

An Analysis of the Effect of the 2018 Tax Revisions on the Tax Benefit of Home Ownership

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One of the benefits of home ownership is the tax deductibility of mortgage interest. When combined with property tax and state income taxes, this sum exceeds the standard deduction, lowering the home owner's tax liability. The new tax law limits the deductibility of these expenses. The result is a will house provide less of a tax saving in the future than in the immediate past, which translates to higher federal income taxes owed. This study estimates the present value of the increased tax liability. In the scenarios examined, this value ranges from approximately \$1000 to nearly \$100,000.

INTRODUCTION

Nearly every list of “reasons to buy a house” includes the income tax advantages from such a purchase. Mortgage interest, unlike interest paid on other types of debt, is income tax deductible, and can lower the home owner’s tax liability. Other housing associated expenses, such as property taxes, are also tax deductible. Once deductions total more than the standard deduction, then it pays the home owner to keep track of other deductible items, such as charitable contributions. Renters usually do not itemize their deductions, but home owners, with the sizable of mortgage interest paid, usually do itemize because of the considerable tax savings it provides.

Buying a house, therefore, can be described as buying a physical shelter that also provides a cash flow in the form of income tax saving. The recent tax legislation (S. 2254) is the first major tax legislation since the Reagan era tax cut (H.R. 3838). These two tax reforms are similar in that both removed items that were previously deductible from the tax code, as well as reduced the tax rates. One impact of the recent tax reform legislation is the reduction in the tax savings related to home ownership in two ways. First, some expenses that were previously deductible, such as state and local income tax and property tax, are no longer be fully deductible. Mortgage interest, which previously was fully deductible, is now deductible only for mortgages up to \$750,000. Interest paid on a mortgage loan in excess of the \$750,000 limit cannot be deducted (Horowitz, 2017). In addition, the standard deduction for 2017 has been raised from \$6350 to \$12,000 for single fliers for the 2018 tax year (\$12,700 to \$24,000 for married filing jointly). The personal exemption, which was \$4050 per household member in 2017 (if the adjusted gross income was less than \$156,900), is also removed. This higher standard deduction, especially for married filing jointly, makes it less likely that the sum of their itemized deductions will exceed the standard deduction (Frankel, 2017).

While the individual may not pay any additional taxes under the new system, their house may provide less financial benefit at tax time. Thus, a large incentive for home ownership has been diminished, and

perhaps removed, for the home owner-taxpayer. Without the tax benefit, it is easy to imagine that the demand for home ownership would decline. And in the absence of the beneficial cash flow from home ownership, it is not unreasonable to expect housing prices to decrease.

This study examines the magnitude of the beneficial tax cash flow lost as a result of the 2018 tax legislation. Three hypothetical houses will be examined: a \$200,000 house; a \$500,000 house; and a \$1,000,000 house. Each home is assumed to be purchased with a 20% down payment, with the balance financed with a 4%, 30-year mortgage. Estimates are made assuming that the buyers file singly and also as married filing jointly.

LITERATURE REVIEW

A quick internet search on the reasons to buy a house turns up millions of sites. While some of these sites are actually reasons NOT to buy a house, the vast majority of the responses proclaim the wisdom of home ownership. A common reason given was the income tax advantage home ownership provides. (For instance, see Four Reasons ...2018, Top 5 Reasons ...2018, Neumann 2018, Weintraub 2018, or National Association of Realtors, 2018.) Mortgage interest is tax deductible for federal income tax purposes. This is, in effect, a government subsidy for borrowing money to buy a house. Mortgage-related interest qualifies for such a deduction, while most other interest expenses, such as credit cards, automobile loans, personal loans, etc., do not. (A notable exception is interest on student loan debt, which is deductible up to \$2500 per year (Shain, 2017).)

This tax deductibility of mortgage interest provides a tax savings only if your itemized deductions exceed the standard deduction. But there are other common deductions that, when combined with mortgage interest, increase the likelihood that itemizing deductions will be beneficial. Until the 2018 tax legislation, state and local income taxes, as well as property taxes, were tax deductible. In addition, charitable contributions are tax deductible, as are certain job expenses, losses, and medical expenses in excess of 7.5% of your adjusted gross income. For many taxpayers, it is the mortgage interest expense that pushes them over the standard deduction threshold.

Forty-three states tax some form of income, with rates ranging from 1% to 9%. The median state income tax rate is 4% (Income Tax Rates by State). Charitable giving is also tax deductible for the tax payer that itemizes deductions. Donations can be made in cash or non-cash items, such as the old couch donated to the Salvation Army. The National Philanthropic Trust estimated that the average American donates 3% of their income each year (Charitable Giving ...). Property taxes also qualify as deductions from income for federal income tax purposes. Property taxes are a local tax, and therefore vary a great deal. Some localities base the tax on the full appraised value of the property, while other communities tax only a fraction of the appraised value. One study concluded that property tax is approximately 1% of the property's actual value (Property Taxes by State).

METHODOLOGY

It is clear that one result of the 2018 tax legislation is to reduce the tax benefits from home ownership. This study seeks to provide a framework to estimate the lost cash flow that results from the reduced tax benefits to the home owner. These lost cash flows are assumed to continue into the future, so the sum of the present values of cash stream is estimated. This amount, expressed as a single sum, represents the lost value to the home owner.

The tax value of home ownership results from the difference between the itemized deductions the home owner could claim and the standard deduction. The increase in the standard deduction in the 2018 tax legislation obviously reduces this difference, thereby reducing the tax benefit derived from home ownership. Eliminating or reducing itemized deductions also reduces the tax benefits of home ownership. As mentioned previously, itemized deductions come from a variety of sources, which include housing related expenses, such as mortgage interest and property tax. It also includes other state and local taxes,

such as state income tax. Charitable contribution to qualified non-profit institutions are also tax deductible.

For the purposes of this analysis, a 4% 30-year mortgage will be assumed to calculate the mortgage interest paid. Since federal income taxes are paid annually, 30 annual mortgage payments will be used. This will also facilitate the presentation of the results, as a table of 30 years is easier to view than one a table of 360 monthly payments. Three home values will be assumed: \$250,000; \$500,000; and \$1,000,000. It is also assumed that the home owner financed 80% of the home's value, resulting in mortgages of \$200,000, \$400,000, and \$800,000. Annual payments for these 4%, 30-year mortgages were \$11,566, \$23,123, and \$46,264, respectively. The loans were amortized, with the principal and deductible interest portion of the payment being identified.

An estimate of the home owner's income was developed estimated in the following manner. Mortgage companies generally require the principal, interest, taxes and insurance (PITI) to be less than 28% of the borrower's monthly income (Regeher, 2017). This study limited the principal and interest portion of the payment to approximately 20%, leaving 8% to cover the monthly property taxes and home owner's insurance portion of the payment. A payment of \$11,566 per year (for a \$200,000 30-year mortgage at 4%) would be 20% of \$57,830 annually. For simplicity, this figure was rounded up to \$60,000 per year. Following this process, the \$23,123 payment (\$400,000 mortgage) was supported by an annual income of \$120,000, and the \$46,264 mortgage payment (\$800,000 mortgage) corresponded to an annual income of \$235,000. (The monthly payment-to- monthly income ratio was 19.3%, 19.3%, and 19.7% respectively for the three home owners.) These incomes are used to estimate the home owner's state income tax liability and their charitable donations for tax deduction purposes.

The relevant incremental cash flow resulting from home ownership was developed in the following manner. For each income and mortgage, the taxable income was found by subtracting the deductions (mortgage interest, state taxes, property taxes and charitable giving) from the income. The analysis assumed that the taxpaying home owner paid the previously reported national average figures for these amounts. Thus, state income taxes were assumed to be 4% of income, charitable contributions were 3% of income, and property taxes were 1% of the property's value. (Incomes and property values were assumed to be constant in the analysis.) After the qualifying exemption was applied (one of filing single, two if married filing joint), the resulting figure was taxable income. The federal tax liability is calculated using the tax rates for 2017 and 2018. The tax liability is also found for this same level of taxable income but using the standard deduction. The incremental tax benefit from home ownership is the difference between these two values. This difference is calculated for entire 30-year mortgage period. The present value of this incremental cash stream estimated using a discount rate of 5%. This discount rate was selected as it approximates the average 10-year US government bond rate. (The arithmetic average is 5.15%, while the geometric rate is 4.91% (Annual Returns ...). The results of these computations are found in the Tables 1 through Table 12.)

RESULTS

Tables 1 and 2 assume a taxpayer with an annual income of \$60,000 an income tax filing status of single. These tables show the present value of the tax savings as a result of home ownership (derived from being able to itemize tax deductions that exceed the standard deduction). Table 1 is based on the previous income tax structure, while Table 2 is based on the 2018 tax revisions. The present value of the home-related tax savings for this taxpayer under the former system is \$23,547. Table 2 shows that value falls to \$22,462 under the 2018 tax revision guidelines. Tables 3 and 5 represent taxpayers with annual incomes of \$120,000 and \$235,000 and a tax filing status of single. Under the previous tax structure, the present value of the tax savings from home ownership is \$79,052 and \$210,740, respectively. Under the 2018 revisions (Tables 4 and 6), the present value of tax savings from home ownership falls to \$62,735 and \$147,030. In each case, the 2018 tax revision reduces the values of the tax savings from home ownership. For the home owner earning \$60,000, this decline in the value of the tax savings cash flow, \$1085 (= \$23,547 - \$22,462) represents a 4.6% decline in the cash flow's value. For the home owner

earning \$120,000, the decline is a 20.6% reduction in value, and 30.2% for the single home owner earning \$235,000.

Tables 7, 9, and 11 represent couples with the same \$60,000, \$120,000, and \$235,000 income under the previous tax structure, but using a tax filing status of “married filing joint.” Tables 8, 10, and 12 are the same income and tax status, but calculate the cash flow from the tax savings using the tax structure defined by the 2018 tax revision. Under the old tax structure, the present value of the tax savings from home ownership was only \$1597 for a couple earning \$60,000. That value disappears completely under the new tax code. As incomes increase, the present values from the tax savings associated with home ownership increase significantly. For the \$120,000 couple, the present value is \$47,551, while the value is \$158,637 for the couple earning \$235,000. The 2018 tax revisions see these values fall to \$7637 and \$59,244, respectively. These decreases in value equate to 84% and 62.7% of the values from tax savings from home ownership under the prior tax code. The decreases in value are summarized in Table 13.

CONCLUSIONS

This analysis illuminates the effect that the 2018 tax revision will have on hypothetical home owners. The combination of increasing the standard deduction and limiting the itemized deduction levels of mortgage interest and state and local taxes reduces the tax savings from home ownership under the 2018 tax revisions. While the decline in the tax savings were expected, the magnitudes of the declines were surprising. For the taxpayer who earned \$60,000 annually and owned a \$250,000 house (with an initial mortgage of \$200,000), the declines in value are nearly the same, \$1083 for the single filer and \$1597 for the married couple. The near equivalency of these lost values is not surprising, as this income and home value produces itemized deductions that are very nearly equal to the standard deductions available to those tax filers. The present value of the decreased cash flows represented 0.43% of the value of the home to the single taxpayer, and 0.64% to the married couple.

However, as incomes and home values rise, the tax savings lost due to the 2018 tax revision increase. If the home value was \$500,000, the loss was \$16,317 for the single taxpayer and \$39,914 for the couple. Those losses equate to 3.26% and 7.98% of the home’s value. For the million-dollar home owner, the losses are \$63,710 and \$99,393 for the single filer and married couple, respectively. Those numbers correspond to 6.37% and 9.94% of the home’s value.

The loss of cash flows associated with home ownership as a result of the 2018 tax revisions, especially at the higher incomes and home values, is not an insignificant amount. It is reasonable to assume that this loss of cash flow from home ownership must have a negative effect on the subsequent home value. While the house may have the same value as a residence in a certain school district, it has lost some value in the decreased tax savings it generates.

This analysis has used three home values, a single mortgage interest rate, and a common state income tax rate. Incomes and home values were assumed to be constant. These simplifying assumptions do not negate the results derived nor their implications. If higher mortgage rates are used, then more mortgage interest is lost for mortgages in excess of \$750,000. Allowing incomes to increase yields a similar result, as the taxpayer hits the combined \$10,000 limit on state income taxes and local property taxes earlier. Increasing home values would have the same effect of reaching the combined \$10,000 maximum deductibility sooner, as a portion of the higher property tax could not be deducted. Therefore, relaxing the assumptions of constant income and home values only exacerbates the decreases in the tax value of home ownership.

