

Profile of Kentucky's Steel Industry



August 2009

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Kentucky's Steel Industry

| | | |
|--------------|---|----------------|
| I. | Executive Summary | Page 3 |
| II. | Steel Industry in Kentucky | Page 3 |
| III. | Profile of Kentucky Steel Companies | Page 7 |
| IV. | Business Cost Comparison | Page 8 |
| V. | The Steel - Automobile Relationship | Page 11 |
| VI. | Other Steel Product Uses | Page 13 |
| VII. | Location and Transportation System | Page 14 |
| VIII. | Additional Steel Industry Resources | Page 15 |
| IX. | Appendix | Page 17 |
| | A) Kentucky's Steel Related Facilities | Page 18 |
| | B) Labor Cost Comparison Report | Page 21 |
| | C) New and Expanding Steel Related Industry Report | Page 22 |
| | D) Endnotes | Page 29 |

I. Executive Summary

Kentucky ranks as one of the top twenty metal exporting states in the primary metal manufacturing and fabricating industries for 2007¹ when measured by the value of shipments. Kentucky offers several advantages to firms in the steel industry, including: low utility costs, central location, quality workforce, ports along the Ohio and Mississippi rivers, and the automotive industry's significant presence.

Steel has made some great advances over the last two decades. Over 50% of the steels made today were not in existence 10 years ago. Today's "new steel" is stronger, thinner, easier to shape and corrosion-resistant. It makes safer, more fuel-efficient cars and longer-lasting products. Thanks to improvements in galvanizing and coating, steel is the world's most resistant material to decay, corrosion, fire and floods. That is why today's cars last longer and steel is beginning to be used more and more to frame houses. The industry has used computers and new technology to upgrade and streamline the steelmaking process. Steel is an environmentally responsible material. It is recyclable and steel mills have drastically reduced emissions. Lastly, steel is an economical choice for consumers.²

Highlights of the Kentucky steel industry include:

- In 2007, Kentucky exported over \$1.3 billion primary and fabricated metals to foreign countries (See Table 1).
- According to a Kentucky Economic Development Cabinet database, in 2008, there were 54 steel-related facilities with 7,484 employees located in Kentucky.
- The United States exported over \$94 billion of primary metal and fabricated metal products in 2007.³
- Kentucky is one of the top twenty metal product exporting states.⁴
- The average salary in 2007 for primary metals industry employees in Kentucky was \$70,307/year. (See Labor Cost Comparison worksheet in Appendix)
- The automotive, appliance and construction industries are the largest markets for Kentucky steel establishments.
- 19 of Kentucky's steel facilities are considered automobile-related suppliers.

II. Steel Industry in Kentucky

As of April 2009, the steel industry in Kentucky included 54 manufacturing establishments with 7,484 employees, based on surveys conducted by the Kentucky Cabinet for Economic Development. Kentucky has a strong presence in steel production and is one of the top twenty steel producing states.

As measured by value of shipments, Kentucky ranks as one of the top twenty primary metal and fabricated metal exporting states in the nation. In 2008, the value of exports for the metal industry in Kentucky totaled over \$1.3 Billion (see Table 1).

From January, 2000 to April, 2009, nine new steel-related facilities have been established in Kentucky. This represents an investment of over \$134 million and has created 817 jobs. At the same time, there have been 62 expansions to steel-related

facilities operating within the state. This represents an investment of over \$1.24 billion and has created nearly 1,800 jobs.

Table 1: Primary and Fabricated Metal Exports (2008)

| State | Value of Shipments |
|-----------------|---------------------------|
| Texas | \$ 12,675,000,255 |
| New York | \$ 10,656,016,188 |
| California | \$ 6,061,644,817 |
| Pennsylvania | \$ 5,782,587,372 |
| Ohio | \$ 5,470,983,241 |
| New Jersey | \$ 4,974,035,899 |
| Utah | \$ 4,407,656,639 |
| Michigan | \$ 3,847,098,308 |
| Illinois | \$ 3,697,763,629 |
| Nevada | \$ 3,040,091,774 |
| Massachusetts | \$ 2,773,323,731 |
| Indiana | \$ 2,550,158,792 |
| Florida | \$ 2,356,440,143 |
| Washington | \$ 1,774,414,930 |
| North Carolina | \$ 1,620,494,832 |
| Tennessee | \$ 1,547,584,447 |
| Arizona | \$ 1,479,932,239 |
| Alabama | \$ 1,321,413,117 |
| Maryland | \$ 1,306,701,660 |
| Kentucky | \$ 1,300,864,109 |

Source: Data derived from information provided by WISER, at <http://wisertrade.org>, from US Census Bureau, Foreign Trade Division.

Steel Companies

Kentucky is home to several state-of-the-art steel facilities producing a variety of products. Some of these facilities are:

- **North American Stainless (NAS)** located in Ghent is the largest steel employer in Kentucky with 1,350 employees (2008). North American Stainless, part of the most competitive stainless steel manufacturing group in the world, Acerinox, S.A. NAS, produces both long products (such as wire, cold bar, peeled bar, angle and rebar) and flat products (for use in commercial manufacturing for everything from appliances to automotive exhausts). It is the only North American single integrated site that takes a product from melt to finish for both flat and long products. It is also the largest investment by a Spanish corporation in the United States.⁵
- **AK Steel** in Ashland is the state's second largest steel employer with 936 employees. AK Steel produces flat-rolled carbon, stainless and electrical steel products, as well as carbon and stainless tubular steel products, for automotive, appliance, construction and manufacturing markets. It was awarded the 2005, 2006, 2007 and 2008 Max Eward Safety Award from the American Coke and Coal

Chemicals Institute (ACCCI). The award recognizes the ACCCI-member coke plant with the best annual safety record. It was also named one of *America's Most Admired Companies in 2008* by Fortune Magazine.⁶

- **Aichi Forge, USA, Inc.**, formerly Louisville Forge and Gear Works, LLC is a custom manufacturer of highly engineered, impression die steel forgings for demanding applications. Its products are shipped throughout the world to serve a diverse industrial clientele including the following industries: 1) automotive/truck; 2) aerospace; 3) off-highway equipment; and 4) farm machinery.

