



Cabinet for Economic Development

Profile of Kentucky's Aluminum Industry



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Kentucky's Aluminum Industry



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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 2001. A recent report sponsored by the Kentucky Science and Technology Corporation identified the aluminum industry as 1 of the 4 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:

- The combined economic impact (direct, indirect, and induced) of the Primary Aluminum Industry generated an estimated \$1.48 billion in value added to the state's economy.
- There are 112 aluminum-related facilities with 15,329 employees located in Kentucky.
- There are 8,140 primary aluminum industry employees located in Kentucky.
- Primary Aluminum shipments totaled over \$2.5 billion in 2001.
- The average salary for primary aluminum industry employees in Kentucky is \$44,840/year.
- The transportation and containers & packaging industries are the largest markets for Kentucky aluminum establishments.
- 30 of Kentucky's aluminum facilities are considered automobile-related suppliers.
- Logan Aluminum (Russellville) is the largest aluminum employer in Kentucky with 950 employees.
- Logan Aluminum produces around one-third of the aluminum sheet for all beverage cans manufactured in the U.S., which totals about 1.75 billion pounds annually.
- Alcan Ingot (Henderson) and Century Aluminum of Kentucky (Hawesville) are 2 of only 14 active aluminum smelters in the U.S.
- Century Aluminum and Alcan Ingot combined have a production capacity representing over 16 percent of active smelter production capacity in the U.S.
- The Owensboro Riverport is 1 of only 2 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

In 2004, the aluminum industry in Kentucky included 112 manufacturing establishments with 15,329 employees, based on surveys conducted by the Kentucky Cabinet for Economic Development. 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 14 aluminum smelters (where aluminum is produced from alumina) in the United States, 2 of them are located in Kentucky. Nearly, 33% of the U.S. smelter capacity is located in the Pacific Northwest. Most of those have shut down operations due to high electricity costs. As a result, smelters east of the Mississippi River accounted for more than 75% of production in 2003.² Century Aluminum³ and Alcan⁴ 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 2001, the value of shipments for the Primary Aluminum industry in Kentucky totaled over \$2.5 billion.⁵

Table 1: Primary Aluminum Shipments (2001)

State	Value of Shipments
Kentucky	\$ 2,545,217,000
Indiana	\$ 2,425,033,000
Tennessee	\$ 2,420,899,000
New York	\$ 2,079,611,000
Ohio	\$ 2,068,957,000

Source: *Geographic Area Statistics 2001: Annual Survey of Manufactures*, U.S. Census Bureau.

Aluminum Companies

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

- **Logan Aluminum** located in Russellville is the largest aluminum employer in Kentucky with 950 employees (2004). Logan Aluminum manufactures rolled sheet for use in beverage cans. Logan Aluminum produces around one-third of the aluminum sheet for all beverage cans made in the U.S., and it ships out 35,000 truckloads annually.
- **Alcan Ingot** located in Sebree is 1 of 2 aluminum smelters in Kentucky. Alcoa, in Hawesville, is the other. In 2004, Alcan Ingot had 680 employees, and it produced over 196,000 metric tons of aluminum in 2003.
- **Aleris International, Inc., formerly Commonwealth Aluminum**, operates a rolling mill in Lewisport that employs over 800 people. Coils, tubing and conduit are the primary products manufactured at this facility. Commonwealth Aluminum's headquarters are located in the Louisville area.
- **Norsk Hydro's Hydro Aluminum Metal Products** located in Henderson is a revolutionary, new remelt plant. The plant opened in the fall of 2000. 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, Reynolds Metal Company, Alcoa Automotive Castings, Cardinal Aluminum Company, and Aisin Automotive Casting.

Table 2: Major Aluminum Employers in Kentucky (2004)

Company	Employment
Logan Aluminum, Inc	950
ThyssenKrupp Budd	935
Aleris International, Inc	806
Century Aluminum of Kentucky, LLC	780
Alcan Primary Metal Group	680
Gibbs Die Casting Corp	643
Aisin Automotive Casting, LLC	560
Cardinal Aluminum Co.	500
Reynolds Metals Co.	500

Source: Kentucky Cabinet for Economic Development

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.
- **Low Cost of Electricity:** Due largely to its abundant coal reserves, in 2003, Kentucky ranked as the lowest cost state for the provision of industrial electrical power.⁶ Because the aluminum industry is so energy intensive, the cost of electricity is a significant cost factor.
- **Central Location:** Kentucky is centrally located within the Eastern United States, where aluminum consumption is centered. 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.⁷ In 2003, Kentucky ranked 4th among the states in light vehicle production,⁸ and it is the location for more than 460 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.
- **Quality Workforce:** Kentucky has an abundant labor base with manufacturing experience, and a workforce that is above the national productivity average.

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 20 different industry classifications, but they are primarily concentrated in 7 industries. Table 3 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 3,300 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 6 and 10 facilities and 2,261 and 3,034 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 & Packaging industries are the biggest markets for aluminum companies in Kentucky. Companies in the Primary Aluminum sector sell over 50 percent of its products to these industries.

Table 3: NAICS Composition of Kentucky Aluminum Facilities

NAICS Code	Description	Facilities	Employees
331312	Primary Production of Aluminum	6	2,261
331314	Secondary Smelting and Refining of Nonferrous Metals	7	507
331315	Aluminum Sheet, Plate, and Foil Manufacturing	4	1,131
331316	Aluminum Extruded Product Manufacturing	13	3,299
331319	Other Aluminum Rolling and Drawing	3	431
331521	Aluminum Die-Castings Foundries	10	3,034
331524	Aluminum Foundries, except Die Casting	3	302

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 112 aluminum-related facilities in Kentucky, 19 are foreign-owned, and these establishments have nearly 5,300 employees. Companies from 10 countries have an ownership stake in the aluminum facilities in Kentucky. Canada and Japan account for much of the foreign investment in the Kentucky aluminum industry with the number of facilities totaling 4 and 5, respectively and over 3,600 employees from each country.

Table 4: Foreign-owned Aluminum Facilities in Kentucky (2004)

Country	Facilities	Employment
Total	19	5,129
Canada	4	1,833
Japan	5	1,818
Germany	3	1,144
Netherlands	1	180
France	1	80
Luxembourg	1	80
Norway	1	55
Austria	1	38
United Kingdom	1	30
Mexico	1	30

Note: The sum of all the countries is greater than the total because in two cases (Gemtron Corp., & Special Metals Corp.) companies from different countries have investment in the same facility. Source: Kentucky Cabinet for Economic Development

IV. Economic Impact of the Primary Aluminum Industry

Due to its significant presence and recent growth, the aluminum industry is one of Kentucky's key industries. In Kentucky, employment in the Primary Aluminum industry grew by over 30 percent from 1995 to 2000 compared to growth rates of just under 11 percent for all industries and negative 2 percent for all manufacturing industries.⁹

**Table 5: Economic Impact on Kentucky by the Primary Aluminum Industry
Fiscal Year: October 2003 to September 2004**

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; Kentucky Education Cabinet, Office of Employment and Training. 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 wage for the Primary Aluminum industry in Kentucky is \$862 for the

year October 2003 –September 2004. The average wage for all industries in Kentucky for the year 2003 was only \$613 per week.

In fiscal year October 2003 – September 2004, the Primary Aluminum industry is estimated to have added almost \$685 million of value to the Kentucky economy. During fiscal year October 2003 – September 2004, employers in the Primary Aluminum 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.¹⁰

V. Business Cost Comparison

Kentucky has the lowest overall cost of doing business in the Eastern 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 4th lowest state for the overall cost of doing business, and it ranks as the lowest among the top aluminum states. According to this index, the overall cost of doing business is 15 percent below the U.S. average, and with respect to the cost of energy Kentucky is significantly below the national average.¹¹

Table 6: Cost of Doing Business for Top Aluminum States (2003)