The results of this analysis are not intended to imply that home values will decrease an amount equal to the present value of the lost tax cash flows. Other variables also impact the value of homes in a locality, most notably, the current demand and supply of houses on the market. This analysis does, however, provide a framework to evaluate the impact of the new tax legislation on an individual situation. The reader is also reminded that the elimination of credit card interest deductibility as a result of the Tax Reform Act of 1986 did not strike a death knell for credit card use (Can I Write Off...). However, the

loss of significant tax benefits from home ownership as a result of the recent tax legislation will certainly have a negative effect on the appeal of home ownership.

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TABLE 1

Year	Int	Pmt	Balance	2017				2017				2017				
				Tax 1% of home value	State Income 4% Income	Gifts to Charity 3% Income	Total Deductions	2017 Income	Tax Owed	Standard Deduction	Tax Owed	Taxable Income	2017 Income	Tax Owed	Savings	Present Value 5%
			\$ 200,000.00													
1	\$ 8,000.00	\$ 11,566.02	\$ 196,433.98	\$ 2,500	\$ 2,400	\$ 1,800	\$ 14,700	\$ 41,250	\$ 6,051	\$ 6,350	\$ 49,600	\$ 8,139	\$ 2,088	\$ 1,988		
2	\$ 7,857.36	\$ 11,566.02	\$ 192,725.32	\$ 2,500	\$ 2,400	\$ 1,800	\$ 14,557	\$ 41,393	\$ 6,087	\$ 6,350	\$ 49,600	\$ 8,139	\$ 2,052	\$ 1,861		
3	\$ 7,709.01	\$ 11,566.02	\$ 188,868.31	\$ 2,500	\$ 2,400	\$ 1,800	\$ 14,409	\$ 41,541	\$ 6,124	\$ 6,350	\$ 49,600	\$ 8,139	\$ 2,015	\$ 1,740		
4	\$ 7,554.73	\$ 11,566.02	\$ 184,857.02	\$ 2,500	\$ 2,400	\$ 1,800	\$ 14,255	\$ 41,695	\$ 6,163	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,976	\$ 1,626		
5	\$ 7,394.28	\$ 11,566.02	\$ 180,685.29	\$ 2,500	\$ 2,400	\$ 1,800	\$ 14,094	\$ 41,856	\$ 6,203	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,936	\$ 1,517		
6	\$ 7,227.41	\$ 11,566.02	\$ 176,346.68	\$ 2,500	\$ 2,400	\$ 1,800	\$ 13,927	\$ 42,023	\$ 6,244	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,894	\$ 1,414		
7	\$ 7,053.87	\$ 11,566.02	\$ 171,834.52	\$ 2,500	\$ 2,400	\$ 1,800	\$ 13,754	\$ 42,196	\$ 6,288	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,851	\$ 1,315		
8	\$ 6,873.38	\$ 11,566.02	\$ 167,141.88	\$ 2,500	\$ 2,400	\$ 1,800	\$ 13,573	\$ 42,377	\$ 6,323	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,806	\$ 1,222		
9	\$ 6,685.68	\$ 11,566.02	\$ 162,261.54	\$ 2,500	\$ 2,400	\$ 1,800	\$ 13,386	\$ 42,564	\$ 6,360	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,759	\$ 1,134		
10	\$ 6,490.46	\$ 11,566.02	\$ 157,185.98	\$ 2,500	\$ 2,400	\$ 1,800	\$ 13,190	\$ 42,760	\$ 6,429	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,710	\$ 1,050		
11	\$ 6,287.44	\$ 11,566.02	\$ 151,907.40	\$ 2,500	\$ 2,400	\$ 1,800	\$ 12,987	\$ 42,963	\$ 6,479	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,659	\$ 970		
12	\$ 6,076.30	\$ 11,566.02	\$ 146,417.68	\$ 2,500	\$ 2,400	\$ 1,800	\$ 12,776	\$ 43,174	\$ 6,532	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,607	\$ 895		
13	\$ 5,856.71	\$ 11,566.02	\$ 140,708.36	\$ 2,500	\$ 2,400	\$ 1,800	\$ 12,557	\$ 43,393	\$ 6,587	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,552	\$ 823		
14	\$ 5,628.33	\$ 11,566.02	\$ 134,770.68	\$ 2,500	\$ 2,400	\$ 1,800	\$ 12,328	\$ 43,622	\$ 6,644	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,495	\$ 755		
15	\$ 5,390.83	\$ 11,566.02	\$ 128,595.49	\$ 2,500	\$ 2,400	\$ 1,800	\$ 12,091	\$ 43,859	\$ 6,704	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,435	\$ 690		
16	\$ 5,143.82	\$ 11,566.02	\$ 122,173.29	\$ 2,500	\$ 2,400	\$ 1,800	\$ 11,844	\$ 44,106	\$ 6,765	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,373	\$ 629		
17	\$ 4,886.93	\$ 11,566.02	\$ 115,494.20	\$ 2,500	\$ 2,400	\$ 1,800	\$ 11,587	\$ 44,333	\$ 6,830	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,309	\$ 571		
18	\$ 4,619.77	\$ 11,566.02	\$ 108,547.94	\$ 2,500	\$ 2,400	\$ 1,800	\$ 11,320	\$ 44,630	\$ 6,896	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,242	\$ 516		
19	\$ 4,341.92	\$ 11,566.02	\$ 101,323.84	\$ 2,500	\$ 2,400	\$ 1,800	\$ 11,042	\$ 44,908	\$ 6,966	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,173	\$ 464		
20	\$ 4,052.95	\$ 11,566.02	\$ 93,810.78	\$ 2,500	\$ 2,400	\$ 1,800	\$ 10,753	\$ 45,197	\$ 7,038	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,101	\$ 415		
21	\$ 3,752.43	\$ 11,566.02	\$ 85,997.19	\$ 2,500	\$ 2,400	\$ 1,800	\$ 10,452	\$ 45,498	\$ 7,113	\$ 6,350	\$ 49,600	\$ 8,139	\$ 1,026	\$ 368		
22	\$ 3,439.89	\$ 11,566.02	\$ 77,871.05	\$ 2,500	\$ 2,400	\$ 1,800	\$ 10,140	\$ 45,810	\$ 7,191	\$ 6,350	\$ 49,600	\$ 8,139	\$ 947	\$ 324		
23	\$ 3,114.84	\$ 11,566.02	\$ 69,419.88	\$ 2,500	\$ 2,400	\$ 1,800	\$ 9,815	\$ 46,135	\$ 7,273	\$ 6,350	\$ 49,600	\$ 8,139	\$ 866	\$ 282		
24	\$ 2,776.80	\$ 11,566.02	\$ 60,630.65	\$ 2,500	\$ 2,400	\$ 1,800	\$ 9,477	\$ 46,473	\$ 7,357	\$ 6,350	\$ 49,600	\$ 8,139	\$ 782	\$ 242		
25	\$ 2,425.23	\$ 11,566.02	\$ 51,489.86	\$ 2,500	\$ 2,400	\$ 1,800	\$ 9,125	\$ 46,825	\$ 7,445	\$ 6,350	\$ 49,600	\$ 8,139	\$ 694	\$ 205		
26	\$ 2,059.59	\$ 11,566.02	\$ 41,983.43	\$ 2,500	\$ 2,400	\$ 1,800	\$ 8,760	\$ 47,190	\$ 7,536	\$ 6,350	\$ 49,600	\$ 8,139	\$ 602	\$ 169		
27	\$ 1,679.34	\$ 11,566.02	\$ 32,096.75	\$ 2,500	\$ 2,400	\$ 1,800	\$ 8,379	\$ 47,571	\$ 7,631	\$ 6,350	\$ 49,600	\$ 8,139	\$ 507	\$ 136		
28	\$ 1,283.87	\$ 11,566.02	\$ 21,814.60	\$ 2,500	\$ 2,400	\$ 1,800	\$ 7,984	\$ 47,966	\$ 7,730	\$ 6,350	\$ 49,600	\$ 8,139	\$ 408	\$ 104		
29	\$ 872.58	\$ 11,566.02	\$ 11,121.16	\$ 2,500	\$ 2,400	\$ 1,800	\$ 7,573	\$ 48,377	\$ 7,833	\$ 6,350	\$ 49,600	\$ 8,139	\$ 306	\$ 74		
30	\$ 444.85	\$ 11,566.02	\$ (0.01)	\$ 2,500	\$ 2,400	\$ 1,800	\$ 7,145	\$ 48,805	\$ 7,940	\$ 6,350	\$ 49,600	\$ 8,139	\$ 199	\$ 46	PV @ 5% = \$ 23,547	

