

Approved January 31, 1985
Date

MINUTES OF THE Senate COMMITTEE ON Assessment and Taxation

The meeting was called to order by Senator Fred A. Kerr at
Chairperson

11:00 a.m. ~~XXX~~ on Wednesday, January 30, 1985 in room 526-S of the Capitol.

All members were present ~~XXX~~:

Committee staff present:

Tom Severn, Research Department
Melinda Hanson, Research Department
Don Hayward, Revisor's Office
LaVonne Mumert, Secretary to the Committee

Conferees appearing before the committee:

Tom Severn, Research Department

Senator Karr moved that the minutes of the January 30, 1985 meeting be approved. Senator Thiessen seconded the motion, and the motion carried.

Tom Severn reviewed a memorandum (Attachment 1) describing the interrelationship of certain aspects of the Kansas income tax. He also used a series of graphs and tables (Attachment 2). Dr. Severn said that the study is limited to just the effects of the federal tax rate, the Kansas standard deduction and the federal income tax deduction under both current law and the booster tax. The booster tax was expected to yield 45 million dollars in 1984 and 50 million in 1985. The preliminary figure for the first year of the booster tax is 49.9 million dollars. Dr. Severn pointed out that this does include a few very large returns outside the range of what was expected and it is not certain that those extremely large returns will continue. Graphs showing marginal tax rate spurts were discussed. Dr. Severn stressed that the graphs are only valid for a given example for a specific set of circumstances. He explained that while it is possible to develop a formula that will follow a given set of deductions to correspond to the federal tax, it is impossible to have a formula that would work at all levels. Answering questions from Committee members, Dr. Severn said it would be his opinion that income tax payers in Kansas have experienced a decreased total income tax burden with the lowering of the federal tax and the booster tax in place.

Meeting adjourned.

ASSESSMENT AND TAXATION

**OBSERVERS
(PLEASE PRINT)**

MEMORANDUM

January 29, 1985

TO: Senate Committee on Assessment and Taxation
FROM: Kansas Legislative Research Department
RE: Aspects of the Kansas Income Tax Structure

Introduction. This memorandum presents a recent effort by our Department to explore certain aspects of the Kansas income tax, specifically, what happens to federal and state income taxes as income varies? In this case, we examine two examples: a single taxpayer using the standard deduction and a married couple claiming three personal exemptions. Income is varied from \$1,000 to \$200,000, and federal and state income taxes are computed for each income level. Other things ordinarily change as incomes change, such as increased deductible expenses (mortgage interest, personal property tax, medical and charity outlays) and diversion of income to exempt sources (as by purchasing tax-exempt securities and tax deferral plans), but this study is limited to the effects of the federal tax rate, the Kansas standard deduction, and the federal income tax deduction (under both current law and the booster tax).

The Booster Tax. The 1983 Legislature passed S.B. 436, now commonly called the booster tax, which limited the federal income tax deduction to a maximum of \$5,000 (\$10,000 for a joint return) or one-half the federal income tax liability, whichever is greater. The limitation was limited to tax years 1983 and 1984, and was expected to raise approximately \$42.1 million in its first year. According to a recent report from the Department of Revenue, additional revenue from the first year of the booster tax was \$49.9 million. The booster tax was "sunsetted" on December 31, 1984.

Effective Marginal Rates. This section will develop the concept of the effective marginal rate for the example taxpayers. Table I presents data for the single individual, and Table II presents data for the married couple. The first column is federal Adjusted Gross Income (AGI). The tables assume that Kansas AGI is the same as federal AGI. Federal taxable income is determined by subtracting personal exemption(s) from federal AGI. For tax year 1985, the personal exemption at the federal level is \$1,040 as a result of the first year of indexing the federal tax. Column 3 is the federal liability as determined from the 1984 federal tables, indexed at 4.08 percent and rounded to the nearest whole dollar. The liabilities we computed could vary from the official federal table by a dollar or two because of rounding, but the errors should not cumulate. Kansas taxable income, shown in Column 4, is determined by subtracting the Kansas personal exemption(s) (\$1,000 each), the Kansas standard deduction amount (16 percent of AGI but not less than \$1,700 nor more than \$2,400 on a single return and not less than \$2,100 nor more than \$2,800 on a joint return), and the federal income tax from Kansas AGI. The Kansas income tax is computed from the Kansas taxable income and is shown in Column 5. The marginal Kansas income tax, shown in Column 6, is the increase in tax associated with a \$1,000 increase in income, with all other factor held constant. Column 7 converts the increase to a rate (e.g., 20 percent) by dividing the amount in Column 6 by \$1,000. The last five columns repeat this calculation sequence but limit the federal income tax deduction (shown in the first column under "booster tax") to the amount permitted by S.B. 436.

