

## **Standards regarding Factors, Forms, Fractions, Multipliers, Ratios, Rates and Rounding.**

### **Codified by Statute**

**Inflation Rate Multiplier** - The Inflation Rate Multiplier shall be computed by the State Tax Commission and shall be rounded to three (3) decimal places per MCL 211.34d(15).

**Millage Rates** – Millage rates shall be rounded down to four (4) decimal places per MCL 211.39(2). (See STC Bulletin No. 11 of 1999). Example: If the millage rate is 5.45829, the rounded rate would be 5.4582. The rate is **NOT** rounded to 5.4583.

**IFT Rates** – Depending on the millage rate, the IFT Rate may be either 4 or 5 decimal places.

Act 198 of 1974; Section 207.564(3) covers IFT's and their calculation as 1/2 of the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is located. Example: A millage rate of 8.4962 would be 4.2481. A millage rate of 8.4961 would be 4.24805.

**Millage Reduction Fractions** - Millage Reduction Fractions calculated per MCL 211.34d shall be rounded to four (4) decimal places per MCL 211.34d(15). Millage Reduction Fractions shall not exceed 1.0000.

**Millage Rollback Fractions** – Millage Rollback Fractions shall be rounded to four (4) decimal places. The "Truth in County Equalization" and "Truth in Assessing" Millage Rollback Fractions shall not exceed 1.0000. Millage Rollback Fractions are covered in MCL 211.34 and guidance is also provided in a State Tax Commission Bulletin every year.

**Maximum Allowable Millage Levy** - The Maximum Allowable Millage Levy shall be rounded down to four (4) decimal places per MCL 211.39(2). (See STC Bulletin No. 11 of 1999). Example: If the millage rate is 5.45829, the rounded rate would be 5.4582. The rate is NOT rounded to 5.4583.

**Equalization Factors** – Factors used in determining the state equalized valuation for real and personal property on the tax roll shall be rounded up to (5) decimal places. Example: If the calculated factor is 0.9923638, this would be rounded up per statute to 0.99237. MCL 211.34(2) indicates rounding up to not less than four (4) decimal places.

**Tentative Ratios** – Tentative equalization ratios shall be rounded to four (4) decimal places. MCL 211.34a(1) references tentative equalization ratios but does not give specifics on decimal places and rounding.

**Tentative Multipliers** – Tentative multipliers shall be rounded up to five (5) decimal places. MCL 211.34a(1) references tentative estimated multipliers but does not give specifics on decimal places and rounding.

**L-4029** – covered in the statutory references above. (See Millage Rates, Millage Reduction Fractions, Millage Rollback Fractions and Maximum Allowable Millage Levy).

**L-4034** – covered in the statutory references above. (See Millage Reduction Fractions and Millage Rollback Fractions). The Base Tax Rate Fraction should be rounded to four (4) decimal places per MCL 211.34d(15).

### **Codified by STC Bulletin**

**Capped Value** – Capped Value shall be rounded down to the nearest \$1.

The answer from the capped value formula must not be rounded up. (STC Bulletin No. 3 of 1995).

### **Best Practices**

**L-4015** – The L-4015 ratios shall be rounded to four (4) decimal places. Example: a ratio below 100.00% that was .4764 shall read 47.64%. A ratio over 100.00% that was 1.4700 shall read 147.00%.

**L-4015A** – The L-4015A ratios shall be rounded to four (4) decimal places. Example: a ratio below 100.00% that was .4764 shall read 47.64%. A ratio over 100.00% that was 1.4700 shall read 147.00%.

**L-4017 Adjustment Modifiers** – Round to four (4) decimal places.

**L-4017 Adjusted Ratios (Column H)**– Adjusted Ratios shall be rounded to four (4) decimal places. The ratio is then expressed as a percentage. Example: .47649 would be rounded to .4765 and expressed as 47.65%.

**L-4018 R & P** – The % Ratio Assessments to Appraisal Column shall be rounded to four (4) decimal places with the actual visual representation of .4982 as 49.82.

**Economic Condition Factors** – Economic Condition factors shall be rounded to not more than three (3) decimal places. MCL 211.10e pertains to the use of the assessor's manual. STC Assessors Manual Volume III covers Economic condition factors and their calculation. No reference is made regarding decimal places or rounding.

