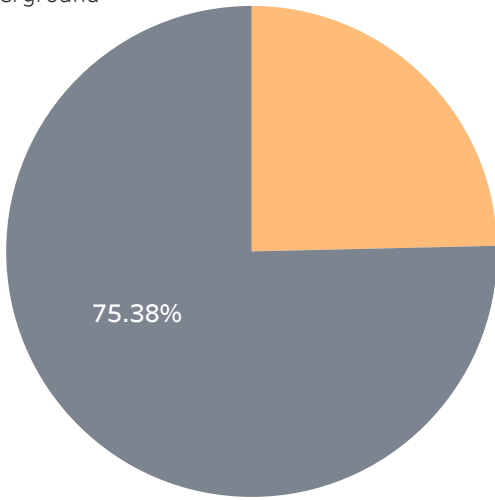
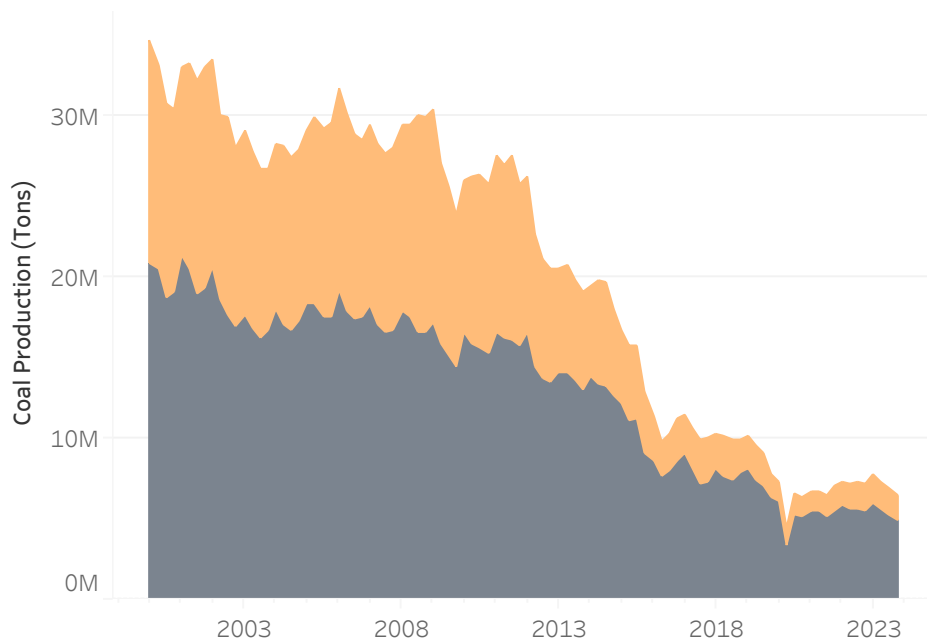