TABLE 2

Year	Value	2018		2018		2018		2018		2018	
		SINGLE FILER		State Income		Gifts to Charity 3% Income		Taxable Income		Standard Deduction	
		Income	Pmt	Tax 1% of home value	Charity 4% Income	Total Deductions	Itemize	Owed	Standard Deduction	Owed	Present Tax Savings
1	\$ 8,000.00	\$ 11,566.02	\$ 136,433.98	\$2,500	\$2,400	\$1,800	\$ 14,700	\$ 41,250	\$ 4,906	\$ 12,000	\$ 48,000 \$ 6,985 \$ 2,079 \$ 1,980
2	\$ 7,857.36	\$ 11,566.02	\$ 132,725.32	\$2,500	\$2,400	\$1,800	\$ 14,557	\$ 41,393	\$ 4,937	\$ 12,000	\$ 48,000 \$ 6,985 \$ 2,048 \$ 1,857
3	\$ 7,709.01	\$ 11,566.02	\$ 138,868.31	\$2,500	\$2,400	\$1,800	\$ 14,409	\$ 41,541	\$ 4,970	\$ 12,000	\$ 48,000 \$ 6,985 \$ 2,015 \$ 1,741
4	\$ 7,554.73	\$ 11,566.02	\$ 134,857.02	\$2,500	\$2,400	\$1,800	\$ 14,255	\$ 41,695	\$ 5,004	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,981 \$ 1,630
5	\$ 7,394.28	\$ 11,566.02	\$ 130,685.29	\$2,500	\$2,400	\$1,800	\$ 14,094	\$ 41,856	\$ 5,039	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,946 \$ 1,525
6	\$ 7,227.41	\$ 11,566.02	\$ 136,346.68	\$2,500	\$2,400	\$1,800	\$ 13,927	\$ 42,023	\$ 5,076	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,909 \$ 1,425
7	\$ 7,033.87	\$ 11,566.02	\$ 131,834.52	\$2,500	\$2,400	\$1,800	\$ 13,754	\$ 42,196	\$ 5,114	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,871 \$ 1,330
8	\$ 6,873.38	\$ 11,566.02	\$ 137,141.88	\$2,500	\$2,400	\$1,800	\$ 13,573	\$ 42,377	\$ 5,154	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,831 \$ 1,239
9	\$ 6,685.68	\$ 11,566.02	\$ 162,261.54	\$2,500	\$2,400	\$1,800	\$ 13,386	\$ 42,564	\$ 5,195	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,790 \$ 1,154
10	\$ 6,490.46	\$ 11,566.02	\$ 157,185.98	\$2,500	\$2,400	\$1,800	\$ 13,190	\$ 42,760	\$ 5,238	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,747 \$ 1,072
11	\$ 6,287.44	\$ 11,566.02	\$ 151,907.40	\$2,500	\$2,400	\$1,800	\$ 12,987	\$ 42,963	\$ 5,283	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,702 \$ 995
12	\$ 6,076.30	\$ 11,566.02	\$ 146,417.68	\$2,500	\$2,400	\$1,800	\$ 12,776	\$ 43,174	\$ 5,329	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,656 \$ 922
13	\$ 5,836.71	\$ 11,566.02	\$ 140,708.36	\$2,500	\$2,400	\$1,800	\$ 12,557	\$ 43,393	\$ 5,378	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,607 \$ 852
14	\$ 5,628.33	\$ 11,566.02	\$ 134,770.68	\$2,500	\$2,400	\$1,800	\$ 12,328	\$ 43,622	\$ 5,428	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,557 \$ 787
15	\$ 5,390.83	\$ 11,566.02	\$ 128,595.49	\$2,500	\$2,400	\$1,800	\$ 12,091	\$ 43,859	\$ 5,480	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,505 \$ 724
16	\$ 5,143.82	\$ 11,566.02	\$ 122,173.29	\$2,500	\$2,400	\$1,800	\$ 11,844	\$ 44,106	\$ 5,534	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,451 \$ 665
17	\$ 4,886.93	\$ 11,566.02	\$ 115,494.20	\$2,500	\$2,400	\$1,800	\$ 11,587	\$ 44,363	\$ 5,591	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,394 \$ 608
18	\$ 4,619.77	\$ 11,566.02	\$ 108,547.94	\$2,500	\$2,400	\$1,800	\$ 11,320	\$ 44,630	\$ 5,650	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,335 \$ 555
19	\$ 4,341.92	\$ 11,566.02	\$ 101,323.84	\$2,500	\$2,400	\$1,800	\$ 11,042	\$ 44,908	\$ 5,711	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,274 \$ 504
20	\$ 4,052.95	\$ 11,566.02	\$ 93,810.78	\$2,500	\$2,400	\$1,800	\$ 10,753	\$ 45,197	\$ 5,774	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,211 \$ 456
21	\$ 3,752.43	\$ 11,566.02	\$ 85,997.19	\$2,500	\$2,400	\$1,800	\$ 10,452	\$ 45,498	\$ 5,840	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,145 \$ 411
22	\$ 3,439.89	\$ 11,566.02	\$ 77,871.05	\$2,500	\$2,400	\$1,800	\$ 10,140	\$ 45,810	\$ 5,909	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,076 \$ 368
23	\$ 3,114.84	\$ 11,566.02	\$ 69,419.88	\$2,500	\$2,400	\$1,800	\$ 9,815	\$ 46,135	\$ 5,981	\$ 12,000	\$ 48,000 \$ 6,985 \$ 1,004 \$ 327
24	\$ 2,776.80	\$ 11,566.02	\$ 60,630.65	\$2,500	\$2,400	\$1,800	\$ 9,477	\$ 46,473	\$ 6,055	\$ 12,000	\$ 48,000 \$ 6,985 \$ 930 \$ 288
25	\$ 2,425.23	\$ 11,566.02	\$ 51,489.86	\$2,500	\$2,400	\$1,800	\$ 9,125	\$ 46,825	\$ 6,132	\$ 12,000	\$ 48,000 \$ 6,985 \$ 853 \$ 252
26	\$ 2,059.59	\$ 11,566.02	\$ 41,983.43	\$2,500	\$2,400	\$1,800	\$ 8,760	\$ 47,190	\$ 6,213	\$ 12,000	\$ 48,000 \$ 6,985 \$ 772 \$ 217
27	\$ 1,679.34	\$ 11,566.02	\$ 32,096.75	\$2,500	\$2,400	\$1,800	\$ 8,379	\$ 47,571	\$ 6,297	\$ 12,000	\$ 48,000 \$ 6,985 \$ 688 \$ 184
28	\$ 1,283.87	\$ 11,566.02	\$ 21,814.60	\$2,500	\$2,400	\$1,800	\$ 7,984	\$ 47,966	\$ 6,384	\$ 12,000	\$ 48,000 \$ 6,985 \$ 601 \$ 153
29	\$ 872.58	\$ 11,566.02	\$ 11,121.16	\$2,500	\$2,400	\$1,800	\$ 7,573	\$ 48,377	\$ 6,474	\$ 12,000	\$ 48,000 \$ 6,985 \$ 511 \$ 124
30	\$ 444.85	\$ 11,566.02	\$ (0.01)	\$2,500	\$2,400	\$1,800	\$ 7,145	\$ 48,805	\$ 6,568	\$ 12,000	\$ 48,000 \$ 6,985 \$ 417 \$ 96

PV @ 5% = \$ 22,462

TABLE 3

Year	Value	\$500,000 Mortgage	\$400,000 Pmt	2017				2017				2017			
				SINGLE FILER		Property Tax 1% of value		State Income Tax 4% value		Gifts to Charity 3%		2017 Taxable Income Itemize Deductions		2017 Tax Owed	
				Term	30 yrs	Income	\$120,000	Int.	\$400,000.00		\$29,400	\$86,550	\$17,376	\$6,350	\$109,600
1	\$16,000.00	\$23,132.04	\$392,867.96	\$5,000	\$4,800	\$3,500	\$29,400	\$29,115	\$86,835	\$17,448	\$6,350	\$109,600	\$23,670	\$6,222	\$5,644
2	\$15,714.72	\$23,132.04	\$395,450.64	\$5,000	\$4,800	\$3,500	\$29,400	\$28,818	\$87,132	\$17,522	\$6,350	\$109,600	\$23,670	\$6,148	\$5,311
3	\$15,438.03	\$23,132.04	\$377,736.62	\$5,000	\$4,800	\$3,500	\$29,400	\$28,509	\$87,441	\$17,599	\$6,350	\$109,600	\$23,670	\$6,071	\$4,995
4	\$15,160.46	\$23,132.04	\$369,714.05	\$5,000	\$4,800	\$3,500	\$29,400	\$28,189	\$87,761	\$17,679	\$6,350	\$109,600	\$23,670	\$5,991	\$4,694
5	\$14,788.56	\$23,132.04	\$361,370.57	\$5,000	\$4,800	\$3,500	\$29,400	\$27,855	\$88,095	\$17,763	\$6,350	\$109,600	\$23,670	\$5,907	\$4,408
6	\$14,454.82	\$23,132.04	\$352,693.35	\$5,000	\$4,800	\$3,500	\$29,400	\$27,508	\$88,442	\$17,849	\$6,350	\$109,600	\$23,670	\$5,820	\$4,136
7	\$14,107.73	\$23,132.04	\$343,669.05	\$5,000	\$4,800	\$3,500	\$29,400	\$27,147	\$88,803	\$17,940	\$6,350	\$109,600	\$23,670	\$5,730	\$3,878
8	\$13,746.76	\$23,132.04	\$334,283.77	\$5,000	\$4,800	\$3,500	\$29,400	\$26,771	\$89,179	\$18,033	\$6,350	\$109,600	\$23,670	\$5,636	\$3,633
9	\$13,371.35	\$23,132.04	\$324,523.08	\$5,000	\$4,800	\$3,500	\$29,400	\$26,381	\$89,569	\$18,131	\$6,350	\$109,600	\$23,670	\$5,539	\$3,400
10	\$12,980.92	\$23,132.04	\$314,371.96	\$5,000	\$4,800	\$3,500	\$29,400	\$25,975	\$89,975	\$18,233	\$6,350	\$109,600	\$23,670	\$5,437	\$3,179
11	\$12,574.88	\$23,132.04	\$303,814.80	\$5,000	\$4,800	\$3,500	\$29,400	\$25,553	\$90,397	\$18,338	\$6,350	\$109,600	\$23,670	\$5,332	\$2,969
12	\$12,152.59	\$23,132.04	\$292,835.35	\$5,000	\$4,800	\$3,500	\$29,400	\$25,113	\$90,837	\$18,448	\$6,350	\$109,600	\$23,670	\$5,222	\$2,769
13	\$11,713.41	\$23,132.04	\$281,416.73	\$5,000	\$4,800	\$3,500	\$29,400	\$24,657	\$91,293	\$18,562	\$6,350	\$109,600	\$23,670	\$5,108	\$2,580
14	\$11,256.67	\$23,132.04	\$269,541.36	\$5,000	\$4,800	\$3,500	\$29,400	\$24,182	\$91,768	\$18,681	\$6,350	\$109,600	\$23,670	\$4,989	\$2,400
15	\$10,781.65	\$23,132.04	\$257,190.97	\$5,000	\$4,800	\$3,500	\$29,400	\$23,688	\$92,262	\$18,815	\$6,350	\$109,600	\$23,670	\$4,855	\$2,224
16	\$10,287.64	\$23,132.04	\$244,346.57	\$5,000	\$4,800	\$3,500	\$29,400	\$23,174	\$92,776	\$18,959	\$6,350	\$109,600	\$23,670	\$4,711	\$2,055
17	\$9,773.86	\$23,132.04	\$230,988.39	\$5,000	\$4,800	\$3,500	\$29,400	\$22,640	\$93,310	\$19,109	\$6,350	\$109,600	\$23,670	\$4,561	\$1,895
18	\$9,239.54	\$23,132.04	\$217,095.89	\$5,000	\$4,800	\$3,500	\$29,400	\$22,084	\$93,866	\$19,264	\$6,350	\$109,600	\$23,670	\$4,405	\$1,743
19	\$8,683.84	\$23,132.04	\$202,647.69	\$5,000	\$4,800	\$3,500	\$29,400	\$21,506	\$94,444	\$19,426	\$6,350	\$109,600	\$23,670	\$4,244	\$1,599
20	\$8,105.91	\$23,132.04	\$187,621.55	\$5,000	\$4,800	\$3,500	\$29,400	\$20,905	\$95,045	\$19,594	\$6,350	\$109,600	\$23,670	\$4,075	\$1,463
21	\$7,504.86	\$23,132.04	\$171,994.37	\$5,000	\$4,800	\$3,500	\$29,400	\$20,280	\$95,670	\$19,769	\$6,350	\$109,600	\$23,670	\$3,900	\$1,333
22	\$6,879.77	\$23,132.04	\$155,742.11	\$5,000	\$4,800	\$3,500	\$29,400	\$19,630	\$96,320	\$19,951	\$6,350	\$109,600	\$23,670	\$3,718	\$1,211
23	\$6,229.68	\$23,132.04	\$138,839.75	\$5,000	\$4,800	\$3,500	\$29,400	\$18,954	\$96,996	\$20,141	\$6,350	\$109,600	\$23,670	\$3,529	\$1,094
24	\$5,553.59	\$23,132.04	\$121,261.30	\$5,000	\$4,800	\$3,500	\$29,400	\$18,250	\$97,700	\$20,338	\$6,350	\$109,600	\$23,670	\$3,332	\$984
25	\$4,850.45	\$23,132.04	\$102,979.72	\$5,000	\$4,800	\$3,500	\$29,400	\$17,519	\$98,431	\$20,542	\$6,350	\$109,600	\$23,670	\$3,127	\$880
26	\$4,119.19	\$23,132.04	\$83,966.86	\$5,000	\$4,800	\$3,500	\$29,400	\$16,759	\$99,191	\$20,755	\$6,350	\$109,600	\$23,670	\$2,914	\$781
27	\$3,358.67	\$23,132.04	\$64,193.50	\$5,000	\$4,800	\$3,500	\$29,400	\$15,968	\$99,982	\$20,977	\$6,350	\$109,600	\$23,670	\$2,693	\$687
28	\$2,567.74	\$23,132.04	\$43,629.20	\$5,000	\$4,800	\$3,500	\$29,400	\$15,145	\$100,805	\$21,207	\$6,350	\$109,600	\$23,670	\$2,463	\$598
29	\$1,745.17	\$23,132.04	\$22,242.33	\$5,000	\$4,800	\$3,500	\$29,400	\$14,290	\$101,660	\$21,447	\$6,350	\$109,600	\$23,670	\$2,223	\$514
30	\$889.69	\$23,132.04	\$ (0.02)	\$5,000	\$4,800	\$3,500	\$29,400								PV @ 5% = \$ 79,052