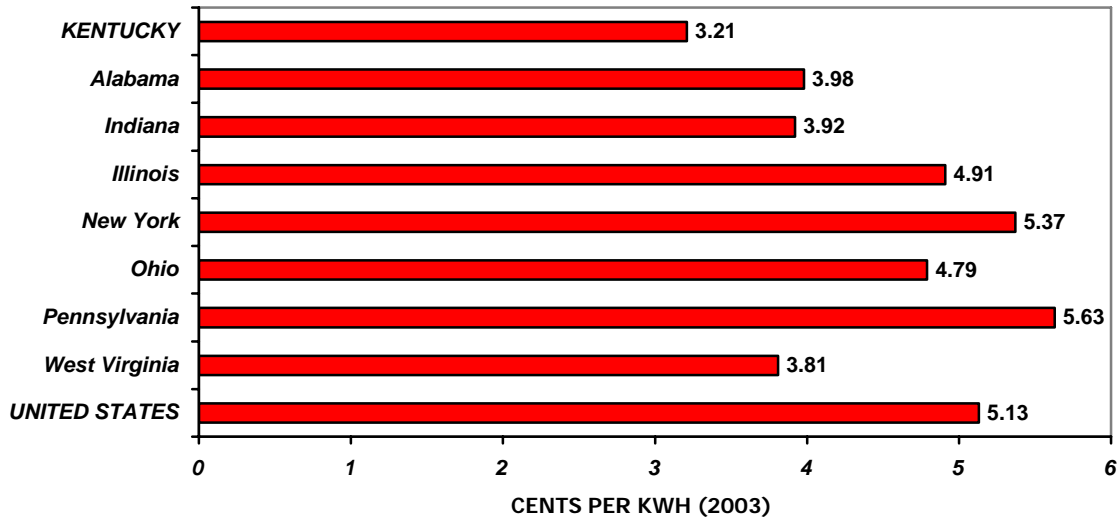
	Overall Cost of Doing Business		Unit Labor Cost		Energy Cost		State & Local Taxes	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
U.S.	100.0		100.0		100.0		100.0	
Alabama	91.5	8	94.9	12	83	17	78.5	1
Illinois	102.3	30	104	30	98.1	36	96.1	23
Indiana	97.8	22	102.3	27	76.8	10	95.7	21
Kentucky	85	4	87	4	66.5	1	97.6	26
New York	106	38	95.9	13	143	46	126.6	51
Ohio	101.7	28	102.3	28	94.7	32	107.3	41
Oregon	95.6	16	96.9	16	83.9	20	104	39
Pennsylvania	104.3	36	104.4	33	109.5	40	95.8	30
Tennessee	94.2	14	98.4	20	83.2	18	78.9	2
Texas	97.6	21	98.1	19	100.9	38	89.4	10
Washington	103.9	35	108.1	39	79.9	13	107.8	43
West Virginia	103.3	34	108.6	40	73.5	5	108.3	45

Note: A ranking of one represents the lowest cost.

Source: Derived from data provided by *North American Business Cost Review*, 11th Edition, Prepared by Economy.com, Inc., Updated May, 2005; (Top Aluminum States Data Source: Aluminum Association; *Geographic Area Statistics 2001: 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.¹² Labor is

INDUSTRIAL SECTOR COSTS
AVERAGE REVENUE PER KILOWATTHOUR
LEADING ALUMINUM PRODUCING STATES



Source: Energy Information Administration/Electric Power Annual 2003

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 in the nation for four consecutive years.

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 foreseeable 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 2003, the weekly wages for employees in all private industries and manufacturing in Kentucky are below the U.S. average and 2nd lowest among the top aluminum states. With respect to the Primary Metals and Fabricated Metals industry sectors, average weekly wages in Kentucky are also below the U.S. average and rank 2nd in both industries among the top aluminum producing states.

Table 7: Labor Cost Comparison among Top Aluminum Producing States

	<i>Average Weekly Wages: 2003</i>			
State	Private Industry	Manufacturing	Primary Metals	Fabricated Metals
United States	\$697	\$1,141	\$1,160	\$938
Alabama	596	940	1,137	838
Illinois	772	1,152	1,134	1,019
Indiana	660	1,200	1,365	873
Kentucky	613	1,097	1,120	865
New York	886	1,185	1,217	971
Ohio	672	1,185	1,297	991
Pennsylvania	698	1,089	1,188	952
Tennessee	620	1,018	1,143	929
Texas	674	1,195	1,073	908
Washington	732	1,245	1,239	887

Sources: Derived from data provided by the U.S. Bureau of Economic Analysis, <http://www.bea.doc.gov/>

VI. The Aluminum - Automobile Relationship

Automobile Industry in Kentucky

Kentucky has a strong presence in the automobile industry. Kentucky ranks 4th among the 50 states in total light vehicle production. In 2003, 1,164,967 cars and light trucks were produced in Kentucky, which is about 10 percent of all cars and trucks manufactured in the United States.¹³ The gross state product for the Kentucky automotive industry was over \$10.6 billion in 2002.

There are four automobile assembly plants located in Kentucky that employ over 18,000 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 trucks and Excursion SUV models in the other plant. GM has a plant in Bowling Green that manufactures the Corvette and the Cadillac XLR, and Toyota has a plant in Georgetown that makes the Camry, Avalon and Solara. In addition to the 4 assembly plants, Toyota's North American Manufacturing Headquarters are located in Erlanger. There are 460 auto-related suppliers located in Kentucky that have over 90,000 employees.

Table 8: Total Light Vehicle Production in 2003

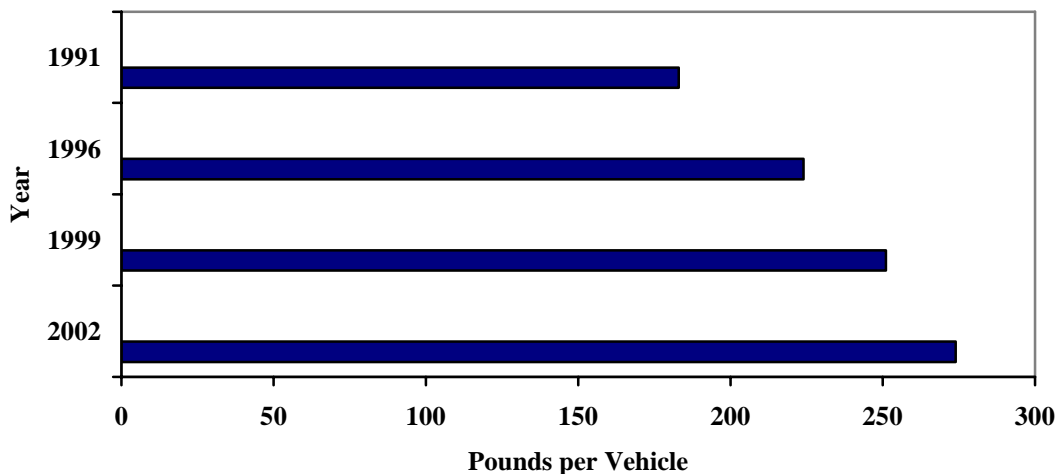
State	Total Light Vehicle Production
Michigan	2,783,839
Ohio	1,884,665
Missouri	1,298,051
Kentucky	1,164,967
Indiana	721,334
Tennessee	691,373
Illinois	500,698
California	395,083
Georgia	380,281
Wisconsin	261,568

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

Aluminum Usage in Automobiles

The transportation industry is the largest and fastest growing market for aluminum. In the last decade, aluminum usage has doubled in cars and tripled in SUVs. In 2002, its usage in vehicles was estimated at 274 pounds per unit. It has surpassed plastic and trails only iron and steel as a percentage of vehicle content.¹⁴ Much of aluminum's growth in motor vehicles can be attributed to increases in aluminum engine blocks (38% in 2002 compared to 22% in 1999) and cylinder heads (86% in 2002 compared to 69%

Aluminum Content in Automobiles



in 1999).¹⁵

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. 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. Approximately 60 percent of all aluminum used in cars is recycled aluminum, and 90 percent of aluminum in autos is recovered and recycled.¹⁶

The following all-aluminum cars illustrate the environmental, safety, and performance benefits associated with aluminum-intensive automobiles:

- Audi A8 received a perfect 5-star government crash rating;
- Honda Insight is the most fuel-efficient car in the U.S.;
- Ferrari 360 Modena is considered to be one of the world's top performance vehicles, and Ferrari recently announced all of their future cars will be aluminum intensive.¹⁷

New automotive applications of aluminum can be found in automobiles manufactured in Kentucky. The 2002 and later models of the Ford Explorer and Mercury Mountaineer feature aluminum front fenders that were designed to improve handling. The Explorer and Mountaineer have the highest content of aluminum sheet components of all vehicles in 2002. Toyota added an aluminum-intensive engine to the products of its Georgetown plant at the end of 2002.¹⁸

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 30 aluminum-related facilities that are considered auto-related, and these establishments have over 6,900 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. Two-thirds 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. The Pacific Northwest and the Ohio Valley regions contain over 70 percent of the aluminum smelting capacity in the United States, but in recent years 10 aluminum smelters in the Pacific Northwest have reduced their capacity due to increased electrical energy costs.¹⁹ Over 1,270 aluminum plants, which accounts for over 60 percent of the aluminum plants in the United States, are located within 600 miles of Kentucky.²⁰

Over the last 30 years, manufacturers in the auto industry have steadily moved southward, and as a result a new auto corridor has been created that runs southward from Michigan to Alabama, in which Kentucky is located in the center. In 2002, within 500 miles of Central Kentucky, there were 4,829 motor vehicle-related manufacturers, including 69 auto assembly plants accounting for 62 percent of the motor vehicle-related manufacturers in the United States.²¹

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 highway travel of 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.

