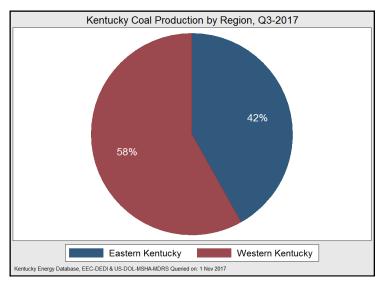
## Kentucky Quarterly Coal Report

July to September 2017



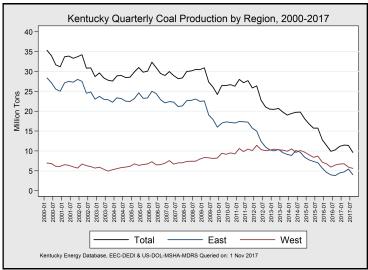
Kentucky Coal Production by Mine Type, Q3-2017
26%
74%
Underground Surface
Kentucky Energy Database, EEC-DEDI & US-DOL-MSHA-MDRS Queried on: 1 Nov 2017

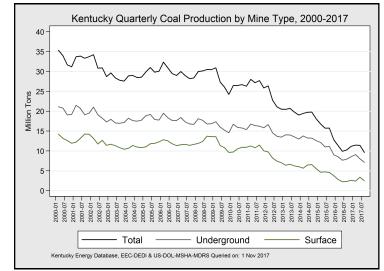
Region	Q3 Tonnage	YOY Change	Quarter		
Kegion	Q3 Tolliage	TOT Change	Change		
Total	9,630,172	-6.3%	-15.6%		
West KY	5,597,554	-13.4%	-5.9%		
East KY	4,032,618	+5.8%	-26.1%		

Quarter Mine Type Q3 Tonnage YOY Change Change Total 9,630,172 -6.3% -15.6% 7,130,296 Underground -11.5% -11.2% +6.9% 2,499,876 -26.0% Surface

While third quarter production declined by 15.6 percent from the second quarter, year over year production decreased by 6.3 percent.

Coal production at underground mines totaled 7.1 million tons during the third quarter of 2017, a decrease of 11.5 percent from the previous year.



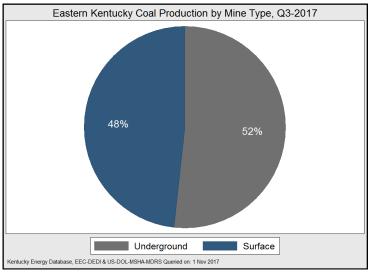


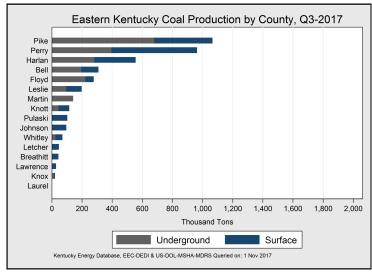
Eastern Kentucky increased output by 5.8 percent from the third quarter of 2016 to 4 million tons. Western Kentucky decreased output by 13.4 percent to 5.5 million tons. Western Kentucky mines accounted for 58 percent of Kentucky coal production while eastern Kentucky accounted for 42 percent.

In the third quarter of 2017, surface mines in Kentucky produced just under 2.5 million tons of coal, a 6.9 percent increase from the third quarter of 2016. Underground mines accounted for 74 percent of coal production in the Commonwealth, while surface mines contributed 26 percent.

## **Eastern Kentucky Coal Production**

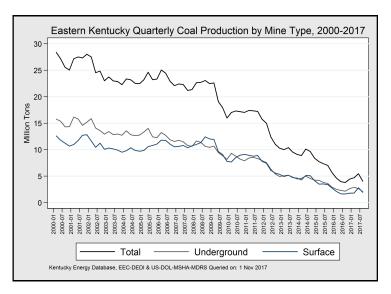
July to September 2017





Mine Type	Q3 Tonnage	YOY Change	Quarter Change
Total	4,032,618	+5.8%	-26.1%
Underground	2,086,936	-4.2%	-21.3%
Surface	1,945,682	+19.1%	-30.7%

Surface production in eastern Kentucky increased by 19.1 percent from the third quarter of 2016.



