

# **2014 Minerals Yearbook**

# **INDIANA [ADVANCE RELEASE]**



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

# THE MINERAL INDUSTRY OF INDIANA

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

In 2014, in the State of Indiana (fig. 1), the value of the nonfuel mineral production<sup>1</sup> increased to \$874 million. This was an 8% increase from the State's revised nonfuel mineral production value of \$813 million in 2013, led by increases in crushes stone and cement (table 1). Nonfuel mineral production value in Indiana increased for the third year in a row and was the highest value since 2008 (fig. 2). In 2014, employment at mines increased although the number of mines and plants decreased. Indiana ranked 28th in nonfuel mineral production value among the 50 States, and the per capita value was \$133 compared with the national average of \$252 (table 2).

Indiana's nonfuel mining industry consisted entirely of industrial mineral commodities. In 2014, about 95% of Indiana's crushed stone, the State's leading nonfuel mineral commodity in production quantity and production value, consisted of limestone. This limestone, among other end uses, supported four plants (table 3) that produced cement, the State's second leading mineral commodity in production value. Limestone mining also supported two lime plants that produced high-calcium quicklime. Of the two lime plants, one was a commercial plant and the other a captive plant that produced lime for use in the steel industry. Steel and aluminum were important industries in the State but raw materials for the plants were sourced from outside Indiana and so were not included in this report. Indiana produced dimension limestone as well as crushed limestone, and was the second leading U.S. producer of dimension stone in production quantity in 2014.

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

Following the reduction in construction activity that began with the 2008–9 recession and continued through 2011, the construction industry first began to show signs of recovery in 2012. Indiana produced industrial minerals that were used extensively in construction, such as cement, construction sand and gravel, crushed stone, and gypsum; the increase in construction activity was reflected in the increasing mineral production value in the State. In 2014, Indiana's production value surpassed that of 2009 (fig. 2). In descending order of tonnage, crushed stone, construction sand and gravel, and cement were the leading mineral commodities in the State; however, despite the increasing production value, the quantity produced remained relatively level in the years after the recession. The Indiana Geological Survey<sup>2</sup> provided a summary of the mineral industry of the State covering activities in 2014. State initiatives enacted in 2014 that could boost construction spending included the "Major Moves 2020" program in which about \$400 million was made available for highway improvements. The Indiana Department of Transportation released an additional \$70 million for road construction and \$17 million for bridge construction to cities, towns, and counties. Other developments in the State's mineral industry extracted from this summary were as follows:

- Gypsum.—New NGC Incorporated (d.b.a. National Gypsum Company) closed its Shoals underground gypsum mine in Martin County and began using only synthetic gypsum from electric powerplants in its Indiana wallboard plant. This left one active crude gypsum operation in the State, an underground mine.
- Lime.—Carmeuse Lime and Stone purchased 200 acres for development at their Buffington Harbor lime operation.
- Sand and Gravel, Construction.—The U.S. Mine Safety Health Administration (2015) reported several ownership changes and closings. Beaver Gravel Corp. acquired Ma-Ri-Al Corp. in Morgan County and Mulzer Crushed Stone, Inc. acquired McDonald Sand and Gravel in Posey County. Closings included Country Stone Sand and Gravel Brand Pit in DeKalb County, Hagerstown Gravel & Construction, Inc. House Gravel Pit in Wayne County, and Carpenter Materials, Inc. in Steuben County.
- Stone, Crushed.—The Hanson Aggregates Midwest, LLC Salem Quarry in Washington County and the Rogers Group, Inc. Owen Valley Quarry in Owen County closed. Irving Materials, Inc. acquired two Indiana crushed stone operations in 2014—Corydon Stone and Asphalt Co. in Harrison County and Sellersburg Stone Co., Inc. in Clark County. North American Limestone Corp. in Putnam County was sold and renamed NALC, LLC. The purchase included both the quarry and the fine-grind plant. The company acquired additional reserves of highcalcium limestone for the operation.
- Stone, Dimension.—Financial problems were experienced by the State's largest dimension stone producer, the Indiana Limestone Company. The company was purchased by Wynnchurch Capital, Ltd. in May and the Victor Oolitic Quarry in Monroe County was renamed the Central Quarry. Wynnchurch helped to update the operation with newly designed manufacturing facilities and quarry equipment.

