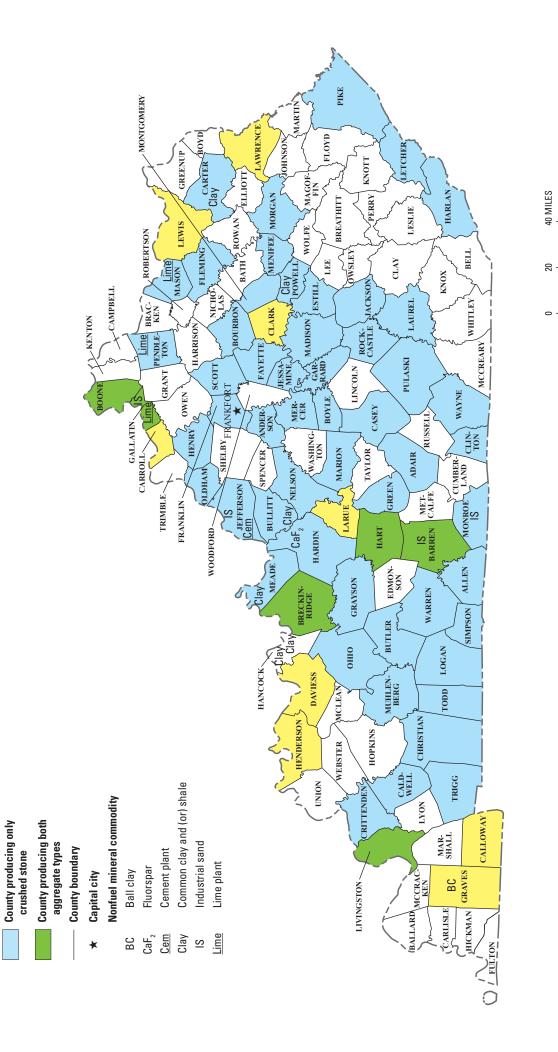


# **2014 Minerals Yearbook**

**KENTUCKY [ADVANCE RELEASE]** 



construction sand and gravel

County producing only

**EXPLANATION** 

Figure 1. Map showing major nonfuel-mineral-producing areas in Kentucky in 2014. Sources: Kentucky Geological Survey and U.S. Geological Survey.

40 KILOMETERS

20

Base from U.S. Geological Survey digital data Albers Equal-Area Conic projection

### THE MINERAL INDUSTRY OF KENTUCKY

### By Madan M. Singh

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Kentucky Geological Survey for collecting information on all nonfuel minerals.

In 2014, the value of nonfuel mineral production<sup>1</sup> in the State of Kentucky was \$516 million.<sup>2</sup> This was a 3.8% increase from the State's revised nonfuel mineral production value of \$497 million<sup>2</sup> in 2013 (table 1). Nonfuel mineral production in the State surpassed a value of \$800 million in 2006 when the total production value for the State could be published; since then, to avoid disclosing company proprietary data, only a partial total has been published, which has been lower than the 2006 State total (fig. 1). Kentucky's partial total accounted for approximately 0.6% of the total U.S. nonfuel mineral production value in 2014, but it ranked 29th among the 50 States based on the total value. On a per capita basis, the partial value of nonfuel mineral production was \$117 in 2014 compared with the total national average of \$252. In 2014, the number of nonfuel mineral mines and the mine employment both decreased with respect to the previous year (table 2).

In 2014, the leading three minerals in the State, in descending order of production value, were crushed stone, lime, and portland cement. In 2014, Hastie Mining & Fluorspar and Moodie Minerals Inc. did not mine fluorspar in the Klondike Mine II in Livingston County because of permitting difficulties and the low market value of fluorspar. The Boonesboro Quarry (limestone), Madison County, sought a zone change to expand into the adjacent Clark County, but was stalled by public opposition. The mining permit for the Drakes Creek Holding LLC's Franklin Rock Quarry (limestone) in Simpson County was revoked because of complaints by local landowners. Freshwater pearl and Kentucky agate (a semiprecious stone) were produced in some Kentucky counties (W.H. Anderson, Geologist V, Kentucky Geological Survey, written commun., November 21, 2016).