Gallatin Steel Company, a state-of-the-art steel mill at Ghent in Gallatin County is a joint venture between Dofasco, Inc. and Gerdau Ameristeel. It began production in 1995 and is one of the most technologically advanced mills in the world. It currently produces over 1.4 million tons of hot steel bands on an annual basis and recycles over 4,000 tons of scrap metal daily. It was awarded by the Kentucky Association of Manufacturers in the large business category the *Kentucky Manufacturer of the Year* for 2008.

Other large steel employers in Kentucky include: Mubea, Inc., Stephens Pipe and Supply, IPSCO Tubulars Kentucky, Inc., Gerdau Ameristeel and Sypris Technologies, Inc.

Table 2: Major Steel Employers in Kentucky (2008)

| Company | Employment |
|-----------------------------------|-------------------|
| North American Stainless | 1,350 |
| AK Steel Corp. (Both location) | 936 |
| Mubea, Inc. | 688 |
| Gallatin Steel | 423 |
| IPSCO Tubulars Kentucky, Inc. | 324 |
| Aichi Forge USA, Inc. | 320 |
| Stephens Pipe & Supply | 320 |
| Sypris Technologies, Inc. | 310 |
| Gerdau Ameristeel CCK | 200 |
| Kobe Aluminum Automotive Products | 200 |

Source: Kentucky Cabinet for Economic Development (NAICS Codes 331111, 331210, 332111, 331221 and 331222). Information gathered April 28, 2009.

Kentucky Advantages

Kentucky is attractive to the steel industry for several reasons, including:

- **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.

- **Ports along the Ohio and Mississippi Rivers:** Access to these river ports provides low cost transportation of steel and steel-related products to both national and global markets.
- **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.⁷ For the previous six years, Kentucky had the lowest industrial electrical power costs. Because the steel 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 steel 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.
- **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 2008 corporate survey conducted by *Area Development Magazine* named highway accessibility as the number one factor listed by most corporations as the primary reason for selecting a site, chosen by 95.4% of respondents.⁸
- **Auto Industry:** Steel is the largest item by weight input in an automobile. Due to the increased use of advanced high-strength steels, auto parts are more dent-resistant and up to 30 percent stronger than a decade ago.⁹ In 2007, Kentucky ranked 3rd among the states in light vehicle production,¹⁰ and it is the location for nearly 500 motor vehicle-related suppliers. Although automobiles have increased the amount of aluminum per vehicle over the last fifteen years, steel remains the chief ingredient for most automobiles.
- **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 five consecutive years, Kentucky was 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 (2006) | | | | |
|---|--------------------------|--------------------------------|--------------------------------|--------------------------------------|
| | US Industry Total | US All Industries Total | Kentucky Industry Total | Kentucky All Industries Total |
| Primary Metal | 449,914 | 119,917,165 | 14,218 | 1,552,012 |
| Fabricated Metal | 1,563,713 | 119,917,165 | 25,528 | 1,552,012 |

Source: U.S. Census Bureau, 2006 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:

$$Mi = 14,218$$

$$Mt = 1,552,012$$

$$USi = 449,914$$

$$USst = 119,917,165$$

$$LQit = \mathbf{2.44}$$

LQit for Kentucky Fabricated Metals Products Manufacturing in 2006:

$$Mi = 25,528$$

$$Mt = 1,552,012$$

$$USi = 1,563,713$$

$$USst = 119,917,165$$

$$LQit = \mathbf{1.26}$$

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

III. Profile of Kentucky Steel Companies

The steel industry in Kentucky consists of companies that produce steel as their primary product and those that fabricate steel into other products, such as wires or automotive parts. Kentucky steel-related companies represent seven different industry classifications, but they are primarily concentrated in 5 industries. Table 4 shows the number of facilities and employees for the 6-digit NAICS industries with a significant presence in the Kentucky economy. Rolled steel shape manufacturing (NAICS 331221) has the largest presence in Kentucky with 22 establishments and over 4,000 employees. Iron and steel mills (NAICS 331111) also compose a large share of Kentucky's steel industry with 13 facilities and 2,287 employees.

Common products of Kentucky steel establishments include stainless steel coils, sheets, and long products such as bar, wire, angle and rebar. Many of the facilities specialize in producing products for the automotive industry and the majority of their production goes to supply the demands of that industry. Other areas of concentration are in fabricating and forging steel and stainless steel productions.

Table 4: NAICS Composition of Kentucky Steel Facilities

| NAICS Code | Description | Facilities | Employees |
|-------------------|--|-------------------|------------------|
| 331221 | Rolled Steel Shape Manufacturing | 22 | 4,039 |
| 331111 | Iron & Steel Mills | 13 | 2,287 |
| 332111 | Iron & Steel Forging | 9 | 1,314 |
| 331222 | Steel Wire Drawing | 7 | 707 |
| 331210 | Iron/Steel Pipe & Tube Mfg (Purchased Steel) | 7 | 608 |

Note: Since many facilities are classified into more than one NAICS code and not all NAICS codes are mentioned, the sum of the 5 industries does not equal the total of all steel-related facilities.

Source: Kentucky Cabinet for Economic Development. Information gathered April 30, 2009.

The Kentucky steel industry has a very international flavor. Of the state's 54 steel-related facilities listed in the Economic Development Cabinet's database, 19 are foreign-owned, representing companies from nine countries and employing over 4,300 employees in Kentucky (See Appendix- Kentucky Steel Related Facilities for the list). Spain, Japan, Germany, Brazil and Canada account for much of the foreign investment in the Kentucky steel industry with sixteen of the nineteen facilities between them and employing over 4,100 people.

Table 5: Foreign-owned Steel Facilities in Kentucky

| Country | Facilities | Employment |
|----------------|-------------------|-------------------|
| Total # | 19 | 4,344 |
| Japan | 9 | 1,095 |
| Spain | 1 | 1,350 |
| Germany | 2 | 751 |
| Brazil # | 3 | 653 |
| Canada # | 2 | 483 |
| Luxembourg # | 1 | 423 |
| Russia | 1 | 324 |
| Belgium | 1 | 95 |
| Netherlands | 1 | 16 |

Source: Kentucky Cabinet for Economic Development (May, 2009)

- Canada, Brazil and Luxembourg are joint investors in a facility that employ 423 people. Therefore, the numbers do not total to 19 facilities and 4,344 employees.