In an analysis of the comparative performance of state highway systems conducted at the University of North Carolina-Charlotte, only Kentucky and Oregon achieved a top ten rating among the leading aluminum states.²²

Further evidence of the superior quality of Kentucky's transportation system lies in the high rankings awarded to it by *Expansion Management* and *Transportation & Distribution* magazines in their joint analysis of state and metropolitan area logistics factors. Kentucky achieved the following rankings among the 50 states:

- Rail Freight Utilization – 4th best
- Logistics (Overall Ranking) – 6th highest
- Lowest State Fuel Taxes and Fees – 5th best²³

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 1100 miles of navigable waterway, second only to Alaska. 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 in the handling and storage of primary and secondary aluminum. The New York Mercantile Exchange has approved the Owensboro Riverport as 1 of only 2 licensed warehouses to serve as the delivery point of primary aluminum traded on its COMEX Division aluminum futures contract.²⁴

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.

The Cincinnati/Northern Kentucky International Airport is ranked as the best airport in North America and in the Top Ten worldwide for passenger service and convenience in 2003.²⁵ A Federal Aviation Administration (FAA) report named the airport as the second fastest growing U.S. hub airport, based on total passenger boardings or enplanements.²⁶

The Louisville International Airport is home to the international air sorting hub of United Parcel Service (UPS), whose operations have helped make the Louisville International Airport the fifth largest cargo airport in the nation, and the eleventh largest cargo airport in the world for the year 2003.²⁷

VIII. Additional Aluminum Industry Resources

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 fulfills its mission by performing several functions. It performs proprietary and general research for individual companies, joint efforts by two or more companies, and industry-wide research projects. Secat 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.²⁸

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.²⁹

Center for Manufacturing

The Center for Manufacturing (CRMS), located in Lexington at the University of Kentucky - www.crms.uky.edu/crms/index.htm, 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 it provides wide range 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.

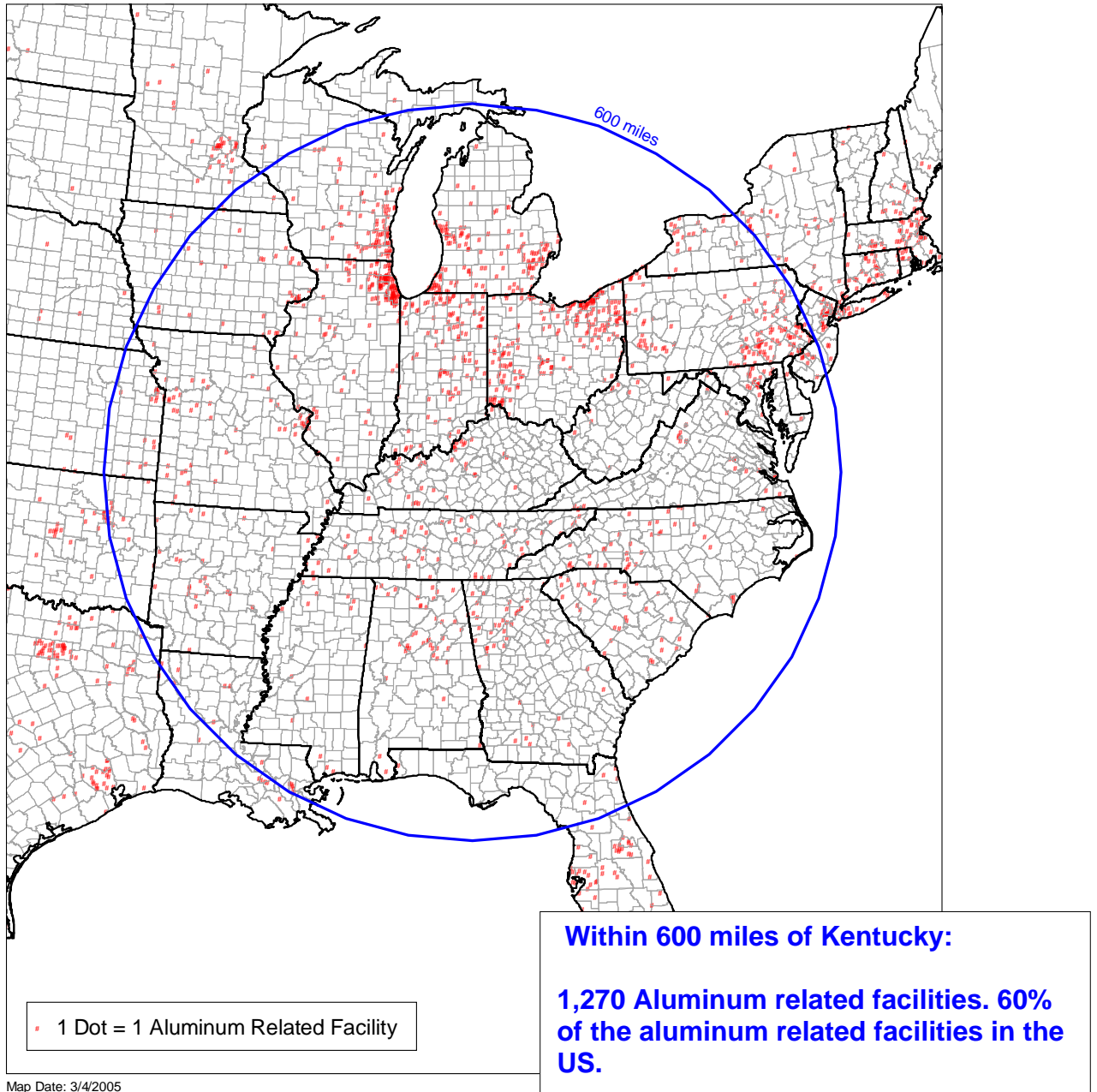
Because of CRMS' capabilities, Toyota Motor Manufacturing selected CRMS to develop a working model of the Toyota Production System. CRMS' efforts with Toyota resulted in the Lean Manufacturing program, which is an integrated research, education, and technology transfer effort. The CRMS Lean Manufacturing 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.³⁰

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.³¹

APPENDIX

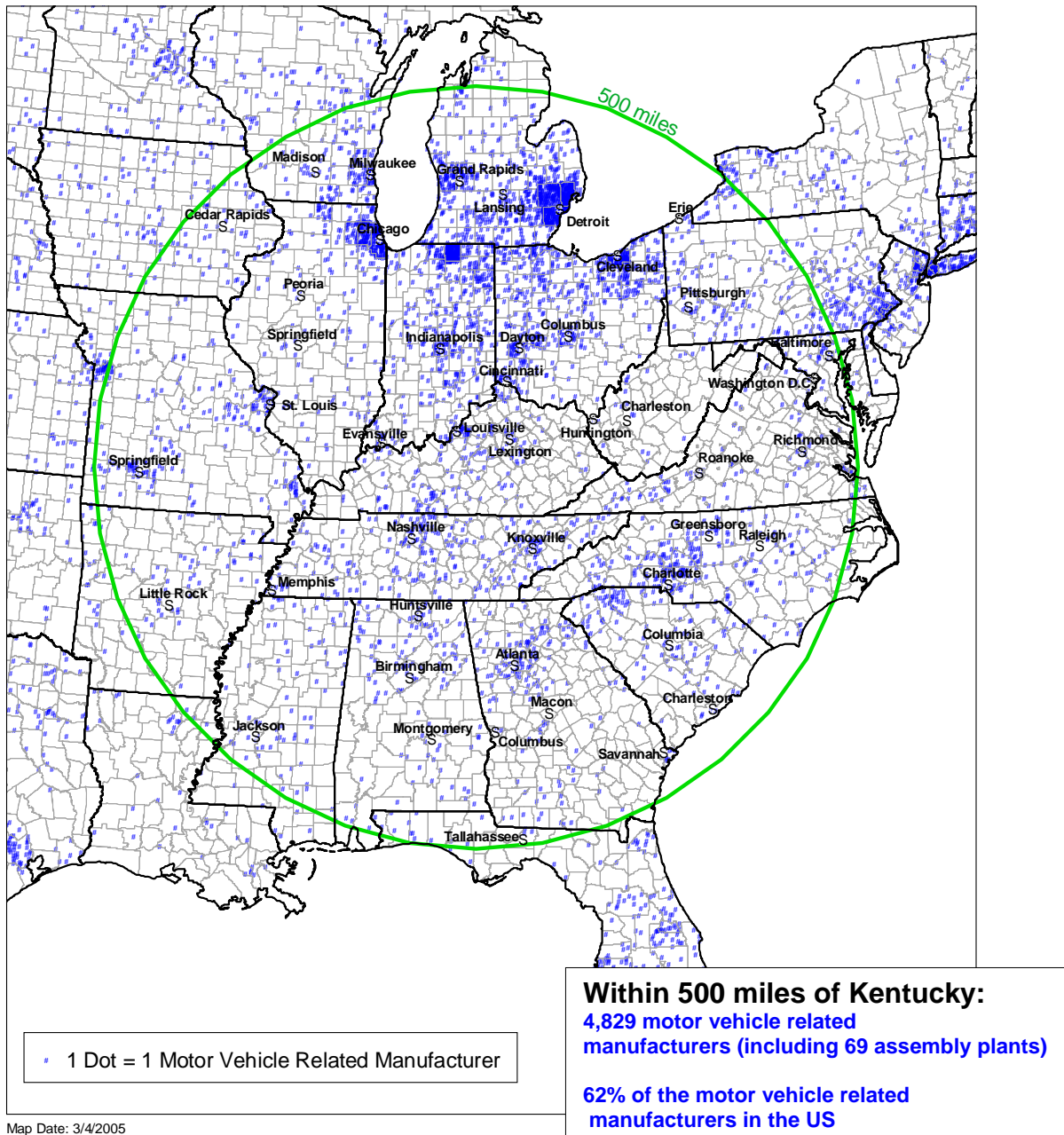
Aluminum Related Facilities located within 600 miles of Kentucky (2002)



Note: For the purposes of this map, aluminum related facilities are establishments from the following NAICS codes: 3313, 331521, 331524, 332112, and 33243.