#### **Events, Trends, and Issues**

Synthetic gypsum for wallboard was produced as a byproduct at several Kentucky coal-fired powerplants, but some plants were switching to natural gas, which may affect future supplies. Synthetic graphite was produced in several Kentucky counties. In 2014, there were 18 aluminum-related facility announcements in Kentucky accounting for more than \$577 million in investments and the hiring for over 650 full-time jobs. Ford Motor Company unveiled a multimillion-dollar upgrade to the Louisville automobile manufacturing plant and planned to convert many of its truck bodies to aluminum by 2017. Bilstein Group, North America (a subsidiary of Bilstein GmbH & Co.) planned to invest \$120 million in a steel production mill in Warren County. Horizon Steel Co. was the sole supplier and processor for Bilstein. PTC Seamless Tube Corporation announced an investment of \$102 million in a seamless tube and oilfield tubular steel plant in Christian County. Many of the steel products were stainless or galvanized (W.H. Anderson, Minerals Geologist V, Kentucky Geological Survey, written commun., November 21, 2016).

In 2014, the production quantity of construction sand and gravel in Kentucky increased by 1.9% and crushed stone increased by 5.7% from the previous year (table 1).

#### Aggregates by State and End Use

A companion dataset, "Aggregates by State and End Use," replaces the discrete aggregate tables that were included in the individual State chapters prior to 2014 and is available on the State Minerals Statistics and Information web page at https://minerals.usgs.gov/minerals/pubs/state/. This dataset is updated annually.

<sup>&</sup>lt;sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of June 2017. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the internet at http://minerals.usgs.gov/minerals.

<sup>&</sup>lt;sup>2</sup>Partial total; excludes values that must be withheld to avoid disclosing company proprietary data.

# $\label{eq:table 1} \text{NONFUEL MINERAL PRODUCTION IN KENTUCKY}^{1,\,2,\,3}$

#### (Thousand metric tons and thousand dollars)

	2012		2013		2014	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common clay	271	4,390	W	W	W	W
Gemstones, natural <sup>e</sup>	NA	11	NA	11	NA	11
Sand and gravel, construction	7,560 <sup>r</sup>	37,000 <sup>r</sup>	8,350 °	43,700 <sup>r</sup>	8,510	41,500
Stone, crushed	44,500 <sup>r</sup>	449,000 <sup>r</sup>	48,700 <sup>r</sup>	453,000 <sup>r</sup>	51,500	474,000
Combined values of cement, clays (ball clay), lime, sand						
and gravel [industrial (2013-14)], and values indicated						
by symbol W	XX	W	XX	W	XX	W
Total	XX	490,000 <sup>r</sup>	XX	497,000 <sup>r</sup>	XX	516,000

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from total. XX Not applicable.

TABLE 2 MINING ACTIVITY IN KENTUCKY

Mining activity		2012	2013	2014
State rank <sup>1</sup>		29	28	29
Employment, number: <sup>2</sup>				
Nonfuel mineral mines		1,049	1,031	1,001
Mills and plants		411	450	417
Number of nonfuel mineral mines <sup>2</sup>		209	206	199
Number of mills and plants <sup>2</sup>		32	33	30
Average annual wage, all mining <sup>3</sup>	dollars per year	46,179	46,704	53,419
Average annual wage, all industries <sup>3</sup>	do.	41,814	42,294	43,529
Per capita value <sup>4</sup>	dollars per person	112	113	117
National per capita value <sup>1</sup>	do.	241	236	252
1. D:4.				

do. Ditto.

<sup>&</sup>lt;sup>1</sup>Includes data available through June 2017.

<sup>&</sup>lt;sup>2</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>&</sup>lt;sup>3</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>1</sup>Based on unadjusted State total value.

<sup>&</sup>lt;sup>2</sup>Source: U.S. Mine Safety and Health Administration.

<sup>&</sup>lt;sup>3</sup>Source: National Mining Association.

<sup>&</sup>lt;sup>4</sup>Based on partial State total value to avoid disclosing company proprietary data.

## ${\bf TABLE~3}$ STRUCTURE OF THE NONFUEL MINERAL INDUSTRY IN KENTUCKY

(Nonfuel-mineral-producing companies, not including aggregate producers)

Graves Hancock
Hancock
Carter
Hancock
Weakley
Meade
Powell
Bullitt
nerals Inc.) <sup>1</sup> Hardin
Jefferson, various others
Various
Mason and Pendleton
Gallatin
Barren and Monroe
Gallatin and Jefferson

Do., do. Ditto.

<sup>&</sup>lt;sup>1</sup>Hastie Mining & Fluorspar was idle in 2014, therefore fluorspar is not in table 1. The company had a stockpile of about 20,000 metric tons and planned to restart in 2016.

<sup>&</sup>lt;sup>2</sup>Most natural gemstone producers in the United States are small businesses that are widely dispersed and operate independently.