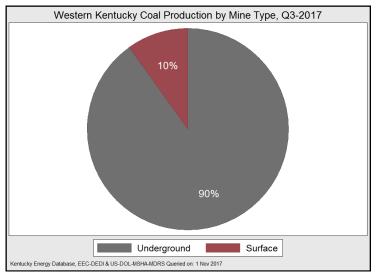
Quarterly surface production decreased by 30.7 percent from the previous quarter. Surface production totaled 1.9 million tons. Underground production experienced a decrease of 21.3 percent from the previous quarter.

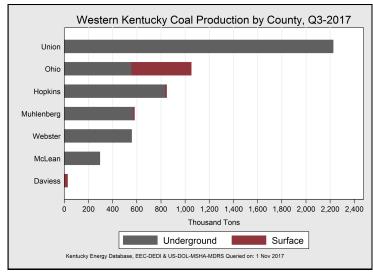
Eastern County	Q3 Tons	YOY Change	Quarter Change
Pike	1,066,011	+0.3%	-7.6%
Perry	962,920	+27.2%	-8.5%
Harlan	<i>555,</i> 480	-33.3%	-39.6%
Bell	309,365	+26.5%	+1.1%
Floyd	277,768	+284.7%	-7.7%
Leslie	1 <i>97,</i> 73 <i>5</i>	-7.3%	-32.9%
Martin	141,228	-41.5%	-25.0%
Knott	114,874	+262.1%	+20.5%
Pulaski	102,561	+133.6%	+77.9%
Johnson	95,669	+82.9%	-89.1%
Whitley	69,989	+67.4%	+11.0%
Letcher	46,133	+34.0%	-13.1%
Breathitt	42,965	+93.9%	+416.8%
Lawrence	27,865	-20.1%	+209.5%
Knox	20,925	-39.8%	-63.4%
Laurel	1,130	-	+276.7%

Preliminary data indicate that Pike County remained the top coal producing county in eastern Kentucky during the third quarter of 2017 by mining just under 1.1 million tons, a 7.6 percent decrease from the previous quarter, but a 0.3 percent increase from the previous year. Perry County produced just under 1 million tons to rank second in coal production in eastern Kentucky. Harlan remained third in production with 555 thousand tons.

## Western Kentucky Coal Production

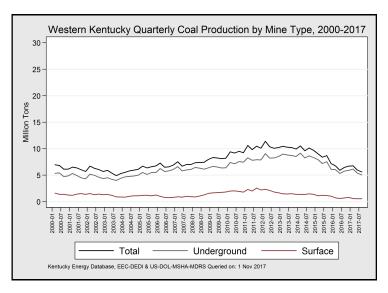
July to September 2017





Mine Type	Q3 Tonnage	YOY Change	Quarter Change
Total	5,597,554	-13.4%	-5.9%
Underground	5,043,360	-12.6%	-6.2%
Surface	554,194	-20.0%	-2.8%

Surface mines in western Kentucky decreased production by 20 percent from the 3rd quarter of 2016.



County	Q3 Tonnage	YOY Change	Quarter
Coomy	Q0 Tollinage	TOT change	Change
Union	2,227,793	+0.87%	+6.5%
Ohio	1,052,920	-12.86%	-5.0%
Hopkins	848,662	-12.64%	-7.1%
Muhlenberg	582,973	-29.54%	-22.0%
Webster	<i>55</i> 9 <b>,</b> 871	-39.42%	-16.0%
McLean	296,222	+4.25%	-19.2%
Daviess	29,113	-28.17%	-47.6%

Western Kentucky coal production decreased by 13.4 percent from the third quarter of 2016, to just under 5.6 million tons. Underground production decreased by 12.6 percent from the third quarter of 2016 while surface mining operations showed a decrease of 20 percent to 554 thousand tons.

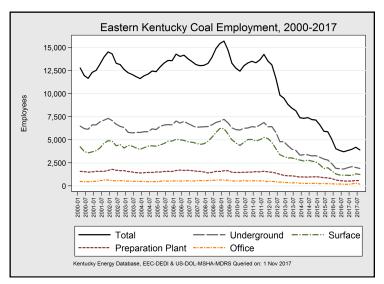
Union County mined just over 2.2 million tons of coal during the 3rd quarter of 2017, a 0.87 percent increase from the previous year and a 6.5 percent increase from the previous quarter.

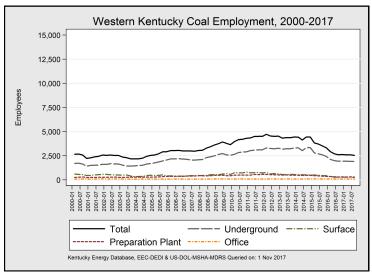
McLean County experienced the largest year-over-year production increase at 4.25 percent. Union County followed with a 0.87 percent increase.