Source: U.S. Census Bureau, *County Business Patterns* 2001-2002, issued December 2004

Motor Vehicle Related Manufacturers located within 500 miles of Kentucky (2002)



Note: For the purposes of this map, motor vehicle related companies are establishments from the following NAICS codes 3361 (Motor vehicle mfg), 3362 (Motor vehicle body & trailer mfg), and 3363 (Motor vehicle parts mfg).

Source: U.S. Census Bureau, *County Business Patterns* 2001-2002, issued December 2004.

Kentucky's Aluminum-Related Facilities (2004)

Facility Name	Product Description	Employment
Albany		
Thoroughbred Cruisers	Aluminum houseboats	47
Benton		
Alcan Composites USA Inc	Composite aluminum & plastic foam panels & sheets	135
Berea		
Novelis Corporation	Ingots & recycled aluminum cans	110
Bowling Green		
Capitol Window & Door	Vinyl replacement windows; aluminum storm windows & doors	18
Trace Die Cast Inc*	Aluminum die castings & secondary specialty machining	340
Buckner		
Superior Container Corp	Aluminum containers	7
Campbellsville		
Campbellsville Industries Inc	Ornamental metal & aluminum fabricating; steeples, cupolas, crosses, cornices, awnings, columns, louvers, shutters, railings & balusters	125
Tec-Fab Inc	Custom sheet metal fabricating: bell towers, church steeples, cupolas, cornices, crosses & columns	15
Covington		
AFCO Manufacturing Inc	Steel & aluminum fabricating: containers, hoppers, dumps, bins, racks, shelving, drums, barrels, pipe, tubes, rods, tote boxes & pans	12
Edgewood		
Summit Fire Apparatus Inc*	Aluminum & steel fabricating; welding & fire truck bodies	22
Franklin		
Franklin Precision Industry*	Assembly of automotive throttle bodies & charcoal canisters, injection molding	410
Novitec Industries Inc	CNC machining facility, long-run production, volume die cast machining, 30 CNC machines, screw machines, production tube-cutting, wire edm, waterjets	50
Glasgow		
J L French Automotives Castings Corp*	Die cast aluminum automotive parts	310
J L French Automotives Castings Corp*	Aluminum die cast automotive parts-machining facility.	300
Greensburg		
Aluminum Fabricators Inc	Aluminum steeples, cupolas & architectural metal products	21
Harrodsburg		
Armstrong Custom Powder Coating	Custom powder coating service	2
Hawesville		
Alcoa Automotive Casting Inc*	Aluminum foundries, castings/forgings, auto components	246
Century Aluminum of Kentucky LLC	Aluminum castings, sows & smelting	739
Columbia Specialty Metals		
Roll Coater Inc	Steel & aluminum coil painting & coating service	106
Southwire Co	Aluminum wire strand & rod wire	247

Hebron		
Architectural Products Inc	Aluminum products & extrusions; commercial building; architectural sheet metal	12
Ellison Surface Technologies	Aircraft engine part coating service	60
Wagstaff Inc*	Custom aluminum molds & castings	30
Henderson		
Accuride Corp*	Truck wheels & rims	47
Audubon Metals LLC*	Heavy-media separator and secondary specification aluminum alloy producer. Recycling process of automobile shredder residue into new aluminum castings	160
Gibbs Die Casting Corp*	Aluminum & magnesium die castings, headquarters	1000
Hydro Aluminum	Aluminum extrusion billet and log	55
Sonoco	Aluminum & steel can ends	108
Hickman		
Bermag Corp	Precision aluminum castings, rapid prototyping	16
Hopkinsville		
CoPar Inc*	Industrial aluminum radiators and oil coolers	264
Independence		
Benda-Lutz*	Metal powder products for auto industry. Bonded metallic powder coatings for general industrial use.	38
Island		
Smelter Service Corporation	Aluminum secondary smelting & recycling	4
Ivel		
R & S Godwin Truck Body Co LLC*	Steel & aluminum fabricating: dump truck bodies & trailers	185
Jenkins		
Taylor Metal Roofing & Siding Inc	Metal roofing, siding panels, related trim components, insulation, doors, sliding door track systems	
Lancaster		
Click Packaging, Fabricating and Rigging	Plate, structural & sheet metal fabricating, custom machinery	73
Lebanon		
Angell Manufacturing Co*	Metal nameplates & plaques & aluminum trim	150
Montebello Packaging Inc	Collapsible aluminum tubes primarily for the pharmaceutical and cosmetic industries	98
Lewisport		
Aleris International, Inc.	Coils, aluminum tubing & flexible conduits	830
McElroy Metal Inc	Steel & aluminum fabricating	30
Lexington		
Blue Grass Manufacturing Inc*	Contract manufacturer, CNC Machining, metal fab., welding and electro mechanical assembly, stampings	20
Grayhawk LLC	Prefabricated exterior wall panels & light gauge metal roof trusses	135
Kentucky Ornamental Iron	Architectural metal, brass, aluminum & ornamental iron products, entrance gates, railings & spiral staircases	12

Rogers Window Inc	Aluminum storm windows, doors & prime replacement windows; vinyl window mfg	25
London		
Aisin Automotive Casting LLC*	Automotive aluminum die cast components	615
Jasper Iron & Metal Co Inc	Scrap metal & iron processing, aluminum smelting	27
Louisville		
Alcoa Heat Exchanger Products*	Aluminum heat exchanger tubing	60
Alcoa Louisville Foil Division	Aluminum foil, flexible packaging, consumer products, foodservice packaging	500
A-Line Tool & Die Inc	Tool & die: plastic injection molds & aluminum stamping dies	7
Allied Aluminum Products Inc	Aluminum storm windows & doors; jalousie, sliding patio doors; awnings, carports, porch enclosures & aluminum siding: replacement windows	12
Arco Aluminum Inc	Aluminum rolled sheet products for can manufacturing industry	30
Beneke Wire Co*	Aluminum rod, bar & wire for cold heading	49
C & R Graphic	Offset plates, negatives, industrial engravings & photo engraving	25
Cardinal Aluminum Co	Custom aluminum extrusions & moldings including anodizing, powder coating and fabricating.	525
Commonwealth Industries Inc	Corporate headquarters	100
Conco Inc	Metal fabricated ammunition containers & boxes	125
Dant Clayton Corp	Grandstands/bleachers, spectator seating.	140
Eckart America LP*	Metallic aluminum paint pigments, powders & paste	130
Fold-A-Way Corp*	Aluminum sand castings; aluminum & nylon fold-away bumper steps for vans & RV's	6
Green Bull Inc	Industrial aluminum, fiberglass & wooden ladders; climbing scaffolding	100
J T Nelson Co LLC	Aluminum window sash & steel equipment for railroad cars	35
Louisville Ladder	Corporate Headquarters	30
Nelson B Boone Co Inc	Aluminum & brass promotional products	70
Novelis Corporation	Converted aluminum foil	105
Performance Powders LLC	Powder coatings	15
Premium Foil Products Co	Aluminum foil containers	19
Progress Rail Services	Railroad freight car wheels	50
River City Machine & Tool Inc	Steel & aluminum fabricating, general machining, drilling, boring, cutting, honing, arc & gas welding, surface grinding, lathe & mill work	15
River Metals Recycling LLC	Scrap metal recycling center	180
Specialty Tool & Machine Co	Machine shop: general & CNC machining; custom metal fabricating; arc, gas, MIG & TIG welding; drilling, boring, cutting & honing; lathe & mill work, laser & press brake	40
Stiglitz Corp	Metal stampings; sheet metal fabricating & powder coating service	85
Syltone Industries Inc	Couplers and valves for dry materials - pumps, blowers, compressors, loading arms	40
Sypris Technologies Inc*	Custom forgings	296

