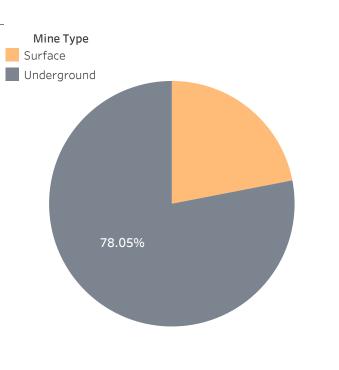
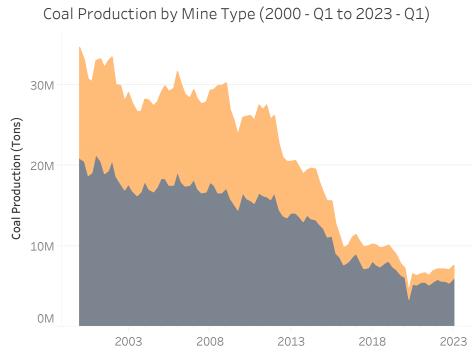
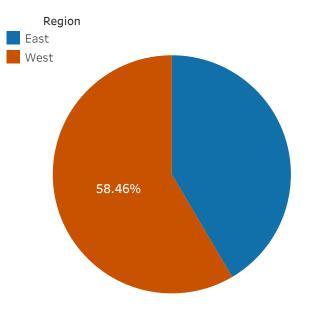
# Kentucky Quarterly Coal Report (2023 - Q1)

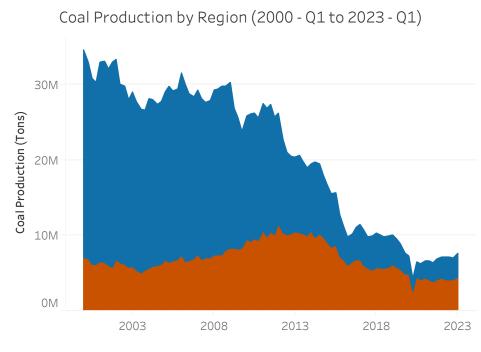




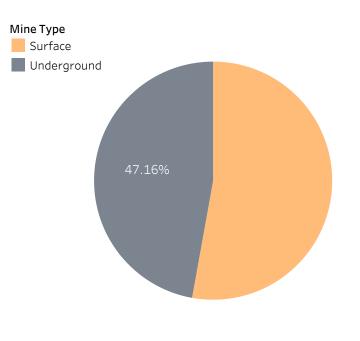
|             | Production | YoY change | Qtr change |
|-------------|------------|------------|------------|
| Total       | 7,576,953  | +6.22%     | + 7.56%    |
| Underground | 5,914,139  | + 1.47%    | + 9.79%    |
| Surface     | 1,662,814  | + 27.44%   | + 0.35%    |



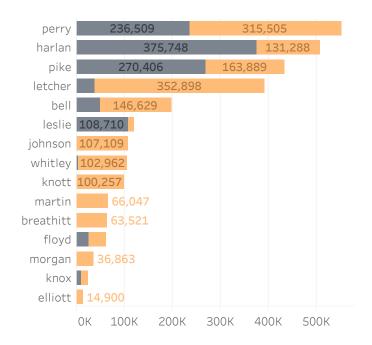
|       | Production | YoY change | Qtr change |
|-------|------------|------------|------------|
| Total | 7,576,953  | +6.22%     | + 7.56%    |
| East  | 3,147,095  | + 10.31%   | +4.30%     |
| West  | 4,429,858  | +3.50%     | + 10.01%   |

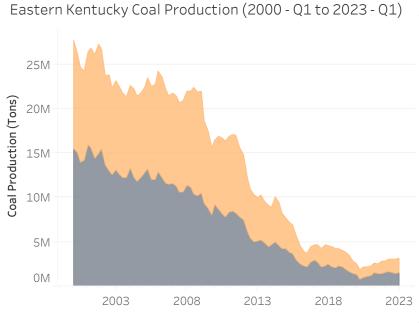


## Eastern Kentucky (2023 - Q1)



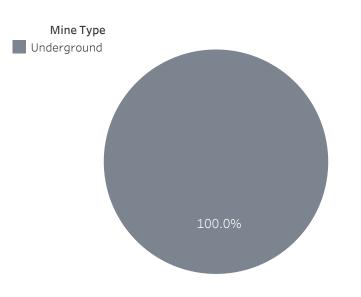
|             | Production | YoY change | Qtr change |
|-------------|------------|------------|------------|
| Total       | 3,147,095  | + 10.31%   | + 4.30%    |
| Surface     | 1,662,814  | + 27.44%   | + 0.35%    |
| Underground | 1,484,281  | - 4.13%    | + 9.11%    |