<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>Kathryn Shaffer, Minerals Statistician, Indiana Geological Survey, provided the State nonfuel mineral industry information.

#### 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.

#### **Reference Cited**

U.S. Mine Safety and Health Administration, [2015], Mine injury and worktime, quarterly, January–December 2014: U.S. Mine Safety and Health Administration, Final, closeout edition, 35 p. (Accessed December 9, 2016, at https://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ-Master-2014final.pdf.)

### TABLE 1 NONFUEL MINERAL PRODUCTION IN INDIANA<sup>1, 2, 3</sup>

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

	2012		2013		2014	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Cement, portland	2,390	193,000 e	2,280	191,000 °	2,400	208,000 °
Clays, common	369	6,240	294	6,490	287	6,510
Gemstones, natural <sup>e</sup>	NA	4	NA	4	NA	4
Sand and gravel, construction	18,500	107,000	18,300 <sup>r</sup>	132,000 <sup>r</sup>	17,600	132,000
Stone:						
Crushed	42,700	304,000	41,000	304,000	44,100	337,000
Dimension	186	32,000	150	26,200	200	34,400
Combined values of cement (masonry), clay (ball clay),						
gypsum (crude), lime, peat, sand and gravel						
(industrial)	XX	159,000 <sup>r</sup>	XX	153,000 <sup>r</sup>	XX	156,000
Total	XX	801,000 <sup>r</sup>	XX	813,000	XX	874,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. XX Not applicable.

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

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

<sup>3</sup>Data are rounded to three significant digits; may not add to totals shown.

#### TABLE 2 MINING ACTIVITY IN INDIANA

Mining activity		2012	2013	2014
State rank <sup>1</sup>		28	27	28
Employment, number: <sup>2</sup>				
Nonfuel mineral mines		1,262	1,232	1,234
Mills and plants		1,200	1,045	1,170
Number of nonfuel mineral mines <sup>2</sup>		289	286	275
Number of mills and plants <sup>2</sup>		114	114	113
Average annual wage, all mining <sup>3</sup> dolla	ırs per year	65,755	68,628	70,965
Average annual wage, all industries <sup>3</sup>	do.	41,075	41,399	42,718
Per capita value <sup>1</sup> dollars	per person	123	124	133
National per capita value <sup>1</sup>	do.	241	236	252

do. Ditto.

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

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

<sup>3</sup>Source: National Mining Association.

#### TABLE 3

#### STRUCTURE OF THE NONFUEL MINERAL INDUSTRY IN INDIANA

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

Commodity	Company	County	
Cement	Buzzi Unicem USA, Inc.	Putnam	
Do.	Essroc Cement Corp.	Cass and Clark	
Do.	Lehigh Portland Cement Co.	Lawrence	
Clays, common	Buzzi Unicem USA, Inc.	Putnam	
Do.	Essroc Cement Corp.	Clark	
Do.	General Shale Brick Inc	Morgan	
Do.	Hydraulic Press Brick Co.	Do.	
Do.	Jarvis Coal LLC	Sullivan	
Do.	Rogers Group, Inc.	Lawrence	
Gemstones <sup>1</sup>	Various	Various	
Gypsum	U.S. Gypsum Co.	Martin	
Do.	National Gypsum Co.	Do.	
Lime	ArcelorMittal USA LLC	Lake	
Do.	Carmeuse Lime & Stone, Inc.	Do.	
Peat	Buesching's Peat Moss & Mulch, Inc.	Allen	
Do.	Felger's Peat Moss	Do.	
Sand and gravel, industrial	Irving Materials, Inc.	Grant	
Stone, dimension	B.G. Hoadley Quarries, Inc.	Monroe	
Do.	Big Creek, LLC	Do.	
Do.	Elliott Mineral Extraction, Inc.	Lawrence	
Do.	Evans Quarries, Inc.	Do.	
Do.	Independent Limestone Co.	Monroe	
Do.	Indiana Limestone Co.	Lawrence and Monroe	
Do.	Indiana Quarries & Carvers LLC	Monroe	
Do.	Reed Quarries, Inc.	Do.	

Do. Ditto.

<sup>1</sup>Most natural gemstone producers in the United States are small businesses that are widely dispersed and operate independently.

