Otisfield, Maine: the sales ratio study and the coefficient of dispersion

What the COD measures, the number the firm's study delivered, the published guidelines, the sample behind each class, and the certified ratio against the State valuation. Prepared 5 November 2026 from the Town's Freedom of Access Act production and Maine Revenue Services publications.

INFORMATION ONLY. THIS IS A DATA COLLECTION, NOT A LEGAL SERVICE AND NOT LEGAL ADVICE. It describes public records and published guidance. It does not say whether to file anything, what to put on any form, or what any property is worth.

1. What a sales ratio study is, and what the COD measures

A sales ratio study takes each parcel that sold, divides its assessed value by its sale price, and looks at the spread of those ratios. If every parcel were assessed at exactly its market value every ratio would be 1.00. The **median** ratio says where the roll sits against the market. The **coefficient of dispersion (COD)** says how uniform it is: take each ratio's distance from the median, average those distances, and divide by the median, as a percentage. A COD of 5 means the typical sale is assessed within about 5% of the median level; a COD of 20 means within about 20%. Uniformity, not level, is what Maine's Constitution requires of a roll: taxes must be "apportioned and assessed equally according to the just value thereof" (art. IX, §8), and a parcel assessed 20% above its neighbors pays 20% more than its share whatever the mill rate. The **price-related differential (PRD)**, the mean ratio divided by the weighted mean, says whether expensive and inexpensive properties are assessed at different levels.

2. The number the study delivered

The Town produced two Sales Ratio Analysis reports (2024 sales: 21; 2025-26 sales: 24), prepared by John E. O'Donnell & Associates. Filter as printed: BuildingValue > 0; sale dates 1 Jan 2024 to 31 Dec 2024 and 1 Jan 2025 to 31 Dec 2026 (latest printed 2 Mar 2026). The ratios test the 2026 revaluation values against the sale prices. The header prints an **Average Deviation of 4 (92/21 and 93/24)** and a **Quality Rating of 4**, as whole numbers; Average Deviation is the same kind of measure as the COD. Recomputed here from the 45 printed ratios, to two decimals:

Group	Sales	Median	Mean	Weighted mean	COD	PRD	Lowest	Highest
All sales in the study	45	1.000	1.008	1.014	4.20	0.994	0.89	1.16
Rural Residential (nonwaterfront)	33	1.000	1.000	1.001	3.97	0.999	0.89	1.10
Waterfront	8	1.005	1.022	1.029	4.98	0.994	0.93	1.16
Water Access	4	1.030	1.045	1.047	4.37	0.998	1.00	1.12

3. The published guidelines

Source	What it says
IAAO Standard on Ratio Studies (2013), Table 1-3	Median ratio 0.90 to 1.10; PRD 0.98 to 1.03; COD 5.0 to 10.0 for newer, more homogeneous single-family areas, 5.0 to 15.0 for older, more heterogeneous areas, 5.0 to 20.0 for rural, seasonal or recreational areas. The table notes that a COD below 5.0 may indicate sales chasing or a non-representative sample. Check the current edition for exact wording.
MRS Rule Ch. 201 (18-125 CMR ch. 201), §§3–4	A segregated ratio study needs at least eight samples in each class; where sales fall short the minimum is reached by adding appraisals (§3(D)). Classes are studied separately when sales do not reflect the class mix or when class average ratios differ by more than ten points; the example residential classes are nonwaterfront, waterfront and condominium (§4). The rule governs the State Valuation; it does not by its terms bind a town's revaluation contractor.
36 M.R.S. §327 and MRS practice	A municipality whose assessments fall below 70% of just value, or whose quality rating (COD) exceeds 20, loses State reimbursements; the certified ratio is the town's own statement of its assessment level on the Municipal Valuation Return.
The Otisfield revaluation contract	The revaluation contract has not been produced; whether it sets a target ratio or a study method is not known.

4. What the sample behind each class looks like

The roll has about houses 736, waterfront houses and camps 364, mobile homes 169, vacant land 547, outbuilding-only 111, commercial 5. The study is filtered to parcels with a building value, so vacant land, which the revaluation repriced on its own tables, is tested by no sale at all. The Town's own transfer workbooks (RETTD data) list 21 improved-property transfers at $25,000 or more dated January 2025 to March 2026 that are not in the 2025-26 study; the assessors marked 12 of them usable. The studies do not say why a usable sale was left out.

5. The certified ratio against the State valuation

The Town certified its 5 August 2026 roll to the State at a ratio of 1.00. Maine Revenue Services' 2026 State Valuation for Otisfield is 619.9 million; its 2025 figure was 517.8 million. The committed roll is 721.7 million gross (land plus buildings) and 696.0 million net of 25.6 million in exemptions: 1.164 times the 2026 State figure gross, 1.123 times net. The year before, at 19.55 mills, the roll was 320.3 million gross against a State valuation of 517.8 million, and the Town certified 63%.

Read with care: the State Valuation for a year is set from sales ending two years earlier (the 2026 figure reflects the market as of 1 April 2024), and it is a net figure after the State's own adjustments, so a gap between a fresh revaluation and the State figure is expected in a rising market. What the gap does not settle is whether a certified ratio of 1.00 is the right statement of the new roll's level; the study above, with its sample sizes, is the only published test of that.

6. What this document does not say

It does not say that any parcel is over- or under-assessed, that the study was done wrongly, or that anyone should file anything. A COD below 5.0 is, in the IAAO's words, a figure that "may indicate" a problem with the sample, not a finding; a class with three sales has no reliable COD at all. The questions these figures raise are for the Town, its assessors and Maine Revenue Services. Every ratio used here is printed in the study on the documents page of the site.

Sources: Sales Ratio Analysis, OtisfieldReval (J.E. O'Donnell & Associates), produced under FOAA; the Town's commitment books and signed commitment papers; MRS Municipal Valuation Return Statistical Summaries; MRS State Valuation history 2007–2026; IAAO Standard on Ratio Studies; 18-125 CMR ch. 201; Me. Const. art. IX §8; 36 M.R.S. §§327, 701-A.