

**State of New Hampshire
Department of Revenue Administration**

109 Pleasant Street
PO Box 487, Concord, NH 03302-0487
Telephone (603) 230-5000
www.revenue.nh.gov



MUNICIPAL AND PROPERTY
DIVISION
Stephan W. Hamilton
Director

Josephine Belville
Assistant Director

John T. Beardmore
Commissioner

Lindsey M. Stepp
Assistant Commissioner

2/14/2017

TOWN OF ALLENSTOWN
OFFICE OF SELECTMEN
16 SCHOOL STREET
ALLENSTOWN NH 03275

Dear Selectmen/Assessing Officials:

The Department of Revenue Administration is charged with the responsibility of annually equalizing the local assessed valuation of municipalities and unincorporated places throughout the state. The Department has conducted a sales-assessment ratio study using market sales, which have taken place in your municipality between October 1, 2015 and September 30, 2016. Based on this information, we have determined the average level of assessment of land, buildings and manufactured housing as of April 1, 2016.

The sales values have been determined from revenue stamps and verified whenever possible. When it appears that changes in the assessed values of properties have been made solely because of the sale price, the assessed values prior to the sale have been used.

Based on the enclosed survey, we have determined a median ratio for the land, buildings and manufactured housing in your municipality for Tax Year 2016 to be **90.9%**. The median ratio is the generally preferred measure of central tendency for assessment equity, monitoring appraisal performance, and determining reappraisal priorities, or evaluating the need for reappraisal. The median ratio, therefore, should be the ratio used to modify the market value of properties under review for abatement to adjust them in accordance with the overall ratio of all properties in your municipality.

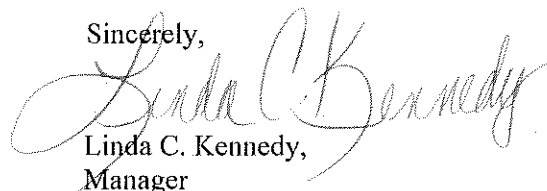
We have also determined the overall equalization assessment - sales ratio for the land, buildings and manufactured housing in your municipality for Tax Year 2016 to be **89.1%**. This ratio will be used to equalize the modified local assessed valuation for all land, buildings and manufactured housing in your municipality. This ratio does not include any public utility property in your municipality, nor will it be used to equalize the net local assessed value of public utilities.

In an effort to provide municipalities with more detailed information regarding their level of assessment (i.e. equalization ratio) and dispersion (i.e. coefficient of dispersion and price-related differential), we have prepared separate analysis sheets for various property types (stratum). See attached summary sheet showing your municipality's stratified figures and a further explanation of the D.R.A.'s stratified analysis.

Please review the enclosed list of sales used in determining your assessment-sales ratio. If any incorrect data has been used, or if you would like to meet with me to discuss this ratio or an alternate ratio methodology as outlined in the accompanying information sheet, please contact me immediately.

You will be notified of your municipality's total equalized valuation when the Department has completed its process of calculating the total equalized valuation.

Sincerely,



Linda C. Kennedy,
Manager

TDD Access: Relay NH 1-800-735-2964

Individuals who need auxiliary aids for effective communication in programs and services of the Department of Revenue Administration are invited to make their needs and preferences known to the Department.



2016 Final Ratio Study Report

1 of 7

2/9/2017 7:46:40 AM

Town Name: Allenstown, Merrimack County

Use Code: AA - Any & All

Date Range: 10-01-2015 through 09-30-2016

Ratios were created using stipulated year assessments.

Dot W. White 2/9/17
Sandra C. Brandy 2/9/17

Summary of Codes Used

Group Class: AA - Any & All	Property Codes: 11 = Single Family Home 12 = Multi Family 2-4 Units 14 = Single Res Condo Unit 17 = Mfg Housing With Land 18 = Mfg Housing Without Land 22 = Residential Land 33 = Commercial L&B
Modifier Codes: 00 = No Modifier Code 70 = Waterfront 74 = View Influence - Positive	Special Codes: 00 = No Special Code

Indicated Ratio / Weighted Mean

Year	2016	2015	2014
Indicated Ratio	89.1	93.6	95.8
Weighted Mean	89.1	93.6	95.8

Basic Statistics Section (Not Trimmed)