IV. Business Cost Comparison

Kentucky has the fourth lowest overall cost of doing business for states east of the Mississippi River and fifth with states that are generally considered to be economic competitors with Kentucky*. The index utilized to measure the overall cost of doing business within a state ranks Kentucky as the state with the 13th lowest cost nationally with a state index of 92. The national average index is 100%.¹¹

Table 6: Cost of Doing Business for Competitive Steel States (2006)

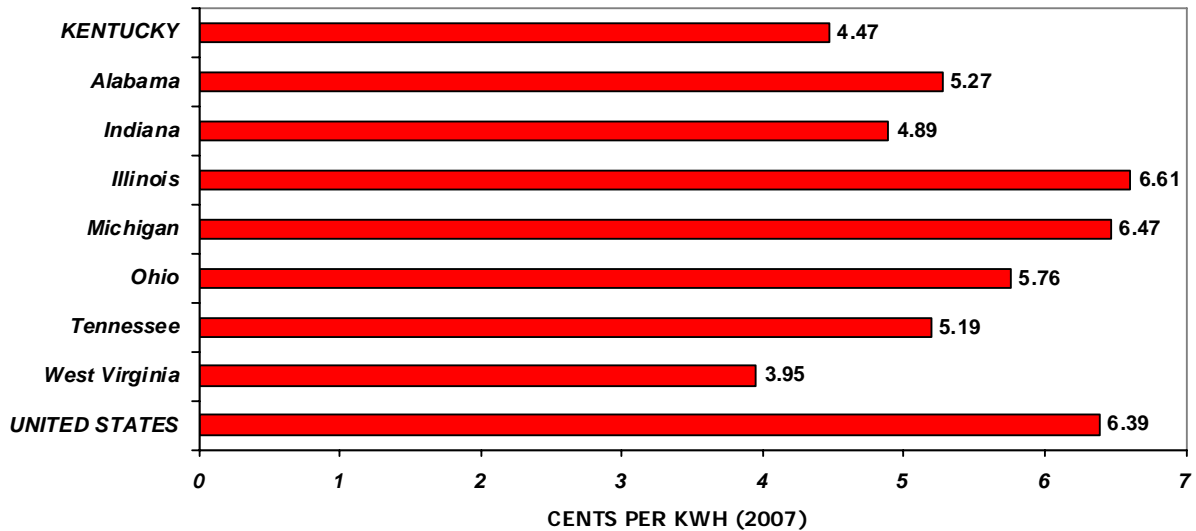
| | Overall Cost of Doing Business | | Unit Labor Cost | | Energy Cost | | State & Local Taxes | |
|---------------|---------------------------------------|-------------|------------------------|-------------|--------------------|-------------|--------------------------------|-------------|
| | Index | Rank | Index | Rank | Index | Rank | Index | Rank |
| U.S. | 100% | - | 100% | - | 100% | - | 100% | - |
| Alabama | 95% | 21 | 98% | 25 | 84% | 23 | 75% | 1 |
| Illinois | 100% | 33 | 104% | 43 | 83% | 22 | 95% | 25 |
| Indiana | 89% | 5 | 90% | 5 | 79% | 15 | 92% | 16 |
| Kentucky | 93% | 15 | 97% | 23 | 69% | 7 | 91% | 13 |
| Ohio | 98% | 28 | 95% | 18 | 91% | 29 | 113% | 46 |
| Tennessee | 89% | 5 | 90% | 5 | 86% | 25 | 79% | 2 |
| West Virginia | 92% | 12 | 93% | 12 | 60% | 2 | 117% | 49 |

Note: A ranking of one represents the lowest cost.

Source: Derived from data provided by *North American Business Cost Review*, 2007 Edition, Prepared by Economy.com, Inc., - Updated July 2008. A ranking of 1 represents the best condition or the lowest business cost.

***Note:** Delaware has an overall lower cost of doing business than Kentucky and is located east of the Mississippi River. Arkansas, a competitor state, has a lower overall cost of doing business than Kentucky, but it is located west of the Mississippi River.

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



Source: Energy Information Administration/Electric Power Annual 2007.

Two of the major costs for companies in the steel industry are energy and labor. Labor is a significant cost factor for the steel industry as with all manufacturing industries. The following section details how Kentucky compares to the other competitor steel 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 steel 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. The two years in which it wasn't the lowest it was the second lowest.

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 steel producing and competitor states. For 2007, the weekly wages for employees in all private industries and for manufacturing in Kentucky are below the U.S. average. Overall employee wages in Kentucky are third lowest among the steel producing competitor states. For manufacturing in these same states it has the fourth lowest wages (See Table 7). A 2008 corporate survey conducted by *Area Development Magazine* listed labor cost as the second most important factor considered by corporations when selecting a site or location. It was chosen by 91.4% of the respondents. Only highway access had a higher rating.

Table 7: Labor Cost Comparison Among Competitor Steel Producing States

| Average Weekly Wages: 2007 | | |
|-----------------------------------|-------------------------------|----------------------|
| State | All Private Industries | Manufacturing |
| United States | \$ 791 | \$ 1,284 |
| Alabama | \$ 661 | \$ 1,057 |
| Illinois | \$ 885 | \$ 1,338 |
| Indiana | \$ 717 | \$ 1,260 |
| Kentucky | \$ 675 | \$ 1,159 |
| Michigan | \$ 792 | \$ 1,479 |
| Ohio | \$ 736 | \$ 1,253 |
| Tennessee | \$ 691 | \$ 1,123 |
| West Virginia | \$ 627 | \$ 1,127 |

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

V. The Steel - 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.¹² 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 449 auto-related suppliers located in Kentucky employing over 80,000 people.

Table 8: 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 |
| Georgia | 324,089 |

Source: *Automotive News 2008*, <http://www.autonews.com/>.