#### **Traditional rounding means:**

- Increase it by 1 if the next digit is 5 or more (known as rounding up)  
Example: .3456 would be rounded to .346 when rounding 3 decimal places since the fourth decimal place is 5 or more.
- Leave it the same if the next digit is 4 or less (known as rounding down)

Example: .5044 would be rounded to .504 when rounding 3 decimal places since the fourth decimal place is 4 or less.

**References:** (Bold added to facilitate finding applicable text)

**STATE CONSTITUTION (EXCERPT)  
CONSTITUTION OF MICHIGAN OF 1963**

**§ 3 Property taxation; uniformity; assessments; limitations; classes; approval of legislature.**

Sec. 3.

The legislature shall provide for the uniform general ad valorem taxation of real and tangible personal property not exempt by law except for taxes levied for school operating purposes. The legislature shall provide for the determination of true cash value of such property; the proportion of true cash value at which such property shall be uniformly assessed, **which shall not, after January 1, 1966, exceed 50 percent**; and for a system of equalization of assessments. For taxes levied in 1995 and each year thereafter, the legislature shall provide that the taxable value of each parcel of property adjusted for additions and losses, shall not increase each year by more than the increase in the immediately preceding year in the general price level, as defined in section 33 of this article, or 5 percent, whichever is less until ownership of the parcel of property is transferred. When ownership of the parcel of property is transferred as defined by law, the parcel shall be assessed at the applicable proportion of current true cash value. The legislature may provide for alternative means of taxation of designated real and tangible personal property in lieu of general ad valorem taxation. Every tax other than the general ad valorem property tax shall be uniform upon the class or classes on which it operates. A law that increases the statutory limits in effect as of February 1, 1994 on the maximum amount of ad valorem property taxes that may be levied for school district operating purposes requires the approval of 3/4 of the members elected to and serving in the Senate and in the House of Representatives.

**MCL 211.10e:**

All assessing officials whose duty it is to assess real or personal property on which real or personal property taxes are levied by any taxing unit of the state shall use only the official assessor's manual or a manual approved by the state tax commission consistent with the official assessor's manual, with their latest supplements, as prepared or approved by the state tax commission as a guide in preparing assessments. Beginning with the tax assessing year 1978, all assessing officials shall maintain records relevant to the assessments, including appraisal record cards, personal property records, historical assessment data, tax maps, and, through calendar year 2018, land value maps, consistent with standards set forth in the assessor's manual published by the State Tax Commission.

**MCL 211.27a(1):**

Except as otherwise provided in this section, property **shall be assessed at 50% of its true cash value** under section 3 of article IX of the state constitution of 1963.

**MCL 211.34(2):**

(2) The county board of commissioners shall examine the assessment rolls of the townships or cities and ascertain whether the real and personal property in the respective townships or cities has been equally and uniformly assessed at true cash value. If, on the examination, the county board of commissioners considers the assessments to be relatively unequal, it shall equalize the assessments by adding to or deducting from the valuation of the taxable property in a township or city an amount which in the judgment of the county board of commissioners will produce a sum which represents the true cash value of that property, and the amount added to or deducted from the valuations in a township or city shall be entered upon the records. The county board of commissioners and the state tax commission shall equalize real and personal property separately by adding to or deducting from the valuation of taxable real property, and by adding to or deducting from the valuation of taxable personal property in a township, city, or county, an amount which will produce a sum which represents the proportion of true cash value established by the legislature. Beginning December 31, 1980, the county board of commissioners and the state tax commission shall equalize separately the following classes of real property by adding to or deducting from the valuation of agricultural, developmental, residential, commercial, industrial, and timber cutover taxable real property, and by adding to or deducting from the valuation of taxable personal property in a township, city, or county, an amount as will produce a sum which represents the proportion of true cash value established by the legislature. The tax roll and the tax statement shall clearly set forth the latest state equalized valuation for each item or property which shall be determined by using a separate factor for personal property and a separate factor for real property as equalized. Beginning December 31, 1980, the tax roll and the tax statement shall clearly set forth the latest state equalized valuation for each item or property which shall be determined by using a separate factor for personal property and a separate factor for each classification for real property as equalized. **Factors used in determining the state equalized valuation for real and personal property on the tax roll shall be rounded up to not less than 4 decimal places.** Equalized values for both real and personal property shall be equalized uniformly at the same proportion of true cash value in the county. The county board of commissioners shall also cause to be entered upon its records the aggregate valuation of the taxable real and personal property of each township or city in its county as determined by the county board. The county board of commissioners shall also make alterations in the description of any land on the rolls as is necessary to render the descriptions conformable to the requirements of this act. After the rolls are equalized, each shall be certified to by the chairperson and the clerk of the board and be delivered to the supervisor of the proper township or city, who shall file and keep the roll in his or her office.