Sales In Date Range	Sales Used	Results
Total: 103 XX Moved: 0 Sales w/PA34: 88 %Sales w/PA34: 85.4%	Total Strata: 103 Sales Used: 76 %Sales Used: 73.8% Sales Used w/PA34: 68 %Sales Used w/PA34: 89.5%	%Mean: 93.8% %Median: 90.9% %WtMean: 89.3% COD (Median): 14.5 PRD: 1.05 Median Selling Price: \$150,000 Median Assessed Value: \$131,450

Extended Statistics Section (Trimmed)

Town Code:	004	Weighted Mean:	89.1	COD:	13.1	PRD:	1.04
Valid Sales:	76	Wt. Mean Lo 90%CI:	86.9	COD Lo 90%CI:	11.1	PRD Lo 90%CI:	1.02
Trimmed:	1	Wt. Mean Up 90%CI:	91.4	COD Up 90%CI:	15.8	PRD Up 90%CI:	1.06
Untrimmed:	75	Median Ratio:	90.9	Weighted COD:	10	COV:	17.7
Trim Factor:	3	Median Lo 90%CI:	88.2	Med. Abs. Dev.:	14.2	25th Percentile:	81.3
Lo Trim Point:	44.8	Median Up 90%CI:	93.6	Med % Dev.:	15.6	75th Percentile:	100.7
Up Trim Point:	142	Mean Ratio:	92.4	Coef. Conc. 10%:	52.6	Broaden Median:	90.9



2016 Final Ratio Study Report

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Min Ratio:	44.8	Mean Lo 90%CI:	89.5	Coef. Conc. 15%:	72.4	Geometric Mean:	91
Max Ratio:	201.9	Mean Up 90%CI:	95.6	Coef. Conc. 20%:	82.9	Harmonic Mean:	89.5
Min Sale \$:	\$10,000	Avg. Sale Price:	\$140,431	Coef. Conc. 50%:	97.4	Std. Deviation:	16.3
Max Sale \$:	\$450,000	Avg. Appraised Val:	\$125,139	Coef. Conc. 100%:	98.7	Normality Test:	Accept

The general descriptive and median ratio statistics are not trimmed of outliers and are based on all valid sales in the sample.

Summary of Exclusion Codes Used

Codes	Description	Count	%Excluded	%Strata
36	Relig/Char/edu as Grantor/Grantee	1	3.7	1.3
43	Short Sales: Requiring 3rd Party Approval	2	7.4	2.6
38	Family/Relatives/Affil as Grantor/Grantee	2	7.4	2.6
41	Government Related Entities: NH Housing Authority, FNMA	3	11.1	3.9
33	Landlord/Tenant as Grantor/Grantee	4	14.8	5.3
35	Government Agency as Grantor/Grantee	1	3.7	1.3
81	Estate Sale With Fiduciary Covenants	4	14.8	5.3
99	Unclassified Exclusion	3	11.1	3.9
27	Less than 100% Interest Transferred	1	3.7	1.3
37	Financial Entity as Grantor/Grantee	3	11.1	3.9
40	Business Affiliates as Grantor/Grantee	1	3.7	1.3
39	Divorcing Parties as Grantor/Grantee	1	3.7	1.3
90	RSA 79-A Current Use	1	3.7	1.3
		27	99.9	35.3

Included Sales

Verno	Book Page	Sale Price	Assessed Value	Ratio	PC	MC	SC	Trim	Notes
6	3494-2664	\$21,000	\$22,400	106.7	18				
8	3495-1167	\$196,000	\$176,500	90	11	70			
13	3496-1012	\$250,000	\$226,300	90.5	11				



