	72
Trace Die Cast, Inc.*	Aluminum die castings and secondary specialty machining.	420
Cadiz		
Transcraft Corporation	Aluminum and steel dump trailers and bodies.	107
Campbellsville		
Campbellsville Industries, Inc.	Ornamental metal and aluminum fabricating; steeples, cupolas, crosses, cornices, awnings, columns, louvers, shutters, railings and balusters.	127
Dayton		
Metal Solutions Design and Fabrication LLC	Manufacture DOT certified metal containers for nuclear waste and other hazardous products. Reusable shipping containers; airport ground support equipment; ornamental and architectural metal work and laser.	26
Edgewood		
Summit Fire Apparatus, Inc.*	Aluminum and steel fabricating; welding and fire truck bodies.	22
Elizabethtown		
Freedom Metals, Inc.	Ferrous, nonferrous, industrial and precious scrap processing and recycling base metals.	15
Franklin		
Franklin Precision Industry, Inc.*	Assembly of automotive throttle bodies and charcoal canisters, injection molding.	496
Novitec Industries, Inc.	CNC machining facility, long-run production, volume die cast machining, 30 CNC machines, screw machines, production tube-cutting, wire edm, waterjets.	60
Garfield		
Campbell's Machine Shop, Inc.*	CNC mill & lathe work and screw machine products; pharmaceutical products; automotive products, wire EDM; and CNC plasma.	8
Georgetown		
Green Metals, Inc.	Process scrap metal, ferrous and non-ferrous, including transportation.	25
Glasgow		

J L French Automotives Castings Corp.*	Die cast aluminum automotive parts.	300
J L French Automotives Castings Corp.*	Aluminum die cast automotive parts-machining facility.	250
Greensburg		
Aluminum Fabricators, Inc.	Aluminum steeples, cupolas and architectural metal products.	20
Harrodsburg		
Armstrong Custom Powder Coating	Custom powder coating service.	2
Hawesville		
Century Aluminum of Kentucky LLC	Aluminum castings, sows and smelting.	771
Columbia Specialty Metals	Aluminum fabricator.	5
Southwire Co., Kentucky Plant	Aluminum wire strand, aluminum redraw & alloy rods.	317
Hebron		
Architectural Products, Inc.	Manufacture coping, gravel stop, gutter, downspout, fascia systems; excelling at custom and unusual shapes and finishes per the architect's specifications and drawings.	11
Ellison Surface Technologies	Aircraft engine part coating service.	80
Henderson		
Audubon Metals LLC*	Heavy-media separator and secondary specification aluminum alloy producer. Recycling process of automobile shredder residue into new aluminum castings.	160
Fields Machine and Fabrication	Machine shop: general machining; lathe and mill work; drilling; surface grinding; boring; cutting and honing; arc and gas welding.	5
Gibbs Die Casting Corp.*	Aluminum and magnesium die castings; headquarters.	800
Hydro Aluminum North America, Inc.	Aluminum extrusion billet and log.	52
Sonoco Can Div.	Aluminum and steel can ends.	120
Hickman		
Bermag Industries LLC	Prototype aluminum, zinc, and bronze castings; heat-treating; machining; and rapid prototyping.	15
Hodgenville		
Metaltek of KY, Inc.	Custom metal fabrication, including welding and CNC machining.	3
Hopkinsville		
T.RAD North America, Inc.*	Heat transfer products for off-highway and automotive industry. Products such as radiators, oil coolers and heater cores.	243
Independence		
Benda-Lutz Corporation*	Aluminum, zinc flake and goldbronze metallic pigments for paints, printing inks, plastics and powder coatings. Blitz Bonded metallic powder coatings.	50
Ivel		
R & S Godwin Truck Body Co., LLC*	Steel and aluminum fabricating: dump truck bodies and trailers.	100
Jenkins		
Taylor Metal Roofing & Siding, Inc.	Metal roofing, siding panels, related trim components, insulation, doors, sliding door track systems, lumber, roof trusses, and garage doors.	7
Lancaster		
Central Machinery Movers, Inc.	Steel fabricating.	7

Chick Packaging, Fabricating and Rigging	Plate, structural & sheet metal fabricating, custom machinery.	52
Lebanon		
Angell-Demmell North America, Inc.*	Metal nameplates and plaques & aluminum trim.	188
Montebello Packaging, Inc.	Collapsible aluminum tubes primarily for the pharmaceutical and cosmetic industries.	104
Lewisport		
Aleris Rolled Products	Coils, aluminum tubing and flexible conduits.	848
McElroy Metal, Inc.	Steel fabricating.	25
Lexington		
Accucromm USA, Inc., *	Carbide cutting tools.	62
Blue Grass Manufacturing, Inc.*	Contract manufacturer and fulfillment. CNC machining, metal fabrication, welding and electro mechanical assembly, stampings, fabricated wire, tube and pipe.	39
DSM, Inc.	Screw machine products.	43
Ideal Tool and Manufacturing, Co.	Machine shop: parts, components, tools and dies; CNC, general and EDM machining, drilling, boring, cutting, surface grinding, mill & lathe work.	20
Kentucky Ornamental Iron	Architectural metal, brass, aluminum and ornamental iron products, entrance gates, railings & spiral staircases.	8
Secat, Inc.	Research and development and testing facility – provides technical assistance and support to all segments of the aluminum industry.	14
London		
Aisin Automotive Casting LLC*	Aluminum engine components for the automotive market.	582
Jasper Iron & Metal Co., Inc.	Scrap metal and iron processing, aluminum smelting.	16
Louisville		
Alcoa Flexible Packaging	Laminate aluminum foil to paper; film and board.	127
Aleris Rolled Products	Business office.	53
A-Line Tool & Die, Inc.	Tool and die: plastic injection molds and aluminum stamping dies.	6
Allied Aluminum Products, Inc.	Aluminum storm windows and doors; sliding patio doors; porch enclosures and aluminum siding; replacement windows; screen porches; and entry doors.	12
Arco Aluminum, Inc.	Aluminum rolled sheet products for can manufacturing industry and corporate office.	33
Beneke Wire Co.*	Aluminum rod, bar and wire for cold heading.	47
Cardinal Aluminum Co.	Custom aluminum extrusions and moldings including anodizing, powder coating and fabricating.	335
Central Glass Co., Inc.	Glass and commercial glass glazing.	13
Dant Clayton Corp.	Grandstands/bleachers, spectator seating.	103
Dynamic Metal Kentucky LLC	Aluminum window sash and steel equipment for railroad cars.	44
Eckart America Corporation*	Metallic aluminum paint pigments, powders and pastes.	106
Fold-A-Way Corp.*	Aluminum and nylon fold-away bumper steps for vans and RV's.	3