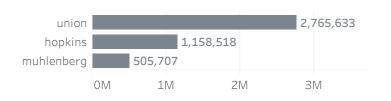




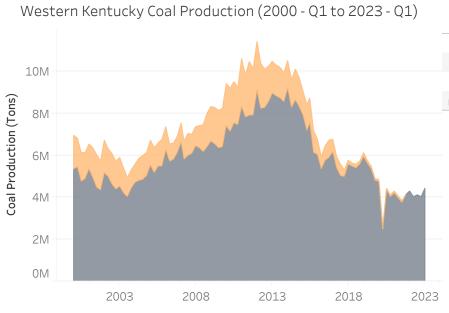
|                  | County Coal Pro | YoY change | Qtr change |
|------------------|-----------------|------------|------------|
| <b>EKY Total</b> | 3,147,095       | + 10.31%   | +4.30%     |
| pike             | 799,788         | - 2.80%    | + 2.13%    |
| perry            | 552,014         | - 1.05%    | + 11.17%   |
| harlan           | 507,036         | - 5.01%    | +3.53%     |
| letcher          | 391,031         | +63.22%    | +3.61%     |
| bell             | 196,898         | + 11.35%   | - 27.84%   |
| leslie           | 118,983         | + 42.94%   | + 25.85%   |
| johnson          | 107,109         | - 26.52%   | - 1.02%    |
| whitley          | 106,613         | + 32.40%   | + 44.48%   |
| knott            | 100,257         | + 10.05%   | + 30.54%   |
| martin           | 66,047          | + 770.07%  | + 4.54%    |
| breathitt        | 63,521          | + 278.55%  | + 19.21%   |
| floyd            | 62,873          | + 1.09%    | + 9.68%    |
| morgan           | 36,863          | + 108.84%  | - 9.61%    |
| knox             | 23,162          | + 41.70%   | + 27.23%   |
| elliott          | 14,900          |            | + 38.77%   |

# Western Kentucky (2023 - Q1)





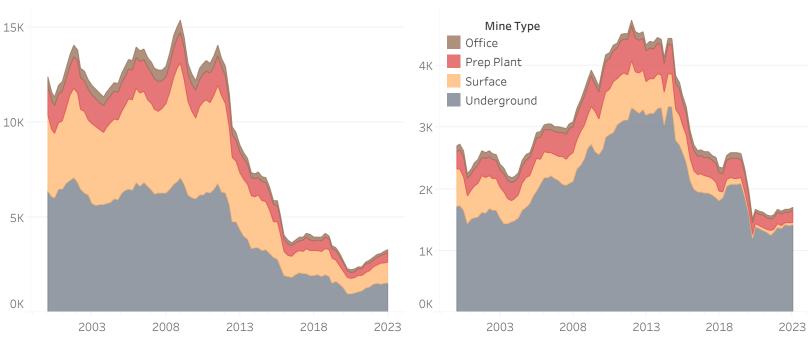
|             | Production | YoY change | Qtr change |
|-------------|------------|------------|------------|
| Total       | 4,429,858  | + 3.50%    | + 10.01%   |
| Underground | 4,429,858  | + 3.50%    | + 10.01%   |
| Surface     | 0          |            |            |



|            | County Coal<br>Production | YoY change | Qtr change |
|------------|---------------------------|------------|------------|
| WKY Total  | 4,429,858                 | + 3.50%    | + 10.01%   |
| union      | 2,765,633                 | +3.90%     | + 7.86%    |
| hopkins    | 1,158,518                 | + 12.44%   | + 16.04%   |
| muhlenberg | 505,707                   | - 13.96%   | + 8.95%    |