Steel Usage in Automobiles

The transportation industry is one of the largest markets for steel. Steel represents the single largest material in most automobiles. One of the new innovations to come along in the automotive industry is the introduction of the Ultralight Steel Auto Body – Advanced Vehicle Concepts (ULSAB-AVC). ULSAB-AVC is a new concept initiated by the steel industry using advanced high-strength steels (AHSS) and a new automotive design to provide more strength at a lower weight. Tests done on the ULSAB-AVC designs have shown the following improvements: 1) A 25% weight reduction and the possibility of an additional 35% reduced from that; 2) An 80% improvement in torsional rigidity (a vehicle’s resistance to twisting forces); 3) A 52% improvement in bending rigidity (a vehicle’s resistance to bending forces) and 4) first body mode (a vehicle’s resistance to impacting forces) (www.ulsab-avc.org).

For every million ULSAB-AVC vehicles, there is an estimated savings of 2.1 million tons of annual CO2 emissions into the atmosphere. This would also reduce annual fuel consumption by an estimated 171.3 million gallons because every 10% reduction in weight increases fuel consumption by 6 to 8 percent.¹³

Auto-Related Steel Facilities

The migration of the automobile industry southward over the last two decades gives Kentucky some distinct advantages over other states. Kentucky is located at the heart of the automobile producing regions in the United States. There are 19 steel-related facilities that are considered auto-related within the state, and these establishments have nearly 3,500 employees.¹⁴ Crankshafts, brakes, custom forging, press metals, steel tubing and die-cast automotive parts are some of the common products of Kentucky steel-related facilities sold to automotive assembly plants and automotive parts manufacturers.

VI. Other Steel Product Uses and Information

Other Uses

Kentucky steel facilities produce a variety of steel related products. Roofing is one of the hot spots for metal. On average thirteen million homes are re-roofed every year. One advantage that metal roofs have over asphalt shingles is longevity. A metal roof will last the life of the house, but asphalt shingles have an average life expectancy of 17.3 years. Metal roofs have superior durability, lower-life cycle costs and are lighter per unit area when compared to other non-metal alternatives.¹⁵

Bridges and steel utility poles offer a growing market for the steel industry. In the late 1990's, a high performance steel (HPS) was developed for use in bridge steel plates. It is stronger than traditional steel and 28% lighter. Today there are over 200 HPS bridges in service in 43 states.¹⁶

There are an estimated 185 million utility poles in North America. Each year between two and four million utility poles need replacing. Utility poles, which have traditionally been made from trees, are being replaced by steel distribution poles. They are lighter, require less maintenance than traditional wooden poles, have a life expectancy of over 50 years, are resistant to insects and rot, and don't require the use of a toxic chemical preservative. It takes an entire tree to create one utility pole. One recycled car can create four such poles. At the end of its lifecycle, a tree must be disposed of, but a steel pole can be recycled.¹⁷

Recycling

The steel industry has made great strides over the last three decades to become more environmentally friendly. For 2007, the overall recycle rate was over 78%. The recycling rate for automobiles for 2007 was 110% or ten percent more steel was recycled from older vehicles than went into the production of newer ones. The same year 90% of appliances were recycled compared to those produced. The most recycled product year-in and year-out is structural beams and plates, with a recycle rate for 2007 of almost 98%.¹⁸ Interestingly, the steel from the 9/11 attack on the World Trade Center was recycled and used in the production of a warship for the United States Navy.¹⁹

Environment

Since 1975, the steel industry spent over \$60 billion in new technologies in order to improve energy efficiency and productivity. During the same period, the greenhouse gas emissions from the production of one ton of steel dropped by 45% and air and water emissions produced were lowered by 90%. During a typical year, over \$500 million or 15% of the industry's capital are directed toward environmental facilities.²⁰ Today, nearly 95% of the water used for steel making is recycled. Virtually all hazardous waste produced in the process is recycled and put to a beneficial use.²¹ The U.S. steel industry reduced its energy intensity per ton of steel by 29% since 1990.²²

Every ton of steel recycled saves 2,500 pounds of iron ore, 1,400 pounds of coal, and 120 pounds of limestone. Recycling takes 74% less energy than producing new steel.²³

Innovation

The North American steel industry is dedicated to producing the highest quality steel in the world and the greatest productivity as well. More than 120,000 engineers, technicians, and scientists are constantly seeking ways to improve the productivity and quality of steel. From the early 1980's to 2006, productivity skyrocketed. In the early 1980's it took an average of 10.1 man-hours to produce a ton of steel by 2006 that average was down to 2 man-hours. The steel industry is one of the world's most productive and yet it constantly seeks out ways to improve upon this record.²⁴

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 in a strong position to compete in the global marketplace. Nearly 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 provide safe, efficient, and cost-effective access to all points of the globe.

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. Kentucky is in the center of this auto corridor. 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.²⁵

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.

The [Reason Foundation](#) ranked Kentucky's highways as the 9th most efficient in the nation in its *17th Annual Performance of State Highway Systems* report. The cost effectiveness for each state is computed by averaging its 12 performance ratios (ratio of each state's statistic to the national average, for 5 financial measures and 7 condition measures), then ranking the states. The report was released in July 31, 2008 and compared the state highway systems from 1984 to 2006.²⁶

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.

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.

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 Steel 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.²⁷

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.²⁸

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.

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

Earth 911

Earth 911 is division of the cause media company [Global Alerts](http://www.globalalerts.org) 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)

