

Overview

LinkUp has created a new, proprietary metric that calculates the diversity of job openings in a given geographic region. The Job Market Diversification Report does not measure diversity in terms of demographics of the population, but rather the diversity of the job openings within the geography. The Report provides a composite score for each geography using the following parameters:

- Number of industries with job openings (based on 3-digit NAICS codes)
- Number of companies with job openings (based on companies in the LinkUp Index)
- Number of job categories (based on LinkUp’s job category classification)

Methodology

The diversification of a metropolitan statistical area (MSA) is calculated by adding the number of rows (i.e. industries, companies, or job categories) with >0 job openings and then breaking that count into quintiles. The number of job openings are then summed within each quintile and divided by the total number of job openings to determine the percent of job openings in each quintile (Figure 1). The quintile percentages are then compared to the variance from “perfect” (i.e. 20%) for each quintile. Finally, to invert the final score so the higher number indicates a better score, the sum of the variance is subtracted from 160 (Figure 2).

Figure 1.

% of Job Openings in Each Quintile of Total Job Openings						
Quintiles	Ex 1	Ex 2	Ex 3	Ex 4	Ex 5	Ex 6
Top 20%	20%	30%	40%	60%	80%	100%
21-40%	20%	25%	30%	15%	10%	0%
41-60%	20%	20%	15%	15%	6%	0%
61-80%	20%	15%	10%	5%	3%	0%
81-100%	20%	10%	5%	5%	1%	0%
Total	100%	100%	100%	100%	100%	100%

Figure 2.

Absolute Difference from “Perfect”						
Quintiles	Ex 1	Ex 2	Ex 3	Ex 4	Ex 5	Ex 6
Top 20%	0%	10%	20%	40%	60%	80%
21-40%	0%	5%	10%	5%	10%	20%
41-60%	0%	0%	5%	5%	14%	20%
61-80%	0%	5%	10%	15%	17%	20%
81-100%	0%	10%	15%	15%	19%	20%
Total	0%	30%	60%	80%	120%	160%
SCORE	160	130	100	80	40	0

Figure 3 shows an example of how the composite score for the San Francisco MSA is calculated. A diversification score is calculated for each parameter and then those three scores are averaged for a composite diversification score of 50 for San Francisco.

Figure 3.

Example Calculation For San Francisco						
Parameters	Categories		Industries		Companies	
	% of Job Openings in each Quintile	Variance from 20%	% of Job Openings in each Quintile	Variance from 20%	% of Job Openings in each Quintile	Variance from 20%
Top 20%	76%	56%	70%	50%	79%	59%
21-40%	15%	5%	19%	1%	12%	8%
41-60%	6%	14%	8%	12%	6%	14%
61-80%	2%	18%	3%	17%	2%	18%
81-100%	1%	19%	0%	20%	1%	19%
Sum of Variances:		112%		99%		118%
Parameter Scores (160-Sum of Variances):		48		61		42
Diversification Score:	50					

Results

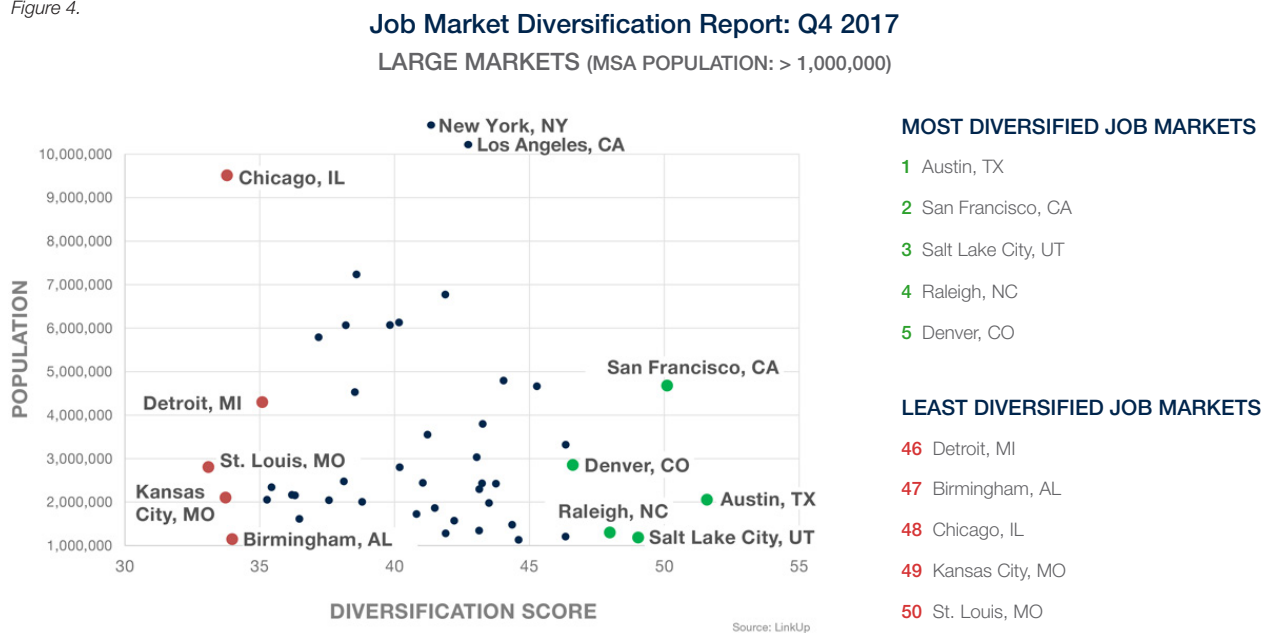
LinkUp has calculated the Job Market Diversification Report for the top 200 MSAs in the United States. The 200 MSAs have been grouped into large markets (population > 1,000,000), mid markets (population 500,000-999,999), and small markets (population 250,000-499,999).