All counties in western Kentucky except Union County had declining coal production compared to the previous quarter.

## Kentucky Coal Mine Employment

July to September 2017





East KY	Q3	YOY	Change	Quarte	r Change
Total	3,896	+209	+5.7%	-262	-6.3%
Pike	929	+0	+0.0%	-170	-15.5%
Harlan	762	-45	-5.6%	-120	-13.6%
Perry	691	+167	+31.9%	+3	+0.4%
Bell	383	+49	+14.7%	-10	-2.5%
Floyd	231	+97	+72.4%	+2	+0.9%
Martin	199	-61	-23.5%	+18	+9.9%
Leslie	192	+39	25.5%	-19	-9.0%
Whitley	143	+21	+17.2%	+18	+14.4%
Knox	76	-19	-20.0%	+23	+43.4%
Knott	72	+22	+44.0%	-10	-12.2%
Johnson	53	+17	+47.2%	-23	-30.3%
Letcher	48	-26	-35.1%	+19	+65.5%
Boyd	27	+2	+8.0%	+0	+0.0%
Lawrence	22	-9	-29.0%	+1	+4.8%
Pulaski	20	2	+11.1%	+4	+25.0%
Breathitt	15	-8	-34.8%	+9	+150%
Clay	14	-1	-6.7%	+0	0.0%
Magoffin	11	-37	<i>-77.</i> 1%	-7	-38.9%
Laurel	4	-1	-20.0%	+0	+0.0%
McCreary	4	+0	+0.0%	+0	+0.0%

West KY	Q3	YOY	Change	Quarte	r Change
Total	2,542	-68	-2.6%	-62	-2.4%
Union	659	+41	+6.6%	-10	-1.5%
Ohio	490	-18	-3.5%	-5	-1.0%
Hopkins	458	-1 <i>7</i>	-3.6%	+12	+2.7%
Muhlenberg	384	+7	+1.9%	-19	-4.7%
Webster	308	-62	-16.8%	+0	+0.0%
McLean	1 <i>57</i>	-28	-15.1%	-22	-12.3%
Marshall	46	+15	+48.4%	-14	-23.3%
Daviess	22	+5	+29.4%	+2	+10.0%
Livingston	13	-6	-31.6%	-6	-31.6%
Henderson	5	-5	-50.0%	+0	+0.0%

Description	Q3	YOY	Change	Quarter Chang		
KY Total	6,438	+133	+2.1%	-349	-5.1%	
Underground	3,794	+32	+0.9%	-131	-3.3%	
Surface	1,500	+53	+3.7%	-81	-5.1%	
Preparation Plant	857	+33	+4.0%	-31	-3.5%	
Office	287	+15	+5.5%	-106	-27.0%	

Eastern Kentucky coal mines increased employment by 209 jobs or 5.7 percent on a year over year basis. Western Kentucky decreased employment by 68 jobs or 2.6 percent on a year over year basis. Eastern and western Kentucky saw quarterly decreases of 6.3 percent and 2.4 percent, respectively.

During the third quarter of 2017, Kentucky coal mines decreased total employment by 349 jobs, a 5.1 percent drop from the second quarter of 2017. On a year over year basis, Kentucky coal mines increased total employment by 2.1 percent or 133 jobs.

For more information about coal, please visit: <a href="mailto:energy.ky.gov/Pages/CoalFacts.aspx">energy.ky.gov/Pages/CoalFacts.aspx</a>