APPENDIX

Kentucky's Steel-Related Facilities (April 2009)

| Facility Name | Product Description | Employment |
|--|--|------------|
| Ashland | | |
| AK Steel Corp.* | Steel slabs. | 695 |
| AK Steel Corp.* | Coke making. | 241 |
| Kentucky Electric Steel LLC* | Steel flat bars. | 149 |
| Bardstown | | |
| AA Machine, Inc. | Industrial machine parts. | 5 |
| MST Steel Corporation of Kentucky | Slitting and cold-reduction of steel coil. | 14 |
| Bowling Green | | |
| Kobe Aluminum Automotive Products, LLC * | Aluminum forging plant. | 200 |
| Calvert City | | |
| Gerdau Ameristeel CCK Mill | Structural steel mill; angles, channels, flats and miscellaneous channels. | 200 |
| Elizabethtown | | |
| Alabama Wire Products | Drawn wire for refrigerator shelving, oven racks, and modular storage racks. | 8 |
| Associated Tube USA, Inc. | Stainless steel tubing. | 60 |
| Eminence | | |
| Steel Technologies, Inc.* | Steel service center, steel rolling, annealing and slitting/blanking. | 117 |
| Florence | | |
| IT Spring Wire LLC* | Manufacture of high-strength steel wire for coil springs, as for in automotive applications. | 63 |
| Mubea, Inc.* | Automotive springs, hose clamps & stabilizer bars | 688 |
| Plymouth Steel Corp. | Steel bars. | 30 |
| Georgetown | | |
| Aichi Forge USA, Inc.* | Steel forging & powder metal sinter forgings for application in automotive/aircraft engines and suspension components. | 320 |
| International Crankshaft, Inc. * | Crankshafts and steel forgings. | 151 |
| Ghent | | |
| Gallatin Steel Co. | Hot rolled coiled steel, flat rolled steel. | 423 |
| Ghent Steel Industries, LLC | Coil steel process. | 15 |
| North American Stainless | Stainless steel coils, sheets, and long products (bar, wire and rod). | 1,350 |
| Steel Technologies, Inc. | Process flat rolled steel. | 130 |
| Glasgow | | |
| Felker Brothers Corp. | Stainless steel pipe, stainless steel pipe and tube 2" thru 24" in diameter. | 58 |
| Henderson | | |
| Taubensee Steel & Wire Co. | Steel wire. | 49 |
| Hickman | | |
| Hickman Pipe & Tube, Inc. | Steel sprinkler system pipe. | 15 |
| Hopkinsville | | |
| Plymouth Extruded Shapes | Stainless, carbon & alloy steel extrusions; special & structural titanium & nickel base shapes. | 89 |
| PTC Alliance | Cold drawn steel tubing. | 70 |
| Superior Graphite* | Granular synthetic graphite & desulfurized petroleum coke. | 72 |

| | | |
|---|--|-----|
| Jackson | | |
| Combs Custom Manufacturing | Truck bumpers and accessories, push bars, grilles and grille guards; equipment parts – loaders, dozers, handrails custom off road and ATV parts. | 2 |
| Lebanon | | |
| Portland Forge | Custom impression steel die forgings for truck & farm machinery industries. | 123 |
| Liberty | | |
| Chieftain Steel LLC | Manufacture welded rolled steel tube. | 32 |
| Floyd Industries LLC | Livestock handling equipment made from tubular steel. | 60 |
| Louisville | | |
| Amstar Steel LLC | Cold roll steel wall studs, floor joists and roof trusses. | N/A |
| Builders Metal Supply, Inc. | Steel fabrication. | 25 |
| Cardinal Manufacturing Co.* | Steel, bronze, brass & aluminum roll formed metal products and parts. | 62 |
| Gerdau AmeriSteel* | Steel fabricating and rebar. | 30 |
| Millennium Forge, Inc. | Steel forging & fittings for valve & OEM use, custom forging-raw. | 75 |
| MISA Metal Processing of Kentucky, Inc. | Steel processing and coil slitting | 30 |
| Republic Conduit Manufacturing | Republic Conduit TM is a domestic producer of EMT, IMC and rigid electrical steel conduit. Republic Conduit is also an ISO 9001:2000 and UL certified company. | 45 |
| Steel Structural Systems, Inc. | Roll formed steel framing components & light-gauge metal construction material. | 31 |
| Sypris Technologies, Inc.* | Custom forgings. | 310 |
| Worthington Steel Co. | Cold and hot rolled steel processing. | 51 |
| Mt. Sterling | | |
| Nooyen Manufacturing | Galvanized steel pig flooring. | 16 |
| Newport | | |
| IPSCO Tubulars Kentucky, Inc. | Steel pipes. | 324 |
| Nicholasville | | |
| Adcom Wire Co. | High carbon spring wire, bright plating. | 100 |
| American Building Components | Metal building products. | 42 |
| Owensboro | | |
| Ken-Tron Mfg., Inc.* | Wire drawing & precision stampings for electronics, automotive, battery, medical and television products. | 72 |
| Paducah | | |
| JMS Russel Metals Corp. | Metal sales, processing and distributing. | 42 |
| Pride | | |
| Pride Industries, Inc. | Steel & aluminum standing seam roofing, preformed metal shingles. | 28 |
| Richmond | | |
| Asahi Forge of America Corporation* | Hot forge manufacturing for the automotive industry. | 52 |
| Russell Springs | | |
| Stephens Pipe & Supply | Chain link fence, industrial gates, dog kennels. | 320 |
| Shelbyville | | |
| Bekaert Corp.* | Preformed steel staple wire, fine wire, flat wire, nylon-coated wire, tin-coated wire and galvanized wire. | 95 |
| South Union | | |
| Precision Strip, Inc., Plant 3* | Steel, aluminum & copper processing & slitting | 123 |

| | | |
|---------------------------------|--|--------------|
| | service. | |
| Versailles | | |
| Nisshin Automotive Tubing LLC* | Stainless steel automotive tubing. | 17 |
| Whitesburg | | |
| Drill Steel Service, Inc. | Steel rods, overcast, mandrels and other metal products. Distribute cutting bits and roof bolt products. | 32 |
| Winchester | | |
| Advanced Green Components, LLC* | Manufacture forgings & machined rings for tapered roller bearings. | 78 |
| CONTECH Construction Products | Steel retaining sheets & multiple bridge planks. | 55 |
| | | TOTAL |
| | Employees | 7,484 |
| | Facilities/Plants | 54 |
| | Automotive Related Facilities | 19 |

* Indicates that the facility produces or manufacturers automotive related products as of April 28, 2009.