Comparison of Effective and Statutory Marginal Rates. The effective marginal rate obviously is distinct from the statutory rates set out in the Kansas rate brackets (K.S.A. 79-32,110). The rate brackets are expressed in terms of taxable income. The effective marginal rate is expressed in terms of AGI, and thus is valid only for a given set of conditions, e.g., the assumptions used to calculate Tables I and II. (A different set of assumptions would result in a different set of effective marginal rates.)

Analysis of Effective Marginal Rates. Figures I and II present the effective marginal rates for current law and with the booster tax, as shown in Tables I and II, respectively, in the form of a graph. In each case the lower line traces the rate under the current law and the upper line traces the rate under the booster tax. It can be seen that under current law the rate at first increases at higher incomes, and then decreases. Peak rates occur at AGI of \$30,000 for the single return (6.0 percent) and \$32,000 for the joint return (5.6 percent), and in both cases the rates begin to decline almost immediately, to 4.5 percent at the higher income levels. Under the booster tax, rates increase sharply when the federal income tax limitation first applies. Peak rates for both single and joint returns equal the statutory marginal rate of 9.0 percent. When half of the federal income tax exceeds the \$5,000 or \$10,000 limitation, the effective marginal rate falls sharply -- to 7.1 percent on both the single and joint returns, and eventually to 6.8 percent on very high incomes.

Progressivity. Most authorities define progressivity in terms of average effective rates that increase as income increases. This memorandum has focused on changes in taxes measured over small changes in incomes — a marginal rate. Average rates will move toward marginal rates as income increases; thus, a marginal rate exceeding the average rate would be consistent with rising average rates and the conventional concept of progressivity, even if the marginal rate were itself stable or falling slightly. Thus the effective marginal rate would generally be a more stringent standard by which to determine progressivity.

Federal Rate Brackets. Aside from the Kansas tax brackets themselves, the largest single influence on the Kansas effective marginal rate is the progressive nature of the federal tax brackets. Another significant factor is the increasing standard deduction (within the narrow limits stated earlier).

