

RENO MSA INDUSTRY TRENDS-JUNE 2019

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Business Activity, Construction, and Housing indexes provide a simplified look at important industry trends within the Reno MSA economy.

Due to housing affordability concerns in the region, we replaced our Single Family Housing Index with a Housing Affordability Index, which compares family income necessary to purchase a median priced home in Washoe County to the median family income in the region. Due to data availability constraints, this index will be updated quarterly.

Business Activity Index June 2019

Provides historical and current trends for business activity in the Reno MSA region.

Construction Index June 2019

Provides historical and current trends for the construction industry in the Reno MSA region.

Housing Affordability Index 2Q 2019

Provides historical and current trends for housing affordability in the Reno MSA region.

Business Activity Index						Construction Index					Housing Affordability Index					
June 2019						June 2019					2Q 2019					
Provides historical and current trends for business activity in the Reno MSA region.						Provides historical and current trends for the construction industry in the Reno MSA region.					Provides historical and current trends for housing affordability in the Reno MSA region.					
0.16% ↑						-4.74% ↓					0.16% ↑					
% Change	Taxable Sales	Taxable Gaming Revenue	Nonfarm Employment	Airport Passengers	Airport Cargo	% Change	Construction Employment	Commercial Building Permit Valuation	Commercial Building Permits	Residential Building Permit Valuation	Residential Building Permit Units	% Change	Median Price of SF Homes	Median Family Income	30-Year Fixed Mortgage Rate	Required Qualifying Income
Month to Month	0.20% ↑	-0.98% ↓	0.50% ↑	0.19% ↑	-0.16% ↓	Month to Month	0.76% ↑	-13.26% ↓	-15.65% ↓	-0.88% ↓	-1.51% ↓	Month to Month	3.90% ↑	0.59% ↑	-8.30% ↓	0.44% ↑
2.93% ↑						-21.42% ↓					3.71% ↑					
% Change	Taxable Sales	Taxable Gaming Revenue	Nonfarm Employment	Airport Passengers	Airport Cargo	% Change	Construction Employment	Commercial Building Permit Valuation	Commercial Building Permits	Residential Building Permit Valuation	Residential Building Permit Units	% Change	Median Price of SF Homes	Median Family Income	30-Year Fixed Mortgage Rate	Required Qualifying Income
Year to Year	1.64% ↑	-2.16% ↓	5.93% ↑	4.32% ↑	-0.17% ↓	Year to Year	8.10% ↑	-26.48% ↓	-69.78% ↓	-4.32% ↓	-8.93% ↓	Year to Year	3.63% ↑	2.43% ↑	-11.75% ↓	-1.23% ↓

The Reno MSA Business Activity and Construction Indexes are created using the composite methodology introduced by the Department of Commerce and made popular by The Conference Board. All data variables are monthly, seasonally adjusted using the moving average method, and all series reported in dollar terms are adjusted for inflation. The Business Activity Index is based on data starting January 1995, with 1995=100. The Construction Index is based on data starting January 2001, with 2001=1000.

The Reno MSA Housing Affordability Index is based on a ratio of median family income to qualifying family income, the income necessary to purchase a median priced home in Washoe County. Qualifying income is estimated using a mortgage calculator with inputs for median home price, average 30-year fixed mortgage rate, and housing-related expenses (property tax, utilities, and mortgage insurance). Annual median family income data lags a year and is estimated quarterly using the national Employment Cost Index data for wage and salary increases for each quarter. This index is based on annual data between 1997 and 2018, with data starting in the 1st Quarter (1Q) 2019 estimated on quarterly basis.

The following variables are included in each index:

Business Activity Index

- MSA Employment
- WC Gaming Revenue
- WC Taxable Sales
- RTIA Passengers
- RTIA Cargo

Construction Index

- MSA Construction Employment
- WC Commercial Permits
- WC Commercial Permit Valuation
- WC Residential Permit Units
- WC Residential Permit Valuation

Housing Affordability Index

- WC Median Price of New and Existing SF Homes
- MSA Median Family Income
- US 30-Year Fixed Mortgage Rate