# Employment by Region (2023 - Q1)

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



|           | Emp   | YoY pct<br>change | YoY change | Qtr pct<br>change | Qtr change |
|-----------|-------|-------------------|------------|-------------------|------------|
| EKY Total | 3,288 | + 14.76%          | +423       | +3.3%             | +106       |
| pike      | 1,133 | + 21.57%          | +201       | +6.4%             | +68        |
| harlan    | 569   | + 16.12%          | +79        | +6.2%             | +33        |
| perry     | 428   | - 23.43%          | -131       | - 0.2%            | -1         |
| bell      | 341   | + 29.17%          | +77        | +3.3%             | +11        |
| letcher   | 187   | +92.78%           | +90        | + 27.2%           | +40        |
| leslie    | 134   | + 0.75%           | +1         | +2.3%             | +3         |
| whitley   | 104   | +30.00%           | +24        | +0.0%             | -          |
| floyd     | 82    | + 2.50%           | +2         | - 17.2%           | -17        |
| knott     | 74    | + 25.42%          | +15        | - 9.8%            | -8         |
| johnson   | 48    | - 25.00%          | -16        | +0.0%             | -          |
| martin    | 48    | + 242.86%         | +34        | - 4.0%            | -2         |
| breathitt | 46    | + 475.00%         | +38        | + 12.2%           | +5         |
| knox      | 42    | + 5.00%           | +2         | - 25.0%           | -14        |
| elliott   | 16    |                   |            | - 5.9%            | -1         |
| morgan    | 11    | + 10.00%          | +1         | - 26.7%           | -4         |
| boyd      | 10    | + 25.00%          | +2         | - 16.7%           | -2         |
| clay      | 7     | - 50.00%          | -7         | - 22.2%           | -2         |
| mccreary  | 4     | -                 | -          | +0.0%             | -          |
| lawrence  | 2     | - 33.33%          | -1         | - 50.0%           | -2         |
| lee       | 2     | -                 | -          | - 33.3%           | -1         |

|            | Emp   | YoY pct<br>change | YoY change | Qtr pct<br>change | Qtr change |
|------------|-------|-------------------|------------|-------------------|------------|
| WKY Total  | 1,690 | + 1.50%           | +25        | + 1.87%           | +31        |
| union      | 882   | + 9.02%           | +73        | + 2.80%           | +24        |
| hopkins    | 490   | + 3.59%           | +17        | + 1.24%           | +6         |
| muhlenberg | 259   | - 13.38%          | -40        | - 1.15%           | -3         |
| marshall   | 39    | + 2.63%           | +1         | - 2.50%           | -1         |
| ohio       | 20    | - 37.50%          | -12        | +33.33%           | +5         |
| webster    | 0     |                   | -          |                   | -          |

### Total Employees by Mine Type

|                   | Total Workers | YoY pct change | Qtr pct change |
|-------------------|---------------|----------------|----------------|
| Total             | 4,978         | + 9.89%        | + 2.83%        |
| Underground       | 2,947         | + 4.10%        | + 0.75%        |
| Surface           | 1,128         | + 17.01%       | +3.96%         |
| Preparation Plant | 700           | + 24.56%       | + 6.54%        |
| Office            | 203           | + 17.34%       | + 16.67%       |

### West Production YoY change Production Qtr change Q1 4,429,858 +3.50% +10.01% 3,147,095 Q4 - 2.25% 3,017,474 4,026,604 - 1.93% +6.94% +2.19% 2,974,115 4,105,715 Q3 - 1.04% Q2 4,017,548 -6.13% 3,059,622 Q1 4,279,989 +0.05% +3.90% 2,853,078 2,780,271 Q4

3,839,326

4,059,665

4,278,043

4,098,927

4,424,915

2,562,103

4,825,923

4,884,272

5,481,282

5,760,256

6,114,327

5,723,927

5,566,036

5,611,408

5,757,753

5,313,607

5,583,324

5,948,923

6,759,704

6,716,354

6,464,425

5,938,328

6,764,538

7,171,565

8,706,595

8,396,251

9,049,591

9,695,896

10,116,906

9,612,041

10,519,840

9,930,116

10,209,207

10,283,803

10,446,242

10,212,118

10,078,665

10,356,005

11,399,527

10,108,522

10,466,346

9,838,635

10,610,622

9,249,023

9,494,482

9,171,091

2023

2022

2021

2020

2019

2018

2017

2016

2015

2014

2013

2012

2011

2010

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1 Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3 Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