Utility Metals	Steel & aluminum fabricating: lighting area poles & mast arms	44
Madisonville		
Electro Cycle Inc	Aluminum recycling	37
Gemtron Corporation	Manufacturing of appliance components	79
Manchester		
Denny Beckner & Co	Scrap metal processing & recycling	6
Mayfield		
Turbo Technologies Inc	Parts & service for centrifugal compressors	20
Milton		
Ameriform Manufacturing Inc*	Aluminum & plastic fabricating	161
Monticello		
Stardust Cruisers Inc	Aluminum hull houseboats	102
Sunstar Houseboats Inc	Aluminum houseboats	55
Morgantown		
IMCO Recycling Inc	Aluminum recycling	160
Mt. Sterling		
Snap-Lok Inc	Aluminum wire ties	12
Owensboro		
Apollo Replacement Windows	Wood aluminum clad windows and doors; vinyl windows	95
Dahl & Groezinger Inc	Scrap iron, ferrous & nonferrous metal processing, export scrap.	15
Lloyd's Mechanical & Engineering Inc	Steel, aluminum & stainless steel fabricating, mechanical contractors	14
Mid American Metals & Chemicals	Metal recovery	5
Sun Windows Inc	Aluminum & wooden windows	60
West Irving Die Casting Co*	Aluminum die castings and precision machining for appliance, automotive & tool industries	108
Paducah		
JMS Inc	Metal processing, distributing	20
Paris		
CMC/CLA*	Automotive wheels	450
Pride		
Pride Industries Inc	Steel & aluminum standing seam roofing, preformed metal shingles.	20
Princeton		
AFCO Manufacturing*	Race car suspension parts & radiators and exhaust headers	39
Fontaine Trailer Co*	Steel and aluminum flatbed trailers and drop deck semi trailers	91
Special Metals Corp	Metal powder & nickel base metal alloy billets	80
Prospect		
Pluckebaum Custom Boats Inc	Yachts, aluminum houseboats & motorboats	20
Richmond		
National Metal Processing Inc	Commercial heat treating/laser processing and welding.	27
Robards		
Alcan Primary Metal Group	Aluminum extrusion billets & ingots	650
K B Alloys Inc*	Aluminum base & metal alloys, aluminum based master alloys	50

Russellville		
Logan Aluminum Inc	Aluminum rolled sheet stock	950
Sensus Precision Die Casting*	Aluminum die castings	325
Shelbyville		
Industrial Powder Coatings Inc*	Powder coating service for automotive appliance and general industry.	80
Integrus Metals	Aluminum & stainless steel processing	61
Ohio Valley Aluminum Co Inc	Aluminum billets, ingots & extrusions	102
Revere Packaging LLC	Aluminum foil containers & plastic dome food covers	57
ThyssenKrupp Budd*	Automobile parts stamping	935
Somerset		
Sharpe Marine Inc	Aluminum & luxury houseboats	85
Sumerset Houseboats	Aluminum houseboats	150
TDE Group Inc	Aluminum die cast manufacturer	
Totz		
Cumberland Mine Service Inc	Metal fabricating; custom ceramic & abrasion resistant coating service; ceramic liners and construction and maintenance	30
Winchester		
Custom Cylinders International Inc	Hydraulic & pneumatic cylinders, steel rounds & tubing, precision machining, and assembly	11
Woodburn		
Precision Strip Inc	Steel, aluminum & copper processing & slitting service	78
TOTAL		
15,329	Employees	15,329
112	Facilities/Plants	112
30	Automotive Related Facilities	30

* 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.

**Kentucky's Estimated Primary Aluminum Industry
Economic Impact
(October 2003 to September 2004)**

February 15, 2005

Kentucky Cabinet for Economic Development
<http://www.thinkkentucky.com/>
Office of Research and Information Technology

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Kentucky's Estimated Primary Aluminum Industry Economic Impact (October 2003 to September 2004)

The Kentucky Office of Employment and Training reports that Kentucky's primary aluminum industries employed 8,140 (on an annualized basis) workers for the fiscal year October 2003 to September 2004. These workers received \$365 million in base wages and salaries during this period. The above employment and wage values emanate from the following NAICS codes:

- Primary Aluminum Production (331312);
- Secondary Smelting and Alloying (331314);
- Aluminum Sheet, Plate, and Foil Manufacturing (331315);
- Aluminum Extruded Product Manufacturing (331316);
- Other Aluminum Rolling and Drawing (331319);
- Aluminum Die Casting Foundries (331521); and
- Aluminum Foundries, except Die Casting (331524).

The direct economic impact of Kentucky's primary aluminum industry added \$685 million to Kentucky's economy during the fiscal year October 2003 to September 2004. Indirect aluminum (backward-linked industries supplying goods and services to the aluminum industry) industrial activity in the Commonwealth added another \$406 million and the impact of household incomes (induced effect) emanating from Kentucky's aluminum industries added \$391 million. The combined economic impact (direct, indirect, and induced) generated an estimated \$1.48 billion in value added to the state's economy and an estimated 20,660 jobs in the Commonwealth. Kentucky's direct and indirect aluminum industries generated an estimated \$96 million in state and local tax revenue during the fiscal year (October 2003 to September 2004). The combined economic impact (direct, indirect, and induced) generated an estimated \$142 million in state and local tax revenue. Financial incentives offered by the state may reduce the tax estimates.

Table 1

Estimated Annual Operational Economic Impact

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	7,480	20,660
Average Annual Wage & Salary (With Benefits)	\$ 66,917	\$ 38,494	\$ 24,699	\$ 44,698
Total Employee Compensation (With Benefits)	\$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

Fiscal Year: October 2003 to September 2004

Note: Values are in Current Dollars

Note: Direct employment is composed of primary aluminum production and aluminum foundry production.

Source: Wage and employment data provided by Kentucky Education Cabinet, Office of Employment and Training, (Employment by NAICS) October 2003 to September 2004. <http://oet.ky.gov/index.asp>

Note: Values are on a fiscal year annualized basis (October 2003 to September 2004).

Note: Total employee compensation values are inclusive of estimated benefits.

Source: Estimated benefits are derived from data obtained from Salary.com, Inc., http://www.salary.com/home/layoutscripts/homl_display.asp

Note: Impact estimates are statewide.

Assumptions

1. Direct Employment = 8,140;
2. Total Annual Wages and Salaries (Current) = \$364,952,000;
3. Wages and Salaries = 67% of total Compensation; and
4. Employee Benefits = 33% of total Compensation.

Table 2

Indirect Aluminum Industry Sectors with More Than \$5,000,000 in Direct Value Added to Kentucky's Economy

Indirect Industry Sectors	NAICS	Indirect Value Added	Indirect Jobs
Wholesale Trade	42	\$89,909,000	980
Federal Electric Utilities	-	\$45,925,000	40
Power Generation and Supply	2211	\$43,836,000	160
Truck Transportation	484	\$29,926,000	680
Management of Companies and Enterprises	55	\$22,452,000	200
Other State and Local Government Enterprises	--	\$17,267,000	90
Rail Transportation	482	\$ 8,749,000	70
Financial Institutions (Banking)	521, 5221	\$ 8,229,000	80
Nondepository Credit Intermediation	5222, 5223	\$ 6,356,000	70
Real Estate	531	\$ 5,619,000	80
State and Local Government Electric Utilities	-	\$ 5,063,000	10

(Fiscal Year: October 2003 to September 2004)

Social/Economic Cost

This study estimates/reports the positive economic impacts which occur as a result of the operation of industries listed in the above report. This report does not account for the cost incurred by the Commonwealth as a result of this industry. These costs may include police and fire department services, public education, public infrastructure (roads, bridges, prisons, airports, sewage treatment, water treatment, trash collection, etc.), social services, health services, environmental impacts, and tax incentives/abatements.

Glossary of Economic Impact Terms

Economic impacts are a mathematical method of specifying the economic relationships among all businesses/industries and between businesses/industries and consumers. Input-output (I/O) modeling is the most commonly utilized method to assess the economic outcomes of job creation or reduction. Economic impact modeling captures the direct impact of an employment expenditure (jobs with wages, salaries, and benefits) on the economy. Additionally, the secondary effect (indirect) on the economy is captured and the consumer based (induced) effects are calculated by the model.

Economic impact analysis typically utilizes an economic model (I/O) which traces the flow of goods and services, income, and employment among related sectors of the economy. The I/O model generates a mathematical depiction of the flow of economic activity. *id est*:

Final demand changes on the industrial sector producing the good/service (output) purchases inputs from other industrial sectors, which in turn purchase inputs from other sectors. These industrial sectors purchase additional labor inputs. Employees of these industries use their compensation to purchase goods and services from the economy. Linkages between industries in a region create an economic ripple effect as a result of changes in demand for products. Strong linkages can lead to a healthier economy, as capital flows through the economy rather than out of it.