# Kentucky Quarterly Coal Report (2023 - Q4)

Mine Type  
 Surface  
 Underground

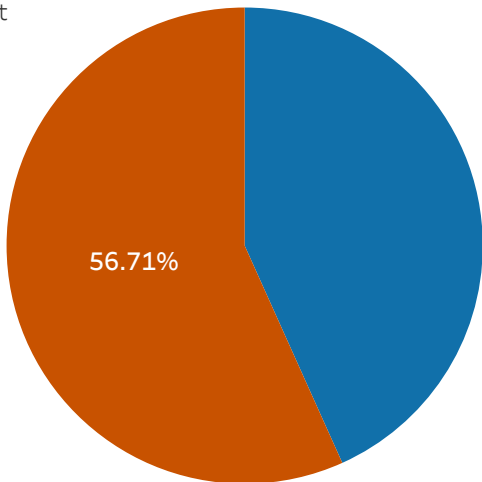


## Coal Production by Mine Type (2000 - Q1 to 2023 - Q4)

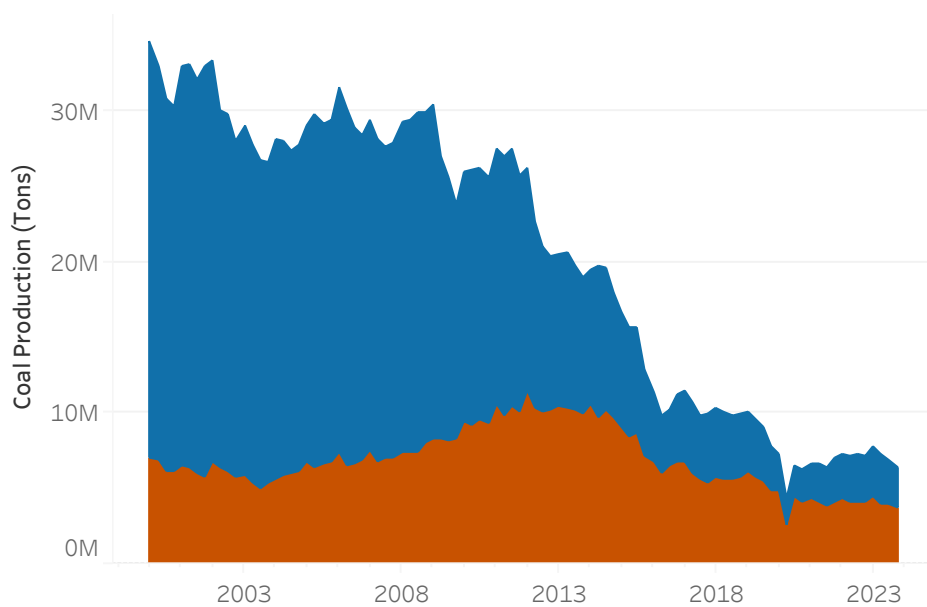


	Production	YoY change	Qtr change
<b>Total</b>	6,405,320	-10.64%	-6.85%
<b>Underground</b>	4,828,021	-11.01%	-7.35%
<b>Surface</b>	1,577,299	-9.49%	-5.28%

Region  
 East  
 West



## Coal Production by Region (2000 - Q1 to 2023 - Q4)

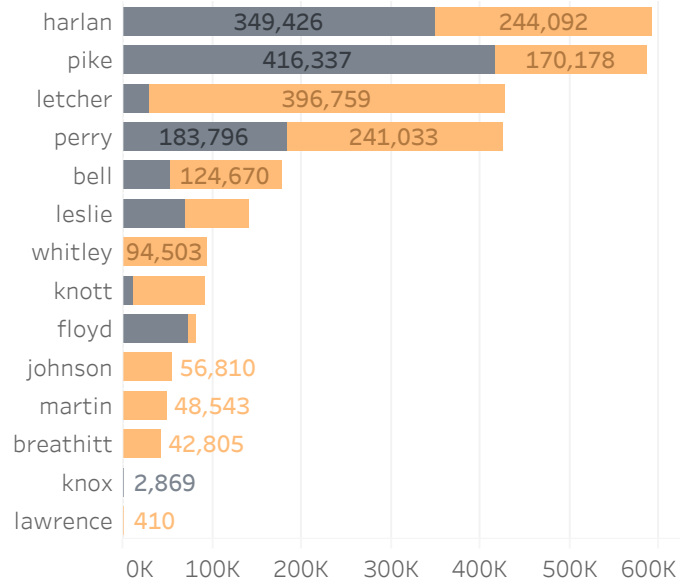
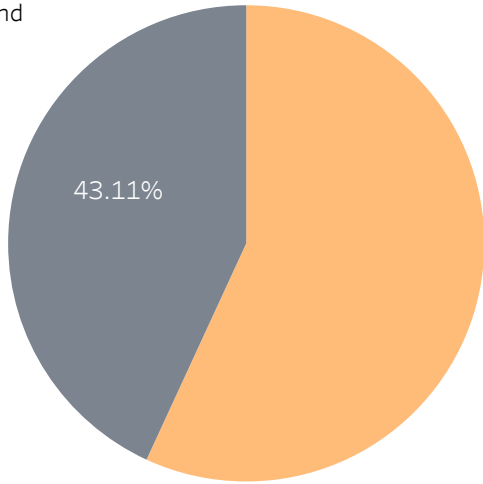


	Production	YoY change	Qtr change
<b>Total</b>	6,405,320	-10.64%	-6.85%
<b>East</b>	2,772,552	-11.74%	-6.80%
<b>West</b>	3,632,768	-9.78%	-6.89%