Large Markets:

For the large markets, Austin, San Francisco, Raleigh-Durham, Salt Lake City, and Denver have the most diversified job markets, while Detroit, Birmingham, Chicago, Kansas City, and St. Louis have the least diverse job markets (Figure 4).

The rank of cities is based on the variance of job openings across categories, industries and companies. The smaller the variance across the quintiles, the higher the diversification score. In Austin, TX for example, the top three industries based on job openings account for only 19% of all job openings. On the other hand, in St. Louis, the top three industries account for 44% of all job openings. Austin has a more diversified job market than St. Louis because Austin's job openings are spread more evenly across many industries.

Figure 4.

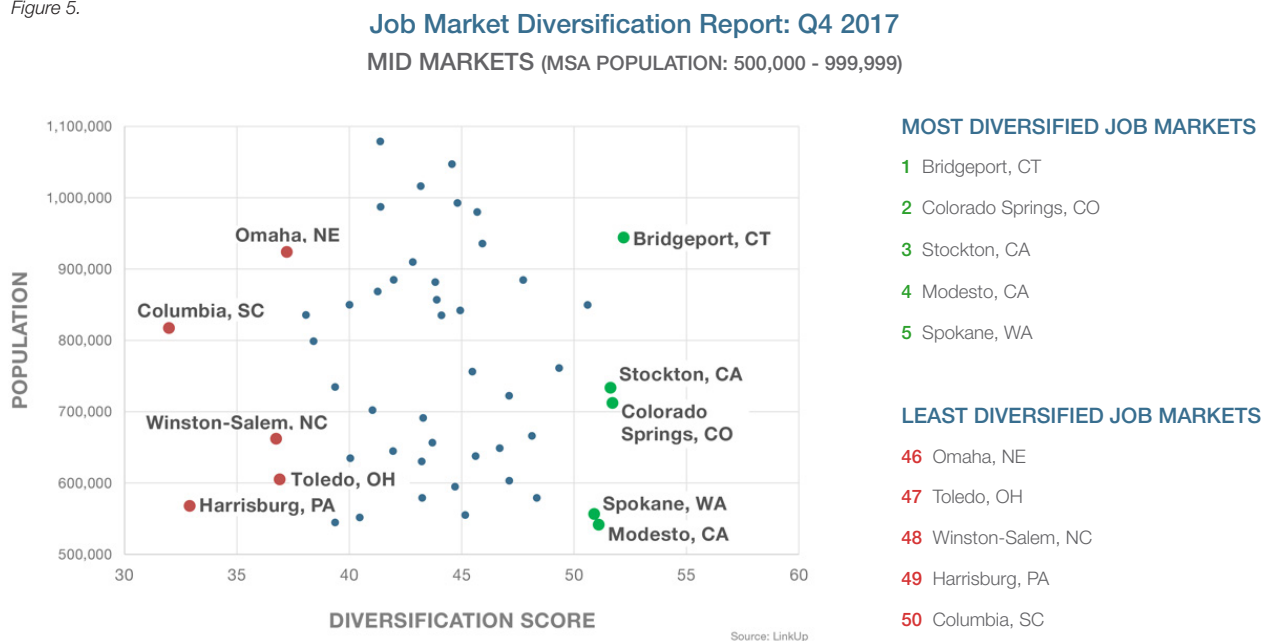


Mid Markets:

Among the mid-level MSAs, the top five MSAs are Bridgeport, Colorado Springs, Stockton, Modesto, and Spokane. The bottom five are Omaha, Toledo, Winston-Salem, Harrisburg, and Columbia (Figure 5).

