

Board of Assessors 870 Moraine Street Marshfield, MA 02050

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## UNDERSTANDING THE LAND CURVE TABLE and LAND VALUES

Land – A portion of the earth's surface, together with the earth below it, the space above it, and all things annexed thereto by nature or by man.

This document should help to explain the how's and why's of Land Valuation Methodology, in the simplest of terms. In order for land to have value, it must have utility. For the purposes of this document, utility is the ability of a parcel to support an improvement (a dwelling). If only one house can be constructed on a 10000 square foot parcel (in the R3 Zone) and only one house can be constructed on a 1 acre parcel due to the lack of frontage, then they have essentially the same utility – the construction of one house. As you will see, it would not be equitable to assess each of these two parcels with the same base rate. Although the 1 acre lot is more than 4 times the area of the 10,000 sq. ft. lot, the additional land has very little utility (1 Acre = 43,560 sq. ft). Without the use of the Land Curve an equitable value could not exist for the range of lot sizes in a typical community.

If a lot is to be considered "buildable" or has improvements already in place, <u>the smaller the lot, the higher the</u> <u>square foot value</u>. This concept can be difficult to understand without the use of examples. These examples are actual parcels as assessed for Fiscal Year 2021.

The following grid describes land located in the Residential Neighborhood CTG3 (Cottage – Good) using 43,560 square foot building lot as a baseline. The Base rate for this NBHD is \$5.25. Keep in mind that this is just 1 neighborhood and Marshfield has 31 separate NBHD's

MBLU	NBHD	Street	Square ft	Sq. Foot Price	Total Value w/ Curve	Base Rate	Total Value w/o Curve	Difference
L09-19-02	CTG3	Ocean St	2830	\$62.50	\$176,875.00	\$6.25	\$17,687.50	\$159,187.50
L09-19-01	CTG3	Ocean St	3703	\$62.49	\$231,400.47	\$6.25	\$23,143.75	\$208,256.72
K12-09-06	CTG3	Charlotte St	5000	\$49.62	\$248,100.00	\$6.25	\$31,250.00	\$216,850.00
L10-03-05	CTG3	Farragut Rd	5100	\$48.66	\$248,166.00	\$6.25	\$31,875.00	\$216,291.00
M09-02-04	CTG3	Ocean St	5366	\$46.29	\$248,397.51	\$6.25	\$33,537.50	\$214,860.01
L09-22-01	CTG3	Ocean St	7088	\$35.20	\$249,497.60	\$6.25	\$44,300.00	\$205,197.60
M05-10- 16A	CTG3	Marginal St	7864	\$31.78	\$249,941.51	\$6.25	\$49,150.00	\$200,791.51
J13-02-30	CTG3	Parker St	10890	\$23.13	\$251,831.25	\$6.25	\$68,062.50	\$183,768.75
M06-06-02	CTG3	Marginal St	11800	\$21.39	\$252,402.00	\$6.25	\$73,750.00	\$178,652.00
M05-11-03	CTG3	Marginal St	15800	\$16.13	\$254,854.00	\$6.25	\$98,750.00	\$156,104.00
M06-03-13	CTG3	Marginal St	16570	\$15.41	\$255,393.41	\$6.25	\$103,562.50	\$151,830.91
M08-21-04	CTG3	Plymouth Ave	21000	\$12.30	\$258,195.00	\$6.25	\$131,250.00	\$126,945.00
K11-10-02	CTG3	Circuit Ave	43560	\$6.25	\$272,250.00	\$6.25	\$272,250.00	\$ -

The actual Land Curve Table for Marshfield contains hundreds of pages of data for the residential parcels alone. This information is meant to present the concepts that are used in all Massachusetts communities. There are numerous influence factors to consider when valuing land, these are some of them: neighborhoods or site indices, topography and shape, public or private road frontage, waterfront, views, water and sewer services, economic influences from external sources, right of ways, covenants, wetland, insufficient frontage, landlocked, etc. The Board of Assessors considers all of these factors when valuing the land in the Town of Marshfield.

Further reading on the complexities of land valuation can be found in The Homevoter Hypothesis by W. A. Fischel