Single Taxpayer Using Standard Deduction

Table I

Federal Adjusted Gross Income	CURRENT LAW (WITHOUT BOOSTER TAX)						WITH BOOSTER TAX					
	Federal Taxable Income	Federal Income Tax Liability	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	
\$1,000	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0	\$0	\$0	0.0%	
2,000	960	0	0	0	0	0.0	0	0	0	0	0.0	
3,000	1,960	0	300	6	6	0.6	0	300	6	6	0.6	
4,000	2,960	63	1,237	25	19	1.9	63	1,237	25	19	1.9	
5,000	3,960	176	2,124	44	20	2.0	176	2,124	44	20	2.0	
6,000	4,960	304	2,996	75	31	3.1	304	2,996	75	31	3.1	
7,000	5,960	444	3,856	109	34	3.4	444	3,856	109	34	3.4	
8,000	6,960	586	4,715	144	34	3.4	586	4,715	144	34	3.4	
9,000	7,960	736	5,565	183	40	4.0	736	5,565	183	40	4.0	
10,000	8,960	887	6,413	226	42	4.2	887	6,413	226	42	4.2	
11,000	9,960	1,047	7,193	268	42	4.2	1,047	7,193	268	42	4.2	
12,000	10,960	1,207	7,873	312	44	4.4	1,207	7,873	312	44	4.4	
13,000	11,960	1,382	8,538	355	43	4.3	1,382	8,538	355	43	4.3	
14,000	12,960	1,562	9,198	398	43	4.3	1,562	9,198	398	43	4.3	
15,000	13,960	1,752	9,848	440	42	4.2	1,752	9,848	440	42	4.2	
16,000	14,960	1,952	10,648	499	58	5.8	1,952	10,648	499	58	5.8	
17,000	15,960	2,164	11,437	558	59	5.9	2,164	11,437	558	59	5.9	
18,000	16,960	2,394	12,207	615	58	5.8	2,394	12,207	615	58	5.8	
19,000	17,960	2,624	12,977	673	58	5.8	2,624	12,977	673	58	5.8	
20,000	18,960	2,854	13,746	731	58	5.8	2,854	13,746	731	58	5.8	
21,000	19,960	3,114	14,486	786	56	5.6	3,114	14,486	786	56	5.6	
22,000	20,960	3,374	15,226	842	56	5.6	3,374	15,226	842	56	5.6	
23,000	21,960	3,634	15,966	897	56	5.6	3,634	15,966	897	56	5.6	
24,000	22,960	3,894	16,706	953	55	5.5	3,894	16,706	953	55	5.5	
25,000	23,960	4,154	17,446	1,008	56	5.6	4,154	17,446	1,008	56	5.6	
26,000	24,960	4,433	18,167	1,063	54	5.4	4,433	18,167	1,063	54	5.4	
27,000	25,960	4,733	18,867	1,115	52	5.2	4,733	18,867	1,115	52	5.2	
28,000	26,960	5,033	19,567	1,168	53	5.3	5,000	19,600	1,170	55	5.5	
29,000	27,960	5,333	20,267	1,223	55	5.5	5,000	20,600	1,251	81	8.1	
30,000	28,960	5,633	20,967	1,282	60	6.0	5,000	21,600	1,336	85	8.5	
31,000	29,960	5,933	21,667	1,342	60	6.0	5,000	22,600	1,421	85	8.5	
32,000	30,960	6,271	22,329	1,398	56	5.6	5,000	23,600	1,506	85	8.5	
33,000	31,960	6,611	22,989	1,454	56	5.6	5,000	24,600	1,591	85	8.5	
34,000	32,960	6,951	23,649	1,510	56	5.6	5,000	25,600	1,679	88	8.8	
35,000	33,960	7,291	24,309	1,566	56	5.6	5,000	26,600	1,769	90	9.0	
36,000	34,960	7,631	24,969	1,622	56	5.6	5,000	27,600	1,859	90	9.0	
37,000	35,960	7,992	25,608	1,680	57	5.7	5,000	28,600	1,949	90	9.0	
38,000	36,960	8,372	26,228	1,736	56	5.6	5,000	29,600	2,039	90	9.0	
39,000	37,960	8,752	26,848	1,791	56	5.6	5,000	30,600	2,129	90	9.0	
40,000	38,960	9,132	27,468	1,847	56	5.6	5,000	31,600	2,219	90	9.0	
41,000	39,960	9,512	28,088	1,903	56	5.6	5,000	32,600	2,309	90	9.0	
42,000	40,960	9,892	28,708	1,959	56	5.6	5,000	33,600	2,399	90	9.0	
43,000	41,960	10,272	29,328	2,015	56	5.6	5,136	34,464	2,477	78	7.8	
44,000	42,960	10,652	29,948	2,070	56	5.6	5,326	35,274	2,550	73	7.3	
45,000	43,960	11,063	30,537	2,123	53	5.3	5,532	36,068	2,621	71	7.1	
46,000	44,960	11,483	31,117	2,175	52	5.2	5,742	36,858	2,692	71	7.1	
47,000	45,960	11,903	31,697	2,228	52	5.2	5,952	37,648	2,763	71	7.1	
48,000	46,960	12,323	32,277	2,280	52	5.2	6,162	38,438	2,834	71	7.1	
49,000	47,960	12,743	32,857	2,332	52	5.2	6,372	39,228	2,906	71	7.1	
50,000	48,960	13,163	33,437	2,384	52	5.2	6,582	40,018	2,977	71	7.1	

