

2016 Sales Ratio Small Sample Study

About the Small Sample Study

The Small Sample Study is produced by the Property Tax Data & Analysis Unit to identify jurisdictions that consistently do not meet the 6 sale minimum for State Board ratios. Counties should review the Small Sample Study with their PTCO to identify jurisdictions that may require further attention.

Data & Analysis will issue a preliminary Small Sample Study using the final preliminary 2016 sales ratios and a final Small Sample Study using the final 2016 sales ratios.

Detailed Description of the Small Sample Study

A “small sample” is a jurisdiction that was not reviewed by the State Board of Equalization at least twice in the past 5 years. In other words, any jurisdiction that did not have at least 2 years over the past 5 years with at least 6 sales is considered a small sample. Jurisdictions with 6 good sales in the 2016 Sales Ratio Study are not included in the Small Sample Study. The Small Sample Study is stratified by sales ratio property types.

The Small Sample Study provides the following information for every small sample for each of the 5 years. This information is also provided at the county level for reference:

- Sale count, including extreme sales.
- Annual trend, if any, applied or indicated.
- Median ratio, including extreme sales.
- % value change, determined using values for all parcels of that property type in the jurisdiction, adjusted for net improvements. These values are determined using values from market value by parcel (MVP) files.

A five-year weighted median is calculated to provide a snapshot of median ratios over the 5 years. The weighted median gives more weight to the median ratios from more recent years and less weight to the median ratios from older years. The five-year weighted median is not calculated for jurisdictions with less than 6 sales over the 5 years. Table 1 (below) describes the weights for each year as the percent that each contributes to the final weighted median.

Table 1: Weights by Year for the Five-Year Weighted Median.

Year	2016	2015	2014	2013	2012
Weight	30%	25%	20%	15%	10%

If there is a year (or years) with no sales, the weights adjust proportionally to include only those years with sales. For example, if there were no sales in 2015, the weights only add up to 75%. To determine the new weights for each year with sales, divide the weight in Table 1 by the new total. In this example, 2016 would now hold 40% ($30\% \div 75\%$) of the weight, 2014 would hold 27% ($20\% \div 75\%$), etc.

There are certain situations which may warrant attention from the county. Several flags were created to indicate these jurisdictions. These flags are not definitive indicators of a problem, nor is a lack of flags a definitive indicator that there is not a problem. These flags are described below.

- The Low Total Sales Flag indicates jurisdictions where there are less than 6 total sales over the 5 years.
- The Value Change Flag indicates jurisdictions where values did not change at least twice over the 5 years.
- The Weighted Median Flag indicates jurisdictions where the five-year weighted median is outside of the standard 90% to 105% compliance level.

Due to changes in study methodology over the past 5 years, including changes to how data is reported and collected, several accommodations need to be made to the data in order to compare all 5 years to each other. Please keep these changes in mind when reviewing the Small Sample Study. These accommodations are listed below.

- For 2012 and 2013, commercial and industrial ratios were combined. Commercial and industrial sale counts, trends, and ratios for these two years will be the same.
- For 2012 and 2013, residential/SRR (PT 91) were not separated by water. The on-water, off-water, and combined sale counts, trends, and ratios for these two years will be the same.
- If water status was not reported on the MVP, PT 91 % value changes are not separated by water.
- On the preliminary Small Sample Study, 2016 % value changes were determined using values reported on the preliminary 2016 MVP.
- On the final Small Sample Study, 2016 % value changes will be determined using final 2016 values from the PRISM Submission 2 file. 2017 % value changes will be determined using preliminary 2017 values from the PRISM Submission 1 file.

Contact your PTCO or Data & Analysis with any questions, comments, or concerns.

Data & Analysis

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