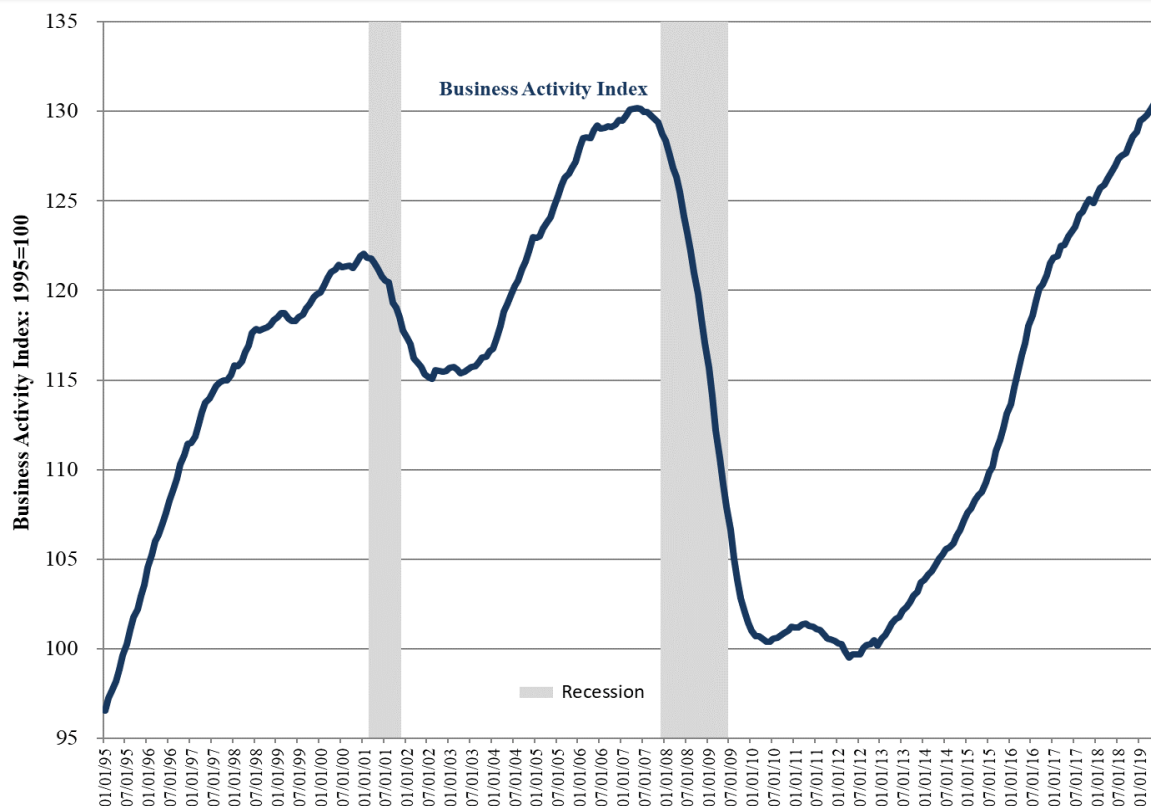
* MSA-Reno Metropolitan Statistical Area * WC-Washoe County * RTIA-Reno Tahoe International Airport *SF-Single Family

Reno MSA Business Activity Index

Reno MSA Business Activity Index increased between May and June 2019, the 18th month of growth after a small (0.20%) index decrease in December 2017.

The Reno MSA Business Activity Index provides a simplified picture of business activity in the Reno MSA region. While similar to our Reno MSA Leading Economic Index, this index excludes some local residential indicators and all national indicators to arrive at a local business activity index. As with the leading index, taxable sales and airport data for this index is projected using average 12-month, year-over-year change for the variable.

The Index shows 0.16% increase between May and June 2019. The index increased by 2.93% over the same period last year (June 2018 and 2019).



Series	Latest Period- June 2019	Prev. Period- May 2019	Change Prev. Period	Prev. Year- June 2018	Change Prev. Year
Taxable Sales (Washoe Co., SA, CPI)	443,834,483	442,965,321	0.20%	436,661,597	1.64%
Taxable Gaming Revenue (Washoe Co., SA, CPI)	42,853,581	43,278,709	-0.98%	43,800,595	-2.16%
CES Employment (Reno MSA, SA)	251,392	250,142	0.50%	237,317	5.93%
Airport Passengers (Reno Tahoe Airport, SA)	358,213	357,537	0.19%	343,388	4.32%
Airport Cargo Lbs. Shipped (Reno Tahoe Airport, SA)	12,336,631	12,356,366	-0.16%	12,357,683	-0.17%
Business Activity Index Result	130.66	130.44	0.16%	126.94	2.93%

Taxable gaming revenue has experienced some declines in 2019 and is a series to watch this year. Other local series continue to show positive growth. Airport cargo shipped series declined after two months of growth in April and May.

Source: Nevada Department of Taxation, Nevada Gaming Control Board, Current Employment Statistics (CES)-Bureau of Labor Statistics, and Reno-Tahoe International Airport.