Industrial Carbide Saw and Tool	Carbide tipped cutting tools; band saw, segmental and inserted saw blades, strapping, fittings & knives, stretch film, plastic banding & sharpening services.	20
Judd Brothers Machine*	Machine parts for auto industry, fabrication, sheet metal work manufacturing and precision turned products manufacturing.	6
Louisville Ladder, Inc.	Corporate headquarters and distribution center.	31
Nelson B Boone Co., Inc.	Aluminum and brass promotional products.	45
O'Neal Steel, Inc.	Steel service center. Complete line of ferrous and non-ferrous products: bars, structurals, plate sheet, pipe tubing, bar grating, expanded metal, extrusions and specialty steel.	146
Performance Powders LLC	Powder coatings.	12
Premium Foil Products Co.	Aluminum foil containers.	15
Professional Tool Grinding, Inc.	Machine and tool grinding shop, industrial tooling manufacturing/sharpened.	4
Progress Rail Services	Railroad freight car wheels and assembly.	35
Reynolds Foil, Inc.	Aluminum foil; household foil.	475
River City Machine & Tool, Inc.	Steel and aluminum fabricating, general machining, drilling, boring, cutting, honing, arc and gas welding, surface grinding, lathe and mill work.	12
River Metals Recycling LLC	Scrap metal recycling center.	180
Roller Die and Forming Co., Inc.	Custom roll formed metal shapes and tool and die.	70
Sapa HE Tubing *	Aluminum heat exchanger tubing.	57
Schuler Machine and Tool Co.	Full service steel fabrication facility with paint booth.	38
Stiglitz Corp.	Metal stampings; sheet metal fabricating and powder coating service.	80
Sypris Technologies, Inc.*	Custom forgings.	310
Utility Metals	Steel and aluminum fabricating: outdoor lighting products poles/mastarms/bracketes/etc.	46
Werner Co.	Industrial aluminum, fiberglass and climbing scaffolding.	100
Whelan Machine & Tool Co.	Machine shop: MIG and TIG welding, general and CNC machining, drilling, boring, cutting, honing, lathe and mill work.	28
Madisonville		
Electro Cycle, Inc.	Aluminum recycling.	40
Gemtron Corporation	Manufacturing of appliance components.	125
Manchester		
Denny Beckner and Co.	Scrap metal processing and recycling.	7
Middlesboro		
Solid Steel Solutions	After market parts for heavy equipment, welding and manufacturing.	16
Monticello		
LaCrosse Enclosures	Metal Fabrication.	45
Sunstar Houseboats, Inc.	Aluminum houseboats and yachts.	35
Morganfield		
C and C Roofing, Inc.	Metal roofing and flashing.	12
Morgantown		
Aleris International	Aluminum recycling.	175
Mt. Sterling		

Snap-Lok, Inc.	Aluminum wire ties, steel wire ties and hog rings.	6
Murray		
Briggs & Stratton Corp., Small Engine Division	Small engines for various applications.	585
Owensboro		
Dahl & Groezinger Inc.	Scrap iron, ferrous and nonferrous metal processing, export scrap.	20
Lloyd's Mechanical and Engineering, Inc.	Steel, aluminum and stainless steel fabricating, mechanical contractors.	14
Mid American Metals Company*	Metal recovery, automotive computers and mass air flow sensors.	5
Sun Windows, Inc.	Aluminum, vinyl, and wooden windows and sales.	90
Paducah		
JMS Russell Metal Corp.	Metal processing and distributing.	42
South-Side Machine Shop, Inc.	General machining; arc, gas, MIG and TIG welding; drilling; boring; cutting; honing; mill and lathe work.	28
Paris		
CMWA*	Automotive wheels – steel and aluminum.	475
Kentucky Smelting Technology (KST)	Aluminum smelting.	45
Pride		
Pride Industries, Inc.	Steel and aluminum standing seam roofing, preformed metal shingles.	28
Princeton		
Bodycote, Inc.	HIP (Hot Isostatic Pressing).	24
Prospect		
Pluckebaum Custom Boats, Inc.	Yachts, aluminum houseboats and motorboats.	4
Richmond		
B and H Tools Works, Inc.*	A full service tooling, machining, stamping, and fabrication job shop. Capabilities include CNC, EDM, and laser machining. Progressive and hand transfer stamping capabilities.	118
Robards		
K B Alloys, Inc.*	Aluminum base and metal alloys, aluminum based master alloys.	50
Rio Tinto Alcan	Aluminum extrusion billets and ingots.	629
Russellville		
Logan Aluminum, Inc.	Aluminum rolled sheet stock.	1,030
Sensus Precision Die Casting*	Aluminum die castings.	230
Shelbyville		
Alcan Global Pharmaceutical Packaging, Inc.	Flexible packaging for pharmaceutical industry.	158
Martinrea *	Automotive parts stamping.	262
Ohio Valley Aluminum Co., LLC	Aluminum billets.	111
Revere Packaging LLC	Aluminum foil containers and plastic dome food covers.	55
Ryerson, Inc.	Aluminum and stainless steel processing.	49
Somerset		
Sharpe Marine, Inc.	Aluminum and luxury houseboats.	85
Somerses Houseboats	Houseboat manufacturing, services, transportation.	138
South Union		
Precision Strip, Inc.*	Steel, aluminum and copper processing and slitting	123

	service.	
Summer Shade		
Form-All	Use advanced processing equipment to cut, bend, shape, and punch metal sheet stock.	N/A
Totz		
Cumberland Mine Service, Inc.	Metal fabricating; custom ceramic and abrasion resistant coating service; ceramic liners and construction and maintenance.	50
Woodburn		
Precision Strip, Inc.	Steel, aluminum and copper processing and slitting service.	123
TOTAL		
14,771	Employees	14,771
120	Facilities/Plants	120
29	Automotive Related Facilities	29

* Indicates that the facility produces or manufacturers automotive related products.