**MCL 211.34d (15):**

The fractions calculated pursuant to this section shall be rounded to 4 decimal places, except that the inflation rate shall be computed by the state tax commission and shall be rounded to 3 decimal places. The state tax commission shall publish the inflation rate before March 1 of each year.

**MCL 211.39 (2):**

(2) To avoid fractions in computation, the assessor shall round down the tax rate to 4 decimal places.

**PLANT REHABILITATION AND INDUSTRIAL DEVELOPMENT DISTRICTS  
(EXCERPT)  
Act 198 of 1974**

**207.564 Industrial facility tax; amount of tax; determination; "industrial personal property" defined; termination or revocation; reduction.**

Sec. 14.

(1) The amount of the industrial facility tax, in each year for a replacement facility, shall be determined by multiplying the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is situated by the taxable value of the real and personal property of the obsolete industrial property for the tax year immediately preceding the effective date of the industrial facilities exemption certificate after deducting the taxable value of the land and of the inventory as specified in section 19.

(2) The amount of the industrial facility tax, in each year for a new facility or a speculative building for which an industrial facilities exemption certificate became effective before January 1, 1994, shall be determined by multiplying the taxable value of the facility excluding the land and the inventory personal property by the sum of 1/2 of the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is located other than mills levied for school operating purposes by a local school district within which the facility is located or mills levied under the state education tax act, 1993 PA 331, MCL 211.901 to 211.906, plus 1/2 of the number of mills levied for local school district operating purposes in 1993.

**(3) Except as provided in subsection (4), the amount of the industrial facility tax in each year for a new facility or a speculative building for which an industrial facilities exemption certificate becomes effective after December 31, 1993, shall be determined by multiplying the taxable value of the facility excluding the land and the inventory personal property by the sum of 1/2 of the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is located other than mills levied under the state education tax act, 1993 PA 331, MCL 211.901 to 211.906, plus, subject to section 14a, the number of mills levied under the state education tax act, 1993 PA 331, MCL 211.901 to 211.906.**

(4) For taxes levied after December 31, 2007, for the personal property tax component of an industrial facilities exemption certificate for a new facility or a speculative building

that is sited on real property classified as industrial real property under section 34c of the general property tax act, 1893 PA 206, MCL 211.34c, the amount of the industrial facility tax in each year for a new facility or a speculative building shall be determined by multiplying the taxable value of the facility excluding the land and the inventory personal property by the sum of 1/2 of the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is located other than mills levied on industrial personal property under the state education tax act, 1993 PA 331, MCL 211.901 to 211.906, and the number of mills from which industrial personal property is exempt under section 1211(1) of the revised school code, 1976 PA 451, MCL 380.1211. For taxes levied after December 31, 2007, for the personal property tax component of an industrial facilities exemption certificate for a new facility or a speculative building that is sited on real property classified as commercial real property under section 34c of the general property tax act, 1893 PA 206, MCL 211.34c, the amount of the industrial facility tax in each year for a new facility or a speculative building shall be determined by multiplying the taxable value of the facility excluding the land and the inventory personal property by the sum of 1/2 of the total mills levied as ad valorem taxes for that year by all taxing units within which the facility is located other than the number of mills from which the property is exempt under section 1211(1) of the revised school code, 1976 PA 451, MCL 380.1211. As used in this subsection, "industrial personal property" means the following:

(a) Except as otherwise provided in subdivision (b), personal property classified under section 34c of the general property tax act, 1893 PA 206, MCL 211.34c, as industrial personal property.

(b) Beginning December 31, 2011, industrial personal property does not include a turbine powered by gas, steam, nuclear energy, coal, or oil the primary purpose of which is the generation of electricity for sale.

(5) For a termination or revocation of only the real property component, or only the personal property component, of an industrial facilities exemption certificate as provided in this act, the valuation and the tax determined using that valuation shall be reduced proportionately to reflect the exclusion of the component with respect to which the termination or revocation has occurred.