Among the mid markets, number of companies with job openings is a key driver in a higher versus lower score. Columbia, SC is home to one of the region's top hospitals, Lexington Medical Center. This one employer represents 26% of all job openings in Columbia, SC. Compare that to Bridgeport, CT where their top employer with job openings only accounts for 3% of all job openings. While it may be a boom for the community of Columbia, SC to have one of the best hospitals located there, the local job market is highly dependent on that one employer. If Lexington Medical Center decided to reduce hiring, it would have a major impact on the local job market. The more one company dominates the local job market, the less diversified the market.

Figure 5.

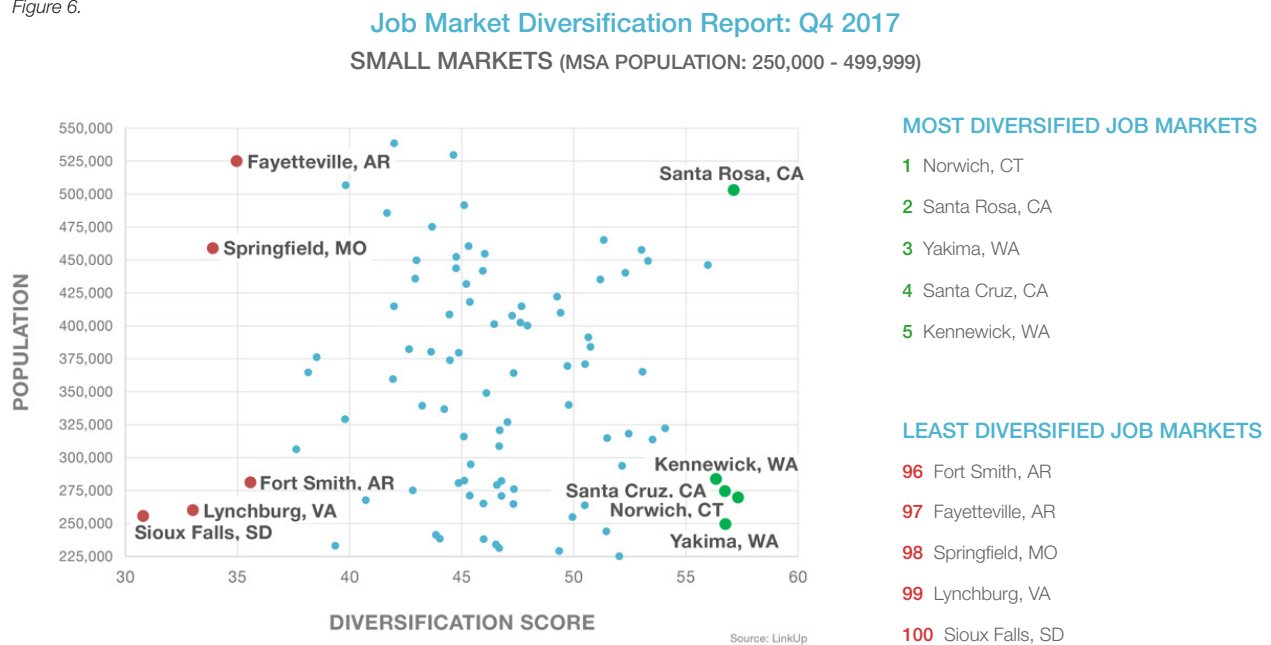


Small Markets:

Among the small markets, Norwich, Santa Rosa, Yakima, Santa Cruz, and Kennewick, are the most diversified while Fort Smith, Fayetteville, Springfield, Lynchburg, and Sioux Falls are the least diversified.

In the small markets, job openings in Sioux Falls, SD are dominated by Avera Health, a regional health system based in Sioux Falls. This one employer alone accounts for 31% of all job openings in Sioux Falls. On the other hand, in Norwich, CT the top employer with job openings, William Backus Hospital, accounts for only 6% of all job openings. The job market in Sioux Falls, SD would be hit much harder if Avera Health no longer had job openings compared to if William Backus Hospital stopped hiring in Norwich, CT.

Figure 6.



About LinkUp

LinkUp is a leading job search engine empowering people with knowledge obtained from the largest, highest quality database of global job listings. Through its proprietary technology, LinkUp indexes millions of job openings every day directly from employer websites. This unique job dataset can be used to assess labor demand, align training and education, understand human capital trends, and predict job growth within regions, professions, industries, and nations.