# Eastern Kentucky (2023 - Q4)

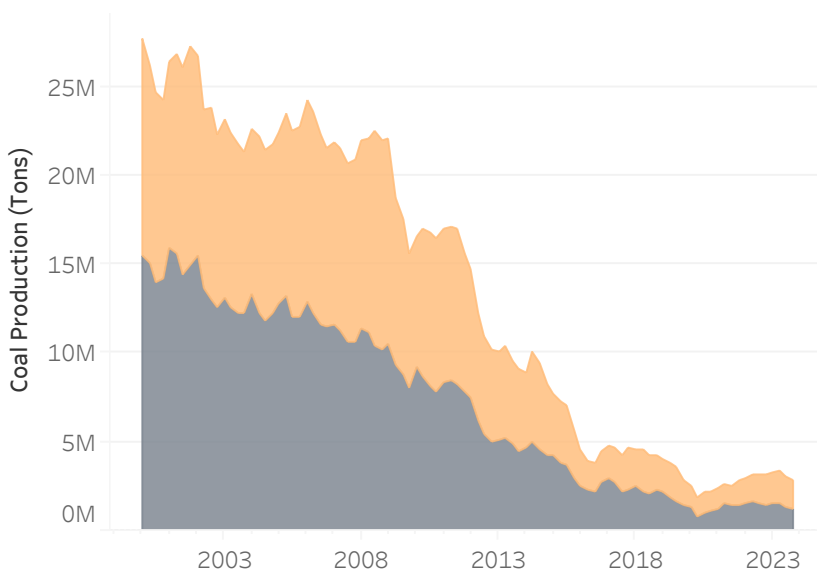
## Mine Type

- Surface
- Underground



	Production	YoY change	Qtr change
<b>Total</b>	2,772,552	- 11.74%	- 6.80%
<b>Surface</b>	1,577,299	- 9.49%	- 5.28%
<b>Underground</b>	1,195,253	- 14.54%	- 8.74%

Eastern Kentucky Coal Production (2000 - Q1 to 2023 - Q4)

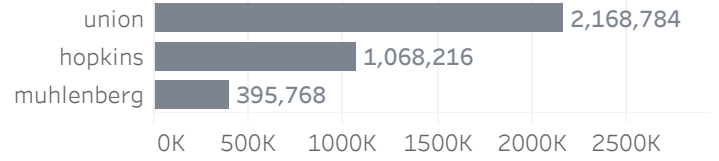
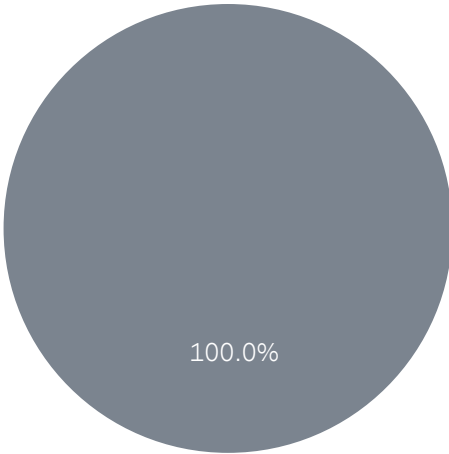


	County Coal Production	YoY change	Qtr change
<b>EKY Total</b>	2,772,552	- 11.74%	- 6.80%
<b>harlan</b>	593,518	+ 18.11%	+ 23.44%
<b>pike</b>	586,515	- 28.59%	- 17.40%
<b>letcher</b>	427,503	- 5.05%	- 10.35%
<b>perry</b>	424,829	- 14.44%	- 9.19%
<b>bell</b>	178,191	- 35.38%	- 25.00%
<b>leslie</b>	141,536	+ 49.71%	- 12.71%
<b>whitley</b>	95,288	+ 29.14%	+ 14.94%
<b>knott</b>	91,668	+ 24.06%	+ 13.31%
<b>floyd</b>	82,067	+ 43.17%	+ 13.43%
<b>johnson</b>	56,810	- 47.50%	- 34.67%
<b>martin</b>	48,543	- 23.16%	- 0.91%
<b>breathitt</b>	42,805	- 19.67%	+ 8.00%
<b>knox</b>	2,869	- 84.24%	- 63.77%
<b>lawrence</b>	410	- 56.89%	- 42.98%

# Western Kentucky (2023 - Q4)

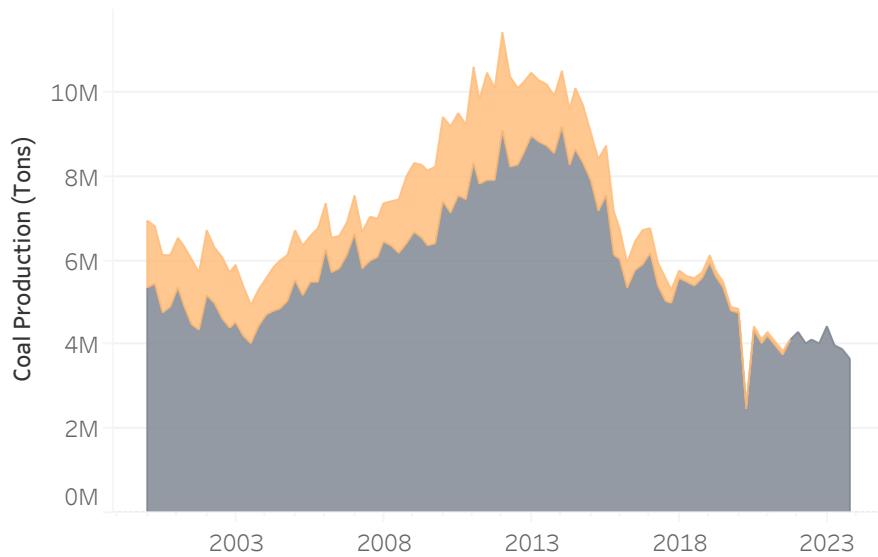
## Mine Type

Underground



	Production	YoY change	Qtr change
Total	3,632,768	- 9.78%	- 6.89%
Underground	3,632,768	- 9.78%	- 6.89%
Surface	0		