Q1

Q4

Q3

Q2

# +0.49% +7.29% 4,119,150

-13.23%

+58.45%

- 11.35%

-16.08%

-19.27%

-55.52%

-21.07%

- 14.67%

- 1.52%

+ 2.65%

+6.19%

+7.72%

-0.31%

- 5.67%

-14.82%

-20.89%

- 13.63%

+0.18%

- 0.07%

- 6.35%

- 25.75%

- 29.27%

- 25.25%

- 26.04%

-13.94%

-12.65%

- 13.98%

- 2.36%

- 0.90%

- 6.53%

+0.70%

- 2.76%

+1.30%

-0.70%

- 8.36%

+1.02%

-3.70%

+5.26%

+7.44%

+9.29%

+10.24%

+7.28%

+12.63%

+ 12.45%

+ 16.80%

+10.95%

- 5.43%

- 5.10%

+4.37%

- 7.37%

+72.71%

-46.91%

- 1.19%

- 10.89%

- 4.84%

- 5.79%

+6.82%

+ 2.84%

-0.81%

- 2.54%

+8.36%

- 4.83%

- 6.15%

-11.99%

+ 0.65%

+3.90%

+8.86%

- 12.21%

- 5.68%

- 17.63%

+3.70%

- 7.22%

- 6.67%

-4.16%

+5.25%

-8.63%

+ 5.94%

- 2.73%

- 0.73%

- 1.55%

+ 2.29%

+ 1.32%

-2.68%

- 9.15%

+ 12.77%

-3.42%

+6.38%

-7.28%

+14.72%

- 2.59%

+ 3.53%

- 2.65%

**Coal Production Reference Table** 

2,500,590

2,561,228

2,297,973

2,150,628

2,113,836

1,808,553

2,437,690

2,809,830

3,482,826

3,767,634

3,969,148

4,163,284

4,234,952

4,462,680

4,501,906

4,650,046

4,242,101

4,675,556

4,697,894

4,382,530

3,701,814

3,869,781

4,487,280

5,576,708

6,887,813

7,176,915

7,655,645

8,243,529

9,384,357

10,067,336

8,885,552

9,034,165

9,477,476

10,284,678

9,957,406

10,215,917

10,894,623

12,262,325

14,753,095

15,545,221

16,950,481

17,059,598

16,852,971

16,340,827

16,682,361

16,874,451

East

YoY change

+10.31%

+8.53%

+18.94%

+19.46%

+24.16%

+29.28%

+18.30%

+41.62%

- 5.73%

- 23.46%

-39.31%

- 52.00%

-38.58%

- 32.51%

- 17.76%

- 15.57%

- 11.83%

- 10.47%

-0.17%

- 4.55%

-4.17%

+6.10%

+ 14.60%

+20.82%

+4.69%

- 21.41%

-46.26%

- 46.08%

- 41.39%

- 32.35%

- 26.60%

- 28.71%

- 13.84%

- 8.75%

- 0.98%

- 2.11%

- 10.76%

- 11.57%

- 13.01%

- 16.13%

-32.51%

-34.28%

- 35.73%

- 28.12%

- 12.46%

- 4.87%

+ 1.61%

+ 1.10%

+ 2.49%

+5.33%

- 4.46%

-9.47%

Qtr change

+4.30%

+ 1.46%

- 2.79%

+7.24%

+ 2.62%

+11.18%

- 2.37%

+11.46%

+6.85%

+ 1.74%

+16.88%

- 25.81%

- 13.24%

- 19.32%

- 7.56%

-5.08%

- 4.66%

- 1.69%

- 5.10%

- 0.87%

-3.19%

+9.62%

- 9.27%

-0.48%

+7.20%

+18.39%

- 4.34%

- 13.76%

- 19.54%

- 19.04%

- 4.03%

- 6.25%

- 7.13%

- 12.16%

-6.78%

+13.30%

- 1.65%

- 4.68%

- 7.85%

+3.29%

- 2.53%

- 6.23%

- 11.15%

- 16.88%

- 5.10%

-8.29%

- 0.64%

+1.23%

+3.13%

- 2.05%

- 1.14%

+ 2.62%

Total

YoY change

+6.22%

+2.10%

+11.67%

+6.89%

+8.47%

+10.40%

-3.04%

+51.49%

- 9.47%

- 18.77%

- 27.06%

- 54.13%

- 27.97%

- 22.18%

-8.54%

- 5.42%

- 1.72%

- 0.77%

-0.25%

-5.18%

- 10.46%

-10.23%

