

Travis CAD Present Value Factor Table- 2009 Development

The Fair Market Value of Business Personal Property is calculated using the mass appraisal technique of trended historical costs less depreciation. The historical costs are provided by the filed rendition statements by the business owners. These costs are indexed to replacement cost new, and then depreciated to fair market value. To simplify the calculation, only one combined factor is used, called the Present Value Factor. Fair Market Value of the business assets is obtained by multiplying the historical cost times the Present Value Factor. The Present Value Factor includes ordinary depreciation, as well as some functional and economic obsolescence.

How the Travis CAD 2009 Present Value Factor (PVF) was determined:

$$A \times B \times C = PVF$$

Where A is the Index factor, B is the % Good factor, and C is the Local Factor.

Factor A, the Index Factor

Index factors may be used to estimate current reproduction costs. The Commercial Equipment Index Factors were compiled based on equipment price data published by the Marshall and Swift Publication Co., *Marshall Valuation Service*. The Industrial Machinery and Equipment Index Factors were derived using the Bureau of Labor Statistics' *Producer Price Indexes* as a basis. Staff has concluded that application of the index factors to a property's original cost typically results in reproduction cost new.

Factor B, the Percent Good Tables

Percent good factors may be used in conjunction with the index factors to estimate reproduction cost new less normal depreciation. Machinery and Equipment Percent Good Factors, was derived from a system developed by the Iowa State University Engineering Research Center. We used the Iowa State % Good tables, R-3, with 6.25% internal rate of return. The Rate of Return represents the lending rate that companies are charged for this type of equipment purchase. With the Feds moving to increase short term lending rate, we expect that in future years, the rate of return will probably be higher. Historically, it was not uncommon for 10% to be used for the Rate of Return.

Factor C, the Local Factor

We studied the local economy in Central Texas, and from our work, determined a local factor, that included some Economic Obsolescence. For 2009, the total industry economic factor is 93% utility (representing a 7% economic obsolescence). The economic factor was derived from the Federal Reserve G17 report, table 2, Capacity Utilization: Manufacturing, Mining and Utilities, dated Jan 16, 2009. We use the 0.6 Power Utilization to calculate utility of various industries by sectors. The overall total industry utilization for the US is 93% and Travis County follows closely to the US as a whole in relation to manufacturing and retail..

The Furniture and Fixtures is a large driver in the Central Texas Market, and the Dot Com bubble led to a great deal of furniture being dumped into this market. The largest adjustment factor could not be greater than the inherent transportation costs to move this furniture to another market where the demand for used furniture is greater. Observed functional obsolescence is adjusted by life class assignment of certain types of assets. For example, furniture and fixtures has an assigned eight year life instead of a ten year life so that the indicated value more closely matches market value.

No changes to the table for 2009 have been made for Computers (4 year life class) or Motor Vehicles.

Travis Central Appraisal District, Business Personal Property