Western Kentucky Coal Production (2000 - Q1 to 2023 - Q4)

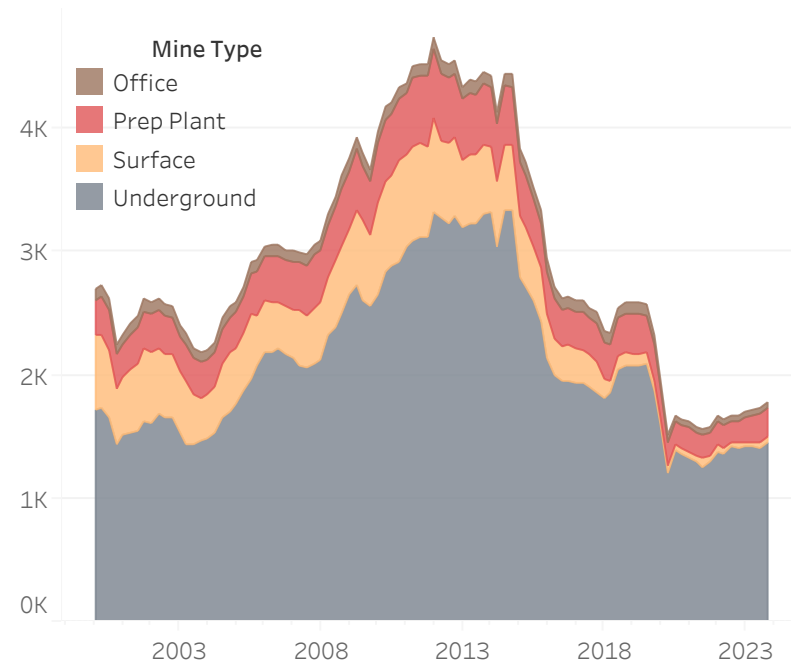
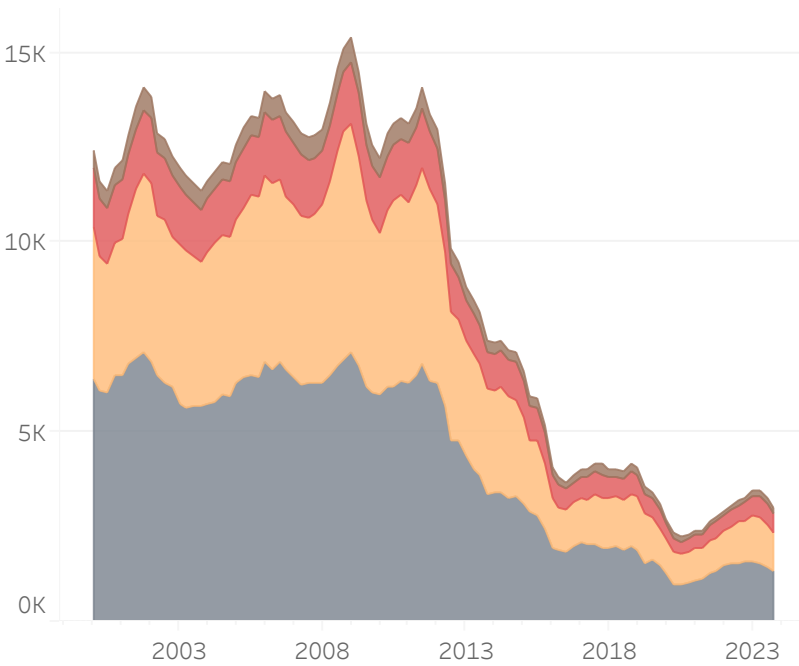


	County Coal Production	YoY change	Qtr change
WKY Total	3,632,768	- 9.78%	- 6.89%
union	2,168,784	- 15.42%	- 9.68%
hopkins	1,068,216	+ 7.00%	- 2.32%
muhlenberg	395,768	- 14.73%	- 2.67%

# Employment by Region (2023 - Q4)

East Kentucky Employment by Mine Type (2000 - Q1 to 2023 - Q4)

West Kentucky Employment by Mine Type (2000 - Q1 to 2023 - Q4)



