

Introduction

In the last edition of Kevin's Corner we discussed the impact of the pandemic on employment in Vermont industries. That report can be found [here](#). In this edition we discuss how the pandemic impacted employment in each of Vermont's 14 counties. Perhaps not surprisingly, counties with high concentrations of Leisure and Hospitality were most heavily impacted.

Because normal seasonal employment changes can be significant the basis of comparison for the decline in employment related to the pandemic is an over-the-year comparison of April, 2019 and April, 2020. The basis of comparison for the subsequent recovery is the change in employment from April to June 2020. In both cases employment counts are from the Vermont Department of Labor's Quarterly Census of Employment and Wages, QCEW.

Location Quotients

Much of this analysis will rely on the concept of location quotients. Location quotients tell us about the prevalence of an industry in a region. They are ratios that allow an area's distribution of employment by industry to be compared to a larger reference area's distribution. In this analysis Vermont is used as the reference area. The reference industry is always the all-industry, all-ownerships total.

Calculating Vermont County Location Quotients:

$$\frac{\text{Employment in industry within county} / \text{All employment in county}}{\text{Employment in industry statewide} / \text{All employment in state}}$$

The result of the calculation is a number greater than zero. A result of 1.0 indicates that the share of employment in the county is the same as the share of employment in the state for a particular industry. Figures greater than 1 represent heavier concentrations of

employment in that industry. A location quotient of 1.5, for example, means that the county has a 50% higher concentration of employment in that industry than the statewide average. A location quotient of .75 means that the county has a lower concentration of employment in that industry, namely 75% of the statewide average.

For the purposes of this discussion location quotients for Vermont counties are based on June, 2019 QCEW employment counts.

Over-the-Year Declines

The state of Vermont lost 62,892 jobs between April of 2019 and April of 2020, 20.5% of all jobs in the state. The individual county with the highest number of job losses was Chittenden (-19,001) but this was largely due to its large employment base. As a share of a county's total April 2019 employment the largest losses were in Lamoille (-37.0% or -4,290 jobs), Grand Isle (-29.6% or -337 jobs), Rutland (-26.1% or -6,938 jobs) and Orleans (-25.8% or 2,789).

These losses can be explained in part by each county's high concentration of jobs in industries that suffered the greatest losses – in other words, counties with high location quotients for these industries. Lamoille county's location quotient for Leisure and Hospitality is 2.31 while Grand Isle's is 1.87, by far the two highest concentrations in the state. Rutland's location quotient for Leisure and Hospitality is a more modest 1.09 but it also has high concentrations of Construction, Manufacturing and Retail Trade. Orleans county has concentrations at or above 1.2 for Construction, Manufacturing, Retail Trade and Leisure & Hospitality. See table 1 below for losses and location quotients for these counties.



Table 1: Location Quotients for Counties with Largest Employment Declines

County	Loss (Apr-Apr)	Location Quotients			
		Construction	Manufacturing	Retail Trade	Leisure & Hospitality
Grand Isle	-337 (-29.6%)	1.57	0.39	1.16	1.87
Lamoille	-4,290 (-37.0%)	1.35	0.54	1.02	2.31
Orleans	-2,789 (-25.8%)	1.24	1.23	1.22	1.21
Rutland	-6,938 (-26.1%)	1.15	1.21	1.11	1.09

The smallest declines were found in Franklin (-14.9% or -2,687 jobs), Orange (-16.1% or -1,231 jobs) and Washington (-17.3% or -5,715 jobs). Franklin and Washington counties both have very low location quotients for Leisure and Hospitality; 0.58 and 0.77 respectively. Orange's location quotient for Leisure and Hospitality is 1.01 but the figures for other hard-hit industries – Retail trade at 0.80 and Manufacturing at 0.83 - are quite low for the county.

Measuring the Recovery

Between April and June the Vermont economy added 28,712 jobs (11.8%). While the gains were large the employment count was still down 42,653 relative to the same month in the previous year. As with the declines, the recovery was uneven and concentrated in those areas with high location quotients for quickly-recovering industries.