- 3.35%

+8.32%

+1.83%

- 12.94%

-34.81%

- 37.02%

- 32.64%

- 28.94%

- 20.03%

- 20.87%

- 13.91%

- 5.40%

- 0.94%

-4.32%

-4.89%

- 7.17%

-6.13%

-9.06%

- 21.98%

- 20.37%

- 23.50%

- 15.91%

- 4.77%

+0.25%

+4.74%

+3.27%

+6.18%

+7.80%

+ 2.29%

-3.20%

Qtr change

+7.56%

- 0.50%

+0.04%

-0.78%

+3.39%

+8.83%

-4.24%

+0.68%

+5.22%

-4.42%

+49.61%

-39.83%

- 5.60%

- 14.17%

-5.92%

- 5.51%

+1.99%

+0.88%

-2.71%

- 1.81%

+2.97%

+1.41%

- 7.52%

-7.27%

+3.23%

+9.17%

+3.65%

- 12.83%

- 11.74%

- 18.25%

+0.14%

-6.78%

- 6.88%

-8.01%

-0.91%

+1.41%

+ 2.33%

-3.67%

-4.29%

+0.81%

-0.12%

- 2.60%

-7.27%

- 13.51%

+ 1.94%

- 6.43%

+1.93%

- 2.06%

+7.32%

- 2.24% + 0.50%

+0.70%

Production

7,576,953

7,044,078

7,079,830

7,077,170

7,133,067

6,899,421

6,339,916

6,620,893

6,576,016

6,249,555

6,538,751

4,370,656

7,263,613

7,694,102

8,964,108

9,527,890

10,083,475

9,887,211

9,800,988

10,074,088

10,259,659

9,963,653

9,825,425

10,624,479

11,457,598

11,098,884

10,166,239

9,808,109

11,251,818

12,748,273

15,594,408

15,573,166

16,705,236

17,939,425

19,501,263

19,679,377

19,405,392

18,964,281

19,686,683

20,568,481

20,403,648

20,428,035

20,973,288

22,618,330

26,152,622

25,653,743

27,416,827

26,898,233

27,463,593

25,589,850

26,176,843

26,045,542

# Employment Reference Table

|      |    |       | West       |            |        | East       |            |        | Total      |            |
|------|----|-------|------------|------------|--------|------------|------------|--------|------------|------------|
|      |    | Emp   | YoY change | Qtr change | Emp    | YoY change | Qtr change | Emp    | YoY change | Qtr change |
| 2023 | Q1 | 1,690 | + 1.50%    | + 1.87%    | 3,288  | + 14.76%   | + 3.33%    | 4,978  | +9.89%     | + 2.83%    |
| 2022 | Q4 | 1,659 | + 5.33%    | - 0.84%    | 3,182  | + 17.37%   | + 2.38%    | 4,841  | + 12.95%   | + 1.25%    |
|      | Q3 | 1,673 | + 7.38%    | + 2.64%    | 3,108  | + 18.17%   | + 2.64%    | 4,781  | + 14.16%   | + 2.64%    |
|      | Q2 | 1,630 | + 3.56%    | - 2.10%    | 3,028  | + 26.80%   | + 5.69%    | 4,658  | + 17.57%   | + 2.83%    |
|      | Q1 | 1,665 | + 2.97%    | + 5.71%    | 2,865  | + 19.67%   | + 5.68%    | 4,530  | + 12.94%   | + 5.69%    |
| 2021 | Q4 | 1,575 | - 4.08%    | + 1.09%    | 2,711  | + 19.74%   | +3.08%     | 4,286  | +9.73%     | + 2.34%    |
|      | Q3 | 1,558 | - 6.82%    | - 1.02%    | 2,630  | + 18.52%   | + 10.13%   | 4,188  | +7.63%     | + 5.70%    |
|      | Q2 | 1,574 | + 4.65%    | - 2.66%    | 2,388  | + 3.83%    | - 0.25%    | 3,962  | + 4.15%    | - 1.22%    |