2016 Final Ratio Study Report

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Included Sales									
Verno	Book Page	Sale Price	Assessed Value	Ratio	PC	MC	SC	Trim	Notes
20	3497-0332	\$114,600	\$105,200	91.8	14				
23	3497-2081	\$28,000	\$39,100	139.6	18				MLS INDICATES PRICED FOR QUICK SALE, APPEARS BELOW MARKET VALUE
24	3497-2137	\$63,533	\$59,800	94.1	18				
25	3497-2208	\$248,000	\$225,100	90.8	11				
28	3498-1234	\$24,533	\$11,000	44.8	18				
29	3498-1259	\$150,000	\$150,200	100.1	11				
32	3499-0463	\$66,000	\$58,000	87.9	18				
35	3500-1982	\$214,000	\$164,400	76.8	11				REMOVE SHED, CORRETC DECK MEASUREMENT, CONDITION ADJUSTED AS INT HAS NEW KITCHEN, FLOORING ETC
36	3500-2808	\$42,000	\$53,700	127.9	18				
37	3501-0802	\$150,000	\$151,900	101.3	11				
38	3501-1552	\$110,000	\$118,100	107.4	17				
41	3502-1156	\$275,000	\$255,900	93	12				
48	3504-0533	\$217,733	\$224,400	103.1	11				APPRAISED \$220,000, INTERIOR DATA CORRECTED PER ABATEMENT LIST, MANY ERRORS
51	3504-2060	\$20,000	\$15,100	75.5	18				
52	3505-0292	\$23,000	\$22,800	99.1	18				
53	3505-1353	\$275,000	\$242,400	88.2	11				NEW HOUSE 2016 ON NEW LOT
56	3506-1502	\$189,934	\$148,500	78.2	11				PU POOL, PAT, OPF; COR SHED, DEK MEAS; GOOD SITE
57	3506-1579	\$212,000	\$211,400	99.7	11	74			
60	3507-1235	\$20,000	\$20,600	103	18				
61	3507-1634	\$209,000	\$160,700	76.9	11				
63	3508-0367	\$239,533	\$189,800	79.2	11				
66	3508-0893	\$176,200	\$168,100	95.4	11				PU BARN LOFT, DEKS; REMOVED EPF;
67	3508-1348	\$186,500	\$169,700	91	11				NEW HOME COMPLETED
72	3508-1557	\$28,000	\$19,000	67.9	18				
75	3508-2906	\$179,933	\$150,800	83.8	11				NEWER DOORS, WINS, INT PAINT;INT/EXT GOOD CONDITION



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Included Sales										
Verno	Book Page	Sale Price	Assessed Value	Ratio	PC	MC	SC	Trlm	Notes	
78	3509-0841	\$169,933	\$168,800	99.3	11					EFF 04/16 112/192 VOL. MERGED WITH THIS PARCEL BOOK 3508 PAGE 2789
79	3509-1095	\$65,000	\$60,800	93.5	18					
85	3509-2935	\$19,533	\$18,900	96.8	18					
86	3510-0141	\$37,000	\$30,600	82.7	18					
90	3511-0501	\$197,000	\$155,400	78.9	11					CORR SIDING, SHOP TO SHED, GRAVEL TO DRIVEWAY; PU ENT, COOP; EXT GOOD COND FOR AGE;
91	3511-0759	\$27,000	\$26,800	99.3	18					MH Deed
99	3513-0673	\$34,000	\$27,400	80.6	18					
100	3513-0969	\$450,000	\$399,100	88.7	33					
106	3513-2058	\$200,000	\$168,300	84.2	11					
107	3513-2230	\$187,000	\$176,900	94.6	11	70				BMU TO BMG
108	3514-0558	\$17,533	\$35,400	201.9	18			Yes		Resale V84(EC33)/OL\$23,000, MLS STATES SELLERS MOTIVATED, 16 DOM SOLD AS IS NEEDS WORK, SOLD QUICK AT BELOW MKT-DISTR
109	3514-0779	\$200,000	\$189,800	94.9	12					Warranty Deed/Probate #317-2014-ET-00644
110	3514-1007	\$241,000	\$196,400	81.5	11					PU POOL, CPT TO PAT;
112	3514-1558	\$160,200	\$172,700	107.8	12					
115	3515-1480	\$130,000	\$118,300	91	22	70				
121	3516-1779	\$17,533	\$11,800	67.3	18					
122	3516-1904	\$139,933	\$127,600	91.2	11					Resale V19(EC35)/REMOVED WATERFRONT ON COVE AS HAS NO FRONTAGE
125	3517-0895	\$65,000	\$76,000	116.9	18					
126	3517-1720	\$94,267	\$120,100	127.4	11					BOUGHT VERY LOW SUBSEQUENT TO FORECLOSURE, REMODELED AND FLIPPED AT BLW MKT TO MOVE QUICK
127	3517-2125	\$123,333	\$152,800	123.9	11					MLS INDICATES HOME NEEDS TLC AND 10K CONCESSIONS TOWARD COSMETIC REPAIRS AS WELL.
129	3518-2665	\$197,900	\$160,500	81.1	11					CONDITION OF HOME ADJUSTED TO GOOD-NEW ROOF, SIDING, WINDOWS
131	3519-0190	\$110,000	\$101,000	91.8	11	70				I&E=AVG COND; CORR INT DATA; DEK TO OPF
133	3519-1043	\$359,933	\$322,000	89.5	11					