Introduction and Methodology: The Kentucky industry reports provide a list of facilities (with 10 or more employees) normally associated with Cabinet programs designed to locate and retain industry. Most information is taken directly from surveys completed by each facility or from phone or personal contact with the facility. Survey information is collected on an annual basis. Some facilities do not fully complete the survey instrument and in some cases incorrectly complete surveys. Facility name, address, location, product or service, employment and other information may change and often does change between annual survey attempts. While all attempts are made to capture changes between annual surveys from data provided by facilities, local economic development contacts, media announcements, and Cabinet programs designed to locate and retain industry, no guarantee can be made that changes will be discovered.

Disclaimer: The information provided herein by the Kentucky Cabinet for Economic Development is believed to be accurate but is not warranted and is for informational purposes only. While all attempts are made to insure the correctness and accuracy of information in this report and to make corrections and change errors brought to our attention, no representation or guarantee, express or implied, is made as to the accuracy of the information presented. Any information provided in this report is provided without assurances or warranties and should not be relied upon as fact. The Kentucky Cabinet for Economic Development assumes no liability for the accuracy of the information contained in this report.

Labor Cost Comparison (Annual Average Wage): 2007

States	Private Sector	Manufacturing	Primary Metal	Fabricated Metal
United States	\$ 41,680	\$ 47,036	\$ 52,158	\$ 43,045
Alabama	\$ 33,818	\$ 40,327	\$ 54,133	\$ 40,435
Alaska	\$ 46,605	\$ 45,588	N/A	\$ 54,373
Arizona	\$ 37,768	\$ 50,395	\$ 43,030	\$ 44,970
Arkansas	\$ 32,332	\$ 34,172	\$ 50,961	\$ 36,769
California	\$ 47,481	\$ 54,130	\$ 44,710	\$ 45,372
Colorado	\$ 42,295	\$ 52,412	\$ 57,824	\$ 42,911
Connecticut	\$ 52,922	\$ 57,491	\$ 52,236	\$ 50,951
Delaware	\$ 46,951	\$ 51,131	\$ 49,079	\$ 49,578
District of Columbia	\$ 63,369	\$ 47,590	N/A	N/A
Florida	\$ 36,029	\$ 42,260	\$ 45,636	\$ 37,305
Georgia	\$ 38,953	\$ 39,755	\$ 40,306	\$ 39,004
Hawaii	\$ 35,268	\$ 35,105	N/A	\$ 47,255
Idaho	\$ 32,216	\$ 43,537	\$ 35,233	\$ 39,072
Illinois	\$ 45,061	\$ 49,328	\$ 54,697	\$ 45,055
Indiana	\$ 35,800	\$ 45,392	\$ 57,171	\$ 39,140
Iowa	\$ 33,310	\$ 42,870	\$ 48,915	\$ 38,876
Kansas	\$ 35,945	\$ 44,706	\$ 39,460	\$ 36,664
Kentucky	\$ 33,801	\$ 43,266	\$ 52,336	\$ 38,983
Louisiana	\$ 35,956	\$ 51,617	\$ 49,899	\$ 47,147
Maine	\$ 33,842	\$ 42,049	N/A	\$ 43,072
Maryland	\$ 44,421	\$ 52,708	\$ 69,810	\$ 47,417
Massachusetts	\$ 51,151	\$ 58,776	\$ 48,742	\$ 50,750
Michigan	\$ 40,935	\$ 51,701	\$ 52,075	\$ 43,196
Minnesota	\$ 42,428	\$ 49,179	\$ 46,588	\$ 48,684
Mississippi	\$ 30,353	\$ 34,898	\$ 50,210	\$ 37,166
Missouri	\$ 37,141	\$ 44,057	\$ 40,258	\$ 40,878
Montana	\$ 30,091	\$ 39,355	N/A	\$ 35,060
Nebraska	\$ 34,214	\$ 37,809	\$ 59,070	\$ 39,803
Nevada	\$ 37,149	\$ 45,244	N/A	\$ 39,394
New Hampshire	\$ 39,760	\$ 54,277	\$ 43,869	\$ 46,845
New Jersey	\$ 50,295	\$ 56,107	\$ 54,327	\$ 45,513
New Mexico	\$ 34,086	\$ 42,935	N/A	\$ 36,096
New York	\$ 56,983	\$ 46,596	\$ 49,885	\$ 43,729
North Carolina	\$ 36,793	\$ 39,904	\$ 51,702	\$ 39,203
North Dakota	\$ 31,112	\$ 37,699	\$ 38,514	\$ 40,990
Ohio	\$ 37,848	\$ 46,926	\$ 57,912	\$ 43,083
Oklahoma	\$ 34,107	\$ 41,835	\$ 40,964	\$ 42,723
Oregon	\$ 37,923	\$ 46,292	\$ 56,722	\$ 41,569
Pennsylvania	\$ 40,041	\$ 45,664	\$ 56,012	\$ 42,841
Rhode Island	\$ 38,464	\$ 45,323	\$ 48,318	\$ 43,059
South Carolina	\$ 32,683	\$ 41,924	\$ 52,163	\$ 39,503
South Dakota	\$ 30,726	\$ 37,609	N/A	\$ 35,072
Tennessee	\$ 36,391	\$ 41,669	\$ 46,782	\$ 39,392
Texas	\$ 41,260	\$ 49,715	\$ 48,477	\$ 44,056
Utah	\$ 35,119	\$ 43,223	\$ 48,866	\$ 41,769
Vermont	\$ 32,906	\$ 44,534	N/A	\$ 40,068
Virginia	\$ 42,639	\$ 44,276	\$ 50,058	\$ 45,609
Washington	\$ 44,893	\$ 52,025	\$ 55,551	\$ 44,211
West Virginia	\$ 31,081	\$ 43,581	\$ 52,637	\$ 37,448
Wisconsin	\$ 37,293	\$ 45,038	\$ 45,396	\$ 42,890
Wyoming	\$ 37,855	\$ 50,020	\$ 45,396	\$ 49,700

Source: Derived from data provided by the United States Bureau of Economic Analysis, <http://www.bea.gov/>.