Kentuc		Kentuc	ky Total			Eastern Kentucky		Western Kentucky					
Do	ate	Aver	rage	Tons of	f Coal	Ave	rage	Tons o	of Coal	Ave	rage	Tons	of Coal
	AIC	Employ	yment	Produ	uced	Emplo	yment	Prod	uced	Emplo	Employment		uced
		Annual	Quarter	Annual	Quarter	Annual	Quarter	Annual	Quarter	Annual	Quarter	Annual	Quarter
2008	Q4		19,030		30,477,960		15,420		22,503,580		3,610		7,974,371
	Q1		19,422	<u> </u>	30,809,810		15,668		22,477,210		3,754		8,332,597
2009	Q2	17010	18,630	100 262 060	27,264,780	1 4 000	14,702	75 211 072	18,998,720	3,714	3,928	22.052.100	8,266,060
2009	Q3	1 <i>7,</i> 812	17,075	108,263,968	25,979,240	14,098	13,278	<i>75,</i> 311,872	17,850,570	3,/14	3,797	32,952,100	8,128,670
	Q4		16,380		24,127,190		12,729		15,902,420		3,651		8,224,772
	Q1		16,378		26,304,890		12,404		16,883,820		3,974		9,421,068
2210	Q2	17115	17,217	105 554 104	26,510,520	12.000	13,051	(0.000.470	17,339,430	4.005	4,166	27 221 422	9,171,091
2010	Q3	1 <i>7</i> ,115	17,517	105,554,104	26,682,350	13,020	13,308	68,222,672	17,187,870	4,095	4,209	37,331,432	9,494,482
	Q4		17,796	<u></u> _	25,972,700		13,484		16,727,910		4,312		9,244,791
	Q1		17,684		27,889,220		13,331		17,282,860		4,353		10,606,360
	Q2		18,191	1	27,222,030	10.470	13,695		17,385,220	4,390	4,496	41,010,760	9,836,813
2011	Q3	18,069	18,810	109,018,240	27,804,080	13,679	14,301	68,007,480	17,340,210		4,509		10,463,880
ľ	Q4	j	18,087	1 [	26,047,990		13,581	=	15,944,280		4,506		10,103,710
	Q1		17,932		26,571,280		13,203		15,171,750		4,729		11,399,530
	Q2	J	16,278	1	22,924,670	11,117	11,731	49,311,848	12,568,670	4,505	4,547	1	10,356,000
2012	Q3	15,622	14,406	91,358,160	21,173,110		9,892		11,094,450		4,514	42,046,316	10,078,670
1	Q4	j	14,107	1	20,555,240		9,564	1	10,343,130		4,543	1	10,212,120
	Q1		13,223		20,590,860		8,897		10,144,620	4,310	4,326	40,878,964	10,446,240
	Q2	J	12,882	1	20,752,660		8,490	1	10,464,560		4,392		10,288,110
2013	Q3	12,550	12,548	80,359,000	19,876,820	8,239	8,180	39,480,036	9,667,612		4,368		10,209,210
1	Q4	j	11,892	1	19,081,980		7,443	1	9,146,575		4,449		9,935,408
	Q1		11,790		19,494,440		7,366		8,969,519		4,424		10,524,930
	Q2	l	11,574	1 1	19,864,630		7,447		10,240,600		4,127	1	9,624,035
2014	Q3	11,508	11,681	77,468,336	19,866,500	7,242	7,239	37,499,304	9,742,734	4,267	4,442	39,969,028	10,123,770
1	Q4	j	11,619	1	18,204,500		7,186	1	8,508,199		4,433		9,696,298
	Q1		10,465		16,938,520		6,639		7,788,933		3,826		9,149,591
ı	Q2	ı <u>.</u>	9,674	1	15,817,610		5,958		7,421,363		3,716	1	8,396,251
2015	Q3	9,493	9,094	61,424,920	15,574,200	5,897	5,579	28,000,918	6,867,600	3 <b>,</b> 597	3,515	33,424,002	8,706,595
1	Q4	j	8,401	†	12,884,260		5,077		5,712,695		3,324		7,171,565
	Q1		6,994		11,449,092		4,029		4,560,354		2,935		6,764,538
l	Q2	ı	6,550	† <sub></sub> †	9,988,281		3,820		3,954,134		2,704	†	5,938,328
2016	Q3	6,587	6,325	42,972,304	10,311,796	3,844	3,697	16,790,895	3,803,459	2,720	2,610	25,896,688	6,464,425
1	Q4	ı İ	6,477	†	11,223,135 3,830 4,472,948		2,632	=	6,729,397				
	Q1		6,561		11,468,171		3,967		4,708,467		2,594		6,759,704
2017	Q2		6,787	†	11,408,985		4,183	•	5,460,062		2,604	=	5,948,923
	Q3		6,438	†	9,630,172		3,896	1	4,032,618		2,542		5,597,554
			0,700		7,000,172		0,070		7,002,010		2,542	L	3,377,334

In order to provide the public with timely access to these data, this report uses the best-available estimate for each factor at the time of publication. Data for Q3-2017 are preliminary and subject to revision. Data for previous dates have been revised.