	Emp	YoY pct change	YoY change	Qtr pct change	Qtr change
<b>EKY Total</b>	2,985	- 8.55%	-279	- 7.4%	-238
pike	788	- 29.77%	-334	- 16.2%	-152
harlan	652	+ 18.98%	+104	- 0.8%	-5
perry	413	- 3.73%	-16	- 0.2%	-1
bell	282	- 15.06%	-50	- 8.7%	-27
letcher	246	+ 57.69%	+90	+ 8.4%	+19
leslie	165	+ 25.95%	+34	+ 0.6%	+1
floyd	117	+ 18.18%	+18	+ 4.5%	+5
knott	92	+ 15.00%	+12	+ 17.9%	+14
whitley	79	- 28.18%	-31	- 32.5%	-38
johnson	38	- 26.92%	-14	- 15.6%	-7
breathitt	31	- 24.39%	-10	- 11.4%	-4
knox	29	- 42.00%	-21	- 12.1%	-4
martin	20	- 60.00%	-30	- 45.9%	-17
boyd	15	+ 25.00%	+3	- 6.3%	-1
clay	8	- 11.11%	-1	- 11.1%	-1
lawrence	4	-	-	+ 33.3%	+1
mccreary	4	-	-	+ 0.0%	-
lee	2	- 33.33%	-1	+ 0.0%	-
magoffin	0	-	-	-	-
morgan	0	- 100.00%	-15	- 100.0%	-4

	Emp	YoY pct change	YoY change	Qtr pct change	Qtr change
<b>WKY Total</b>	1,771	+ 6.75%	+112	+ 2.55%	+44
union	913	+ 6.41%	+55	+ 3.75%	+33
hopkins	493	+ 1.86%	+9	+ 1.65%	+8
muhlenberg	279	+ 6.49%	+17	+ 2.57%	+7
marshall	56	+ 40.00%	+16	+ 14.29%	+7
ohio	30	+ 100.00%	+15	- 26.83%	-11
webster	0	-	-	-	-

## Total Employees by Mine Type

	Total Workers	YoY pct change	Qtr pct change
<b>Total</b>	4,756	- 3.39%	- 3.92%
<b>Underground</b>	2,786	- 6.26%	- 1.49%
<b>Surface</b>	1,062	- 4.84%	- 8.61%
<b>Preparation Plant</b>	695	+ 5.14%	- 7.58%
<b>Office</b>	213	+ 22.41%	+ 2.40%