2016 Final Ratio Study Report

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Included Sales

Verno	Book Page	Sale Price	Assessed Value	Ratio	PC	MC	SC	Trim	Notes
134	3519-1599	\$208,000	\$168,600	81.1	11				
139	3521-0332	\$50,000	\$71,000	142	22				
142	3521-0899	\$159,000	\$129,800	81.6	11				
143	3521-0966	\$195,000	\$153,900	78.9	11				PU PATIOS; RENO'D SHED=ADJ COND; HSE HAS NEW ROOF, SIDING, WINS; EST INT/EXT RENO 2015; ADJ COND TO
144	3521-1658	\$236,000	\$177,700	75.3	11				
147	3521-2818	\$224,933	\$180,500	80.2	11				
148	3522-0239	\$249,933	\$219,800	87.9	11				ADJ COND; HSF TO TQF=20' REAR DORM; EXT WELL MAINT; OPF TO EPF;
150	3522-1071	\$46,533	\$51,100	109.8	18				CRAWL SPACE TO PIERS
153	3523-0125	\$13,000	\$13,400	103.1	18				
156	3523-1909	\$240,000	\$187,100	78	11				
157	3523-2673	\$14,000	\$15,400	110	18				
159	3524-0357	\$195,000	\$163,000	83.6	11				
162	3524-1461	\$63,000	\$61,500	97.6	18				
163	3524-2121	\$294,533	\$228,500	77.6	11				
164	3524-2438	\$68,000	\$60,100	88.4	18				
165	3525-1160	\$172,000	\$127,200	74	11				
166	3525-1330	\$65,000	\$53,600	82.5	18				
168	3525-1700	\$204,933	\$207,400	101.2	12				
170	3527-0287	\$157,933	\$133,100	84.3	11				
176	3528-0713	\$210,000	\$143,800	68.5	12				
177	3528-1533	\$82,533	\$74,800	90.6	14				
179	3528-2512	\$58,000	\$65,000	112.1	22				
181	3529-0591	\$74,933	\$71,600	95.6	18				
186	3531-0067	\$10,000	\$11,300	113	18				
188	3531-1300	\$85,000	\$73,300	86.2	14				