TABLE 4

Year	Value	\$500,000 Mortgage	\$400,000 Pmt	2018 SINGLE FILER				2018 TAXABLE INCOME NOT ITEMIZE				2018 TAXABLE INCOME ITEMIZE			
				Property Tax 1% of value		State Income Tax 4%		Gifts to Charity 3%		2018 TAXABLE INCOME ITEMIZE		2018 STANDARD DEDUCTION		2018 TAX OWED	
				Term	30 yrs	Income	\$120,000	Int.	\$400,000.00						
1	\$16,000.00	\$23,132.04	\$392,867.96	\$5,000	\$4,800	\$3,500	\$29,400	\$29,115	\$86,835	\$15,021	\$12,000	\$108,000	\$20,101	\$5,080	\$4,607
2	\$15,714.72	\$23,132.04	\$395,450.64	\$5,000	\$4,800	\$3,500	\$29,400	\$28,818	\$87,132	\$15,093	\$12,000	\$108,000	\$20,101	\$5,008	\$4,326
3	\$15,438.03	\$23,132.04	\$377,736.62	\$5,000	\$4,800	\$3,500	\$29,400	\$28,509	\$87,441	\$15,167	\$12,000	\$108,000	\$20,101	\$4,934	\$4,059
4	\$15,169.46	\$23,132.04	\$369,714.05	\$5,000	\$4,800	\$3,500	\$29,400	\$28,189	\$87,761	\$15,244	\$12,000	\$108,000	\$20,101	\$4,857	\$3,806
5	\$14,788.56	\$23,132.04	\$361,370.57	\$5,000	\$4,800	\$3,500	\$29,400	\$27,855	\$88,095	\$15,324	\$12,000	\$108,000	\$20,101	\$4,777	\$3,565
6	\$14,454.82	\$23,132.04	\$352,693.35	\$5,000	\$4,800	\$3,500	\$29,400	\$27,508	\$88,442	\$15,407	\$12,000	\$108,000	\$20,101	\$4,694	\$3,336
7	\$14,107.73	\$23,132.04	\$343,669.05	\$5,000	\$4,800	\$3,500	\$29,400	\$27,147	\$88,803	\$15,494	\$12,000	\$108,000	\$20,101	\$4,607	\$3,118
8	\$13,746.76	\$23,132.04	\$334,283.77	\$5,000	\$4,800	\$3,500	\$29,400	\$26,771	\$89,179	\$15,584	\$12,000	\$108,000	\$20,101	\$4,517	\$2,912
9	\$13,371.35	\$23,132.04	\$324,523.08	\$5,000	\$4,800	\$3,500	\$29,400	\$26,381	\$89,569	\$15,678	\$12,000	\$108,000	\$20,101	\$4,423	\$2,716
10	\$12,980.92	\$23,132.04	\$314,371.96	\$5,000	\$4,800	\$3,500	\$29,400	\$25,975	\$89,975	\$15,775	\$12,000	\$108,000	\$20,101	\$4,326	\$2,529
11	\$12,574.88	\$23,132.04	\$303,814.80	\$5,000	\$4,800	\$3,500	\$29,400	\$25,553	\$90,397	\$15,876	\$12,000	\$108,000	\$20,101	\$4,225	\$2,352
12	\$12,152.59	\$23,132.04	\$292,835.35	\$5,000	\$4,800	\$3,500	\$29,400	\$25,113	\$90,837	\$15,982	\$12,000	\$108,000	\$20,101	\$4,119	\$2,185
13	\$11,713.41	\$23,132.04	\$281,416.73	\$5,000	\$4,800	\$3,500	\$29,400	\$24,657	\$91,293	\$16,091	\$12,000	\$108,000	\$20,101	\$4,010	\$2,025
14	\$11,256.67	\$23,132.04	\$269,541.36	\$5,000	\$4,800	\$3,500	\$29,400	\$24,182	\$91,768	\$16,205	\$12,000	\$108,000	\$20,101	\$3,896	\$1,874
15	\$10,781.65	\$23,132.04	\$257,190.97	\$5,000	\$4,800	\$3,500	\$29,400	\$23,688	\$92,262	\$16,324	\$12,000	\$108,000	\$20,101	\$3,777	\$1,730
16	\$10,287.64	\$23,132.04	\$244,346.57	\$5,000	\$4,800	\$3,500	\$29,400	\$23,174	\$92,776	\$16,447	\$12,000	\$108,000	\$20,101	\$3,654	\$1,594
17	\$9,773.86	\$23,132.04	\$230,988.39	\$5,000	\$4,800	\$3,500	\$29,400	\$22,640	\$93,310	\$16,576	\$12,000	\$108,000	\$20,101	\$3,525	\$1,465
18	\$9,239.54	\$23,132.04	\$217,095.89	\$5,000	\$4,800	\$3,500	\$29,400	\$22,084	\$93,866	\$16,709	\$12,000	\$108,000	\$20,101	\$3,392	\$1,342
19	\$8,683.84	\$23,132.04	\$202,647.69	\$5,000	\$4,800	\$3,500	\$29,400	\$21,506	\$94,444	\$16,848	\$12,000	\$108,000	\$20,101	\$3,253	\$1,226
20	\$8,105.91	\$23,132.04	\$187,621.55	\$5,000	\$4,800	\$3,500	\$29,400	\$20,905	\$95,045	\$16,992	\$12,000	\$108,000	\$20,101	\$3,109	\$1,116
21	\$7,504.86	\$23,132.04	\$171,994.37	\$5,000	\$4,800	\$3,500	\$29,400	\$20,280	\$95,670	\$17,142	\$12,000	\$108,000	\$20,101	\$2,959	\$1,012
22	\$6,879.77	\$23,132.04	\$155,742.11	\$5,000	\$4,800	\$3,500	\$29,400	\$19,630	\$96,320	\$17,298	\$12,000	\$108,000	\$20,101	\$2,297	\$646
23	\$6,229.68	\$23,132.04	\$138,839.75	\$5,000	\$4,800	\$3,500	\$29,400	\$18,954	\$96,996	\$17,460	\$12,000	\$108,000	\$20,101	\$2,803	\$913
24	\$5,553.59	\$23,132.04	\$121,261.30	\$5,000	\$4,800	\$3,500	\$29,400	\$18,250	\$97,700	\$17,629	\$12,000	\$108,000	\$20,101	\$2,641	\$819
25	\$4,850.45	\$23,132.04	\$102,979.72	\$5,000	\$4,800	\$3,500	\$29,400	\$17,519	\$98,431	\$17,804	\$12,000	\$108,000	\$20,101	\$2,472	\$730
26	\$4,119.19	\$23,132.04	\$83,966.86	\$5,000	\$4,800	\$3,500	\$29,400	\$16,759	\$99,191	\$17,987	\$12,000	\$108,000	\$20,101	\$2,114	\$566
27	\$3,358.67	\$23,132.04	\$64,193.50	\$5,000	\$4,800	\$3,500	\$29,400	\$15,968	\$99,982	\$18,177	\$12,000	\$108,000	\$20,101	\$1,924	\$491
28	\$2,567.74	\$23,132.04	\$43,629.20	\$5,000	\$4,800	\$3,500	\$29,400	\$15,145	\$100,805	\$18,374	\$12,000	\$108,000	\$20,101	\$1,727	\$420
29	\$1,745.17	\$23,132.04	\$22,242.33	\$5,000	\$4,800	\$3,500	\$29,400	\$14,290	\$101,660	\$18,579	\$12,000	\$108,000	\$20,101	\$1,522	\$352
30	\$889.69	\$23,132.04	\$ (0.02)	\$5,000	\$4,800	\$3,500	\$29,400							PV @ 5% =	\$ 62,735

TABLE 5

Year	Int.	Pmt	2017			2017			2017			2017		
			SINGLE FILER			Property Tax			State Income Tax			Taxable Income not itemize		
			1% of home value	4% Income	3% Income	Charity	Total	Deductions	Itemize	Total	Tax Owed	Standard Deduction	Itemize	Tax Owed
1	\$32,000.00	\$46,264.08	\$785,735.92	\$10,000	\$9,400	\$7,050	\$58,450	\$172,500	\$41,282	\$6,350	\$224,600	\$57,517	\$16,236	\$15,462
2	\$31,439.44	\$46,264.08	\$701,901.28	\$10,000	\$9,400	\$7,050	\$57,879	\$173,071	\$41,442	\$6,350	\$224,600	\$57,517	\$16,076	\$14,581
3	\$30,836.05	\$46,264.08	\$755,473.25	\$10,000	\$9,400	\$7,050	\$57,286	\$173,664	\$41,608	\$6,350	\$224,600	\$57,517	\$15,910	\$13,743
4	\$30,218.93	\$46,264.08	\$739,428.10	\$10,000	\$9,400	\$7,050	\$56,669	\$174,281	\$41,780	\$6,350	\$224,600	\$57,517	\$15,737	\$12,947
5	\$29,577.12	\$46,264.08	\$722,741.14	\$10,000	\$9,400	\$7,050	\$56,027	\$174,923	\$41,960	\$6,350	\$224,600	\$57,517	\$15,557	\$12,189
6	\$28,909.65	\$46,264.08	\$705,386.71	\$10,000	\$9,400	\$7,050	\$55,360	\$175,590	\$42,147	\$6,350	\$224,600	\$57,517	\$15,370	\$11,469
7	\$28,215.47	\$46,264.08	\$687,338.10	\$10,000	\$9,400	\$7,050	\$54,665	\$176,285	\$42,341	\$6,350	\$224,600	\$57,517	\$15,176	\$10,785
8	\$27,493.52	\$46,264.08	\$668,567.54	\$10,000	\$9,400	\$7,050	\$53,944	\$177,006	\$42,544	\$6,350	\$224,600	\$57,517	\$14,974	\$10,155
9	\$26,742.70	\$46,264.08	\$649,046.16	\$10,000	\$9,400	\$7,050	\$53,193	\$177,757	\$42,754	\$6,350	\$224,600	\$57,517	\$14,763	\$9,517
10	\$25,961.85	\$46,264.08	\$628,743.93	\$10,000	\$9,400	\$7,050	\$52,412	\$178,538	\$42,972	\$6,350	\$224,600	\$57,517	\$14,545	\$8,929
11	\$25,149.76	\$46,264.08	\$607,629.60	\$10,000	\$9,400	\$7,050	\$51,600	\$179,350	\$43,200	\$6,350	\$224,600	\$57,517	\$14,317	\$8,371
12	\$24,305.18	\$46,264.08	\$585,670.71	\$10,000	\$9,400	\$7,050	\$50,755	\$180,195	\$43,436	\$6,350	\$224,600	\$57,517	\$14,081	\$7,841
13	\$23,426.83	\$46,264.08	\$562,833.46	\$10,000	\$9,400	\$7,050	\$49,877	\$181,073	\$43,682	\$6,350	\$224,600	\$57,517	\$13,835	\$7,337
14	\$22,513.34	\$46,264.08	\$539,082.72	\$10,000	\$9,400	\$7,050	\$48,963	\$181,387	\$43,938	\$6,350	\$224,600	\$57,517	\$13,579	\$6,838
15	\$21,563.31	\$46,264.08	\$514,381.94	\$10,000	\$9,400	\$7,050	\$48,013	\$182,937	\$44,204	\$6,350	\$224,600	\$57,517	\$13,313	\$6,404
16	\$20,575.28	\$46,264.08	\$488,693.14	\$10,000	\$9,400	\$7,050	\$47,025	\$183,925	\$44,481	\$6,350	\$224,600	\$57,517	\$13,037	\$5,972
17	\$19,547.73	\$46,264.08	\$461,976.79	\$10,000	\$9,400	\$7,050	\$45,998	\$184,952	\$44,768	\$6,350	\$224,600	\$57,517	\$12,749	\$5,562
18	\$18,479.07	\$46,264.08	\$434,191.78	\$10,000	\$9,400	\$7,050	\$44,929	\$186,021	\$45,068	\$6,350	\$224,600	\$57,517	\$12,450	\$5,173
19	\$17,367.67	\$46,264.08	\$405,295.37	\$10,000	\$9,400	\$7,050	\$43,818	\$187,132	\$45,379	\$6,350	\$224,600	\$57,517	\$12,138	\$4,804
20	\$16,211.81	\$46,264.08	\$375,243.10	\$10,000	\$9,400	\$7,050	\$42,662	\$188,288	\$45,702	\$6,350	\$224,600	\$57,517	\$11,815	\$4,453
21	\$15,009.72	\$46,264.08	\$343,988.75	\$10,000	\$9,400	\$7,050	\$41,460	\$189,490	\$46,039	\$6,350	\$224,600	\$57,517	\$11,478	\$4,120
22	\$13,759.55	\$46,264.08	\$311,484.22	\$10,000	\$9,400	\$7,050	\$40,210	\$190,740	\$46,389	\$6,350	\$224,600	\$57,517	\$11,128	\$3,804
23	\$12,459.37	\$46,264.08	\$277,679.51	\$10,000	\$9,400	\$7,050	\$38,909	\$192,041	\$46,773	\$6,350	\$224,600	\$57,517	\$10,745	\$3,498
24	\$11,107.18	\$46,264.08	\$242,522.61	\$10,000	\$9,400	\$7,050	\$37,557	\$193,393	\$47,219	\$6,350	\$224,600	\$57,517	\$10,298	\$3,193
25	\$9,700.90	\$46,264.08	\$205,959.43	\$10,000	\$9,400	\$7,050	\$36,151	\$194,799	\$47,683	\$6,350	\$224,600	\$57,517	\$9,834	\$2,904
26	\$8,288.38	\$46,264.08	\$167,933.73	\$10,000	\$9,400	\$7,050	\$34,688	\$196,262	\$48,166	\$6,350	\$224,600	\$57,517	\$9,352	\$2,630
27	\$6,177.35	\$46,264.08	\$128,387.00	\$10,000	\$9,400	\$7,050	\$33,167	\$197,783	\$48,668	\$6,350	\$224,600	\$57,517	\$8,850	\$2,370
28	\$5,155.48	\$46,264.08	\$87,258.40	\$10,000	\$9,400	\$7,050	\$31,585	\$199,365	\$49,190	\$6,350	\$224,600	\$57,517	\$8,328	\$2,124
29	\$3,490.34	\$46,264.08	\$44,484.65	\$10,000	\$9,400	\$7,050	\$29,940	\$201,010	\$49,732	\$6,350	\$224,600	\$57,517	\$7,785	\$1,891
30	\$1,779.39	\$46,264.08	\$ (0.04)	\$10,000	\$ 9,400	\$ 7,050	\$ 28,229	\$202,721	\$50,297	\$ 6,350	\$ 224,600	\$57,517	\$ 7,220	\$ 1,671