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 ensure 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 | \$ 41,127 | \$ 66,761 | \$ 72,518 | \$ 55,326 |
| Alabama | \$ 34,346 | \$ 54,963 | \$ 77,148 | \$ 49,942 |
| Alaska | \$ 37,762 | \$ 44,249 | N/A | N/A |
| Arizona | \$ 37,268 | \$ 69,924 | \$ 57,897 | \$ 53,443 |
| Arkansas | \$ 31,706 | \$ 46,066 | \$ 68,945 | \$ 48,257 |
| California | \$ 44,882 | \$ 81,283 | \$ 62,253 | \$ 56,680 |
| Colorado | \$ 40,059 | \$ 67,936 | \$ 68,721 | \$ 52,403 |
| Connecticut | \$ 53,682 | \$ 86,236 | \$ 76,240 | \$ 69,036 |
| Delaware | \$ 45,750 | \$ 77,244 | \$ 78,835 | \$ 55,661 |
| District of Columbia | \$ 69,492 | \$ 79,842 | N/A | N/A |
| Florida | \$ 35,522 | \$ 57,519 | \$ 55,216 | \$ 47,340 |
| Georgia | \$ 38,389 | \$ 56,558 | \$ 56,892 | \$ 47,660 |
| Hawaii | \$ 34,376 | \$ 41,068 | N/A | \$ 47,124 |
| Idaho | \$ 29,024 | \$ 55,440 | \$ 48,839 | \$ 38,987 |
| Illinois | \$ 46,027 | \$ 69,594 | \$ 71,559 | \$ 59,694 |
| Indiana | \$ 37,305 | \$ 65,527 | \$ 85,351 | \$ 50,387 |
| Iowa | \$ 33,368 | \$ 57,684 | \$ 66,433 | \$ 49,708 |
| Kansas | \$ 35,481 | \$ 60,066 | \$ 50,744 | \$ 43,985 |
| Kentucky | \$ 35,121 | \$ 60,250 | \$ 70,307 | \$ 51,161 |
| Louisiana | \$ 35,577 | \$ 69,277 | \$ 65,522 | \$ 56,207 |
| Maine | \$ 30,603 | \$ 53,330 | \$ 62,864 | \$ 49,242 |
| Maryland | \$ 41,866 | \$ 73,944 | \$ 82,241 | \$ 57,548 |
| Massachusetts | \$ 52,247 | \$ 86,499 | \$ 70,167 | \$ 68,781 |
| Michigan | \$ 41,190 | \$ 76,904 | \$ 73,099 | \$ 56,216 |
| Minnesota | \$ 42,297 | \$ 64,698 | \$ 61,570 | \$ 60,369 |
| Mississippi | \$ 29,240 | \$ 47,233 | \$ 62,143 | \$ 45,385 |
| Missouri | \$ 36,887 | \$ 58,821 | \$ 60,305 | \$ 53,610 |
| Montana | \$ 27,055 | \$ 45,986 | \$ 58,158 | \$ 36,252 |
| Nebraska | \$ 33,824 | \$ 49,085 | \$ 67,346 | \$ 47,352 |
| Nevada | \$ 39,119 | \$ 57,490 | \$ 72,093 | \$ 50,178 |
| New Hampshire | \$ 40,024 | \$ 70,379 | \$ 59,260 | \$ 56,802 |
| New Jersey | \$ 50,268 | \$ 88,176 | \$ 75,898 | \$ 60,414 |
| New Mexico | \$ 31,740 | \$ 53,136 | \$ 41,175 | \$ 33,270 |
| New York | \$ 56,548 | \$ 69,328 | \$ 73,284 | \$ 57,242 |
| North Carolina | \$ 36,078 | \$ 59,476 | \$ 68,078 | \$ 52,520 |
| North Dakota | \$ 30,889 | \$ 49,045 | N/A | \$ 45,004 |
| Ohio | \$ 38,258 | \$ 65,173 | \$ 81,948 | \$ 57,750 |
| Oklahoma | \$ 31,848 | \$ 52,599 | \$ 57,675 | \$ 49,908 |
| Oregon | \$ 36,423 | \$ 62,983 | \$ 85,906 | \$ 48,709 |
| Pennsylvania | \$ 41,598 | \$ 63,011 | \$ 76,661 | \$ 55,545 |
| Rhode Island | \$ 38,666 | \$ 58,245 | N/A | \$ 49,894 |
| South Carolina | \$ 33,075 | \$ 57,177 | \$ 73,783 | \$ 51,706 |
| South Dakota | \$ 28,440 | \$ 45,565 | \$ 47,454 | \$ 42,493 |
| Tennessee | \$ 35,941 | \$ 58,374 | \$ 70,597 | \$ 54,622 |
| Texas | \$ 40,396 | \$ 74,056 | \$ 71,456 | \$ 58,086 |
| Utah | \$ 33,459 | \$ 53,876 | \$ 69,140 | \$ 48,608 |
| Vermont | \$ 31,792 | \$ 58,842 | \$ 52,896 | \$ 58,542 |
| Virginia | \$ 42,181 | \$ 59,449 | \$ 69,502 | \$ 61,888 |
| Washington | \$ 43,634 | \$ 74,043 | \$ 71,788 | \$ 52,246 |
| West Virginia | \$ 32,600 | \$ 58,583 | \$ 78,913 | \$ 48,791 |
| Wisconsin | \$ 37,369 | \$ 59,180 | \$ 60,121 | \$ 53,937 |
| Wyoming | \$ 34,401 | \$ 52,822 | N/A | \$ 49,143 |

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 Steel Industries Announced/Reported
Between January 2000 and April 2009
*Excluding locations and expansions known to have been cancelled***

New Manufacturing Firms

| County | City | Facility | Investment | Full-time | | Product |
|----------------|---------------|---|--------------|-----------|---------------|---|
| | | | | Beg. | Full | |
| Boyd | Ashland | KES (Acquisition Company LLC) (2003) | \$4,700,000 | 250 | 250 | Steel flat bars. |
| Casey | Liberty | Chieftain Steel LLC) (2006) | \$2,110,000 | 40 | 40 | Manufacture welded rolled steel tube. |
| Casey | Liberty | Floyd Industries LLC) (2006) | \$560,000 | 50 | 50 | Livestock handling equipment made from tubular steel. |
| Jefferson | Louisville | Maverick C & P, Inc. (2004) | \$62,600,000 | 243 | 243 | Tubular steel products used in energy and industrial applications. |
| Jefferson | Louisville | Steel Structural Systems Inc. (2005) | | 12 | 80 | Roll formed steel framing components and light-gauge metal construction material. |
| Madison | Richmond | Asahi Forge of America Corporation (2002) | \$17,530,000 | 37 | 45 | Press forging for the automotive industry. |
| Nelson | Bardstown | MST Steel Corporation of Kentucky (2001) | \$2,700,000 | 15 | 15 | Slitting & cold-reduction of steel coil. |
| Warren | Bowling Green | Kobe Steel Ltd. (2003) | \$35,645,000 | 78 | 78 | Aluminum forging plant. |
| Woodford | Versailles | Nisshin holding, Inc. (2004) | \$8,247,000 | 16 | 16 | Stainless steel automotive tubing. |
| Totals: | | | | 9 | \$134,092,000 | 817 |