Direct Effects: Direct effects are the changes in economic activity during the first round of spending. These represent the impacts (e.g. change in employment) for the expenditures and /or production values specified as direct final demand changes.

Indirect Effects: Indirect effects are the changes in sales, income, or employment within the region in backward-linked industries supplying goods and services. These represent the impacts (e.g. change in employment) caused by the iteration of industries purchasing from industries resulting from direct final demand changes. New jobs will be created outside of the primary industry/direct impact industry.

Direct aluminum industry employment will result in indirect aluminum industry employment. Indirect aluminum industry employment would be inclusive of support and supplier services: *exempli gratia*, railroad services, water transportation, motor freight transportation and warehousing, wholesale trade, maintenance and repair, coal mining, electric utilities, legal services, accounting, computer and data processing services, communications, credit agencies, and banking services, *et cetera*.

Induced Effects: These represent impacts (e.g. change in employment) on all local industries caused by the expenditures of new household income generated by the direct and indirect effects resulting from direct final demand changes. Induced effects may also reflect government or investment gains. New jobs created in the areas of food services, plumbing, medical/dental care, barbershops, clothing sales, police & fire protection, lawn care, legal services, financial services, real estate, merchandize stores, automobile dealers, & service stations, *et cetera*, are due to the direct and indirect effects of the initial creation of jobs.

Total Value Added: Indicates the total economic value (impact) attributable to Kentucky's workers and industries. Note: Data consistent with Kentucky's Gross State Product (GSP), not identical.

Employee Compensation (Includes Benefits): Employee compensation describes the total payroll costs (including benefits). Includes wage and salary payments (by employers) as well as benefits including overtime compensation, health and life insurance, retirement payments, and other non-cash compensation. Significant employment of seasonal and/or part-time workers may lower personal income averages.

Proprietary Income: Consist of payments received by self-employed individuals as income.

Personal Income = Proprietary Income + Employee Compensation (Includes Benefits)

Other Property Type Income: Consist of payments for rents, royalties, and dividends payments to individuals in the form of rents received on property, royalties from contracts, and dividends paid by corporations are included. Corporate profits earned by corporations are also included.

Table 3: Estimated State and Local Taxes (Fiscal Year: October 2003 to September 2004)

- Local education taxes are excluded.

State and Local Taxes	Tax Values Direct and Indirect	Tax Values Direct, Indirect, and Induced
<i>Corporate Profits Tax (1)</i>	\$ 2,214,000	\$ 3,520,000
Dividends (2)	\$ 7,071,000	\$ 11,241,000
Indirect Bus Tax: Motor Vehicle License (3)	\$ 724,000	\$ 1,135,000
Indirect Bus Tax: Other Taxes –Corp License, etc. (4)	\$ 5,424,000	\$ 8,501,000
Indirect Bus Tax: Property Tax (5)	\$ 18,274,000	\$ 28,641,000
Indirect Bus Tax: S/L NonTaxes (6)	\$ 3,622,000	\$ 5,677,000
Indirect Bus Tax: Sales Tax (7)	\$ 30,941,000	\$ 48,493,000
Indirect Bus Tax: Severance Tax (8)	\$ 1,077,000	\$ 1,688,000
Personal Tax: Income Tax (9)	\$ 19,026,000	\$ 24,150,000
Personal Tax: Motor Vehicle License (10)	\$ 974,000	\$ 1,236,000
Personal Tax: NonTaxes (Fines- Fees) (11)	\$ 3,851,000	\$ 4,888,000
Personal Tax: Other Tax (Fish/Hunt & Licensing Fees) (12)	\$ 412,000	\$ 523,000
Personal Tax: Property Taxes (13)	\$ 259,000	\$ 328,000
Social Ins Tax- Employee Contribution (14)	\$ 554,000	\$ 692,000
Social Ins Tax- Employer Contribution (15)	\$ 1,505,000	\$ 1,881,000
Total State and Local	\$ 95,929,000	\$ 142,595,000

- Estimates are statewide.
- Financial incentives offered by the state may reduced the tax estimates listed above.

Table 4: Estimated Federal Taxes (Fiscal Year: October 2003 to September 2004)

United States (Federal)	Tax Values Direct and Indirect	Tax Values Direct, Indirect, and Induced
<i>Corporate Profits Tax (16)</i>	\$ 11,321,000	\$ 17,998,000
Indirect Bus Tax: Custom Duty (17)	\$ 2,159,000	\$ 3,384,000
Indirect Bus Tax: Excise (18)	\$ 7,313,000	\$ 11,461,000
Indirect Bus Tax: Federal Non Taxes (19)	\$ 2,289,000	\$ 3,588,000
Personal Tax: Income Taxes (20)	\$ 21,998,000	\$ 27,922,000
Personal Tax: Non Taxes (Fines – Fees) (21)	-	-
Social Ins Tax- Employee Contribution (Inclusive of Proprietary Income) (22)	\$ 44,768,000	\$ 56,619,000
Social Ins Tax- Employer Contribution (23)	\$ 43,918,000	\$ 54,899,000
Total Federal Taxes	\$ 133,766,000	\$ 175,870,000

Notes: Estimates are statewide.

Tax Data Sources

Estimated Tax impact report values are based on the existing relationships of the data found in the IMPLAN database. The general sources for that data are described immediately below:

National Income and Product Accounts (NIPA): As with all items in the IMPLAN data sets, all data is ultimately controlled, at the US level, by the BEA's (Bureau of Economic Analysis) NIPA (National Income and Product Accounts) values. For 2001 IMPLAN data, the national values were controlled with the NIPA accounts utilizing the Survey of Current Business – Personal Tax and Non Tax Receipts, Indirect Business Tax and Non Tax Accruals, and Contributions for Social Insurance. Federal Government Receipts and Current Expenditures and State and Local Government Receipts and Current Expenditures contain controls for all the IMPLAN data elements found in the Tax Impact report.

Consumer Expenditure Survey (CES): The Bureau of the Census annually conducts surveys and diary samplings of household expenditure patterns. It is from these surveys that the BEA benchmarks the personal consumption expenditure portion of NIPA. The survey data is reported for nine different categories of household income establishing the tax to income level relationships for the nine different household categories. It is based on these relationships that we can distribute many of the state and federal tax values to a county and state level by utilizing the number of local households in each of the nine household categories.

Annual Survey of State and Local Government Finances (SLGF): The Bureau of the Census also collects annual state and local government receipts and expenditures data. This data acts as preliminary controls for state level values (subject to controlling to the National NIPA values).

Regional Economic Information System (REIS): The BEA collects and reports income, wealth, tax, and employment data on a regional (state and county) basis. Much of the data used to distribute the United States NIPA values to states and counties come from REIS tables: Personal Income by Major Source and Earnings by Industry, and Personal Tax and Non Tax Payments.

State and Local Tax Definitions and Sources

1) State & local government corporate profits tax.

Source: US NIPA value (“Corporate profits tax accruals” table) is distributed to states based on “Tax – Corporate Net Income ” from the SLGF. The state distribution to counties is based on their proportion of state Other Property Income (from IMPLAN database).

2) State & local government dividends represent dividend payments to government by corporations from investments.

Source: US NIPA value (“Dividends received by government” table) is distributed to states based upon: “Employee Retirement – Securities – Mortgages”; “Employee Retirement – Securities – Corporate Stocks”; “Employee Retirement – Securities – Corporate Bonds”; and “Employee Retirement – Total Other Securities” from the SLGF. The state distribution to counties is based on their proportion of state Other Property Income (from IMPLAN database).

3) Motor vehicle license taxes paid to state and local governments.

Source: US NIPA value (“State and Local: Motor Vehicle Licenses” table) is distributed to states based on each state’s proportion of “Tax – Motor Vehicle Operator’s License” plus “Tax – Motor Vehicle License” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

4) Other taxes paid to state and local governments include business licenses, documentary, and stamp taxes.

Source: US NIPA value (“State and Local: Other taxes” table) is distributed to states based on each state’s proportion of: “Tax – Corporation License”; “Tax – Amusement License”; “Tax – Other License”; “Tax – Documentary & Stock Transfer”; “ Tax – Public Utility License”; “ Tax – Alcoholic Beverage License”; “Tax – Occupation & Business License, NEC”; and “Tax – NEC” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

5) Property taxes paid to state and local governments.

Source: US NIPA value (“Indirect business tax and non tax accruals: Property Taxes” table) is distributed to states based on each state’s proportion of “Tax – Property” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

6) Non taxes paid to state and local governments include rents and royalties, special assessments, fines, settlements, and donations.