NOTE: Not all data was available.

**Kentucky New and Expanding Aluminum Industries Announced/Reported
Between January 1, 2000 and August 31, 2009
*Excluding locations and expansions known to have been cancelled.***

New Manufacturing Firms

County	City	Facility	Investment	Full-time		
				Beg.	Full Product	
Bell	Middlesboro	McCoy Manufacturing, Inc. (2005)	\$1,030,000	48	48 After-market parts for heavy equipment.	
Bourbon	Paris	Toyota Tsusho America, Inc. (2004)	\$9,215,000	35	35 Aluminum smelting.	
Hancock	Hawesville	Columbia Specialty Metals (2004)		6	6 Reforms high purity aluminum into aluminum shot for the chemical and metal industry.	
Henderson (2006)	Henderson	Baron Industries of Kentucky		8	24 Vacuum impregnation – sealing – auto parts.	
Hopkins	Madisonville	Gemtron Corporation (2000)	\$8,200,000	100	100 Glass fabrication and injection molding processes.	
Metcalfe	Summer Shade	Form-All (2006)	\$600,000	25	25 Use advanced processing equipment to cut, bend, shape, and punch metal sheet stock.	
Pulaski	Somerset	TDE Group, Inc., (2003)	\$2,050,000	58	58 Aluminum die cast manufacturer.	
Trigg	Cadiz	Benson International, Inc. (2005)	\$13,614,000	150	200 Aluminum flatbed trailers.	
Union	Morganfield	C & C Roofing, Inc., (2007)	\$502,250	15	15 Metal roofing and flashing.	
Warren	Bowling Green	Kobe Steel Ltd. (2003)	\$35,645,000	78	78 Aluminum forging plant.	
Wayne	Monticello	LaCrosse Enclosures, Inc., (2004)	\$1,150,000	100	100 Metal electrical enclosures and military style tent frames.	
Totals:				11	\$72,006,250	689

Expanding Manufacturing Firms

County	City	Facility	Capital	New	Product/Service
			Investment	Full-time Emp.	
Bell	Middlesboro	McCoy Welding & Machine (2001)		30	30 Welding & fabrication.
Boone	Hebron	Architectural Products, Inc. (2000)	\$120,000	3	3 Aluminum Extruded Products.
Boone	Hebron	Ellison Surface Technologies (2002)	\$3,885,000	30	30 Aircraft engine part coating service.
Boone	Independence	Benda-Lutz (2005)	\$3,500,000	15	15 Metal powder products for auto industry. Bonded metallic powder coatings for general industrial use.
Boone	Independence	Benda-Lutz (2002)		3	3 Metal powder products for auto industry.
Bourbon	Paris	CMC/CLA (2007)	\$16,000,000		Automotive wheels - steel and aluminum.
Bourbon	Paris	CMC/CLA (2003)	\$34,000,000	50	50 Automotive wheels.
Bourbon	Paris	CMC/CLA (2001)	\$6,499,212	5	5 Steel and aluminum wheels.
Bourbon	Paris	CMC/CLA (2001)	\$46,210,000	156	156 Automotive aluminum wheels.
Bourbon	Paris	CMC/CLA (2000)	\$20,000,000	25	25 Steel & aluminum wheels.
Bourbon	Paris	CMC/CLA (2000)	\$17,900,000	17	17 Automotive wheels.
Bourbon	Paris	CMWA (2008)	\$7,000,000		Automotive wheels – steel and aluminum.
Bourbon	Paris	Kentucky Smelting Technology (KST) (2008)	\$250,000		Aluminum smelting.
Breckinridge	Garfield	Campbells Machine Shop, Inc. (2006)	\$130,000		CNC mill & lathe work.
Breckinridge	Garfield	Campbells Machine Shop, Inc. (2002)	\$157,766		CNC mill & lathe work & screw machine products, pharmaceutical products, automotive products, etc.
Breckinridge	Garfield	Campbells Machine Shop, Inc. (2001)	\$61,499		CNC mill & lathe work & screw machine products, pharmaceutical products, automotive products, etc.
Caldwell	Princeton	AFCO Manufacturing (2001)	\$110,000		Race car suspension parts & radiators.
Caldwell	Princeton	Bodycote, Inc. (2008)	\$125,000		HIP (Hot Isostatic Pressing).

