



**TOWN OF SUNAPEE**  
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## **Memorandum**

TO: Board of Selectmen

From: Normand G. Bernaiche, Town Assessor

Re: Equalization and Ratio Study

Date: January 22, 2009

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### **2008 EQUALIZATION RATIO**

The equalization ratio is used by the State of NH and Sullivan County to collect and distribute taxes dollars based on assessed value. Every town and city in the state goes through this process every year. While not trying to be exhaustive, I will attempt to supply definitions and statistical standards which help us understand the process. Accompanying this narrative explanation are the numbers which were derived by the State of New Hampshire Department of Revenue Administration for the time period of October 1, 2007 to September 30, 2008. The reason for this date range is to use sales 6 months prior and 6 months after April 1 of every year.

**Individual Ratio** – is a single assessment divided by the corresponding sale price of that property.

**Overall Assessment Ratio** – Total of all valid sales from October 1, thru September 30 of any tax year.

**Median Ratio** – The middle ratio when a set of ratios is arrayed in order of magnitude. As per state standards the ratio should fall between .90 and 1.10 in the year of certification.

**Weighted Mean Ratio** – The sum of the assessments divided by the sum of the sales prices in a ratio study. As per state standards the ratio should fall between .90 and 1.10 in the year of certification.

**Stratum** – A class or subset of the population being studied. For example: Single Family Residential, Waterfront, Vacant Land and Condominiums.

**Coefficient of Dispersion** – The (COD) is a measure of assessment equity and represents the average deviation of a group of ratios from the median ratio expressed as a percentage of the median. A COD is calculated for the entire sampling and for each stratum. As per National Assessment Standards, CODs should be under 20 in rural and recreation areas, under 15 for older heterogeneous and under 10 for new, more homogeneous areas. Since New Hampshire is generally rural and has diverse property types the state standard is 20.

**Price Related Differential** – The (PRD) is calculated by dividing the mean ratio by the weighted mean ratio. It measures vertical inequities (differences in the appraisal of low-value and high-value properties) in assessments. PRDs greater than 1.03 tend to indicate assessment regressivity (lower value properties assessed at higher ratios. PRDs less than .98 tend to indicate assessment progressivity (lower-valued properties assessed at lower ratios than higher-valued properties). PRDs in New Hampshire should be between .98 and 1.03 during the year of certification.

### **Sunapee's 2008 Ratio Analysis**

I have reviewed the most recent ratio study provided by the State and my conclusion is Sunapee's assessment program in performing very well. The Weighted Mean Ratio for 2008 is 92%. In 2007 it was 82.4%, 2006 86.2% and 93.5% in 2005, the year of revaluation.

The Median Ratio for 2008 is 92.2%. In 2007 it was 81%, 2006 88.3% and 97% in 2005, the year of the revaluation.

More importantly, our COD has improved from 2006 & 2007. In 2008 it is 11.5%, in 2007 it was 13.4%, in 2006 it was 15% and for 2005 it was 9.6%.

Finally, the PRD for 2008 is 1.00 which indicates assessment uniformity. In 2006 & 2007 it was 1.01, but in 2005 it was 1.00 also. Looking at all four years it appears that taxpayers whether high-priced or low-priced properties are being treated fairly.

In the attached spreadsheet I have attempted to look at whether the sales sample was representative of the total population in Sunapee. With the exception of vacant land other main strata (Residential, Residential Waterfront and Condominiums) appear to be adequately represented. I should caution you that the total sales sample is small so I would not draw any further conclusions except that on average the relationship between assessments and their corresponding sale prices among the different strata appear consistent. I have included separate spreadsheets with the individual ratios for four strata (Single Family, Waterfront, Condominiums and Vacant Land) along with a look at time and price. The reason this is done is to determine if there are different conclusions for time segments or price segments.

I am available to discuss the finding of the state and my analysis of it. Thank You.