|      | Q1 | 1,617 | - 18.00%   | - 1.52%    | 2,394  | - 11.17%   | + 5.74%    | 4,011  | - 14.06%   | + 2.69%    |
| 2020 | Q4 | 1,642 | - 29.44%   | - 1.79%    | 2,264  | - 26.68%   | + 2.03%    | 3,906  | - 27.87%   | +0.39%     |
|      | Q3 | 1,672 | - 34.92%   | + 11.17%   | 2,219  | - 34.66%   | - 3.52%    | 3,891  | - 34.77%   | + 2.29%    |
|      | Q2 | 1,504 | - 41.66%   | - 23.73%   | 2,300  | - 34.38%   | - 14.66%   | 3,804  | - 37.47%   | - 18.49%   |
|      | Q1 | 1,972 | - 23.48%   | - 15.26%   | 2,695  | - 32.96%   | - 12.73%   | 4,667  | - 29.26%   | - 13.81%   |
| 2019 | Q4 | 2,327 | - 9.70%    | - 9.42%    | 3,088  | - 25.25%   | - 9.07%    | 5,415  | - 19.28%   | - 9.22%    |
|      | Q3 | 2,569 | + 1.26%    | - 0.35%    | 3,396  | - 13.57%   | - 3.11%    | 5,965  | - 7.75%    | - 1.94%    |
|      | Q2 | 2,578 | + 10.45%   | +0.04%     | 3,505  | - 11.56%   | - 12.81%   | 6,083  | - 3.40%    | - 7.79%    |
|      | Q1 | 2,577 | + 9.85%    | + 0.00%    | 4,020  | + 1.26%    | - 2.69%    | 6,597  | + 4.45%    | - 1.65%    |
| 2018 | Q4 | 2,577 | + 3.12%    | + 1.58%    | 4,131  | + 0.51%    | + 5.14%    | 6,708  | + 1.50%    | + 3.74%    |
|      | Q3 | 2,537 | - 0.20%    | +8.70%     | 3,929  | - 5.00%    | - 0.86%    | 6,466  | -3.17%     | + 2.68%    |
|      | Q2 | 2,334 | - 10.37%   | - 0.51%    | 3,963  | - 0.13%    | - 0.18%    | 6,297  | -4.18%     | - 0.30%    |
|      | Q1 | 2,346 | - 9.56%    | - 6.12%    | 3,970  | + 0.15%    | - 3.41%    | 6,316  | - 3.69%    | - 4.43%    |
| 2017 | Q4 | 2,499 | - 5.05%    | - 1.69%    | 4,110  | + 7.87%    | - 0.63%    | 6,609  | + 2.59%    | - 1.03%    |
|      | Q3 | 2,542 | - 2.61%    | - 2.38%    | 4,136  | + 13.13%   | + 4.23%    | 6,678  | + 6.58%    | + 1.61%    |
|      | Q2 | 2,604 | - 3.70%    | + 0.39%    | 3,968  | + 4.75%    | +0.10%     | 6,572  | +1.23%     | + 0.21%    |
|      | Q1 | 2,594 | - 11.62%   | - 1.44%    | 3,964  | - 1.91%    | + 4.04%    | 6,558  | - 5.99%    | + 1.80%    |
| 2016 | Q4 | 2,632 | - 20.82%   | + 0.84%    | 3,810  | - 26.21%   | + 4.21%    | 6,442  | - 24.10%   | + 2.81%    |
|      | Q3 | 2,610 | - 25.87%   | - 3.48%    | 3,656  | - 37.54%   | - 3.48%    | 6,266  | - 33.16%   | - 3.48%    |
|      | Q2 | 2,704 | - 27.23%   | - 7.87%    | 3,788  | - 35.67%   | - 6.26%    | 6,492  | - 32.40%   | - 6.94%    |
|      | Q1 | 2,935 | - 23.29%   | - 11.70%   | 4,041  | - 38.51%   | - 21.73%   | 6,976  | - 32.91%   | - 17.80%   |
| 2015 | Q4 | 3,324 | - 24.98%   | - 5.60%    | 5,163  | - 27.07%   | - 11.79%   | 8,487  | - 26.26%   | - 9.46%    |