Expanding Manufacturing Firms

| County | City | Facility | Investment | Full-time | | Product |
|--------|----------|------------------------------|--------------|-----------|------|---------------------------------|
| | | | | Beg. | Full | |
| Barren | Glasgow | Felker Brothers Corp. (2008) | \$300,000 | 3 | 3 | Stainless steel pipe and tubes. |
| Barren | Glasgow | Felker Brothers Corp. (2001) | \$2,000,000 | 5 | 5 | Stainless steel pipe. |
| Barren | Glasgow | Felker Brothers Corp. (2003) | \$250,000 | 0 | 0 | Stainless steel pipe. |
| Boone | Florence | IT Spring Wire (2000) | \$12,978,000 | 26 | 26 | Spring wire for auto industry. |

| | | | | | | |
|-----------|--------------|--|---------------|-----|-----|--|
| Boone | Florence | IT Spring Wire LLC (2003) | \$1,280,000 | | | Steel wire for coil spring of automobile. |
| Boone | Florence | Mubea Inc. (2005) | \$16,000,000 | | | Automotive springs & spring hose clamps. |
| Boone | Florence | Mubea Inc., Sub Muhr Und Bender (2000) | \$7,743,104 | 60 | 60 | Steel springs, except wire. |
| Boone | Florence | Mubea Inc. (2001) | \$31,200,000 | 145 | 145 | Dual coated automotive springs. |
| Boone | Florence | Plymouth Steel Corp. (2000) | \$3,100,000 | 15 | 15 | Steel bars. |
| Boyd | Ashland | AK Steel Corp. (2004) | \$65,000,000 | | | Flat rolled carbon steel. |
| Boyd | Ashland | Kentucky Electric Steel, Inc. (2004) | \$1,340,620 | | | Hot rolled steel bars. |
| Carroll | Carrollton | Parthenon Metal Works (2005) | \$100,000 | 2 | 2 | Steel tubing |
| Carroll | Carrollton | Parthenon Metal Works (2000) | \$1,040,000 | 4 | 4 | Blast furnace, coke ovens and steel rolling mill. |
| Carroll | Ghent | North American Stainless (2000) | \$200,000,000 | 150 | 150 | Hot rolling and finishing stainless steel. |
| Carroll | Ghent | North American Stainless (2002) | \$100,000,000 | 250 | 250 | Stainless steel coils. |
| Carroll | Ghent | North American Stainless (2002) | \$160,961,000 | 50 | 50 | Stainless steel coils. |
| Carroll | Ghent | North American Stainless (2004) | \$74,235,000 | 35 | 175 | Stainless steel coils, sheets, and long products (bar, wire, and rod). |
| Carroll | Ghent | North American Stainless (2005) | \$50,000,000 | | | Stainless steel coils, sheets, and long products (bar, wire, and rod). |
| Carroll | Ghent | North American Stainless (2006) | \$270,000,000 | 80 | 80 | Stainless steel coils, sheets, and long products (bar, wire, and rod). |
| Christian | Hopkinsville | Superior Graphite Co. (2000) | \$494,979 | | | Blast furnaces, coke ovens, steel & rolling mills. |
| Christian | Hopkinsville | Superior Graphite Co. (2002) | \$250,000 | | | Granular synthetic graphite & desulfurized petroleum coke. |
| Christian | Hopkinsville | Superior Graphite Co. (2006) | \$5,069,000 | 20 | 20 | Granular synthetic graphite & desulfurized petroleum coke. |
| Clark | Winchester | Timken Co. (2000) | | 15 | 15 | Iron and steel forgings. |
| Clark | Winchester | Timken Co. (2002) | \$21,660,000 | 80 | 80 | Hot forged steel bearing rings. |
| Daviess | Owensboro | Ken-Tron Manufacturing, Inc. (2000) | \$450,000 | | | Steel wire drawing & nails & spikes. |
| Daviess | Owensboro | Ken-Tron Manufacturing, Inc. (2006) | \$200,000 | | | Steel wire drawing. |
| Gallatin | Ghent | Gallatin Steel Co. (2003) | \$4,000,000 | 20 | 20 | Hot rolled coiled steel, flat rolled steel. |
| Gallatin | Ghent | Steel Technologies, Inc. (2006) | \$6,000,000 | | | Process flat rolled steel. |