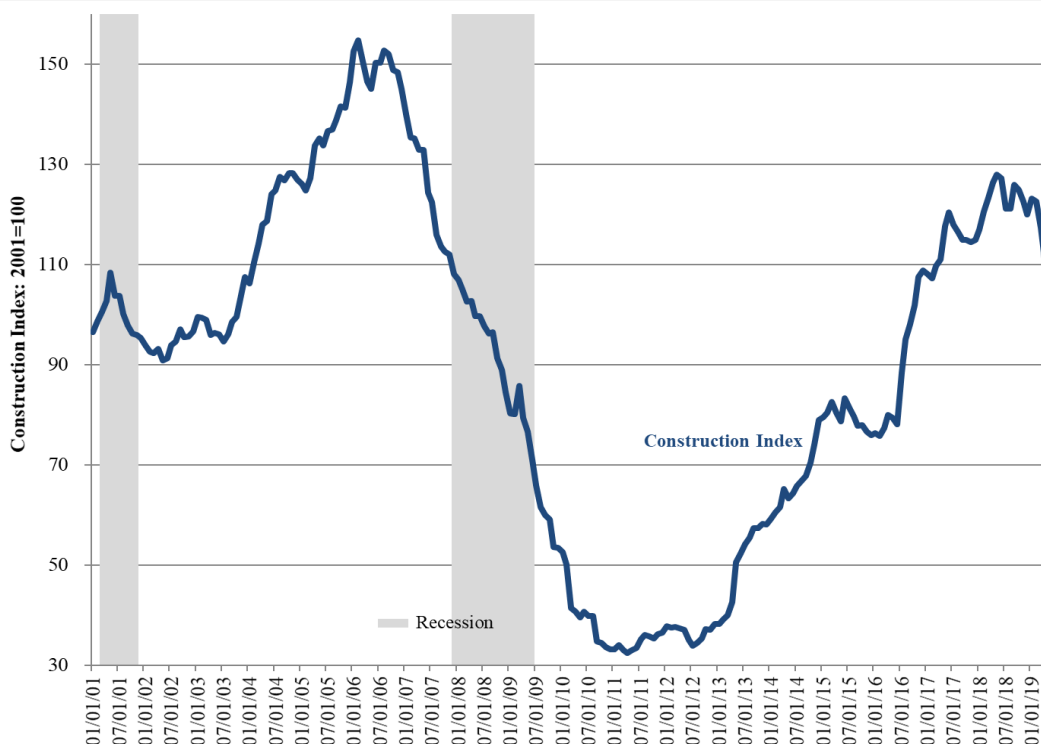
SA-Series results are seasonally adjusted. CPI-Series results are adjusted for inflation to 1995.

Reno MSA Construction Index

Reno MSA Construction Index declined between May and June 2019, the fifth period of decline after an increase in January 2019.¹

The Reno MSA Construction Index provides a picture of the performance of the construction industry in the Reno MSA region. Currently, no single variable represents the condition of the construction industry in the area. By combining multiple construction-related indicators into a single number, the Construction Index represents the state of the construction industry each month, allowing for comparison of trends in the industry over time.

The index shows a decline of 4.74% between May and June 2019. The index declined by 21.42% compared to the same month in the previous year (June 2018 and 2019).



Construction employment in the region continues to increase. However,

Series	Latest Period- June 2019	Prev. Period- May 2019	Change Prev. Period	Prev. Year- June 2018	Change Prev. Year
Reno MSA Construction Employment (SA)	18,800	18,658	0.76%	17,392	8.10%
Washoe Co. Commercial Building Permit Value (SA, CPI)*	26,004,113	29,978,511	-13.26%	35,368,626	-26.48%
Washoe Co. Commercial Building Permits (SA)*	8.1	9.6	-15.65%	27	-69.78%
Washoe Co. Residential Building Permit Value (SA, CPI)*	52,375,843	52,840,210	-0.88%	54,739,392	-4.32%
Washoe Co. Residential Building Permit Units (SA)*	381	387	-1.51%	418	-8.93%
Construction Index Result	99.94	104.92	-4.74%	127.19	-21.42%

commercial and residential permit series declined this month and compared to the same month last year. A decline in the residential permits was primarily in the multi-family permits, likely in response to the high number of multi-family units currently under construction in the region.

Source: Current Employment Statistics-Bureau of Labor Statistics and Building Departments of City of Reno, City of Sparks, and Washoe County.

SA-Series results are seasonally adjusted. CPI-Series results are adjusted for inflation to 2001.

*Includes data for Washoe County, City of Reno, and City of Sparks.

¹ It should be noted City of Reno building permit data for February through June 2019 were not reported as of the date of this index. These data were collected from the Accela database, but may be not directly comparable to historical data due to potential differences in the data reporting methodology.