PV @ 5% =

\$210,740

TABLE 6

Year	Int.	Pmt	2018			2018			2018		
			Property Tax		State Income Tax	Gifts to Charity		Total Deductions	Taxable Income Itemize		Standard Deduction
			1% of home value	4% income	4% income	3% Income	3% Income	Deductions	\$187,950	\$41,725	\$12,000
1	\$32,000.00	\$46,264.08	\$785,735.92	\$10,000	\$9,400	\$7,050	\$47,050	\$187,950	\$41,725	\$12,000	\$223,000
2	\$31,499.44	\$46,264.08	\$770,901.28	\$10,000	\$9,400	\$7,050	\$47,050	\$187,950	\$41,725	\$12,000	\$223,000
3	\$30,836.05	\$46,264.08	\$755,473.25	\$10,000	\$9,400	\$7,050	\$47,050	\$187,950	\$41,725	\$12,000	\$223,000
4	\$30,238.93	\$46,264.08	\$739,428.10	\$10,000	\$9,400	\$7,050	\$47,050	\$187,950	\$41,725	\$12,000	\$223,000
5	\$29,577.12	\$46,264.08	\$722,741.14	\$10,000	\$9,400	\$7,050	\$46,627	\$188,373	\$41,860	\$12,000	\$223,000
6	\$28,909.65	\$46,264.08	\$705,386.71	\$10,000	\$9,400	\$7,050	\$45,960	\$189,040	\$42,074	\$12,000	\$223,000
7	\$28,215.47	\$46,264.08	\$687,338.10	\$10,000	\$9,400	\$7,050	\$45,265	\$189,735	\$42,296	\$12,000	\$223,000
8	\$27,493.52	\$46,264.08	\$668,567.54	\$10,000	\$9,400	\$7,050	\$44,544	\$190,456	\$42,527	\$12,000	\$223,000
9	\$26,742.70	\$46,264.08	\$649,046.16	\$10,000	\$9,400	\$7,050	\$43,793	\$191,207	\$42,767	\$12,000	\$223,000
10	\$25,961.85	\$46,264.08	\$628,743.93	\$10,000	\$9,400	\$7,050	\$43,012	\$191,988	\$43,017	\$12,000	\$223,000
11	\$25,149.76	\$46,264.08	\$607,629.60	\$10,000	\$9,400	\$7,050	\$42,200	\$192,800	\$43,277	\$12,000	\$223,000
12	\$24,335.18	\$46,264.08	\$585,670.71	\$10,000	\$9,400	\$7,050	\$41,355	\$193,645	\$43,547	\$12,000	\$223,000
13	\$23,436.83	\$46,264.08	\$562,833.46	\$10,000	\$9,400	\$7,050	\$40,477	\$194,523	\$43,828	\$12,000	\$223,000
14	\$22,513.34	\$46,264.08	\$539,082.72	\$10,000	\$9,400	\$7,050	\$39,563	\$195,337	\$44,121	\$12,000	\$223,000
15	\$21,533.31	\$46,264.08	\$514,381.94	\$10,000	\$9,400	\$7,050	\$38,613	\$196,387	\$44,425	\$12,000	\$223,000
16	\$20,575.28	\$46,264.08	\$488,693.14	\$10,000	\$9,400	\$7,050	\$37,625	\$197,375	\$44,741	\$12,000	\$223,000
17	\$19,547.73	\$46,264.08	\$461,976.79	\$10,000	\$9,400	\$7,050	\$36,598	\$198,402	\$45,070	\$12,000	\$223,000
18	\$18,479.07	\$46,264.08	\$434,191.78	\$10,000	\$9,400	\$7,050	\$35,529	\$199,471	\$45,412	\$12,000	\$223,000
19	\$17,367.67	\$46,264.08	\$405,295.37	\$10,000	\$9,400	\$7,050	\$34,418	\$200,582	\$45,785	\$12,000	\$223,000
20	\$16,221.81	\$46,264.08	\$375,243.10	\$10,000	\$9,400	\$7,050	\$33,262	\$201,738	\$46,189	\$12,000	\$223,000
21	\$15,099.72	\$46,264.08	\$343,988.75	\$10,000	\$9,400	\$7,050	\$32,060	\$202,940	\$46,610	\$12,000	\$223,000
22	\$13,759.55	\$46,264.08	\$311,484.22	\$10,000	\$9,400	\$7,050	\$30,810	\$204,190	\$47,048	\$12,000	\$223,000
23	\$12,459.37	\$46,264.08	\$277,679.51	\$10,000	\$9,400	\$7,050	\$29,509	\$205,491	\$47,503	\$12,000	\$223,000
24	\$11,107.18	\$46,264.08	\$242,522.61	\$10,000	\$9,400	\$7,050	\$28,157	\$206,843	\$47,976	\$12,000	\$223,000
25	\$9,700.90	\$46,264.08	\$205,959.43	\$10,000	\$9,400	\$7,050	\$26,751	\$208,249	\$48,468	\$12,000	\$223,000
26	\$8,238.38	\$46,264.08	\$167,933.73	\$10,000	\$9,400	\$7,050	\$25,288	\$209,712	\$48,980	\$12,000	\$223,000
27	\$6,717.35	\$46,264.08	\$188,387.00	\$10,000	\$9,400	\$7,050	\$23,767	\$211,233	\$49,512	\$12,000	\$223,000
28	\$5,155.48	\$46,264.08	\$87,258.40	\$10,000	\$9,400	\$7,050	\$22,185	\$212,815	\$50,066	\$12,000	\$223,000
29	\$3,490.34	\$46,264.08	\$44,484.65	\$10,000	\$9,400	\$7,050	\$20,540	\$214,460	\$50,642	\$12,000	\$223,000
30	\$1,779.39	\$46,264.08	\$ (0.04)	\$10,000	\$9,400	\$7,050	\$18,829	\$216,171	\$51,241	\$12,000	\$223,000

PV @ 5% = \$147,030

TABLE 7

Year	Value	MARRIED		2017		2017		2017		2017	
		FILING JOINT		Property Tax 1% of home value		State Income 4% Income		Gifts to Charity 3% Income		Income Itemize	
		Income	Int	\$60,000	balance	\$200,000.00		\$1,800	\$2,400	\$14,700	\$37,200
1	\$ 8,000	\$ 11,566	\$ 196,434	\$2,500	\$2,400	\$1,800	\$1,800	\$14,557	\$37,343	\$4,669	\$20,800
2	\$ 7,857	\$ 11,566	\$ 192,725	\$2,500	\$2,400	\$1,800	\$1,800	\$14,409	\$37,491	\$4,691	\$20,800
3	\$ 7,709	\$ 11,566	\$ 188,888	\$2,500	\$2,400	\$1,800	\$1,800	\$14,255	\$37,645	\$4,714	\$20,800
4	\$ 7,555	\$ 11,566	\$ 184,857	\$2,500	\$2,400	\$1,800	\$1,800	\$14,094	\$37,806	\$4,738	\$20,800
5	\$ 7,394	\$ 11,566	\$ 180,685	\$2,500	\$2,400	\$1,800	\$1,800	\$13,927	\$37,973	\$4,763	\$20,800
6	\$ 7,227	\$ 11,566	\$ 176,347	\$2,500	\$2,400	\$1,800	\$1,800	\$13,754	\$38,146	\$4,789	\$20,800
7	\$ 7,054	\$ 11,566	\$ 171,835	\$2,500	\$2,400	\$1,800	\$1,800	\$13,573	\$38,327	\$4,816	\$20,800
8	\$ 6,873	\$ 11,566	\$ 167,142	\$2,500	\$2,400	\$1,800	\$1,800	\$13,386	\$38,514	\$4,845	\$20,800
9	\$ 6,686	\$ 11,566	\$ 162,262	\$2,500	\$2,400	\$1,800	\$1,800	\$13,190	\$38,710	\$4,874	\$20,800
10	\$ 6,490	\$ 11,566	\$ 157,186	\$2,500	\$2,400	\$1,800	\$1,800	\$12,987	\$38,913	\$4,904	\$20,800
11	\$ 6,287	\$ 11,566	\$ 151,907	\$2,500	\$2,400	\$1,800	\$1,800	\$12,776	\$39,124	\$4,936	\$20,800
12	\$ 6,076	\$ 11,566	\$ 146,418	\$2,500	\$2,400	\$1,800	\$1,800	\$12,557	\$39,343	\$4,969	\$20,800
13	\$ 5,857	\$ 11,566	\$ 140,708	\$2,500	\$2,400	\$1,800	\$1,800	\$12,328	\$39,572	\$5,003	\$20,800
14	\$ 5,628	\$ 11,566	\$ 134,771	\$2,500	\$2,400	\$1,800	\$1,800	\$12,091	\$39,809	\$5,039	\$20,800
15	\$ 5,391	\$ 11,566	\$ 128,595	\$2,500	\$2,400	\$1,800	\$1,800	\$11,844	\$40,056	\$5,076	\$20,800
16	\$ 5,144	\$ 11,566	\$ 122,173	\$2,500	\$2,400	\$1,800	\$1,800	\$11,587	\$40,313	\$5,114	\$20,800
17	\$ 4,887	\$ 11,566	\$ 115,494	\$2,500	\$2,400	\$1,800	\$1,800	\$11,320	\$40,580	\$5,155	\$20,800
18	\$ 4,620	\$ 11,566	\$ 108,548	\$2,500	\$2,400	\$1,800	\$1,800	\$11,042	\$40,858	\$5,196	\$20,800
19	\$ 4,342	\$ 11,566	\$ 101,324	\$2,500	\$2,400	\$1,800	\$1,800	\$10,753	\$41,147	\$5,240	\$20,800
20	\$ 4,053	\$ 11,566	\$ 93,811	\$2,500	\$2,400	\$1,800	\$1,800	\$10,452	\$41,448	\$5,285	\$20,800
21	\$ 3,752	\$ 11,566	\$ 85,997	\$2,500	\$2,400	\$1,800	\$1,800	\$10,140	\$41,760	\$5,332	\$20,800
22	\$ 3,440	\$ 11,566	\$ 77,871	\$2,500	\$2,400	\$1,800	\$1,800	\$9,815	\$42,085	\$5,380	\$20,800
23	\$ 3,115	\$ 11,566	\$ 69,420	\$2,500	\$2,400	\$1,800	\$1,800	\$9,477	\$42,423	\$5,431	\$20,800
24	\$ 2,777	\$ 11,566	\$ 60,631	\$2,500	\$2,400	\$1,800	\$1,800	\$9,125	\$42,775	\$5,484	\$20,800
25	\$ 2,425	\$ 11,566	\$ 51,490	\$2,500	\$2,400	\$1,800	\$1,800	\$8,760	\$43,140	\$5,539	\$20,800
26	\$ 2,060	\$ 11,566	\$ 41,983	\$2,500	\$2,400	\$1,800	\$1,800	\$8,379	\$43,521	\$5,596	\$20,800
27	\$ 1,679	\$ 11,566	\$ 32,097	\$2,500	\$2,400	\$1,800	\$1,800	\$7,984	\$43,916	\$5,655	\$20,800
28	\$ 1,284	\$ 11,566	\$ 21,815	\$2,500	\$2,400	\$1,800	\$1,800	\$7,573	\$44,327	\$5,717	\$20,800
29	\$ 873	\$ 11,566	\$ 11,121	\$2,500	\$2,400	\$1,800	\$1,800	\$7,145	\$44,755	\$5,781	\$20,800
30	\$ 445	\$ 11,566	\$ (0)	\$2,500	\$2,400	\$1,800	\$1,800	\$-	\$-	\$-	\$-