Caldwell	Princeton	Bodycote, Inc. (2007)	\$110,000		HIP (Hot Isostatic Pressing).
Caldwell	Princeton	Bodycote, Inc. (2005)	\$1,500,000	3	4 HIP (Hot Isostatic Pressing).
Calloway	Murray	Briggs & Stratton Corp (2004)	\$9,099,000	80	80 Lawn mower engines.
Calloway	Murray	Briggs & Stratton Corp (2003)	\$6,126,095	98	98 Lawn mower engines.
Calloway	Murray	Southern Sheet Metal, Inc. (2000)	\$20,000	4	4 Sheet Metal Work.
Campbell	Dayton	Metal Solutions Design & Fabrication LLC (2007)	\$750,000	7	7 Metal containers.
Campbell	Dayton	Metal Solutions Design & Fabrication LLC (2006)	\$950,840	22	22 Metal containers.
Carroll	Milton	Ameriform Manufacturing, Inc. (2002)	\$350,000		Aluminum & plastic fabricating.
Carroll	Milton	Ameriform Manufacturing, Inc. (2000)	\$1,200,000	30	30 Sheet metal work.
Christian	Hopkinsville	CoPar, Inc, (2004)		124	124 Industrial aluminum radiators and oil coolers.
Clinton	Albany	Thoroughbred Cruisers (2002)	\$150,000	15	15 Aluminum houseboats.
Clinton	Albany	Thoroughbred Houseboats (2006)	\$90,000	10	10 Aluminum houseboats.
Daviess	Owensboro	Dahl & Groezinger, Inc. (2005)		5	5 Scrap iron, ferrous & nonferrous metal processing, export scrap.
Daviess	Owensboro	Sun Windows, Inc. (2008)	\$3,250,000		Aluminum, vinyl and wooden window and sales.
Daviess	Owensboro	Sun Windows, Inc. (2007)	\$500,000		Aluminum, vinyl and wooden window and sales.
Daviess	Owensboro	Sun Windows, Inc. (2005)	\$1,000,000		Aluminum & wooden windows.
Daviess	Owensboro	Sun Windows, Inc. (2000)	\$240,000	10	10 Metal doors, sash, frames, molding & trim.
Daviess	Owensboro	West Irving Die Casting (2000)	\$2,186,000	75	75 Aluminum die castings.
Daviess	Owensboro	West Irving Die Casting Co. (2004)	\$500,000		Aluminum die castings and precision machining for appliance, automotive & tool Industries.
Daviess	Owensboro	West Irving Die Casting Co. (2001)	\$600,000		Aluminum die castings for appliance, automotive & tool industries.
Daviess	Owensboro	West Irving Die Casting of Kentucky LLC (2005)	\$11,400,000	45	45 Aluminum die castings and precision machining for appliance, automotive & tool

					Industries.
Fayette	Lexington	Accuromm U S A, Inc. (2006)	\$250,000		Carbide cutting tools.
Fayette	Lexington	Accuromm U S A, Inc. (2005)	\$500,000		Carbide cutting tools.
Fayette	Lexington	Accuromm U S A, Inc. (2001)	\$2,400,000	18	18 Automotive drill bits and cutting tools.
Fayette	Lexington	Accuromm U S A, Inc. Sub Fuji Seiko (2000)	\$150,000	2	4 Machine Tools: cutting.
Fayette	Lexington	Blue Grass Manufacturing, Inc. (2008)	\$250,000	15	15 Contract manufacturer and fulfillment.
Fayette	Lexington	Blue Grass Manufacturing, Inc. (2006)	\$100,000	5	5 Metal work, fabricated metal products.
Fayette	Lexington	Blue Grass Manufacturing, Inc. (2000)	\$300,000		Mic. metal work, fabricated metal products.
Fayette	Lexington	D S M, Inc. (2006)	\$347,387	2	2 Screw machine products.
Floyd	Ivel	R & S Godwin Truck Body Co., LLC (2006)	\$850,000		Steel & aluminum fabricating: dump truck bodies & trailers.
Floyd	Ivel	R & S Godwin Truck Body Co., LLC (2004)		66	66 Steel & aluminum fabricating: dump truck bodies & trailers.
Fulton	Hickman	Bermag Industries LLC (2006)	\$60,000	2	2 Prototye aluminum, zinc, and bronze castings; Heat-treating; machining; rapid prototyping.
Green	Greensburg	Aluminum Fabricators, Inc. (2001)	\$15,000		Aluminum steeples, cupolas & architectural metal products.
Hancock	Hawesville	Southwire Co. (2005)	\$2,307,200	15	15 Aluminum wire strand & rod wire.
Hancock	Hawesville	Southwire Co. (2003)	\$1,700,000	15	15 Aluminum wire strand & rod wire.
Hancock	Hawesville	Southwire Company Kentucky Plant (2007)	\$2,610,000	20	20 Aluminum rod and bare aluminum cable.
Hancock	Lewisport	McElroy Metal, Inc. (2002)	\$1,355,110	30	30 Steel & aluminum fabricating.
Harlan	Totz	Cumberland Mine Service, Inc. (2006)	\$4,000,000		Metal fabricating.
Henderson	Henderson	Audubon Metals LLC (2008)	\$750,000		Heavy media separator and secondary specification aluminum alloy producer.
Henderson	Henderson	Audubon Metals LLC (2004)	\$400,000		Heavy media separator and secondary specification aluminum alloy producer.

Henderson	Henderson	Audubon Metals LLC (2002)	\$250,000			Heavy-media separator and secondary specification aluminum alloy producer.
Henderson	Henderson	Audubon Metals LLC (2000)	\$600,000	30	30	Special industry machinery, NEC.
Henderson	Henderson	Gibbs Die Casting Corp. (2002)		100	100	Aluminum & magnesium die castings.
Henderson	Henderson	Gibbs Die Casting Corp. (2001)	\$10,000,000			Aluminum & magnesium die castings.
Henderson	Henderson	Sonoco (2005)	\$3,600,000			Aluminum & steel can ends.
Henderson	Henderson	Sonoco (2002)	\$8,800,000	25	25	Aluminum & steel can ends.
Henderson	Robards	Alcan Aluminum Corporation (2000)	\$5,879,000	80	80	Aluminum producer & fabricator.
Henderson	Robards	Alcan Aluminum Corporation (2000)	\$4,753,000	15	15	Extrusion scrap recycling.
Henderson	Robards	Alcan Ingot Sebree Aluminum Plt (2000)	\$5,000,000	100	100	Primary production of aluminum.
Henderson	Robards	Alcan Primary Metal Group (2005)	\$2,427,000			Aluminum extrusion billets & ingots.
Hopkins	Madisonville	Elcetro Cycle, Inc. (2008)	\$1,500,000			Aluminum recycling.
Hopkins	Madisonville	Gemtron Corporation (2007)	\$1,000,000	42	42	Manufacturing of appliance components.
Hopkins	Madisonville	Gemtron Corporation (2004)	\$500,000	46	46	Manufacturing of appliance components.
Hopkins	Madisonville	Gemtron Corporation (2002)	\$862,406	16	16	Manufacturing of appliance components.
Hopkins	Madisonville	Gemtron Corporation (2001)	\$4,500,000			Manufacturing of appliance components.
Jefferson	Louisville	Alcoa Flexible Packaging (2008)	\$750,000	4	4	Laminate aluminum foil to paper, film & board.
Jefferson	Louisville	Ben Chalmers Products, Inc. (2000)	\$20,000	2	2	Hardware, NEC.
Jefferson	Louisville	Beneke Wire Co. (2004)	\$273,000			Aluminum rod, bar & wire for cold heading.
Jefferson	Louisville	Beneke Wire Co. (2000)	\$7,000,000	5	10	Aluminum extruded products.
Jefferson	Louisville	Cardinal Aluminum Co. (2000)	\$850,000	20	20	Machinery & equipment, industrial & Commercial, NEC.
Jefferson	Louisville	Dant Clayton Corp. (2000)		30	30	Public building & related furniture.
Jefferson	Louisville	Eckart America LP (2002)	\$4,200,000	5	5	Metallic aluminum paint pigments, powders & granules.
Jefferson	Louisville	Industrial Carbide Saw & Tool (2008)	\$100,000			Carbide tipped cutting tools.