Grand Isle employment grew 42.8% (+342 jobs), largely due to gains in tourism-related industries with very high location quotients in the county. Leisure and Hospitality grew by 65.1% statewide and

309.6% (+161 jobs) in Grand Isle, during the two month period, a combination of pandemic relief and very strong seasonal factors in the region. Despite these gains the county was still down 300 jobs (-20.8%) over the year, June to June. Employment in Leisure and Hospitality was down 110 (34.1%) over the same period. Grand Isle's location quotient is also very high in Construction, an industry that increased by 72.3% statewide between April and June due to both pandemic relief and seasonal factor. Grand Isle saw an increase of 70.5% or 43 jobs.

Lamoille County employment grew by 26.2% (1,908) between April and June, leaving the county approximately 22.4% below its June, 2019 level. The April – June growth was due in large part to rebounds in Leisure & Hospitality (+750 or 104.5%) and Construction (+419 or 117.7%).

Every county experienced a decline in employment over the year between June 2019 and June 2020. Despite their recent gains the largest over-the-year declines were in the aforementioned Lamoille and Grand Isle (-22.4% and -20.8% respectively). The smallest percentage declines over the year were in Franklin (-8.8% or -1,617 jobs), Washington (-10.4% or -3,537 jobs) and Caledonia (-10.5% or -1,126). Chittenden, the state's largest county, was down 13,091 jobs (-12.6%) over the year.

Location quotient and employment data for all Vermont counties can be found in the table on the following page. In the next edition of Kevin's Corner we will look at how the composition of the labor force has changed during the pandemic.



Kevin's Corner: Reviewing the Impact of the COVID Pandemic on Employment in Vermont Counties

Table 2: Location Quotients and Change in Employment
 Vermont Department of Labor Quarterly Census of Employment and Wages

County	Location Quotients				Employment Changes					
	Construction	Manufacturing	Retail trade	Leisure & Hospitality	Apr 19 - Apr 20	% change	Apr 20 – June 20	% change	June 19- June 20	% change
Vermont	1.00	1.00	1.00	1.00	-62,892	-20.5%	28,712	11.8%	-42,653	-13.6%
Addison	1.19	1.42	0.94	0.93	-3,176	-21.6%	1,723	15.0%	-2,146	-13.9%
Bennington	0.73	1.41	1.24	1.14	-3,925	-23.0%	1,889	14.4%	-2,546	-14.5%
Caledonia	1.20	1.20	1.22	0.74	-1,950	-18.6%	1,099	12.9%	-1,126	-10.5%
Chittenden	0.99	0.95	1.00	0.96	-19,001	-18.6%	8,091	9.8%	-13,091	-12.6%
Essex	0.97	1.43	0.60	0.59	-209	-19.3%	133	15.3%	-166	-14.2%
Franklin	0.67	1.47	1.10	0.58	-2,687	-14.9%	1,484	9.7%	-1,617	-8.8%
Grand Isle	1.57	0.39	1.16	1.87	-337	-29.6%	342	42.8%	-300	-20.8%
Lamoille	1.35	0.54	1.02	2.31	-4,290	-37.0%	1,908	26.2%	-2,648	-22.4%
Orange	1.53	0.83	0.80	1.01	-1,231	-16.1%	521	8.1%	-1,331	-16.1%
Orleans	1.24	1.23	1.22	1.21	-2,789	-25.8%	1,401	17.5%	-1,715	-15.4%
Rutland	1.15	1.21	1.11	1.09	-6,938	-26.1%	3,049	15.5%	-4,035	-15.1%
Washington	0.80	0.71	0.98	0.77	-5,715	-17.3%	3,134	11.5%	-3,537	-10.4%
Windham	0.96	1.15	0.97	1.08	-5,162	-24.6%	1,618	10.2%	-3,526	-16.8%
Windsor	1.07	0.81	0.92	1.29	-4,199	-18.7%	2,316	12.7%	-3,251	-13.7%

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