PV @ 5% = \$ 1,597

TABLE 8

Year	Value	\$ 250,000	MARRIED FILING JOINT	2018						2018						
				Property Tax. 1% of home value			State Income 4% Income			Gifts to Charity 3% Income			2018 Taxable Income Itemize			2018 Taxable Standard Deduction
				Income	Int.	\$60,000	balance	Pmt.	\$ 200,000.00	Total Deductions		Tax Owed		Tax Owed		Tax Savings
1	\$ 8,000	\$ 11,566	\$ 196,434	\$2,500	\$2,400	\$1,800	\$ 14,700	\$	\$ 45,300	\$ 5,843	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
2	\$ 7,857	\$ 11,566	\$ 192,725	\$2,500	\$2,400	\$1,800	\$ 14,557	\$	\$ 45,443	\$ 5,864	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
3	\$ 7,709	\$ 11,566	\$ 188,868	\$2,500	\$2,400	\$1,800	\$ 14,409	\$	\$ 45,591	\$ 5,886	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
4	\$ 7,555	\$ 11,566	\$ 184,857	\$2,500	\$2,400	\$1,800	\$ 14,255	\$	\$ 45,745	\$ 5,909	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
5	\$ 7,394	\$ 11,566	\$ 180,685	\$2,500	\$2,400	\$1,800	\$ 14,094	\$	\$ 45,906	\$ 5,933	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
6	\$ 7,227	\$ 11,566	\$ 176,347	\$2,500	\$2,400	\$1,800	\$ 13,927	\$	\$ 46,073	\$ 5,958	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
7	\$ 7,054	\$ 11,566	\$ 171,835	\$2,500	\$2,400	\$1,800	\$ 13,754	\$	\$ 46,246	\$ 5,984	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
8	\$ 6,873	\$ 11,566	\$ 167,142	\$2,500	\$2,400	\$1,800	\$ 13,573	\$	\$ 46,427	\$ 6,011	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
9	\$ 6,686	\$ 11,566	\$ 162,262	\$2,500	\$2,400	\$1,800	\$ 13,386	\$	\$ 46,614	\$ 6,040	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
10	\$ 6,490	\$ 11,566	\$ 157,186	\$2,500	\$2,400	\$1,800	\$ 13,190	\$	\$ 46,810	\$ 6,069	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
11	\$ 6,287	\$ 11,566	\$ 151,907	\$2,500	\$2,400	\$1,800	\$ 12,987	\$	\$ 47,013	\$ 6,099	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
12	\$ 6,076	\$ 11,566	\$ 146,418	\$2,500	\$2,400	\$1,800	\$ 12,776	\$	\$ 47,224	\$ 6,131	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
13	\$ 5,857	\$ 11,566	\$ 140,708	\$2,500	\$2,400	\$1,800	\$ 12,557	\$	\$ 47,443	\$ 6,164	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
14	\$ 5,628	\$ 11,566	\$ 134,771	\$2,500	\$2,400	\$1,800	\$ 12,328	\$	\$ 47,672	\$ 6,198	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
15	\$ 5,391	\$ 11,566	\$ 128,595	\$2,500	\$2,400	\$1,800	\$ 12,091	\$	\$ 47,909	\$ 6,234	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
16	\$ 5,144	\$ 11,566	\$ 122,173	\$2,500	\$2,400	\$1,800	\$ 11,844	\$	\$ 48,156	\$ 6,271	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
17	\$ 4,887	\$ 11,566	\$ 115,494	\$2,500	\$2,400	\$1,800	\$ 11,587	\$	\$ 48,413	\$ 6,309	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
18	\$ 4,620	\$ 11,566	\$ 108,548	\$2,500	\$2,400	\$1,800	\$ 11,320	\$	\$ 48,680	\$ 6,350	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
19	\$ 4,342	\$ 11,566	\$ 101,324	\$2,500	\$2,400	\$1,800	\$ 11,042	\$	\$ 48,958	\$ 6,391	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
20	\$ 4,053	\$ 11,566	\$ 93,811	\$2,500	\$2,400	\$1,800	\$ 10,753	\$	\$ 49,247	\$ 6,435	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
21	\$ 3,752	\$ 11,566	\$ 85,997	\$2,500	\$2,400	\$1,800	\$ 10,452	\$	\$ 49,548	\$ 6,480	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
22	\$ 3,440	\$ 11,566	\$ 77,871	\$2,500	\$2,400	\$1,800	\$ 10,140	\$	\$ 49,860	\$ 6,527	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
23	\$ 3,115	\$ 11,566	\$ 69,420	\$2,500	\$2,400	\$1,800	\$ 9,815	\$	\$ 50,185	\$ 6,575	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
24	\$ 2,777	\$ 11,566	\$ 60,631	\$2,500	\$2,400	\$1,800	\$ 9,477	\$	\$ 50,523	\$ 6,626	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
25	\$ 2,425	\$ 11,566	\$ 51,490	\$2,500	\$2,400	\$1,800	\$ 9,125	\$	\$ 50,875	\$ 6,679	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
26	\$ 2,060	\$ 11,566	\$ 41,983	\$2,500	\$2,400	\$1,800	\$ 8,760	\$	\$ 51,240	\$ 6,734	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
27	\$ 1,679	\$ 11,566	\$ 32,097	\$2,500	\$2,400	\$1,800	\$ 8,379	\$	\$ 51,621	\$ 6,791	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
28	\$ 1,284	\$ 11,566	\$ 21,815	\$2,500	\$2,400	\$1,800	\$ 7,984	\$	\$ 52,016	\$ 6,850	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
29	\$ 873	\$ 11,566	\$ 11,121	\$2,500	\$2,400	\$1,800	\$ 7,573	\$	\$ 52,427	\$ 6,912	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -
30	\$ 445	\$ 11,566	\$ (0)	\$2,500	\$2,400	\$1,800	\$ 7,145	\$	\$ 52,855	\$ 6,976	\$ 24,000	\$ 36,000	\$ 4,448	\$ -	\$ -	\$ -

PV @ 5% =

\$ -

TABLE 9

Year	Value	\$ 500,000	MARRIED FILING JOINT	2017						2017					
				Property Tax. 1% of home value			State Income 4% Income			Gifts to Charity 3% Income			2017 Taxable Income Itemize Deductions		
	Term	30 yrs	balance	Income	\$ 120,000	\$ 400,000	Total	Tax Owed	Standard Deduction	Tax Owed	Standard Deduction	Tax Owed	Savings	Present Value 5%	
1	\$ 16,000	\$ 23,132	\$ 392,868	\$ 5,000	\$ 4,800	\$ 3,600	\$ 29,400.00	\$ 82,500.00	\$ 12,102.25	\$ 20,800	\$ 99,200	\$ 16,307	\$ 4,205	\$ 4,005	
2	\$ 15,715	\$ 23,132	\$ 385,451	\$ 5,000	\$ 4,800	\$ 3,600	\$ 29,114.72	\$ 82,785.28	\$ 12,173.57	\$ 20,800	\$ 99,200	\$ 16,307	\$ 4,133	\$ 3,749	
3	\$ 15,418	\$ 23,132	\$ 377,737	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,818.03	\$ 83,081.97	\$ 12,247.74	\$ 20,800	\$ 99,200	\$ 16,307	\$ 4,059	\$ 3,507	
4	\$ 15,109	\$ 23,132	\$ 369,714	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,509.46	\$ 83,390.54	\$ 12,324.88	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,982	\$ 3,276	
5	\$ 14,789	\$ 23,132	\$ 361,371	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,188.56	\$ 83,711.44	\$ 12,405.11	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,902	\$ 3,057	
6	\$ 14,455	\$ 23,132	\$ 352,693	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,854.82	\$ 84,045.18	\$ 12,488.54	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,818	\$ 2,849	
7	\$ 14,108	\$ 23,132	\$ 343,669	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,507.73	\$ 84,392.27	\$ 12,575.32	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,732	\$ 2,652	
8	\$ 13,747	\$ 23,132	\$ 334,284	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,146.76	\$ 84,753.24	\$ 12,665.56	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,641	\$ 2,465	
9	\$ 13,371	\$ 23,132	\$ 324,523	\$ 5,000	\$ 4,800	\$ 3,600	\$ 26,771.35	\$ 85,128.65	\$ 12,759.41	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,548	\$ 2,287	
10	\$ 12,981	\$ 23,132	\$ 314,372	\$ 5,000	\$ 4,800	\$ 3,600	\$ 26,380.92	\$ 85,519.08	\$ 12,857.02	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,450	\$ 2,118	
11	\$ 12,575	\$ 23,132	\$ 303,815	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,974.88	\$ 85,925.12	\$ 12,958.53	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,348	\$ 1,958	
12	\$ 12,153	\$ 23,132	\$ 299,835	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,552.59	\$ 86,347.41	\$ 13,064.10	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,243	\$ 1,806	
13	\$ 11,713	\$ 23,132	\$ 281,417	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,113.41	\$ 86,786.59	\$ 13,173.90	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,133	\$ 1,662	
14	\$ 11,257	\$ 23,132	\$ 269,541	\$ 5,000	\$ 4,800	\$ 3,600	\$ 24,656.67	\$ 87,243.33	\$ 13,288.08	\$ 20,800	\$ 99,200	\$ 16,307	\$ 3,019	\$ 1,525	
15	\$ 10,782	\$ 23,132	\$ 257,191	\$ 5,000	\$ 4,800	\$ 3,600	\$ 24,181.65	\$ 87,718.35	\$ 13,406.84	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,900	\$ 1,395	
16	\$ 10,288	\$ 23,132	\$ 244,347	\$ 5,000	\$ 4,800	\$ 3,600	\$ 23,687.64	\$ 88,212.36	\$ 13,520.34	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,777	\$ 1,272	
17	\$ 9,774	\$ 23,132	\$ 230,988	\$ 5,000	\$ 4,800	\$ 3,600	\$ 23,173.86	\$ 88,726.14	\$ 13,658.78	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,648	\$ 1,155	
18	\$ 9,240	\$ 23,132	\$ 217,096	\$ 5,000	\$ 4,800	\$ 3,600	\$ 22,639.54	\$ 89,260.46	\$ 13,792.37	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,515	\$ 1,045	
19	\$ 8,684	\$ 23,132	\$ 202,648	\$ 5,000	\$ 4,800	\$ 3,600	\$ 22,083.84	\$ 89,816.16	\$ 13,931.29	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,376	\$ 940	
20	\$ 8,106	\$ 23,132	\$ 187,622	\$ 5,000	\$ 4,800	\$ 3,600	\$ 21,505.91	\$ 90,394.09	\$ 14,075.77	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,231	\$ 841	
21	\$ 7,505	\$ 23,132	\$ 171,994	\$ 5,000	\$ 4,800	\$ 3,600	\$ 20,904.86	\$ 90,995.14	\$ 14,226.03	\$ 20,800	\$ 99,200	\$ 16,307	\$ 2,081	\$ 747	
22	\$ 6,880	\$ 23,132	\$ 155,742	\$ 5,000	\$ 4,800	\$ 3,600	\$ 20,279.77	\$ 91,620.23	\$ 14,382.31	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,925	\$ 658	
23	\$ 6,230	\$ 23,132	\$ 138,840	\$ 5,000	\$ 4,800	\$ 3,600	\$ 19,629.68	\$ 92,270.32	\$ 14,544.83	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,762	\$ 574	
24	\$ 5,554	\$ 23,132	\$ 121,261	\$ 5,000	\$ 4,800	\$ 3,600	\$ 18,953.59	\$ 92,946.41	\$ 14,713.85	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,593	\$ 494	
25	\$ 4,850	\$ 23,132	\$ 102,980	\$ 5,000	\$ 4,800	\$ 3,600	\$ 18,250.45	\$ 93,649.55	\$ 14,889.64	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,417	\$ 419	
26	\$ 4,119	\$ 23,132	\$ 83,967	\$ 5,000	\$ 4,800	\$ 3,600	\$ 17,519.19	\$ 94,380.81	\$ 15,072.45	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,235	\$ 347	
27	\$ 3,359	\$ 23,132	\$ 64,193	\$ 5,000	\$ 4,800	\$ 3,600	\$ 16,758.67	\$ 95,141.33	\$ 15,262.58	\$ 20,800	\$ 99,200	\$ 16,307	\$ 1,044	\$ 280	
28	\$ 2,568	\$ 23,132	\$ 43,629	\$ 5,000	\$ 4,800	\$ 3,600	\$ 15,967.74	\$ 95,932.26	\$ 15,460.32	\$ 20,800	\$ 99,200	\$ 16,307	\$ 847	\$ 216	
29	\$ 1,745	\$ 23,132	\$ 22,242	\$ 5,000	\$ 4,800	\$ 3,600	\$ 15,145.17	\$ 96,754.83	\$ 15,665.96	\$ 20,800	\$ 99,200	\$ 16,307	\$ 641	\$ 156	
30	\$ 890	\$ 23,132	\$ (0)	\$ 5,000	\$ 4,800	\$ 3,600	\$ 14,289.69	\$ 97,610.31	\$ 15,879.83	\$ 20,800	\$ 99,200	\$ 16,307	\$ 427	\$ 99	