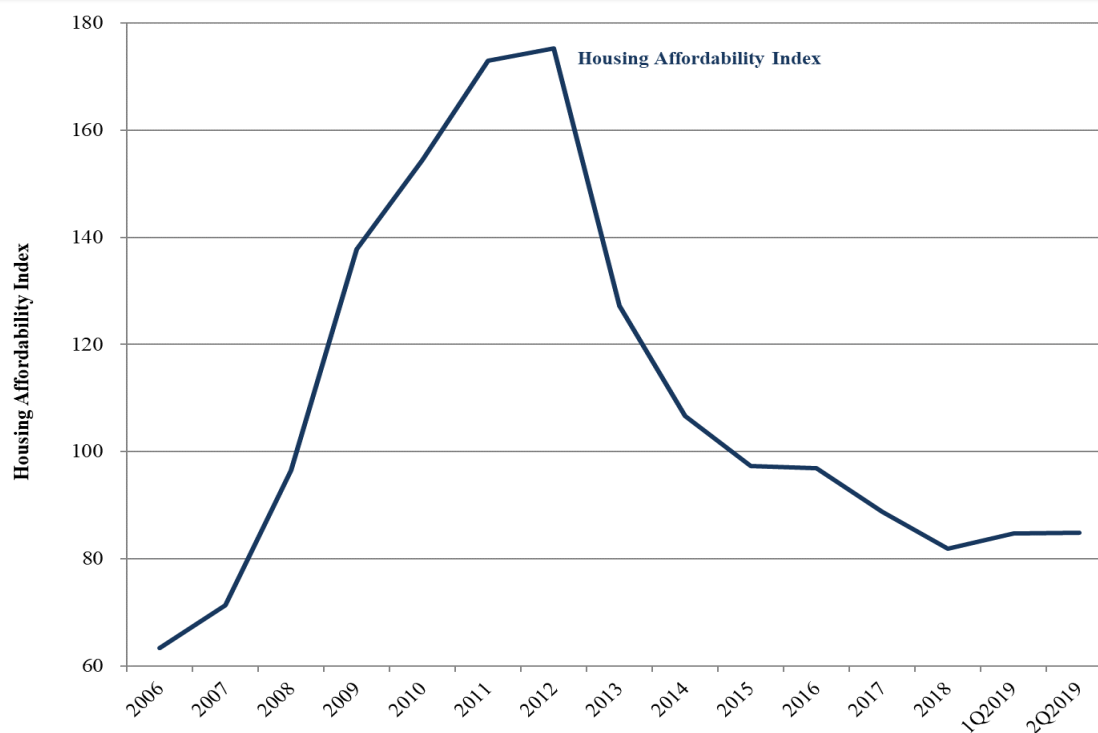
Reno MSA Housing Affordability Index²

The new Reno MSA Housing Affordability index increased between 1Q and 2Q 2019, as well as compared to the previous year (2018).

The goal of the Reno MSA Housing Affordability index is to track affordability of region’s housing over time by combining the three variables affecting affordability: income, interest rates, and prices. The index compares median family income to qualifying income (combination of above three variables).

A ratio of 100 indicates that median family income is sufficient to purchase a median-priced home. A ratio below 100 indicates median income is less than qualifying income and affordability issues exist. For example, the 2Q 2019 index of 84.89

indicates median family income is 15.11% below the income necessary to qualify for median priced home.



The index increased by 0.16% between 1Q and 2Q 2019, making homes in the region slightly more affordable. This is due to a small increase in estimated median family income and a large decline in the quarterly mortgage rate, which declined more than the median home price increase. The index increased by 3.71% compared to 2018, mainly due to declines in the mortgage rate.

Series	Latest Period- 2Q 2019	Prev. Period 1Q 2019	Change Prev. Period	Prev. Year- 2018	Change Prev. Year
Median Price of New/Existing Homes (Washoe Co.)	400,000	385,000	3.90%	386,005	3.63%
Median Family Income (MSA)	75,289	74,845	0.59%	73,500	2.43%
30-Year Fixed Mortgage Rate (US)	4.01	4.37	-8.30%	4.54	-11.75%
Required Qualifying Income (Estimated)	88,687	88,302	0.44%	89,789	-1.23%
Housing Affordability Index Result	84.89	84.76	0.16%	81.86	3.71%

Source: Washoe County Assessor/Center for Regional Studies (UNR), Federal Financial Institutions Examination Council's (FFIEC), Bureau of Labor Statistics, and Federal Reserve Bank of St. Louis.

² Historical data for the index is shown dating back to 2006 only. Additional historical data will be added in the future index releases.