

Nevada Cost of Education Index (NCEI)

The Nevada Cost of Education Index (NCEI) is a composite factor based upon two elements:

- A wage measure – the Comparative Wage Index (CWI) – for the percentage of district funding spent on wages (72 percent), and
- A cost of goods measure – based upon Bureau of Economic Analysis (BEA) regional price parities (RPPs) “goods” Index – for the remaining non-wage portion of district funding (28 percent).

The CWI

The CWI uses regional differences in non-educator wages and is based on the recognition that if wages in comparable professions are higher in a given region, then teacher wages will also have to be higher. By examining the regional wage differentials of a large sample of workers who have characteristics similar to teachers, the CWI implicitly accounts for a wide range of factors that influence the salary levels necessary to attract teachers to live and work in particular districts or regions, such as cost of living and desirability of place, including climate, cultural amenities, safety, commute times, and recreational opportunities.

The CWI is based on the public use microdata area (PUMA) data in the American Community Survey (ACS). PUMAs are county areas with at least 100,000 residents, as such many counties are too small to be considered independently, so CWI figures were calculated for: (1) Storey, Carson City, Lyon, and Douglas collectively; (2) Washoe, (3) Clark and (4) the rest of the state. The most recent CWI for Nevada uses 2017 data (most recent year available).

The CWI calculates the regional differences for these four groups for “comparable” average wages by taking raw data and then using regression analysis to control for any differences attributable to worker characteristics, such as experience, gender, ethnicity, and hours per week worked. Occupation areas and education can also be factors that are controlled for. In Nevada, feedback from stakeholders and the Commission suggested that the CWI should be based upon all occupations/industry areas and for all education levels, instead of restricting it to comparable professional occupations that require a BA or higher. The resulting comparable wage is then compared to statewide average to create an index figure.

Bureau of Economic Analysis (BEA) regional price parities (RPPs) “Goods” Index

The non-wage portion of the NCEI is calculated based upon the Bureau of Economic Analysis (BEA) Regional Price Parities (RPPs), subcomponent for “Goods” to represent the regional cost differences in school districts associated with purchasing goods. BEA produces its RPP index for: (1) Carson City, (2) Reno, (3) Las Vegas-Henderson-Paradise, and then (4) non-metropolitan Nevada.

For consistency, these factors were applied based upon the PUMA-based district groupings, so Storey, Lyon, and Douglas received the RPP Goods figure assigned to Carson City, and the districts in the “rest of state” group for CWI received the non-metropolitan RPP Goods figure.

The following table shows the CWI and RPP Goods figures for each district, that when combined produced the raw NCEI factor for each district. APA recommended applying the NCEI only when it was positive, so any combined figure less than 1.0 was set at 1.0.