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Use Code: AA - Any & All

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Excluded Sales

Verno	Book Page	Sale Price	Assessed Vaue	Ratio	PC	MC	SC	EX	Notes
3	3493-2857	\$11,533	\$16,900	146.5	18			33	Landlord/Tenant as Grantor/Grantee LNDLRD/TENANT SALE
10	3495-2766	\$214,900	\$176,900	82.3	12			41	Government Related Entities: NH Housing Authority, FNMA
14	3496-1910	\$65,000	\$56,100	86.3	18			81	Estate Sale With Fiduciary Covenants ESTATE SALE/FDCY COV
19	3497-0251	\$83,600	\$127,600	152.6	11			35	Government Agency as Grantor/Grantee Resale V122/GOVMT AGENCY GRNTR/E
27	3498-1145	\$139,933	\$134,900	96.4	11			81	Estate Sale With Fiduciary Covenants ESTATE SALE/FDCY COV
31	3498-2593	\$78,000	\$74,800	95.9	14			37	Financial Entity as Grantor/Grantee FINANCIAL CO GRNTR/E
33	3499-0882	\$90,000	\$145,400	161.6	11			37	Financial Entity as Grantor/Grantee FINANCIAL CO GRNTR/E
47	3504-0099	\$20,000	\$15,600	78	18			38	Family/Relatives/Affil as Grantor/Grantee FAMILY/RELAT GRNTR/E
54	3505-1768	\$110,000	\$124,500	113.2	11			41	Government Related Entities: NH Housing Authority, FNMA GOVMT AGENCY GRNTR/E
55	3506-0347	\$8,000	\$15,300	191.2	18			99	Unclassified Exclusion NO EVIDENCE OF MARKETING FOUND ANYWHERE
70	3508-1534	\$55,000	\$104,500	190	18			27	Less than 100% Interest Transferred LESS THAN 100% INT
74	3508-2551	\$249,900	\$228,700	91.5	11			41	Government Related Entities: NH Housing Authority, FNMA
76	3509-0147	\$189,933	\$222,300	117	11			43	Short Sales: Requiring 3rd Party Approval SHORT SALE RQ 3RDPTY
77	3509-0743	\$5,000	\$15,100	302	18			99	Unclassified Exclusion NO EVIDENCE OF MARKETING FOUND ANYWHERE
84	3509-2770	\$9,000	\$35,400	393.3	18			33	Landlord/Tenant as Grantor/Grantee Resale V108/LNDLRD/TENANT SALE
87	3510-1073	\$30,000	\$29,500	98.3	18			37	Financial Entity as Grantor/Grantee FINANCIAL CO GRNTR/E
97	3512-2374	\$5,000	\$10,700	214	18			40	Business Affiliates as Grantor/Grantee BUSIN AFFIL GRNTR/E
101	3513-1026	\$97,000	\$114,300	117.8	14			43	Short Sales: Requiring 3rd Party Approval SHORT SALE RQ 3RDPTY
102	3513-1135	\$10,133	\$17,000	167.8	18			33	Landlord/Tenant as Grantor/Grantee LNDLRD/TENANT SALE
105	3513-1801	\$60,000	\$70,200	117	17			81	Estate Sale With Fiduciary Covenants ESTATE SALE/FDCY COV
111	3514-1080	\$145,000	\$2,449	1.7	22			90	RSA 79-A Current Use RSA 79-A CURRENT USE
119	3516-0408	\$158,000	\$142,900	90.4	11			81	Estate Sale With Fiduciary Covenants See Fiduciary Deed



2016 Final Ratio Study Report

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Excluded Sales

Verno	Book Page	Sale Price	Assessed Vaue	Ratio	PC	MC	SC	EX	Notes
123	3516-2528	\$1	\$318,800	31880000	33			36	Relig/Char/edu as Grantor/Grantee NO STAMP PER DEED
124	3517-0034	\$200,000	\$162,503	81.2	11			38	Family/Relatives/Affil as Grantor/Grantee
149	3522-0460	\$159,134	\$159,100	100	11			33	Landlord/Tenant as Grantor/Grantee
175	3527-2114	\$10,000	\$16,500	165	18			99	Unclassified Exclusion NO EVIDENCE OF MARKETING ANYWHERE
183	3530-0154	\$165,000	\$197,200	119.5	11			39	Divorcing Parties as Grantor/Grantee SOLD BLW MKT, DIVORCE SAME DAY ANC THEN THIS TRANSFER SEE BK 3530 PAGE 152



2016 Ratio Study Summary Report

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Town Name: Allentown, Merrimack County

Date Range: 10/01/2015 through 09/30/2016

NH Dept of Revenue Administration. Ratios were created using stipulated year assessments.

Strata	Description	Mean Ratio	Median Ratio	WM Low CI	WM Ratio	WM High CI	COD	PRD	Total Strata	Sales PA34	Valid	Valid %	Valid PA34 %	UT#	UT %
11	Single Family Home	88.40	84.28	84.69	87.01	89.78	10.42	1.02	47	41	37	78.7%	32 86.5%	37	100%
70	Waterfront	91.87	91.41	0	91.93	0	1.47	1.00	4	4	4	100%	4 100%	4	100%
12	Multi Family 2-4 Units	99.24	94.90	0	98.29	0	5.37	1.01	6	4	5	83.3%	3 60.0%	4	80.0%
14	Single Res Condo Unit	0	0	0	0	0	0	0	5	5	3	60.0%	3 100%	3	100%
18	Mfg Housing Without Land	95.34	97.19	90.22	95.42	101.37	15.10	1.00	37	30	26	70.3%	25 96.2%	25	96.2%
22	Residential Land	0	0	0	0	0	0	0	4	4	3	75.0%	3 100%	3	100%
AA	Any & All	92.39	90.88	86.92	89.11	91.45	13.12	1.04	103	88	76	73.8%	68 89.5%	75	98.7%
GC1	Area Improved Res	91.49	90.70	86.46	88.70	91.06	12.72	1.03	97	82	72	74.2%	64 88.9%	71	98.6%
GC3	Area Unimproved	0	0	0	0	0	0	0	4	4	3	75.0%	3 100%	3	100%