Coal Production Reference Table										
		West			East			Total		
		Production	YoY change	Qtr change	Production	YoY change	Qtr change	Production	YoY change	Qtr change
2023	Q4	3,632,768	-9.78%	-6.89%	2,772,552	-11.74%	-6.80%	6,405,320	-10.64%	-6.85%
	Q3	3,901,458	-4.97%	-1.70%	2,974,934	-3.78%	-10.00%	6,876,392	-4.46%	-5.47%
	Q2	3,968,994	-1.21%	-10.40%	3,305,401	+5.96%	+0.88%	7,274,395	+1.93%	-5.60%
	Q1	4,429,858	+3.50%	+10.01%	3,276,419	+11.74%	+4.30%	7,706,277	+6.85%	+7.51%
2022	Q4	4,026,604	-2.25%	-1.93%	3,141,216	+10.03%	+1.59%	7,167,820	+2.78%	-0.41%
	Q3	4,105,715	+6.94%	+2.19%	3,091,937	+22.53%	-0.88%	7,197,652	+13.12%	+0.85%
	Q2	4,017,548	-1.04%	-6.13%	3,119,377	+20.75%	+6.38%	7,136,925	+7.44%	-1.04%
	Q1	4,279,989	+0.05%	+3.90%	2,932,242	+26.01%	+2.71%	7,212,231	+9.19%	+3.42%
2021	Q4	4,119,150	+0.49%	+7.29%	2,854,762	+32.74%	+13.13%	6,973,912	+11.59%	+9.60%
	Q3	3,839,326	-13.23%	-5.43%	2,523,513	+19.01%	-2.32%	6,362,839	-2.79%	-4.22%
	Q2	4,059,665	+58.45%	-5.10%	2,583,334	+41.91%	+11.02%	6,642,999	+51.58%	+0.58%
	Q1	4,278,043	-11.35%	+4.37%	2,326,942	-5.00%	+8.20%	6,604,985	-9.21%	+5.69%
2020	Q4	4,098,927	-16.08%	-7.37%	2,150,628	-24.59%	+1.42%	6,249,555	-19.22%	-4.52%
	Q3	4,424,915	-19.27%	+72.71%	2,120,427	-40.57%	+16.48%	6,545,342	-27.67%	+49.35%
	Q2	2,562,103	-55.52%	-46.91%	1,820,376	-52.17%	-25.68%	4,382,479	-54.19%	-39.76%
	Q1	4,825,923	-21.07%	-1.19%	2,449,395	-38.35%	-14.12%	7,275,318	-27.88%	-5.96%
2019	Q4	4,884,272	-14.67%	-10.89%	2,852,033	-31.51%	-20.07%	7,736,305	-21.76%	-14.51%
	Q3	5,481,282	-1.52%	-4.84%	3,568,120	-16.11%	-6.26%	9,049,402	-7.84%	-5.41%
	Q2	5,760,256	+2.65%	-5.79%	3,806,324	-15.15%	-4.19%	9,566,580	-5.26%	-5.16%
	Q1	6,114,327	+6.19%	+6.82%	3,972,823	-11.84%	-4.59%	10,087,150	-1.72%	+2.02%
2018	Q4	5,723,927	+7.72%	+2.84%	4,163,936	-10.72%	-2.10%	9,887,863	-0.90%	+0.70%
	Q3	5,566,036	-0.31%	-0.81%	4,253,173	-0.01%	-5.19%	9,819,209	-0.18%	-2.76%
	Q2	5,611,408	-5.67%	-2.54%	4,486,070	-4.12%	-0.45%	10,097,478	-4.99%	-1.62%
	Q1	5,757,753	-14.82%	+8.36%	4,506,269	-4.42%	-3.38%	10,264,022	-10.55%	+2.87%
2017	Q4	5,313,607	-20.89%	-4.83%	4,663,826	+5.61%	+9.64%	9,977,433	-10.38%	+1.43%
	Q3	5,583,324	-13.63%	-6.15%	4,253,798	+13.96%	-9.08%	9,837,122	-3.53%	-7.44%
	Q2	5,948,923	+0.18%	-11.99%	4,678,731	+21.28%	-0.76%	10,627,654	+8.49%	-7.38%
	Q1	6,759,704	-0.07%	+0.65%	4,714,475	+4.53%	+6.76%	11,474,179	+1.77%	+3.07%
2016	Q4	6,716,354	-6.35%	+3.90%	4,416,125	-21.85%	+18.31%	11,132,479	-13.18%	+9.17%
	Q3	6,464,425	-25.75%	+8.86%	3,732,554	-46.62%	-3.25%	10,196,979	-35.04%	+4.09%
	Q2	5,938,328	-29.27%	-12.21%	3,857,884	-46.83%	-14.46%	9,796,212	-37.41%	-13.11%
	Q1	6,764,538	-25.25%	-5.68%	4,510,154	-41.03%	-20.19%	11,274,692	-32.48%	-12.07%
2015	Q4	7,171,565	-26.04%	-17.63%	5,650,773	-31.62%	-19.18%	12,822,338	-28.61%	-18.32%
	Q3	8,706,595	-13.94%	+3.70%	6,991,877	-25.97%	-3.64%	15,698,472	-19.75%	+0.30%
	Q2	8,396,251	-12.65%	-7.22%	7,256,010	-28.09%	-5.13%	15,652,261	-20.56%	-6.26%
	Q1	9,049,591	-13.98%	-6.67%	7,648,268	-14.14%	-7.45%	16,697,859	-14.05%	-7.03%
2014	Q4	9,695,896	-2.36%	-4.16%	8,264,361	-9.01%	-12.50%	17,960,257	-5.54%	-8.19%
	Q3	10,116,906	-0.90%	+5.25%	9,445,255	-1.01%	-6.39%	19,562,161	-0.96%	-0.71%
	Q2	9,612,041	-6.53%	-8.63%	10,090,535	-2.56%	+13.28%	19,702,576	-4.54%	+1.42%
	Q1	10,519,840	+0.70%	+5.94%	8,907,407	-11.03%	-1.93%	19,427,247	-5.04%	+2.18%
2013	Q4	9,930,116	-2.76%	-2.73%	9,082,959	-11.01%	-4.81%	19,013,075	-6.89%	-3.74%
	Q3	10,209,207	+1.30%	-0.73%	9,541,641	-12.58%	-7.86%	19,750,848	-5.92%	-4.30%
	Q2	10,283,803	-0.70%	-1.55%	10,355,209	-15.55%	+3.43%	20,639,012	-8.75%	+0.89%
	Q1	10,446,242	-8.36%	+2.29%	10,011,688	-32.13%	-1.91%	20,457,930	-21.77%	+0.19%
2012	Q4	10,212,118	+1.02%	+1.32%	10,206,870	-34.41%	-6.49%	20,418,988	-20.46%	-2.74%
	Q3	10,078,665	-3.70%	-2.68%	10,914,731	-35.80%	-10.98%	20,993,396	-23.57%	-7.18%
	Q2	10,356,005	+5.26%	-9.15%	12,261,598	-28.23%	-16.87%	22,617,603	-15.99%	-13.51%
	Q1	11,399,527	+7.44%	+12.77%	14,750,443	-12.80%	-5.21%	26,149,970	-5.00%	+1.87%
2011	Q4	10,108,522	+9.29%	-3.42%	15,561,555	-4.99%	-8.46%	25,670,077	+0.17%	-6.54%
	Q3	10,466,346	+10.24%	+6.38%	17,000,458	+1.47%	-0.49%	27,466,804	+4.64%	+2.02%
	Q2	9,838,635	+7.28%	-7.28%	17,084,875	+0.76%	+1.00%	26,923,510	+3.05%	-2.19%
	Q1	10,610,622	+12.63%	+14.72%	16,915,889	+2.50%	+3.28%	27,526,511	+6.18%	+7.41%