PV @ 5% = \$ 47,551

TABLE 10

Year	Value	\$ 500,000	MARRIED FILING JOINT	2018						2018					
				Property Tax. 1% of home value			State Income 4% Income			Gifts to Charity 3% Income			2018 Taxable Income Itemize		
				Income	Int	\$ 120,000	Income	Pmt	\$ 400,000	Total Deductions	Tax Owed	Tax Owed	Income Itemize	Tax Savings	Present Value 5%
1	\$ 16,000	\$ 23,132	\$ 392,868	\$ 5,000	\$ 4,800	\$ 3,600	\$ 29,400	\$ 29,400	\$ 90,600	\$ 11,811	\$ 24,000	\$ 96,000	\$ 12,999	\$ 1,188	\$ 1,131
2	\$ 15,715	\$ 23,132	\$ 385,451	\$ 5,000	\$ 4,800	\$ 3,600	\$ 29,115	\$ 90,885	\$ 11,874	\$ 24,000	\$ 96,000	\$ 12,999	\$ 1,125	\$ 1,021	
3	\$ 15,418	\$ 23,132	\$ 377,737	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,818	\$ 91,182	\$ 11,939	\$ 24,000	\$ 96,000	\$ 12,999	\$ 1,060	\$ 916	
4	\$ 15,109	\$ 23,132	\$ 369,714	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,509	\$ 91,491	\$ 12,007	\$ 24,000	\$ 96,000	\$ 12,999	\$ 992	\$ 816	
5	\$ 14,789	\$ 23,132	\$ 361,371	\$ 5,000	\$ 4,800	\$ 3,600	\$ 28,189	\$ 91,811	\$ 12,078	\$ 24,000	\$ 96,000	\$ 12,999	\$ 921	\$ 722	
6	\$ 14,455	\$ 23,132	\$ 352,693	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,855	\$ 92,145	\$ 12,151	\$ 24,000	\$ 96,000	\$ 12,999	\$ 848	\$ 633	
7	\$ 14,108	\$ 23,132	\$ 343,669	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,508	\$ 92,492	\$ 12,227	\$ 24,000	\$ 96,000	\$ 12,999	\$ 772	\$ 548	
8	\$ 13,747	\$ 23,132	\$ 334,284	\$ 5,000	\$ 4,800	\$ 3,600	\$ 27,147	\$ 92,853	\$ 12,307	\$ 24,000	\$ 96,000	\$ 12,999	\$ 692	\$ 469	
9	\$ 13,371	\$ 23,132	\$ 324,523	\$ 5,000	\$ 4,800	\$ 3,600	\$ 26,771	\$ 93,229	\$ 12,389	\$ 24,000	\$ 96,000	\$ 12,999	\$ 610	\$ 393	
10	\$ 12,981	\$ 23,132	\$ 314,372	\$ 5,000	\$ 4,800	\$ 3,600	\$ 26,381	\$ 93,619	\$ 12,475	\$ 24,000	\$ 96,000	\$ 12,999	\$ 524	\$ 322	
11	\$ 12,575	\$ 23,132	\$ 303,815	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,975	\$ 94,025	\$ 12,565	\$ 24,000	\$ 96,000	\$ 12,999	\$ 434	\$ 254	
12	\$ 12,153	\$ 23,132	\$ 299,835	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,553	\$ 94,447	\$ 12,657	\$ 24,000	\$ 96,000	\$ 12,999	\$ 342	\$ 190	
13	\$ 11,713	\$ 23,132	\$ 281,417	\$ 5,000	\$ 4,800	\$ 3,600	\$ 25,113	\$ 94,887	\$ 12,754	\$ 24,000	\$ 96,000	\$ 12,999	\$ 245	\$ 130	
14	\$ 11,257	\$ 23,132	\$ 269,541	\$ 5,000	\$ 4,800	\$ 3,600	\$ 24,657	\$ 95,343	\$ 12,855	\$ 24,000	\$ 96,000	\$ 12,999	\$ 144	\$ 73	
15	\$ 10,782	\$ 23,132	\$ 257,191	\$ 5,000	\$ 4,800	\$ 3,600	\$ 24,182	\$ 95,818	\$ 12,959	\$ 24,000	\$ 96,000	\$ 12,999	\$ 40	\$ 19	
16	\$ 10,288	\$ 23,132	\$ 244,347	\$ 5,000	\$ 4,800	\$ 3,600	\$ 23,688	\$ 96,312	\$ 13,068	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
17	\$ 9,774	\$ 23,132	\$ 230,988	\$ 5,000	\$ 4,800	\$ 3,600	\$ 23,174	\$ 96,826	\$ 13,181	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
18	\$ 9,240	\$ 23,132	\$ 217,096	\$ 5,000	\$ 4,800	\$ 3,600	\$ 22,640	\$ 97,360	\$ 13,298	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
19	\$ 8,684	\$ 23,132	\$ 202,648	\$ 5,000	\$ 4,800	\$ 3,600	\$ 22,084	\$ 97,916	\$ 13,421	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
20	\$ 8,106	\$ 23,132	\$ 187,622	\$ 5,000	\$ 4,800	\$ 3,600	\$ 21,506	\$ 98,494	\$ 13,548	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
21	\$ 7,505	\$ 23,132	\$ 171,994	\$ 5,000	\$ 4,800	\$ 3,600	\$ 20,905	\$ 99,095	\$ 13,680	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
22	\$ 6,880	\$ 23,132	\$ 155,742	\$ 5,000	\$ 4,800	\$ 3,600	\$ 20,280	\$ 99,720	\$ 13,817	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
23	\$ 6,230	\$ 23,132	\$ 138,840	\$ 5,000	\$ 4,800	\$ 3,600	\$ 19,630	\$ 100,370	\$ 13,960	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
24	\$ 5,554	\$ 23,132	\$ 121,261	\$ 5,000	\$ 4,800	\$ 3,600	\$ 18,954	\$ 101,046	\$ 14,109	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
25	\$ 4,850	\$ 23,132	\$ 102,980	\$ 5,000	\$ 4,800	\$ 3,600	\$ 18,250	\$ 101,750	\$ 14,264	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
26	\$ 4,119	\$ 23,132	\$ 83,967	\$ 5,000	\$ 4,800	\$ 3,600	\$ 17,519	\$ 102,481	\$ 14,425	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
27	\$ 3,359	\$ 23,132	\$ 64,193	\$ 5,000	\$ 4,800	\$ 3,600	\$ 16,759	\$ 103,241	\$ 14,592	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
28	\$ 2,568	\$ 23,132	\$ 43,629	\$ 5,000	\$ 4,800	\$ 3,600	\$ 15,968	\$ 104,032	\$ 14,766	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
29	\$ 1,745	\$ 23,132	\$ 22,242	\$ 5,000	\$ 4,800	\$ 3,600	\$ 15,145	\$ 104,855	\$ 14,947	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	
30	\$ 890	\$ 23,132	\$ (0)	\$ 5,000	\$ 4,800	\$ 3,600	\$ 14,290	\$ 105,710	\$ 15,135	\$ 24,000	\$ 96,000	\$ 12,999	\$ -	\$ -	