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Type	Description	Median Low CI	Median Ratio	Median High CI	PRD Low CI	PRD	PRD High CI	COD	UT#
All (AA)	Any & All	88.16	90.88	93.59	1.02	1.04	1.06	13.12	75
Group (GC1)	Area Improved Res	87.88	90.70	93.54	1.01	1.03	1.05	12.72	71
Group (GC3)	Area Unimproved	0	0	0	0	0	0	0	3

Title	Description	Criteria Met
Strata-Any and All (Median)	Overall Median Point Estimate confidence interval should overlap range of 90-110	True
Strata-Any and All (PRD)	Overall PRD Confidence Interval should overlap range of .98-1.03	True
Strata-Any and All (COD)	Coefficient of Dispersion < 20.0	True
Strata-GC1	Median Confidence Interval should overlap overall median +/- 5%	True
Strata-GC3	Median Confidence Interval should overlap overall median +/- 5%	N/A

**NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION
MUNICIPAL & PROPERTY DIVISION
2016 ASSESSMENT-SALES ANALYSIS REPORTS**

An assessment-sales analysis report has been prepared for the entire sampling of sales in a municipality as well as for each class of property (stratum singular, strata plural) a municipality has provided property-type codes for. Stratified reports are available on the NH Mosaic Equalization System for each municipality.

Each report includes the following:

1. **Equalization summary sheet:** summarizes each stratum, and pertinent statistics for that stratum, as well as statistics for the overall sampling.
2. **Assessment review summary sheet:** summarizes the three strata used for assessment review and whether they meet the assessment review guidelines adopted by the Assessing Standards Board. This sheet includes a graph that visually shows the statistics calculated for the assessment review process.
3. **Equalization Ratio (weighted mean):** The weighted mean ratio will be used to adjust the modified local assessed value of your municipality in order to calculate the total equalized value of your municipality. The Assessing Standards Board adopted the use of the weighted mean for equalization only. It has not been adopted or recommended for use for any other purpose.

If it can be determined that the weighted mean does not reflect an accurate measure of the municipality's assessment level, another factor may be used. This is rare and generally occurs when there are insufficient sales in the ratio study.

Alternate Ratio Methodology: The DRA may consider one of the following as an alternate ratio methodology to the weighted mean:

- The DRA may consider other factors if the sampling of the sales is not generally reflective of the make-up of the municipality. To challenge the representativeness of the ratio study, the municipality must provide data and information as to the correct representativeness and the ratio samples that fall into each category.
- The DRA may consider separate assessment ratios for categories unduly affected by bi-modal or multi-modal assessments in a municipality. Consideration will be dependent upon data and information provided by the municipality and verified by the DRA.
- A municipality may request the DRA to consider using separate ratios for each stratum in their overall ratio study that contains at least 20 valid sales in a stratum, and shows a confidence interval, calculated with a 90% confidence level that is wholly outside the confidence level of other strata.

Applying the separate ratios, when justified, the DRA will arrive at a single weighted overall ratio for the municipality based upon the separate ratios and the total assessed valuation of each. This single weighted overall ratio shall be used by the DRA to adjust payments-in-lieu-of-taxes, railroad tax monies, shared revenues, current use values and to compute the municipality's total equalized valuation, where applicable.

For each alternate ratio methodology listed above, the municipality must be able to provide the DRA with accurate assessed value information, subject to verification, for all properties within the strata. Absent the necessary data and information, the weighted mean will be used.

When reviewing the information for sales used in the overall sampling and sales used in the individual strata, it is important to remember you are looking at two different pictures. The statistics for the overall sampling are calculated using all the sales in the sampling and present a picture of what is happening throughout the municipality. The statistics for the individual strata are calculated using only those sales identified as being a part of that stratum and present a picture of what is happening in just the specific property type. Sales that may be trimmed from the overall sampling may have been left in the stratum or vice versa.