Single Taxpayer Using Standard Deduction

Table I

Federal Adjusted Gross Income	Federal Taxable Income	Federal Income Tax Liability	CURRENT LAW (WITHOUT BOOSTER TAX)					WITH BOOSTER TAX				
			Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	
\$51,000	\$49,960	\$13,583	\$34,017	\$2,436	\$52	5.2%	\$6,792	\$40,808	\$3,048	\$71	7.1%	
52,000	50,960	14,003	34,597	2,489	52	5.2	7,002	41,598	3,119	71	7.1	
53,000	51,960	14,423	35,177	2,541	52	5.2	7,212	42,388	3,190	71	7.1	
54,000	52,960	14,843	35,757	2,593	52	5.2	7,422	43,178	3,261	71	7.1	
55,000	53,960	15,263	36,337	2,645	52	5.2	7,632	43,968	3,332	71	7.1	
56,000	54,960	15,683	36,917	2,697	52	5.2	7,842	44,758	3,403	71	7.1	
57,000	55,960	16,103	37,497	2,750	52	5.2	8,052	45,548	3,474	71	7.1	
58,000	56,960	16,523	38,077	2,802	52	5.2	8,262	46,338	3,545	71	7.1	
59,000	57,960	16,944	38,636	2,852	50	5.0	8,482	47,118	3,616	70	7.0	
60,000	58,960	17,444	39,156	2,899	47	4.7	8,722	47,878	3,684	68	6.8	
61,000	59,960	17,924	39,676	2,946	47	4.7	8,962	48,638	3,752	68	6.8	
62,000	60,960	18,404	40,196	2,993	47	4.7	9,202	49,398	3,821	68	6.8	
63,000	61,960	18,884	40,716	3,039	47	4.7	9,442	50,158	3,889	68	6.8	
64,000	62,960	19,364	41,236	3,086	47	4.7	9,682	50,918	3,958	68	6.8	
65,000	63,960	19,844	41,756	3,133	47	4.7	9,922	51,678	4,026	68	6.8	
66,000	64,960	20,324	42,276	3,180	47	4.7	10,162	52,438	4,094	68	6.8	
67,000	65,960	20,804	42,796	3,227	47	4.7	10,402	53,198	4,163	68	6.8	
68,000	66,960	21,284	43,316	3,273	47	4.7	10,642	53,958	4,231	68	6.8	
69,000	67,960	21,764	43,836	3,320	47	4.7	10,882	54,718	4,300	68	6.8	
70,000	68,960	22,244	44,356	3,367	47	4.7	11,122	55,478	4,368	68	6.8	
71,000	69,960	22,724	44,876	3,414	47	4.7	11,362	56,238	4,436	68	6.8	
72,000	70,960	23,204	45,396	3,461	47	4.7	11,602	56,998	4,505	68	6.8	
73,000	71,960	23,684	45,916	3,507	47	4.7	11,842	57,758	4,573	68	6.8	
74,000	72,960	24,164	46,436	3,554	47	4.7	12,082	58,518	4,642	68	6.8	
75,000	73,960	24,644	46,956	3,601	47	4.7	12,322	59,278	4,710	68	6.8	
76,000	74,960	25,124	47,476	3,648	47	4.7	12,562	60,038	4,778	68	6.8	
77,000	75,960	25,604	47,996	3,695	47	4.7	12,802	60,798	4,847	68	6.8	
78,000	76,960	26,084	48,516	3,741	47	4.7	13,042	61,558	4,915	68	6.8	
79,000	77,960	26,564	49,036	3,788	47	4.7	13,282	62,318	4,984	68	6.8	
80,000	78,960	27,044	49,556	3,835	47	4.7	13,522	63,078	5,052	68	6.8	
81,000	79,960	27,524	50,076	3,882	47	4.7	13,762	63,838	5,120	68	6.8	
82,000	80,960	28,004	50,596	3,929	47	4.7	14,002	64,598	5,189	68	6.8	
83,000	81,960	28,484	51,116	3,975	47	4.7	14,242	65,358	5,257	68	6.8	
84,000	82,960	28,964	51,636	4,022	47	4.7	14,482	66,118	5,326	68	6.8	
85,000	83,960	29,444	52,156	4,069	47	4.7	14,722	66,878	5,394	68	6.8	
86,000	84,960	29,924	52,676	4,116	47	4.7	14,962	67,638	5,462	68	6.8	
87,000	85,960	30,421	53,179	4,161	45	4.5	15,211	68,390	5,530	68	6.8	
88,000	86,960	30,921	53,679	4,206	45	4.5	15,461	69,140	5,598	68	6.8	
89,000	87,960	31,421	54,179	4,251	45	4.5	15,711	69,890	5,665	68	6.8	
90,000	88,960	31,921	54,679	4,296	45	4.5	15,961	70,640	5,733	68	6.8	
91,000	89,960	32,421	55,179	4,341	45	4.5	16,211	71,390	5,800	68	6.8	
92,000	90,960	32,921	55,679	4,386	45	4.5	16,461	72,140	5,868	68	6.8	
93,000	91,960	33,421	56,179	4,431	45	4.5	16,711	72,890	5,935	68	6.8	
94,000	92,960	33,921	56,679	4,476	45	4.5	16,961	73,640	6,003	68	6.8	
95,000	93,960	34,421	57,179	4,521	45	4.5	17,211	74,390	6,070	67	6.7	
96,000	94,960	34,921	57,679	4,566	45	4.5	17,461	75,140	6,138	68	6.8	
97,000	95,960	35,421	58,179	4,611	45	4.5	17,711	75,890	6,205	68	6.8	
98,000	96,960	35,921	58,679	4,656	45	4.5	17,961	76,640	6,273	68	6.8	
99,000	97,960	36,421	59,179	4,701	45	4.5	18,211	77,390	6,340	68	6.8	
100,000	98,960	36,921	59,679	4,746	45	4.5	18,461	78,140	6,408	68	6.8	