Jefferson	Louisville	Industrial Carbide Saw & Tool (2004)	\$100,000		Carbide tipped cutting tools, bandsaw, segmental & inserted saw blades.
Jefferson	Louisville	Industrial Carbide Saw & Tool (2003)	\$100,000		
Jefferson	Louisville	Industrial Carbide Saw & Tool (2002)	\$100,000		Cutting tools.
Jefferson	Louisville	Industrial Carbide Saw & Tool (2001)	\$170,000		Carbide tipped cutting tools; bandsaw, segmental & inserted saw blades, strappings, wire rope, etc.
Jefferson	Louisville	Industrial Carbide Saw & Tool (2000)	\$100,000	5	5 Machine Tools: cutting.
Jefferson	Louisville	Louisville Ladder Corp. Sub. Emerson Electric Co. (2000)	\$900,000		Fabricated metal products, NEC.
Jefferson	Louisville	Nelson J T Co., Inc. (2000)	\$2,000		Railroad equipment.
Jefferson	Louisville	Novelis Corporation (2007)	\$250,000		Converted aluminum foil.
Jefferson	Louisville	Performance Powders LLC (2000)	\$450,000	2	2 Primary metal products, NEC.
Jefferson	Louisville	Premium Foil Products Co. (2000)		2	2 Aluminum sheet, plate & foil.
Jefferson	Louisville	Reynolds Foil, Inc. (2008)	\$13,007,000	100	100 Aluminum foil, household foil.
Jefferson	Louisville	Roller Die & Forming Co., Inc. (2008)	\$500,000	8	8 Custom roll formed metal shapes, tool & die.
Jefferson	Louisville	Roller Die & Forming Co., Inc. (2005)	\$1,000,000	24	24 Custom roll formed metal shapes, tool & die.
Jefferson	Louisville	Roller Die & Forming Co., Inc. (2000)	\$75,000		Fabricated metal products, NEC.
Jefferson	Louisville	Schuler Machine and Tool Co. (2008)	\$1,800,000	15	15 Full service steel fabrication facility with paint booth.
Jefferson	Louisville	Schuler Machine and Tool Co. (2002)			Machine shop.
Jefferson	Louisville	Schuler Machine and Tool Co. (2000)	\$1,100,000	10	10 Machinery & equipment, Industrial & commercial, NEC.
Jefferson	Louisville	Syltone Industries, Inc. (2000)	\$1,200,000	32	32 Couplers and valves for dry materials.
Jefferson	Louisville	Truecast Precision Casting LLC (2000)	\$102,000		Nonferrous foundries: castings, NEC.

Jefferson	Louisville	Tube Turns Technologies, Inc. (2001)	\$20,000,000	150	150 Custom forgings.
Jefferson	Louisville	Utility Metals Div Fabricated Metals LLC (2000)	\$155,000	4	4 Out door lighting brackets & poles.
Jefferson	Louisville	Whelan Machine & Tool Co. (2008)	\$185,500		Machine shop.
Jefferson	Louisville	Whelan Machine & Tool Co. (2006)	\$120,000		Machine shop.
Jefferson	Louisville	Whelan Machine & Tool Co. (2003)	\$70,000	2	2
Jefferson	Louisville	Whelan Machine & Tool Co. (2000)	\$250,000	5	5 Machinery & equipment, industrial & Commercial, NEC.
LaRue	Hodgenville	Metaltek Manufacturing, Inc. (2002)	\$123,700	15	15 Machine shop & metal fabricating service.
LaRue	Hodgenville	Metaltek Manufacturing, Inc. (2000)	\$100,000	2	2 Machinery & equipment, industrial & Commercial, NEC.
LaRue	Hodgenville	Metaltek of KY, Inc. (2006)	\$315,000	3	3 Custom metal fabrication, including welding and CNC machining.
Laurel	London	Aisin Automotive Casting LLC (2006)	\$34,000,000	20	20 Automotive aluminum die cast components.
Laurel	London	Aisin Automotive Castings LLC (2002)	\$41,000,000	180	180 Transmissions, water and oil pumps, pistons for the automotive industry.
Logan	Russellville	Alcan Aluminum Corporation (2002)	\$37,575,000	50	50 Aluminum rolled sheet stock.
Logan	Russellville	Invensys Precision Die Casting Div. Invensys PLC (2000)	\$2,000,000		Aluminum die castings.
Logan	Russellville	Logan Aluminum, Inc. (2007)	\$30,000,000	40	40 Aluminum rolled sheet stock.
Logan	Russellville	Logan Aluminum, Inc., Div. Alcan Aluminum Corp. (2000)	\$21,000,000		Sheet metal work.
Madison	Berea	Alcan Sheet Products (2001)	\$7,000,000		Ingots & recycled aluminum cans.
Madison	Berea	Alcan Sheet Products Div. Alcan Aluminum Corp (2000)	\$13,600,000		Primary production of aluminum.
Madison	Richmond	B & H Tool Works, Inc. (2007)	\$250,000		Tool & die shop.