ASSESSMENT REVIEW PROCESS

The Assessing Standards Board has adopted the following statistical guidelines for municipalities in their year of assessment review:

1. A median ratio between .90 and 1.10 with a 90% confidence level for the overall sample;
2. An overall coefficient of dispersion (COD) of the municipality's median ratio of not greater than 20.0 without the use of the confidence level;
3. A median ratio for the three strata adopted by the Assessing Standards Board with a 90% confidence level within 5% of the overall median point estimate; and

For example: If a municipality's median point estimate were 1.00, the 5% range would be from .95 to 1.05. The median point estimates with 90% confidence intervals for the three assessment review strata would have to cross the .95 - 1.05 range.

4. A price-related differential (PRD) between .98 and 1.03 with a 90% confidence interval.

The minimum sample size for calculating a statistic for any of the categories is eight. Failure to calculate statistics due to insufficient sample size shall not have an adverse effect in meeting assessment review guidelines.

Refer to the "Sales-Assessment Sheet Glossary" included with these education handouts for some general definitions for terms used in this report.

**NEW HAMPSHIRE DEPARTMENT OF REVENUE ADMINISTRATION
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STRATIFIED ASSESSMENT-SALES ANALYSIS REPORTS
GLOSSARY**

Assessment	The gross local assessed value of a property prior to any adjustments for exemptions such as blind, elderly, etc.
Average Sale Price	The average (mean) sale price among valid sales in the municipality for that year.
Average Market Value \$	The average (mean) assessed value among valid sales in the municipality for that year.
Bootstrap	A computer intensive statistical procedure designed to provide numerous random samples from the original data set that are in turn used to generate the statistics of interest, such as point estimates and confidence intervals. This procedure is particularly helpful when the original set of data is small, in order to give more accurate statistics.
Broadened Median	The broadened median attempts to preserve the resistance of the median to outliers while also achieving insensitivity to rounding and grouping.
Coefficient of Concentration	The percentage of observations falling within a specified percentage (i.e. 15%) of a measure of central tendency (median ratio).
Coefficient of Dispersion [COD]	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.
Coefficient of Variation [COV]	The COV is a measure of relative dispersion of the sample data about the mean of the data. The COV is the standard deviation divided by the mean ratio, expressed as a percentage.
Confidence Intervals	For a given confidence level, the range within which one can conclude that a measure of the population (such as the median) lies.
Confidence Levels	The required degree of confidence in a statistical test or confidence level. A 90% confidence level means that one can be 90% confident that the statistic falls within the indicated range.
Equalization Ratio	The DRA will use the weighted mean ratio to equalize the modified assessed value for each municipality. The Assessing Standards Board adopted the use of the weighted mean for equalization only. It has not been adopted or recommended for use for any other purpose. If it can be determined that the weighted mean does not reflect an accurate measure of the municipality's assessment level, another factor may be used. This is rare and generally occurs when there are insufficient sales in the ratio study.
Geometric Mean Ratio	The nth root of the product (multiplication) of the ratios, where n is the number of ratios. This is another measure of assessment level, one that is less sensitive than the mean to extreme ratios.
Harmonic Mean Ratio	Calculated by taking the sum of the reciprocals of each ratio. (The "reciprocal" of a number is the inverse of the number, or 1 divided by the number.) The sum is then divided by the number of ratios, and the reciprocal of that quotient is the harmonic mean.

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STRATIFIED SALES-ASSESSMENT ANALYSIS REPORTS
GLOSSARY**

Sales Used # and %	The number and percent of sales used for the entire sampling or individual stratum.
% Sales w/PA-34	The % of sales used for which an Inventory of Property Transfer, Form PA-34, was received.
Standard Deviation	The square root of the following quantity: the sum of the squares of the differences between the ratios and their mean, divided by the number of ratios minus one. The standard deviation is a measure of uniformity, but is rarely used in sales ratio data, since much of its interpretation depends on the data having a normal distribution.
Strata	(stratum, sing.) A class or subset of the population being studied. For example: residential land or waterfront.
Stratified Analysis	The statistical calculations and report prepared for individual stratum in a municipality.
Trim Method "Outliers"	A 3.0 trim procedure was used for identifying and removing sales from the sampling as outliers. These sales are identified by a "Yes" in the Trim column of the analysis sheet.
Total Equalized Valuation	The total equalized value of all property in the municipality as determined in accordance with RSA 21-J:3, XIII. The total equalized valuation includes the equalized valuation of a municipality's assessed values and the equalized value of payments made in lieu of taxes.
Weighted Mean	(a.k.a. aggregate) The sum of the assessments divided by the sum of the sales prices in a ratio study.