Employment Reference Table										
Year	Quarter	West			East			Total		
		Emp	YoY change	Qtr change	Emp	YoY change	Qtr change	Emp	YoY change	Qtr change
2023	Q4	1,771	+ 6.75%	+ 2.55%	2,985	- 8.55%	- 7.38%	4,756	- 3.39%	- 3.92%
	Q3	1,727	+ 3.23%	+ 0.82%	3,223	+ 1.13%	- 6.50%	4,950	+ 1.85%	- 4.07%
	Q2	1,713	+ 5.09%	+ 1.36%	3,447	+ 13.09%	- 0.26%	5,160	+ 10.30%	+ 0.27%
	Q1	1,690	+ 1.50%	+ 1.87%	3,456	+ 19.75%	+ 5.88%	5,146	+ 13.07%	+ 4.53%
2022	Q4	1,659	+ 5.33%	- 0.84%	3,264	+ 19.52%	+ 2.42%	4,923	+ 14.33%	+ 1.30%
	Q3	1,673	+ 7.38%	+ 2.64%	3,187	+ 20.67%	+ 4.56%	4,860	+ 15.74%	+ 3.89%
	Q2	1,630	+ 3.56%	- 2.10%	3,048	+ 27.27%	+ 5.61%	4,678	+ 17.86%	+ 2.79%
	Q1	1,665	+ 2.97%	+ 5.71%	2,886	+ 20.25%	+ 5.68%	4,551	+ 13.29%	+ 5.69%
2021	Q4	1,575	- 4.08%	+ 1.09%	2,731	+ 20.36%	+ 3.41%	4,306	+ 10.10%	+ 2.55%
	Q3	1,558	- 6.82%	- 1.02%	2,641	+ 18.80%	+ 10.27%	4,199	+ 7.80%	+ 5.79%
	Q2	1,574	+ 4.65%	- 2.66%	2,395	+ 3.46%	- 0.21%	3,969	+ 3.93%	- 1.19%
	Q1	1,617	- 18.00%	- 1.52%	2,400	- 11.34%	+ 5.77%	4,017	- 14.15%	+ 2.71%
2020	Q4	1,642	- 29.44%	- 1.79%	2,269	- 27.04%	+ 2.07%	3,911	- 28.07%	+ 0.41%
	Q3	1,672	- 34.92%	+ 11.17%	2,223	- 34.89%	- 3.97%	3,895	- 34.90%	+ 1.99%
	Q2	1,504	- 41.66%	- 23.73%	2,315	- 34.27%	- 14.48%	3,819	- 37.39%	- 18.38%
	Q1	1,972	- 23.48%	- 15.26%	2,707	- 33.00%	- 12.96%	4,679	- 29.29%	- 13.94%
2019	Q4	2,327	- 9.70%	- 9.42%	3,110	- 25.06%	- 8.90%	5,437	- 19.18%	- 9.13%
	Q3	2,569	+ 1.26%	- 0.35%	3,414	- 13.61%	- 3.07%	5,983	- 7.80%	- 1.92%
	Q2	2,578	+ 10.45%	+ 0.04%	3,522	- 11.62%	- 12.82%	6,100	- 3.47%	- 7.81%
	Q1	2,577	+ 9.85%	+ 0.00%	4,040	+ 1.23%	- 2.65%	6,617	+ 4.42%	- 1.64%
2018	Q4	2,577	+ 3.12%	+ 1.58%	4,150	+ 0.39%	+ 5.01%	6,727	+ 1.42%	+ 3.67%
	Q3	2,537	- 0.20%	+ 8.70%	3,952	- 4.84%	- 0.83%	6,489	- 3.08%	+ 2.69%
	Q2	2,334	- 10.37%	- 0.51%	3,985	+ 0.03%	- 0.15%	6,319	- 4.08%	- 0.28%
	Q1	2,346	- 9.56%	- 6.12%	3,991	+ 0.25%	- 3.46%	6,337	- 3.62%	- 4.46%
2017	Q4	2,499	- 5.05%	- 1.69%	4,134	+ 7.99%	- 0.46%	6,633	+ 2.68%	- 0.93%