| | | | | | | |
|-----------|-----------------|---|--------------|-----|-----|---|
| Gallatin | Ghent | Steel Technologies, Inc. (2005) | \$490,000 | | | Process flat rolled steel. |
| Hardin | Elizabethtown | Copperweld Corp. (2005) | \$5,000,000 | 5 | 25 | Stainless steel tubing. |
| Henderson | Henderson | Taubensee Steel & Wire Co. (2001) | | | | Steel wire. |
| Henry | Eminence | Steel Technologies (2003) | \$7,500,000 | 32 | 32 | Steel service center: steel rolling, annealing & slitting. |
| Henry | Eminence | Steel Technologies (2006) | \$970,214 | | | Steel service center: steel rolling, annealing & slitting/blanking. |
| Jefferson | Louisville | Millennium Forge Inc. (2006) | \$500,000 | | | Steel forging & fitting for valve & OEM use, custom forging-raw. |
| Jefferson | Louisville | Millennium Forge Inc. (2006) | \$500,000 | | | Steel forging & fitting for valve & OEM use, custom forging-raw. |
| Jefferson | Louisville | Penn Locomotive Gear Div Penn Machine Co. (2000) | \$15,000 | | | Iron and steel forging. |
| Jefferson | Louisville | Tube Turns Technologies, Inc. (2001) | \$20,000,000 | 150 | 150 | Custom forgings. |
| Jefferson | Louisville | Worthington Steel Co. (2001) | \$137,308 | | | Cold and hot rolled steel processing. |
| Jessamine | Nicholasville | Adcom Wire Co., Div Leggett & Platt Inc. (2000) | \$1,413,588 | | | Miscellaneous fabricated wire products. |
| Jessamine | Nicholasville | Advanced Tubular Products (2000) | \$3,000,000 | 36 | 36 | Stainless steel tubing. |
| Jessamine | Nicholasville | Advanced Tubular Products (2000) | \$6,000,000 | | | Stainless steel tubing. |
| Marion | Lebanon | Portland Forge (2005) | \$331,000 | 2 | 2 | Custom impression steel die forgings for truck and farm machinery industries. |
| Marion | Lebanon | Portland Forge (2006) | \$6,335,000 | 23 | 23 | Custom impression steel die forgings for truck and farm machinery industries. |
| Marion | Lebanon | Teledyne Industries, Inc. (2000) | \$1,800,000 | 16 | 16 | Impression die forgings. |
| McCracken | Paducah | JMS Inc. (2003) | \$819,750 | 15 | 15 | Metal processing, distributing. |
| Nelson | Bardstown | AA Machine, Inc. (2000) | \$450,000 | | | Machinery & equipment: industrial & commercial, NEC. |
| Nelson | Bardstown | MST Steel Corporation of Kentucky (2002) | \$750,000 | 8 | 8 | Slitting & cold-reduction of steel coil. |
| Russell | Russell Springs | Stephens Pipe & Supply (2003) | \$1,250,000 | 25 | 25 | Chain link fence, industrial gates, dog kennels. |
| Scott | Georgetown | International Crankshaft, Inc. (2006) | \$39,200,000 | 50 | 50 | Crankshafts and steel forgings. |
| Scott | Georgetown | Kentucky Advanced Forge LLC (2001) | \$7,571,000 | | | Warm forged bearing ring. |

| | | | | | | | |
|----------------|---------------|--|--------------|-----|-----|---|-------|
| Scott | Georgetown | Louisville Forge & Gear Works (2000) | \$2,000,000 | | | Iron & steel forgings. | |
| Scott | Georgetown | Louisville Forge & Gear Works (2002) | \$12,000,000 | 22 | 22 | Steel forgings, crankshafts, powder metal sinter forgings. | |
| Scott | Georgetown | Louisville Forge & Gear Works (2003) | \$7,831,000 | 30 | 30 | Steel forgings, crankshafts, powder metal sinter forgings. | |
| Scott | Georgetown | Louisville Forge & Gear Works (2004) | \$1,000,000 | 100 | 100 | Steel forgings, crankshafts, powder metal sinter forgings. | |
| Scott | Georgetown | Louisville Forge & Gear Works (2005) | \$10,000,000 | 20 | 20 | Steel forgings, crankshafts, powder metal sinter forgings, connecting rods, customized parts. | |
| Shelby | Shelbyville | Bekaert Corp. (2000) | \$990,000 | | | Steel wire drawings & nails & spikes. | |
| Shelby | Shelbyville | Bekaert Corp. (2001) | \$2,100,000 | | | Performed steel Staple wire & dramix nylon. | |
| Shelby | Shelbyville | Bekaert Corp. (2002) | \$6,029,000 | 15 | 15 | Wire ties for twist wraps and air bags. | |
| Union | Pride | Pride industries Inc. (2000) | \$155,000 | | | Standing seam metal roofing panels, gutters and downspouts. | |
| Union | Pride | Pride Industries Inc. (2003) | \$262,329 | 20 | 20 | Steel & aluminum standing seam roofing, preformed metal shingles. | |
| Union | Pride | Pride Industries Inc. (2006) | \$170,000 | 6 | 6 | Steel & aluminum standing seam roofing, preformed metal shingles. | |
| 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. | |
| Totals: | | | | 62 | | \$1,240,651,892 | 1,791 |

Expanding Manufacturing Firms

| County | City | Facility | Investment | Full-time | | Product |
|-----------|------------|--|-------------|-----------|------|-------------------------------------|
| | | | | Beg. | Full | |
| Henry | Eminence | Steel Technologies (2000) | \$900,000 | | | Metal service center. |
| Jefferson | Louisville | MISA Metal Processing of Kentucky (2006) | \$4,000,000 | 10 | 10 | Steel processing and coil slitting. |
| Jefferson | Louisville | Nova Steel Processing (2000) | \$280,000 | 4 | 4 | Metal service centers. |

| | | | |
|----------------------|----|-----------------|-------|
| Totals: | 3 | \$5,180,000 | 14 |
| Grand Totals: | 74 | \$1,379,923,892 | 2,622 |

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

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Endnotes

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- ² American Iron and Steel Institute, www.steel.org, Factsheet: *The New Steel. Feel The Strength*. Report released October 15, 2008.
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- ⁸ Area Development On-line, *23rd Corporate Survey Series*, www.areadevelopment.com.
- ⁹ American Iron and Steel Institute, www.steel.org, Factsheet: *The New Steel Industry. A Partner in Futuristic Design*. All data derived from a Report Released in 2008.
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- ¹⁴ Kentucky Cabinet for Economic Development, KBIIS database, May 2009.
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- ²⁰ American Iron and Steel Institute, www.steel.org, Factsheet: *The New Steel Industry: Environmental Leader for a Sustainable Future*. All data derived from a Report Released in 2008.
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- ²⁶ Hartgen, David T., Ph.D., P.E., and Karanam, Ravi K., *17th Annual Performance of State Highway Systems 1984-2006*, The Reason Foundation, July 31, 2008.
- ²⁷ Bluegrass State Skills Corporation, Kentucky Cabinet for Economic Development, <http://www.thinkkentucky.com/bssc>.
- ²⁸ Center for Aluminum Technology, <http://www.engr.uky.edu/cat>.