Madison	Richmond	B & H Tool Works, Inc. (2006)	\$500,000		Tool and die job shop.
Madison	Richmond	B & H Tool Works, Inc. (2005)	\$250,000		Progressive dies, jigs, design and build special machines/wire EDM work, lathe work and stamping.
Madison	Richmond	B & H Tool Works, Inc. (2003)	\$750,000	6	6 Specialty machinery, tool & die, EDM wire & CNC machining.
Madison	Richmond	B & H Tool Works, Inc. (2000)	\$111,630	5	5 Dies, tools, jigs, fixtures & industrial molds.
Marion	Lebanon	Angell Manufacturing Co. (2002)	\$1,000,000		Metal nameplates & plaques & aluminum trim.
Marion	Lebanon	Montebello Packaging, Inc. (2003)	\$4,637,950	43	43 Collapsible aluminum tubes.
Marion	Lebanon	Shuffett Machine & Welding, Inc. (2004)	\$130,000		Machine shop: drilling, boring, MIG & ARC welding.
Marion	Lebanon	Shuffett Machine & Welding, Inc. (2003)	\$70,500	2	2
Marion	Lebanon	Shuffett Machine & Welding, Inc. (2000)	\$100,000	3	3 Machinery & equipment, industrial & commercial, NEC.
Marshall	Benton	Alusuisse Composites, Inc. (2000)	\$926,000	3	3 Aluminum rolling & drawing, NEC.
McCracken	Paducah	JMS, Inc. (2003)	\$819,750	15	15 Metal processing, distributing.
McLean	Island	Meridian Aluminum Products, Inc. (2000)	\$418,000	5	5 Secondary smelting & refining of nonferrous metals.
Mercer	Harrodsburg	Armstrong Custom Powder Coating (2004)	\$200,000		Custom powder coating service.
Pike	Pikeville	Benson Manufacturing Div., International Ind. (2000)	\$10,000		Industrial trucks, tractors, trailers & stackers.
Pulaski	Somerset	Somerset Custom (2000)	\$180,000		Boat building & repairing.
Shelby	Shelbyville	Alcan Packaging Pharma Center, Inc. (2006)	\$27,501,725	100	100 Flexible packaging for pharmaceutical industry.
Shelby	Shelbyville	Alcan Packaging Pharma Center, Inc. (2005)	\$5,500,000	30	30 Flexible packaging for pharmaceutical industry.

Shelby	Shelbyville	Alcan Packaging Pharma Center, Inc. (2003)		16	16 Flexible packaging for pharmaceutical industry.
Shelby	Shelbyville	Revere Packaging (2000)	\$100,000		Aluminum foil containers.
Shelby	Shelbyville	Reynolds Aluminum Supply Co. Div Reynolds Metal (2000)	\$5,750,000	9	11 Metal foil & leaf.
Simpson	Franklin	Franklin Precision Industry (2005)	\$2,000,000	30	30 Assembly of automotive throttle bodies & charcoal canisters, injection molding.
Simpson	Franklin	Franklin Precision Industry (2002)	\$9,870,000	66	66 Assembly of automotive throttle bodies & charcoal canisters, injection molding.
Simpson	Franklin	Franklin Precision Industry (2001)		30	30 Aluminum die casting.
Simpson	Franklin	J D/Novitec Industries, Inc. (2003)	\$1,800,000	30	30 CNC machining.
Simpson	Franklin	Novitec Industries, Inc. (2005)	\$4,500,000	40	40 CNC machining.
Simpson	Franklin	Petroferm Contract Services, Inc. (2004)	\$520,000	5	5 Cleaning of metal stampings, metal finishing.
Simpson	Franklin	Petroferm Contract Services, Inc. (2004)	\$160,000		Cleaning of metal stampings, metal finishing.
Taylor	Campbellsville	Campbellsville Industries, Inc. (2004)	\$200,000	10	10 Cupolas, clock towers, church steeples, dormers, canopies, other architectural metal items.
Taylor	Campbellsville	Tec-Fab, Inc. (2000)	\$350,000	5	10 Steeples - towers for cemeteries, crosses, cornice, and cupolas.
Todd	Elkton	Elkton Die Casting Co. (2002)	\$2,000,000		Saw components; drill components; boat motor components; aluminum die casting, CNC machining.
Union	Pride	Pride Industries, Inc. (2006)	\$170,000	6	6 Steel & aluminum standing seam roofing, preformed metal shingles.
Union	Pride	Pride Industries, Inc. (2003)	\$262,329	20	20 Steel & aluminum standing seam roofing, preformed metal shingles.
Union	Pride	Pride Industries, Inc. (2000)	\$155,000		Standing seam metal roofing panels, gutter and downspouts.

Warren	Bowling Green	C G S Machine & Tool, Inc. (2008)	\$300,000			Specialty machinery, tool and die, spare parts, amd production runs.
Warren	Bowling Green	Capitol Window & Door (2002)	\$115,000	25	25	Vinyl replacement windows.
Warren	Bowling Green	Kobe Aluminum Automotive Products LLC (2007)	\$17,230,000	46	46	Aluminum forging plant.
Warren	Bowling Green	Kobe Steel Ltd (2005)	\$41,700,000	50	50	Aluminum forging plant.
Warren	Bowling Green	Owl's Head Alloys, Inc. (2005)	\$2,516,000	30	30	Melt recycled aluminum products.
Warren	Bowling Green	Trace Die Cast, Inc. (2004)	\$28,000,000	132	132	Aluminum die castings & secondary specialty machining.
Warren	Bowling Green	Trace Die Cast, Inc. (2003)	\$8,400,000	50	50	Aluminum die castings & secondary specialty machining.
Warren	Bowling Green	Trace Die Cast, Inc. (2001)	\$5,850,000	68	68	Aluminum die castings & secondary specialty machining.
Warren	Bowling Green	Trace Die Cast, Inc. (2000)	\$3,000,000			Aluminum die castings.