Source: US NIPA value (“State and Local: Non taxes” table) is distributed to states based on each state’s proportion “Miscellaneous – Rents”; “Miscellaneous – Special Assessments”; “Miscellaneous – Royalties”; and “Miscellaneous – Donations From Private Sources” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

7) Sales taxes paid to state and local government.

Source: US NIPA value (“Indirect business tax and non tax accruals: Property taxes”) is distributed to states based on each state’s proportion of “Tax – Total General Sales” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

8) Severance taxes paid to state and local governments.

Source: US NIPA value (“State and Local: Severance taxes”) is distributed to states based on each state’s proportion of “Tax - Severance” plus “Tax – Motor Vehicle License” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

9) Household personal income tax payments to state and local governments.

Source: US NIPA value (“State and local: Income taxes” table) is distributed to states based on “Tax – Individual Income” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

10) Household personal motor vehicle fee payments to state and local governments.

Source: US NIPA value (“State and local: Motor Vehicle Licenses” table) is distributed to states based on “Miscellaneous – Fines & Forfeits ” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

11) Household personal non tax payments to state and local governments include payments for fines and donations.

12) Household personal--other tax payments to state and local governments--includes hunting, fishing, and other personal licenses.

Source: US NIPA value (“State and local: Other taxes” table) is distributed to states based on “Tax – Hunting and Fishing License ” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

13) Household personal property tax payments to state and local governments.

Source: US NIPA value (“State and local: Property taxes” table) is distributed to states based on “Tax – Property” from the SLGF. State values are distributed to counties based on total “Personal Income” from the BEA REIS (Personal Income) table.

14) The employee paid portion for state social insurance – this represents retirement plans and temporary disability insurance.

Source: US NIPA value (“Personal contributions: State and local social insurance funds) is distributed to states and based on each state’s share of employee paid state social insurance specified in the SLGF. The SLGF categories comprising employee paid state social insurance are “Employee Retirement – Local Employee Contribution”; “Employee Retirement – State Employee Contribution”; and “Workers Compensation – Other Contributions.” County distribution is based on the county’s portion of state and local government non-education employee compensation from IMPLAN.

15) The Employer Paid Portion for state social insurance -- represents retirement plans, worker’s comp, and temporary disability insurance.

Source: US NIPA value (“Employer contributions: State and local social insurance funds) is distributed to states and based on each state’s share of employer paid state social insurance specified in the SLGF. The SLGF categories comprising employer paid state social insurance are “Employee Retirement – From Local Government”; “Employee Retirement – From State Government;” “Unemployment Compensation – Contribution”; and “Workers Compensation – Own Contributions”. County distribution is based on the county portion of state and local government non-education employee compensation from IMPLAN.

Federal Tax Definitions and Sources

16) Federal corporate profits tax.

Source: US NIPA value (“Corporate profits tax accruals” table) is distributed to states and counties based on their proportion of US Other Property Income (from IMPLAN database).

17) Custom duties are gross collections - net refunds.

Source: US NIPA value (“Federal: Customs duties” table) is distributed to states and counties based on IMPLAN estimates of total IBT for all industries in relationship to US total IBT.

18) Includes federally levied excise taxes on alcohol, tobacco, telephones, coal, fuels, air transportation, vehicles, *et cetera*.

Source: US NIPA value (“Federal: Excise taxes” table) is distributed to states and counties based on IMPLAN estimates of total IBT for all industries in relationship to US total IBT.

19) Total Indirect Business Tax (IBT) federal non-tax payments include petroleum royalties, fines, regulatory fees, forfeitures, and donated funds.

Source: US NIPA value (“Federal: Non taxes” table) is distributed to states and counties based on IMPLAN estimates of total IBT for all industries in relationship to US total IBT.

20) Income taxes are taxes paid to the Federal Government through withholding, declarations, and final settlement less refunds.

Source: State “Federal government: Individual income taxes (net of refunds)” from REIS tax tables are controlled to the US NIPA value (“Federal: Income Taxes”). State values are distributed to counties based on total “Personal Income” from the BEA REIS Personal Income table.

21) Personal non taxes consist of a variety of small payments –exempli gratia- passport and immigration fees, fines, and migratory bird-hunting stamps.

Source: State “Federal Government: Non Taxes” from REIS tax tables is controlled to the US NIPA value (“Federal: Non Taxes” table). State values are distributed to counties based on total “Personal Income” from the BEA REIS Personal Income table.

22) The employee paid portion for federal social insurance – this includes Social Security, unemployment insurance, medical and retirement plans.

Source: US NIPA value “Personal contributions: Federal social insurance funds” minus “Old-age, survivors, disability and hospital insurance: Self-employed” is distributed to states and counties based on the “Personal Contribution for Social Insurance” from BEA REIS (Personal Income) table.

22a) Federal social insurance paid by self-employed – this includes Social Security, unemployment insurance, medical, and retirement plans.

Source: US NIPA value (“Personal contributions: Federal social insurance funds: Old-age, survivors, disability and hospital insurance: Self-employed”) is distributed to states and counties based on the “Proprietors’ Income” from BEA REIS (Personal Income) table.

23) The employer paid portion for federal social insurance – this includes Social Security, medical and retirement plans.

Tax Sources: US NIPA value (“Employer contributions: Federal social insurance funds”) is distributed to states and counties based on the “Personal Contribution for Social Insurance” from BEA REIS (Personal Income) table. The employer paid portion is assumed to be a constant proportion of the personal paid proportion. This assumption will be affected by a greater or lesser value than average proprietor income.

Methodology/Sources (partial)

The economic impacts estimates and conclusions resulting from this study have been derived from Minnesota IMPLAN Group, Inc. databases. This aggregate database is primarily composed of government data sources including information from

- US Bureau of Economic Analysis Benchmark I/O Accounts of the US;
- US Bureau of Economic Analysis Output Estimates;

- US Bureau of Economic Analysis REIS Program;
 - US Bureau of Labor Statistics ES 202 Program;
 - US Bureau of Labor Statistics Consumer Expenditure Survey;
 - US Bureau of County Business Patterns;
 - US Census Bureau Decennial Census and Population Surveys;
 - US Census Bureau Economic Census and Surveys;
 - US Department of Agriculture; and
 - US Geological Survey.
- MIG, Inc. 2002 databases and IMPLAN 1997-2002, 2.0.1022 matrices are utilized in the computation of economic impact estimates.

The information provided herein by the Division of Research--Cabinet for Economic Development is believed to be accurate but is not warranted and is for informational purposes only. Any estimates, projections, or information provided to make estimates or projections are provided without assurances or warranties and should not be relied upon as fact. Users of the information should perform their own due diligence in drawing conclusions from the information provided.