Single Taxpayer Using Standard Deduction

Table I

Federal Adjusted Gross Income	Federal Taxable Income	Federal Income Tax Liability	CURRENT LAW (WITHOUT BOOSTER TAX)					WITH BOOSTER TAX				
			Kansas Taxable Income	Kansas Income Tax	Kansas Income Tax	Marginal Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	
\$101,000	\$99,960	\$37,421	\$60,179	\$4,791	\$45	4.5%	\$18,711	\$78,890	\$6,475	\$68	6.8%	
102,000	100,960	37,921	60,679	4,836	45	4.5	18,961	79,640	6,543	68	6.8	
103,000	101,960	38,421	61,179	4,881	45	4.5	19,211	80,390	6,610	68	6.8	
104,000	102,960	38,921	61,679	4,926	45	4.5	19,461	81,140	6,678	68	6.8	
105,000	103,960	39,421	62,179	4,971	45	4.5	19,711	81,890	6,745	68	6.8	
106,000	104,960	39,921	62,679	5,016	45	4.5	19,961	82,640	6,813	68	6.8	
107,000	105,960	40,421	63,179	5,061	45	4.5	20,211	83,390	6,880	68	6.8	
108,000	106,960	40,921	63,679	5,106	45	4.5	20,461	84,140	6,948	68	6.8	
109,000	107,960	41,421	64,179	5,151	45	4.5	20,711	84,890	7,015	68	6.8	
110,000	108,960	41,921	64,679	5,196	45	4.5	20,961	85,640	7,083	68	6.8	
111,000	109,960	42,421	65,179	5,241	45	4.5	21,211	86,390	7,150	68	6.8	
112,000	110,960	42,921	65,679	5,286	45	4.5	21,461	87,140	7,218	68	6.8	
113,000	111,960	43,421	66,179	5,331	45	4.5	21,711	87,890	7,285	68	6.8	
114,000	112,960	43,921	66,679	5,376	45	4.5	21,961	88,640	7,353	68	6.8	
115,000	113,960	44,421	67,179	5,421	45	4.5	22,211	89,390	7,420	68	6.8	
116,000	114,960	44,921	67,679	5,466	45	4.5	22,461	90,140	7,488	68	6.8	
117,000	115,960	45,421	68,179	5,511	45	4.5	22,711	90,890	7,555	68	6.8	
118,000	116,960	45,921	68,679	5,556	45	4.5	22,961	91,640	7,623	68	6.8	
119,000	117,960	46,421	69,179	5,601	45	4.5	23,211	92,390	7,690	68	6.8	
120,000	118,960	46,921	69,679	5,646	45	4.5	23,461	93,140	7,758	68	6.8	
121,000	119,960	47,421	70,179	5,691	45	4.5	23,711	93,890	7,825	68	6.8	
122,000	120,960	47,921	70,679	5,736	45	4.5	23,961	94,640	7,893	68	6.8	
123,000	121,960	48,421	71,179	5,781	45	4.5	24,211	95,390	7,960	68	6.8	