	Q3	2,542	- 2.61%	- 2.38%	4,153	+ 13.25%	+ 4.24%	6,695	+ 6.66%	+ 1.62%
	Q2	2,604	- 3.70%	+ 0.39%	3,984	+ 5.20%	+ 0.08%	6,588	+ 1.49%	+ 0.20%
	Q1	2,594	- 11.62%	- 1.44%	3,981	- 1.73%	+ 4.00%	6,575	- 5.88%	+ 1.78%
2016	Q4	2,632	- 20.82%	+ 0.84%	3,828	- 26.06%	+ 4.39%	6,460	- 24.01%	+ 2.92%
	Q3	2,610	- 25.87%	- 3.48%	3,667	- 37.51%	- 3.17%	6,277	- 33.15%	- 3.30%
	Q2	2,704	- 27.23%	- 7.87%	3,787	- 35.82%	- 6.52%	6,491	- 32.50%	- 7.09%
	Q1	2,935	- 23.29%	- 11.70%	4,051	- 38.43%	- 21.75%	6,986	- 32.87%	- 17.82%
2015	Q4	3,324	- 24.98%	- 5.60%	5,177	- 27.01%	- 11.78%	8,501	- 26.23%	- 9.46%
	Q3	3,521	- 20.68%	- 5.25%	5,868	- 17.82%	- 0.56%	9,389	- 18.91%	- 2.37%
	Q2	3,716	- 9.92%	- 2.88%	5,901	- 20.16%	- 10.32%	9,617	- 16.49%	- 7.58%
	Q1	3,826	- 13.54%	- 13.65%	6,580	- 10.07%	- 7.23%	10,406	- 11.38%	- 9.70%
2014	Q4	4,431	- 0.40%	- 0.18%	7,093	- 4.04%	- 0.66%	11,524	- 2.68%	- 0.47%
	Q3	4,439	+ 1.63%	+ 7.61%	7,140	- 12.21%	- 3.40%	11,579	- 7.38%	+ 0.55%
	Q2	4,125	- 6.02%	- 6.78%	7,391	- 12.51%	+ 1.01%	11,516	- 10.29%	- 1.92%
	Q1	4,425	+ 2.29%	- 0.54%	7,317	- 17.01%	- 1.01%	11,742	- 10.66%	- 0.84%
2013	Q4	4,449	- 2.07%	+ 1.85%	7,392	- 21.95%	- 9.11%	11,841	- 15.51%	- 5.28%
	Q3	4,368	- 3.23%	- 0.48%	8,133	- 17.02%	- 3.73%	12,501	- 12.67%	- 2.62%
	Q2	4,389	- 3.47%	+ 1.46%	8,448	- 26.81%	- 4.19%	12,837	- 20.21%	- 2.33%
	Q1	4,326	- 8.52%	- 4.78%	8,817	- 31.99%	- 6.91%	13,143	- 25.72%	- 6.22%
2012	Q4	4,543	+ 0.71%	+ 0.64%	9,471	- 29.16%	- 3.37%	14,014	- 21.63%	- 2.10%
	Q3	4,514	+ 0.00%	- 0.73%	9,801	- 30.30%	- 15.08%	14,315	- 22.93%	- 11.03%
	Q2	4,547	+ 1.02%	- 3.85%	11,542	- 14.56%	- 10.97%	16,089	- 10.67%	- 9.07%
	Q1	4,729	+ 8.36%	+ 4.83%	12,964	- 1.26%	- 3.04%	17,693	+ 1.14%	- 1.05%
2011	Q4	4,511	+ 4.37%	- 0.07%	13,370	+ 0.93%	- 4.91%	17,881	+ 1.78%	- 3.74%
	Q3	4,514	+ 7.25%	+ 0.29%	14,061	+ 7.32%	+ 4.09%	18,575	+ 7.30%	+ 3.14%
	Q2	4,501	+ 8.04%	+ 3.14%	13,509	+ 5.22%	+ 2.89%	18,010	+ 5.91%	+ 2.95%
	Q1	4,364	+ 9.81%	+ 0.97%	13,130	+ 7.48%	- 0.88%	17,494	+ 8.05%	- 0.43%