Labor Cost Comparison (Annual Average Wage): 2003

States	Private Sector	Manufacturing	Primary Metal	Fabricated Metal
United States	\$ 36,247	\$ 59,329	\$ 60,925	\$ 48,771
Alabama	\$ 30,970	\$ 48,872	\$ 59,149	\$ 43,551
Alaska	\$ 31,931	\$ 39,883	-	\$ 36,082
Arizona	\$ 32,851	\$ 61,998	\$ 50,568	\$ 45,509
Arkansas	\$ 27,640	\$ 40,793	\$ 56,099	\$ 41,936
California	\$ 38,913	\$ 66,788	\$ 53,040	\$ 47,913
Colorado	\$ 35,126	\$ 61,834	\$ 53,020	\$ 49,255
Connecticut	\$ 46,502	\$ 74,735	\$ 63,166	\$ 57,680
Delaware	\$ 41,735	\$ 68,638	\$ 72,745	\$ 48,986
District of Columbia	\$ 58,296	\$ 71,174	\$ 101,893	\$ 83,125
Florida	\$ 31,737	\$ 50,786	\$ 45,788	\$ 41,901
Georgia	\$ 35,732	\$ 49,928	\$ 50,887	\$ 41,726
Hawaii	\$ 30,061	\$ 34,133	-	\$ 43,603
Idaho	\$ 25,605	\$ 47,886	\$ 47,729	\$ 36,078
Illinois	\$ 40,167	\$ 59,892	\$ 58,978	\$ 52,990
Indiana	\$ 34,331	\$ 62,414	\$ 71,003	\$ 45,401
Iowa	\$ 29,229	\$ 51,254	\$ 59,441	\$ 44,487
Kansas	\$ 30,501	\$ 53,557	\$ 41,572	\$ 40,103
Kentucky	\$ 31,895	\$ 57,023	\$ 58,226	\$ 44,996
Louisiana	\$ 29,919	\$ 61,391	\$ 54,663	\$ 45,636
Maine	\$ 27,465	\$ 48,849	\$ 48,657	\$ 43,782
Maryland	\$ 36,950	\$ 62,988	\$ 76,083	\$ 49,218
Massachusetts	\$ 44,707	\$ 73,215	\$ 59,070	\$ 64,073
Michigan	\$ 40,962	\$ 81,211	\$ 67,463	\$ 52,152
Minnesota	\$ 37,664	\$ 58,233	\$ 53,952	\$ 54,705
Mississippi	\$ 26,487	\$ 41,539	\$ 49,714	\$ 40,840
Missouri	\$ 33,246	\$ 54,767	\$ 48,157	\$ 47,413
Montana	\$ 22,501	\$ 39,803	\$ 49,579	\$ 30,492
Nebraska	\$ 29,364	\$ 44,041	\$ 57,604	\$ 41,543
Nevada	\$ 34,377	\$ 49,754	\$ 57,451	\$ 44,245
New Hampshire	\$ 35,020	\$ 59,046	\$ 50,210	\$ 49,149
New Jersey	\$ 45,189	\$ 72,129	\$ 74,045	\$ 51,925
New Mexico	\$ 26,988	\$ 44,781	\$ 45,810	\$ 30,645
New York	\$ 46,073	\$ 61,598	\$ 63,279	\$ 50,502
North Carolina	\$ 32,489	\$ 50,673	\$ 51,366	\$ 45,965
North Dakota	\$ 25,710	\$ 42,676	-	\$ 36,969
Ohio	\$ 34,939	\$ 61,617	\$ 67,421	\$ 51,556
Oklahoma	\$ 26,968	\$ 48,283	\$ 45,096	\$ 43,800
Oregon	\$ 31,969	\$ 55,871	\$ 64,358	\$ 44,568
Pennsylvania	\$ 36,317	\$ 56,647	\$ 61,799	\$ 49,494
Rhode Island	\$ 34,537	\$ 49,514	\$ 54,075	\$ 44,788
South Carolina	\$ 30,226	\$ 50,713	\$ 63,042	\$ 46,593
South Dakota	\$ 24,609	\$ 39,531	\$ 40,796	\$ 38,193
Tennessee	\$ 32,263	\$ 52,931	\$ 59,445	\$ 48,315
Texas	\$ 35,050	\$ 62,160	\$ 55,779	\$ 47,233
Utah	\$ 28,927	\$ 47,424	\$ 60,098	\$ 41,922
Vermont	\$ 28,088	\$ 52,986	\$ 49,418	\$ 55,880
Virginia	\$ 37,116	\$ 51,975	\$ 53,385	\$ 52,400
Washington	\$ 38,043	\$ 64,758	\$ 64,403	\$ 46,099
West Virginia	\$ 28,409	\$ 54,234	\$ 67,702	\$ 44,480
Wisconsin	\$ 33,628	\$ 53,957	\$ 53,442	\$ 49,371
Wyoming	\$ 26,077	\$ 44,686	-	\$ 38,511

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

**Kentucky New and Expanding Aluminum Industries Announced/Reported
Between January 2000 and April 2005
*Excluding locations and expansions known to have been cancelled***

New Manufacturing Firms

County	City	Facility	Investment	Full-time		Product
				Beg.	Full	
Graves	Mayfield	Turbo Aftermarket Inc (2002)	\$840,000	25	25	Parts for centrifugal compressors
Hancock	Hawesville	Columbia Specialty Metals (2004)		6	6	Reforms high purity aluminum into aluminum shot for the chemical and metal industry
Hopkins	Madisonville	Gemtron Corporation (2000)	\$8,200,000	100	100	glass fabrication and injection molding processes
Pulaski	Somerset	TDE Group Inc (2003)	\$2,050,000	58	58	Aluminum die cast manufacturer
Totals:				4	\$11,090,000	189

Expanding Manufacturing Firms

County	City	Facility	Investment	Full-time		Product
				Beg.	Full	
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 (2001)	\$6,499,212	5	5	Steel and aluminum wheels

Bourbon	Paris	CMC/CLA (2003)	\$34,000,000	50	50 Automotive 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
Caldwell	Princeton	AFCO Manufacturing (2001)	\$110,000		Race car suspension parts & radiators
Caldwell	Princeton	Special Metals Corp (2000)	\$400,000		Primary Metal Products, NEC
Calloway	Murray	Southern Sheet Metal Inc. (2000)	\$20,000	4	4 Sheet Metal Work
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
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 & 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
Fayette	Lexington	Blue Grass Manufacturing Inc. (2000)	\$300,000		Mic. Metal Work, Fabricated Metal Products
Fayette	Lexington	Grayhawk LLC. (2000)	\$20,000		Aluminum Rolling & Drawing, NEC
Fayette	Lexington	Rogers Aluminum Inc (2002)	\$60,000		Aluminum storm windows, doors & prime replacement windows
Fayette	Lexington	Rogers Aluminum Inc (2000)	\$60,000	6	6 Metal Doors, Sash, Frames, Molding & Trim

Fayette	Lexington	Rogers Window Inc (2003)	\$125,000		Aluminum storm windows, doors & prime replacement windows; vinyl window mfg
Floyd	Ivel	R & S Godwin Truck Body Co LLC (2004)		66	66 Steel & aluminum fabricating: dump truck bodies & trailers
Graves	Mayfield	Turbo Technologies Inc (2004)		2	5 Parts & service for centrifugal compressors
Green	Greensburg	Aluminum Fabricators Inc (2001)	\$15,000		Aluminum steeples, cupolas & architectural metal products
Hancock	Hawesville	Southwire Co (2003)	\$1,700,000	15	15 Aluminum wire strand & rod wire
Hancock	Lewisport	McElroy Metal Inc (2002)	\$1,355,110	30	30 Steel & aluminum fabricating
Henderson	Henderson	Audubon Metals LLC (2000)	\$600,000	30	30 Special Industry Machinery, NEC
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	Gibbs Die Casting Corp (2001)	\$10,000,000		Aluminum & magnesium die castings
Henderson	Henderson	Gibbs Die Casting Corp (2002)		100	100 Aluminum & magnesium die castings
Henderson	Henderson	Sonoco (2002)	\$8,800,000	25	25 Aluminum & steel can ends
Henderson	Robards	Alcan Aluminum Corporation (2000)	\$4,753,000	15	15 Extrusion scrap recycling
Henderson	Robards	Alcan Aluminum Corporation (2000)	\$5,879,000	80	80 Aluminum producer & fabricator
Henderson	Robards	Alcan Ingot, Sebree Aluminum Plt. (2000)	\$5,000,000	100	100 Primary Production of Aluminum
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	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	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	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	Specialty Tool & Machine Co (2003)	\$400,000	6	6
Jefferson	Louisville	Specialty Tool & Machine Co. (2000)	\$1,000,000	5	5 Fabricated Metal Products, 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
Laurel	London	Aisin Automotive Castings LLC (2002)	\$41,000,000	180	180 Transmissions, water and oil pumps, pistons for the automotive industry
Letcher	Jenkins	Taylor Metal Roofing & Siding Inc (2004)	\$320,000	10	10 Metal roofing, siding panels, related trim components, insulation, doors, sliding door track systems
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, Div Alcan Aluminum Corp (2000)	\$21,000,000		Sheet Metal Work
Madison	Berea	Novelist Corporation (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	National Metal Processing Inc (2004)	\$700,000		Commercial heat treating/laser processing and welding.
Madison	Richmond	National Metal Processing Inc (2001)	\$20,000		Laser heat & vacuum treating, gas welding, induction & flame processing, carburizing & carbon nitrid
Madison	Richmond	National Metal Processing Inc. (2000)	\$200,000	2	2 Metal Heat Treating

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
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
McLean	Island	Smelter Service Corporation (2002)	\$1,200,000	15	15	Aluminum secondary smelting & recycling
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	Sumerset Custom (2000)	\$180,000			Boat Building & Repairing
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 (2002)	\$9,870,000	66	66	Assembly of automotive throttle bodies & charcoal canisters, injection molding
Simpson	Franklin	Franklin Precision Industry Inc (FPI) (2001)		30	30	Aluminum die casting
Simpson	Franklin	J D/Novitec Industries Inc (2003)	\$1,800,000	30	30	
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, Cupalos	
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 Ind., Inc. (2000)	\$155,000		Stanfing seam metal roofing panels, gutter and downspouts	
Warren	Bowling Green	Capitol Window & Door (2002)	\$115,000	25	25 Vinyl replacement windows	
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 (2004)	\$28,000,000	132	132 Aluminum die castings & secondary specialty machining	
Warren	Bowling Green	Trace Die Cast Inc. (2000)	\$3,000,000		Aluminum Die Castings	
Totals:				91	\$417,998,428	2,119

Expanding Supportive/Service Firms

County	City	Facility	Investment	Full-time		Product
				Beg.	Full	
Union	Pride	Pride Industries Inc (2003)	\$262,329	20	20	Steel & aluminum standing seam roofing, preformed metal shingles.
Totals:				1	\$262,329	20
Grand Totals:				96	\$429,350,757	2,328

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

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