124,000	122,960	48,921	71,679	5,826	45	4.5	24,461	96,140	8,028	68	6.8	
125,000	123,960	49,421	72,179	5,871	45	4.5	24,711	96,890	8,095	68	6.8	
126,000	124,960	49,921	72,679	5,916	45	4.5	24,961	97,640	8,163	68	6.8	
127,000	125,960	50,421	73,179	5,961	45	4.5	25,211	98,390	8,230	68	6.8	
128,000	126,960	50,921	73,679	6,006	45	4.5	25,461	99,140	8,298	68	6.8	
129,000	127,960	51,421	74,179	6,051	45	4.5	25,711	99,890	8,365	68	6.8	
130,000	128,960	51,921	74,679	6,096	45	4.5	25,961	100,640	8,433	68	6.8	
131,000	129,960	52,421	75,179	6,141	45	4.5	26,211	101,390	8,500	68	6.8	
132,000	130,960	52,921	75,679	6,186	45	4.5	26,461	102,140	8,568	68	6.8	
133,000	131,960	53,421	76,179	6,231	45	4.5	26,711	102,890	8,635	68	6.8	
134,000	132,960	53,921	76,679	6,276	45	4.5	26,961	103,640	8,703	68	6.8	
135,000	133,960	54,421	77,179	6,321	45	4.5	27,211	104,390	8,770	68	6.8	
136,000	134,960	54,921	77,679	6,366	45	4.5	27,461	105,140	8,838	68	6.8	
137,000	135,960	55,421	78,179	6,411	45	4.5	27,711	105,890	8,905	68	6.8	
138,000	136,960	55,921	78,679	6,456	45	4.5	27,961	106,640	8,973	68	6.8	
139,000	137,960	56,421	79,179	6,501	45	4.5	28,211	107,390	9,040	68	6.8	
140,000	138,960	56,921	79,679	6,546	45	4.5	28,461	108,140	9,108	68	6.8	
141,000	139,960	57,421	80,179	6,591	45	4.5	28,711	108,890	9,175	68	6.8	
142,000	140,960	57,921	80,679	6,636	45	4.5	28,961	109,640	9,243	68	6.8	
143,000	141,960	58,421	81,179	6,681	45	4.5	29,211	110,390	9,310	68	6.8	
144,000	142,960	58,921	81,679	6,726	45	4.5	29,461	111,140	9,378	68	6.8	
145,000	143,960	59,421	82,179	6,771	45	4.5	29,711	111,890	9,445	68	6.8	
146,000	144,960	59,921	82,679	6,816	45	4.5	29,961	112,640	9,513	68	6.8	
147,000	145,960	60,421	83,179	6,861	45	4.5	30,211	113,390	9,580	68	6.8	
148,000	146,960	60,921	83,679	6,906	45	4.5	30,461	114,140	9,648	68	6.8	
149,000	147,960	61,421	84,179	6,951	45	4.5	30,711	114,890	9,715	68	6.8	
150,000	148,960	61,921	84,679	6,996	45	4.5	30,961	115,640	9,783	68	6.8	