PV @ 5% = \$ 7,637

TABLE 11

Year	Value	MARRIED		2017		2017		2017		2017		
		Mortgage	\$ 800,000	Property Tax value	State Income Tax	Gifts to Charity	Total Deductions	Taxable Income Itemize	Tax Owed	Standard Deduction	Tax Owed	Savings
1	\$ 32,000	\$ 46,264	\$ 785,736	\$ 10,000	\$ 9,400	\$ 7,050	\$ 58,450.00	\$ 168,150.00	\$ 34,050.75	\$ 20,800	\$ 214,200	\$ 46,860.00
2	\$ 31,429	\$ 46,264	\$ 770,901	\$ 10,000	\$ 9,400	\$ 7,050	\$ 57,879.44	\$ 169,020.56	\$ 34,210.51	\$ 20,800	\$ 214,200	\$ 46,860.00
3	\$ 30,836	\$ 46,264	\$ 755,473	\$ 10,000	\$ 9,400	\$ 7,050	\$ 57,286.05	\$ 169,613.95	\$ 34,376.66	\$ 20,800	\$ 214,200	\$ 46,860.00
4	\$ 30,219	\$ 46,264	\$ 739,428	\$ 10,000	\$ 9,400	\$ 7,050	\$ 56,668.93	\$ 170,231.07	\$ 34,549.45	\$ 20,800	\$ 214,200	\$ 46,860.00
5	\$ 29,577	\$ 46,264	\$ 722,741	\$ 10,000	\$ 9,400	\$ 7,050	\$ 56,027.12	\$ 170,872.88	\$ 34,729.46	\$ 20,800	\$ 214,200	\$ 46,860.00
6	\$ 28,910	\$ 46,264	\$ 705,387	\$ 10,000	\$ 9,400	\$ 7,050	\$ 55,359.65	\$ 171,540.35	\$ 34,916.05	\$ 20,800	\$ 214,200	\$ 46,860.00
7	\$ 28,215	\$ 46,264	\$ 687,338	\$ 10,000	\$ 9,400	\$ 7,050	\$ 54,665.47	\$ 172,234.53	\$ 35,110.42	\$ 20,800	\$ 214,200	\$ 46,860.00
8	\$ 27,494	\$ 46,264	\$ 668,568	\$ 10,000	\$ 9,400	\$ 7,050	\$ 53,943.52	\$ 172,956.48	\$ 35,312.56	\$ 20,800	\$ 214,200	\$ 46,860.00
9	\$ 26,743	\$ 46,264	\$ 649,046	\$ 10,000	\$ 9,400	\$ 7,050	\$ 53,192.70	\$ 173,707.30	\$ 35,522.79	\$ 20,800	\$ 214,200	\$ 46,860.00
10	\$ 25,962	\$ 46,264	\$ 628,744	\$ 10,000	\$ 9,400	\$ 7,050	\$ 52,411.85	\$ 174,488.15	\$ 35,741.43	\$ 20,800	\$ 214,200	\$ 46,860.00
11	\$ 25,150	\$ 46,264	\$ 607,630	\$ 10,000	\$ 9,400	\$ 7,050	\$ 51,599.76	\$ 175,300.24	\$ 35,968.82	\$ 20,800	\$ 214,200	\$ 46,860.00
12	\$ 24,305	\$ 46,264	\$ 585,671	\$ 10,000	\$ 9,400	\$ 7,050	\$ 50,755.18	\$ 176,144.82	\$ 36,205.30	\$ 20,800	\$ 214,200	\$ 46,860.00
13	\$ 23,427	\$ 46,264	\$ 562,833	\$ 10,000	\$ 9,400	\$ 7,050	\$ 49,876.83	\$ 177,023.17	\$ 36,451.24	\$ 20,800	\$ 214,200	\$ 46,860.00
14	\$ 22,513	\$ 46,264	\$ 539,083	\$ 10,000	\$ 9,400	\$ 7,050	\$ 48,963.34	\$ 177,936.66	\$ 36,707.02	\$ 20,800	\$ 214,200	\$ 46,860.00
15	\$ 21,563	\$ 46,264	\$ 514,382	\$ 10,000	\$ 9,400	\$ 7,050	\$ 48,013.31	\$ 178,386.69	\$ 36,973.02	\$ 20,800	\$ 214,200	\$ 46,860.00
16	\$ 20,575	\$ 46,264	\$ 488,693	\$ 10,000	\$ 9,400	\$ 7,050	\$ 47,025.28	\$ 179,874.72	\$ 37,249.67	\$ 20,800	\$ 214,200	\$ 46,860.00
17	\$ 19,548	\$ 46,264	\$ 461,977	\$ 10,000	\$ 9,400	\$ 7,050	\$ 45,997.73	\$ 180,902.27	\$ 37,537.39	\$ 20,800	\$ 214,200	\$ 46,860.00
18	\$ 18,479	\$ 46,264	\$ 434,192	\$ 10,000	\$ 9,400	\$ 7,050	\$ 44,929.07	\$ 181,970.93	\$ 37,836.61	\$ 20,800	\$ 214,200	\$ 46,860.00
19	\$ 17,368	\$ 46,264	\$ 405,295	\$ 10,000	\$ 9,400	\$ 7,050	\$ 43,817.67	\$ 183,082.33	\$ 38,147.80	\$ 20,800	\$ 214,200	\$ 46,860.00
20	\$ 16,212	\$ 46,264	\$ 375,243	\$ 10,000	\$ 9,400	\$ 7,050	\$ 42,661.81	\$ 184,238.19	\$ 38,471.44	\$ 20,800	\$ 214,200	\$ 46,860.00
21	\$ 15,010	\$ 46,264	\$ 343,369	\$ 10,000	\$ 9,400	\$ 7,050	\$ 41,459.72	\$ 185,440.28	\$ 38,808.03	\$ 20,800	\$ 214,200	\$ 46,860.00
22	\$ 13,760	\$ 46,264	\$ 311,484	\$ 10,000	\$ 9,400	\$ 7,050	\$ 40,209.55	\$ 186,690.45	\$ 39,158.08	\$ 20,800	\$ 214,200	\$ 46,860.00
23	\$ 12,459	\$ 46,264	\$ 277,680	\$ 10,000	\$ 9,400	\$ 7,050	\$ 38,909.37	\$ 187,990.63	\$ 39,522.13	\$ 20,800	\$ 214,200	\$ 46,860.00
24	\$ 11,107	\$ 46,264	\$ 242,523	\$ 10,000	\$ 9,400	\$ 7,050	\$ 37,557.18	\$ 189,342.82	\$ 39,900.74	\$ 20,800	\$ 214,200	\$ 46,860.00
25	\$ 9,701	\$ 46,264	\$ 205,959	\$ 10,000	\$ 9,400	\$ 7,050	\$ 36,150.90	\$ 190,749.10	\$ 40,294.50	\$ 20,800	\$ 214,200	\$ 46,860.00
26	\$ 8,238	\$ 46,264	\$ 167,934	\$ 10,000	\$ 9,400	\$ 7,050	\$ 34,688.38	\$ 192,211.62	\$ 40,704.00	\$ 20,800	\$ 214,200	\$ 46,860.00
27	\$ 6,717	\$ 46,264	\$ 128,387	\$ 10,000	\$ 9,400	\$ 7,050	\$ 33,167.35	\$ 193,732.65	\$ 41,129.89	\$ 20,800	\$ 214,200	\$ 46,860.00
28	\$ 5,135	\$ 46,264	\$ 87,258	\$ 10,000	\$ 9,400	\$ 7,050	\$ 31,585.48	\$ 195,314.52	\$ 41,572.82	\$ 20,800	\$ 214,200	\$ 46,860.00
29	\$ 3,490	\$ 46,264	\$ 44,485	\$ 10,000	\$ 9,400	\$ 7,050	\$ 29,940.34	\$ 196,959.66	\$ 42,033.46	\$ 20,800	\$ 214,200	\$ 46,860.00
30	\$ 1,779	\$ 46,264	\$ (0)	\$ 10,000	\$ 9,400	\$ 7,050	\$ 28,229.39	\$ 198,670.61	\$ 42,512.52	\$ 20,800	\$ 214,200	\$ 4,347

PV @ 5% = \$ 158,637

TABLE 12

Year	Value	MARRIED		2018		2018		2018		2018	
		Mortgage	\$ 800,000	Property Tax 1% of Home value	State Income Tax –4% Income	Gifts to Charity 3% Income	2018 Total Deductions	2018 Taxable Income Itemize	2018 Standard Deduction	Tax Owed	Tax Owed
1	\$ 32,000	\$ 46,264	\$ 785,736	\$ 10,000	\$ 9,400	\$ 7,050	\$ 47,050	\$ 187,950	\$ 33,687	\$ 24,000	\$ 211,000
2	\$ 31,429	\$ 46,264	\$ 770,901	\$ 10,000	\$ 9,400	\$ 7,050	\$ 47,050	\$ 187,950	\$ 33,687	\$ 24,000	\$ 211,000
3	\$ 30,836	\$ 46,264	\$ 755,473	\$ 10,000	\$ 9,400	\$ 7,050	\$ 47,050	\$ 187,950	\$ 33,687	\$ 24,000	\$ 211,000
4	\$ 30,219	\$ 46,264	\$ 739,428	\$ 10,000	\$ 9,400	\$ 7,050	\$ 47,050	\$ 187,950	\$ 33,687	\$ 24,000	\$ 211,000
5	\$ 29,577	\$ 46,264	\$ 722,741	\$ 10,000	\$ 9,400	\$ 7,050	\$ 46,627	\$ 188,373	\$ 33,788	\$ 24,000	\$ 211,000
6	\$ 28,910	\$ 46,264	\$ 705,387	\$ 10,000	\$ 9,400	\$ 7,050	\$ 45,960	\$ 189,040	\$ 33,949	\$ 24,000	\$ 211,000
7	\$ 28,215	\$ 46,264	\$ 687,338	\$ 10,000	\$ 9,400	\$ 7,050	\$ 45,265	\$ 189,735	\$ 34,115	\$ 24,000	\$ 211,000
8	\$ 27,494	\$ 46,264	\$ 668,568	\$ 10,000	\$ 9,400	\$ 7,050	\$ 44,544	\$ 190,456	\$ 34,289	\$ 24,000	\$ 211,000
9	\$ 26,743	\$ 46,264	\$ 649,046	\$ 10,000	\$ 9,400	\$ 7,050	\$ 43,793	\$ 191,207	\$ 34,469	\$ 24,000	\$ 211,000
10	\$ 25,962	\$ 46,264	\$ 628,744	\$ 10,000	\$ 9,400	\$ 7,050	\$ 43,012	\$ 191,988	\$ 34,656	\$ 24,000	\$ 211,000
11	\$ 25,150	\$ 46,264	\$ 607,630	\$ 10,000	\$ 9,400	\$ 7,050	\$ 42,200	\$ 192,800	\$ 34,851	\$ 24,000	\$ 211,000
12	\$ 24,305	\$ 46,264	\$ 585,671	\$ 10,000	\$ 9,400	\$ 7,050	\$ 41,355	\$ 193,645	\$ 35,054	\$ 24,000	\$ 211,000
13	\$ 23,427	\$ 46,264	\$ 562,833	\$ 10,000	\$ 9,400	\$ 7,050	\$ 40,477	\$ 194,523	\$ 35,265	\$ 24,000	\$ 211,000
14	\$ 22,513	\$ 46,264	\$ 539,083	\$ 10,000	\$ 9,400	\$ 7,050	\$ 39,563	\$ 195,437	\$ 35,484	\$ 24,000	\$ 211,000
15	\$ 21,563	\$ 46,264	\$ 514,382	\$ 10,000	\$ 9,400	\$ 7,050	\$ 38,613	\$ 196,387	\$ 35,712	\$ 24,000	\$ 211,000
16	\$ 20,575	\$ 46,264	\$ 488,693	\$ 10,000	\$ 9,400	\$ 7,050	\$ 37,625	\$ 197,375	\$ 35,949	\$ 24,000	\$ 211,000
17	\$ 19,548	\$ 46,264	\$ 461,977	\$ 10,000	\$ 9,400	\$ 7,050	\$ 36,598	\$ 198,402	\$ 36,196	\$ 24,000	\$ 211,000
18	\$ 18,479	\$ 46,264	\$ 434,192	\$ 10,000	\$ 9,400	\$ 7,050	\$ 35,529	\$ 199,471	\$ 36,452	\$ 24,000	\$ 211,000
19	\$ 17,368	\$ 46,264	\$ 405,295	\$ 10,000	\$ 9,400	\$ 7,050	\$ 34,418	\$ 200,582	\$ 36,719	\$ 24,000	\$ 211,000
20	\$ 16,212	\$ 46,264	\$ 375,243	\$ 10,000	\$ 9,400	\$ 7,050	\$ 33,262	\$ 201,738	\$ 36,996	\$ 24,000	\$ 211,000
21	\$ 15,010	\$ 46,264	\$ 343,399	\$ 10,000	\$ 9,400	\$ 7,050	\$ 32,060	\$ 202,940	\$ 37,285	\$ 24,000	\$ 211,000
22	\$ 13,760	\$ 46,264	\$ 311,484	\$ 10,000	\$ 9,400	\$ 7,050	\$ 30,810	\$ 204,190	\$ 37,585	\$ 24,000	\$ 211,000
23	\$ 12,459	\$ 46,264	\$ 277,680	\$ 10,000	\$ 9,400	\$ 7,050	\$ 29,509	\$ 205,491	\$ 37,897	\$ 24,000	\$ 211,000
24	\$ 11,107	\$ 46,264	\$ 242,523	\$ 10,000	\$ 9,400	\$ 7,050	\$ 28,157	\$ 206,843	\$ 38,221	\$ 24,000	\$ 211,000
25	\$ 9,701	\$ 46,264	\$ 205,959	\$ 10,000	\$ 9,400	\$ 7,050	\$ 26,751	\$ 208,249	\$ 38,559	\$ 24,000	\$ 211,000
26	\$ 8,238	\$ 46,264	\$ 167,934	\$ 10,000	\$ 9,400	\$ 7,050	\$ 25,288	\$ 209,712	\$ 38,910	\$ 24,000	\$ 211,000
27	\$ 6,717	\$ 46,264	\$ 128,387	\$ 10,000	\$ 9,400	\$ 7,050	\$ 23,767	\$ 211,233	\$ 39,275	\$ 24,000	\$ 211,000
28	\$ 5,135	\$ 46,264	\$ 87,258	\$ 10,000	\$ 9,400	\$ 7,050	\$ 22,185	\$ 212,815	\$ 39,654	\$ 24,000	\$ 211,000
29	\$ 3,490	\$ 46,264	\$ 44,485	\$ 10,000	\$ 9,400	\$ 7,050	\$ 20,540	\$ 214,460	\$ 40,049	\$ 24,000	\$ 211,000
30	\$ 1,779	\$ 46,264	\$ (0)	\$ 10,000	\$ 9,400	\$ 7,050	\$ 18,829	\$ 216,171	\$ 40,460	\$ 24,000	\$ 211,000

PV @ 5% = \$ 59,244

TABLE 13

Filing status	2017	2018	SUMMARY		
	Present value of tax savings	Present value of tax savings	Difference	% Decline	Difference/Home value
Income					
\$60,000	\$23,547	\$22,462	\$1,085	4.6%	0.43%
\$120,000	\$79,052	\$62,735	\$16,317	20.6%	3.26%
\$235,000	\$210,740	\$147,030	\$63,710	30.2%	6.37%

Filing status Married, filing joint	2017	2018			
	Present value of tax savings	Present value of tax savings	Difference	% Decline	Difference/Home value
Income					
\$60,000	\$1,597	0	\$1,597	100.0%	0.64%
\$120,000	\$47,551	\$7,637	\$39,914	83.9%	7.98%
\$235,000	\$158,637	\$59,244	\$99,393	62.7%	9.94%