|      | Q3 | 3,521 | - 20.68%   | - 5.25%    | 5,853  | - 17.81%   | - 0.59%    | 9,374  | - 18.91%   | - 2.39%    |
|      | Q2 | 3,716 | - 9.92%    | - 2.88%    | 5,888  | - 20.14%   | - 10.41%   | 9,604  | - 16.47%   | - 7.64%    |
|      | Q1 | 3,826 | - 13.54%   | - 13.65%   | 6,572  | - 9.89%    | - 7.16%    | 10,398 | - 11.26%   | - 9.66%    |
| 2014 | Q4 | 4,431 | - 0.40%    | - 0.18%    | 7,079  | - 3.78%    | - 0.59%    | 11,510 | - 2.51%    | - 0.43%    |
|      | Q3 | 4,439 | + 1.63%    | + 7.61%    | 7,121  | - 12.11%   | - 3.42%    | 11,560 | - 7.30%    | + 0.54%    |
|      | Q2 | 4,125 | - 6.02%    | - 6.78%    | 7,373  | - 12.40%   | + 1.10%    | 11,498 | - 10.21%   | - 1.88%    |
|      | Q1 | 4,425 | + 2.29%    | - 0.54%    | 7,293  | - 17.01%   | - 0.87%    | 11,718 | - 10.65%   | - 0.75%    |
| 2013 | Q4 | 4,449 | - 2.07%    | + 1.85%    | 7,357  | - 22.12%   | - 9.20%    | 11,806 | - 15.61%   | - 5.32%    |
|      | Q3 | 4,368 | - 3.23%    | - 0.48%    | 8,102  | - 17.08%   | - 3.74%    | 12,470 | - 12.71%   | - 2.62%    |
|      | Q2 | 4,389 | - 3.47%    | + 1.46%    | 8,417  | - 26.88%   | - 4.22%    | 12,806 | - 20.25%   | - 2.35%    |
|      | Q1 | 4,326 | - 8.52%    | - 4.78%    | 8,788  | - 32.10%   | - 6.97%    | 13,114 | - 25.79%   | - 6.25%    |
| 2012 | Q4 | 4,543 | + 0.71%    | + 0.64%    | 9,446  | - 29.29%   | - 3.33%    | 13,989 | - 21.72%   | - 2.07%    |
|      | Q3 | 4,514 | +0.00%     | - 0.73%    | 9,771  | - 30.46%   | - 15.12%   | 14,285 | - 23.05%   | - 11.04%   |
|      | Q2 | 4,547 | + 1.02%    | - 3.85%    | 11,511 | - 14.73%   | - 11.06%   | 16,058 | - 10.79%   | - 9.13%    |
|      | Q1 | 4,729 | +8.36%     | + 4.83%    | 12,942 | - 1.36%    | - 3.12%    | 17,671 | + 1.07%    | - 1.11%    |
| 2011 | Q4 | 4,511 | + 4.37%    | - 0.07%    | 13,359 | + 0.91%    | - 4.92%    | 17,870 | + 1.76%    | - 3.74%    |
|      | Q3 | 4,514 | + 7.25%    | + 0.29%    | 14,051 | + 7.30%    | + 4.08%    | 18,565 | +7.29%     | + 3.13%    |
|      | Q2 | 4,501 | +8.04%     | +3.14%     | 13,500 | + 5.21%    | +2.90%     | 18,001 | +5.90%     | +2.96%     |
|      |    |       |            |            |        |            |            |        |            |            |

+0.97%

+ 2.68%

+ 1.03%

+ 4.83%

13,120

13,239

13,095

12,832

+ 7.44%

+ 5.62%

+ 0.06%

- 11.38%

- 0.90%

+ 1.10%

+ 2.05%

+5.09%

17,484

17,561

17,304

16,998

+8.03%

+8.49%

+ 2.49%

- 7.65%

- 0.44%

+ 1.49%

+ 1.80%

+5.02%

Q1

Q4

Q3

Q2

2010

4,364

4,322

4,209

4,166

+9.81%

+ 18.38%

+ 10.85%

+6.06%