Totals: 160 \$683,933,599 3,136

New Supportive/Service Firms

County	City	Facility	Capital Investment	New Full-time Emp. Beg.	New Full-time Emp. Full	Product/Service
Simpson	Franklin	Petroferm (2001)		20	20	Cleaning of manufacturing equipment.
Totals:				1	20	

Expanding Supportive/Service Firms

County	City	Facility	Capital Investment	New Full-time Emp. Beg.	New Full-time Emp. Full	Product/Service
† Fayette	Lexington	Secat, Inc. (2006)	\$910,000	3	3	R&D and testing facility - aluminum industry technical assistance and support.
Jefferson	Louisville	Reynolds Metals Co. Laminating Plant (2000)	\$800,000			Business services.
Totals:			\$1,710,000	2	3	

Grand Totals: 174 \$757,649,849 3,848

† DCI-Funded Project

Kentucky New and Expanding Industries Report

Introduction and Methodology

The Kentucky new and expanding industries reports provide a measure of economic development based on qualified industrial activity in the Commonwealth announced or reported during the year. The reports are compiled from data provided by companies, local and industrial development contacts, newspaper announcements, and Cabinet programs designed to locate and retain industry.

The reports include estimated number of jobs, estimated investments, and products. Activities are reported in the year the announcements are made, even though full employment announced may not be realized until future years.

If investment or employment exceeds the original announced figures, the additional investment or jobs are included as an expansion in a later report. If actual employment figures are less than those reported, future employment expansion are not reported until after the projected figure has been reached. Efforts are made to eliminate duplications and overestimates of jobs and investments.

New industries are defined as companies locating in a Kentucky community for the first time, companies locating an additional facility in a community with new product line, or the reopening of a facility after an announced permanent shutdown of operations. Expansions are defined as companies increasing employment, capital investment or square footage to physical facilities. Replacement of machinery is included only if it results in greater productivity or product improvement. Expansions announced after January 1, 2003, are included only if they are expected to increase employment or involve at least \$100,000 in capital investment. Announced locations/expansions are removed from the report if it is known that the location will not or the expansion did not take place.

The supportive industry section includes new and expanding warehouses, packaging and distribution facilities, corporate headquarters, and services.

Disclaimer

The information provided herein by the Kentucky Cabinet for Economic Development is believed to be accurate but is not warranted and is for informational purposes only. While all attempts are made to insure the correctness and accuracy of information in this report and to make corrections and change errors brought to our attention, no representation or guarantee, express or implied, is made as to the accuracy of the information presented. Any information provided in this report is provided without assurances or warranties and should not be relied upon as fact. The Kentucky Cabinet for Economic Development assumes no liability for the accuracy of the information contained in this report.

Endnotes

- ¹ Feser, Edward J. and Jun Koo, *Kentucky Clusters: Industrial Interdependence and Economic Competitiveness*, Kentucky Science and Technology Corporation.
- ² Century Aluminum, Inc., *History*, <http://centuryca.com>.
- ³ Alcan, Inc., *Alcan Facts 2004*, page 17.
- ⁴ *Geographic Area Statistics 2005: Annual Survey of Manufactures*, U.S. Census Bureau.
- ⁵ Energy Information Administration, *Electric Power Annual 2007*.
- ⁶ *Turning Point Aluminum Passes Iron Among Automotive Materials in Use Worldwide; What Lies Ahead?* <http://www.aluminum.org>, Aluminum Association.
- ⁷ *Automotive News*, 2008 Market Data Book, <http://www.autonews.com>.
- ⁸ *Area Development Magazine*, *Corporate Survey Series*, December/January 2007, page 43.
- ⁹ *Geographic Area Statistics 1995, 2000 and 2005: Annual Survey of Manufactures*, U.S. Census Bureau.
- ¹⁰ Bureau of Economic Analysis, Regional Economic Accounts, *Compensation by Industry*, 2007, www.bea.gov.
- ¹¹ Kentucky Cabinet for Economic Development, (Estimated Tax Impact Data Found on the IMPLAN database).
- ¹² Regional Financial Associates, *North American Business Cost Review*, 2007 Edition, June 2009.
- ¹³ Burns, Adam, *Shiny Happy People*, The Lane Report, August 2001.
- ¹⁴ *Automotive News*.
- ¹⁵ *Turning Point Aluminum Passes Iron Among Automotive Materials in Use Worldwide; What Lies Ahead?* <http://www.aluminum.org>, Aluminum Association.
- ¹⁶ Ducker Worldwide, *Aluminum Content for Light Non-Commercial Vehicles Assembled in North America, Japan and the European Union in 2006*, Report sponsored by the Aluminum Association.
- ¹⁷ *Loose Weight Fast: Auto Chiefs Look to Aluminum as Fuel Prices Spike, Climate Regulations Loom*, <http://www.aluminum.org>, Aluminum Association.
- ¹⁸ *Did You Know: General Aluminum Facts*, <http://www.aluminum.org>, Aluminum Association.
- ¹⁹ Ducker Worldwide.
- ²⁰ Ibid.
- ²¹ Ibid.
- ²² Wrigley, Al. *Aluminum Revs Up for More Automotive Industry Gains*, American Metal Market, 2001.
- ²³ U.S. Census Bureau, *County Business Patterns*, December 2004.
- ²⁴ Hartgen, David T., Ph.D., P.E., and Karanam, Ravi K., *17th Annual Performance of State Highway Systems 1984-2006*, The Reason Foundation, July, 2008.
- ²⁵ The Owensboro Port Authority, *Port Information*, <http://www.owensbororiverport.com>.
- ²⁶ Bluegrass State Skills Corporation, Kentucky Cabinet for Economic Development, <http://www.thinkkentucky.com/bssc>.
- ²⁷ Center for Aluminum Technology, <http://www.engr.uky.edu/cat>.
- ²⁸ Center for Manufacturing Systems, College of Engineering, University of Kentucky, <http://www.mfg.uky.edu>.
- ²⁹ Secat, Inc., <http://www.secat.net>.