Single Taxpayer Using Standard Deduction

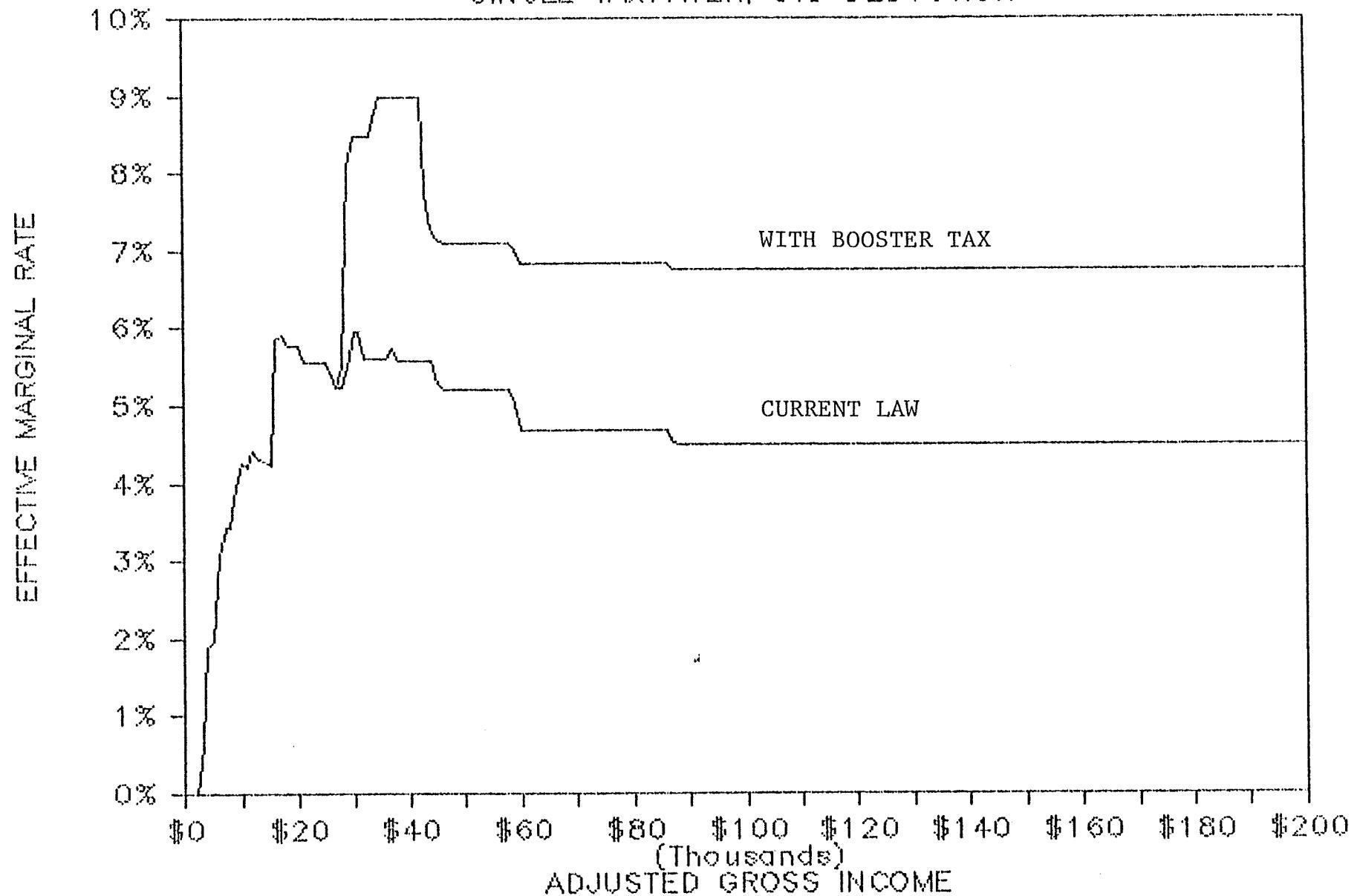
Table I

Federal Adjusted Gross Income	Federal Taxable Income	Federal Income Tax Liability	CURRENT LAW (WITHOUT BOOSTER TAX)					WITH BOOSTER TAX				
			Kansas Taxable Income	Kansas Tax	Marginal Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Income Tax	Effective Marginal Rate	
\$151,000	\$149,960	\$62,421	\$85,179	\$7,041	\$45	4.5%	\$31,211	\$116,390	\$9,850	\$68	6.8%	
152,000	150,960	62,921	85,679	7,086	45	4.5	31,461	117,140	9,918	68	6.8	
153,000	151,960	63,421	86,179	7,131	45	4.5	31,711	117,890	9,985	68	6.8	
154,000	152,960	63,921	86,679	7,176	45	4.5	31,961	118,640	10,053	68	6.8	
155,000	153,960	64,421	87,179	7,221	45	4.5	32,211	119,390	10,120	68	6.8	
156,000	154,960	64,921	87,679	7,266	45	4.5	32,461	120,140	10,188	68	6.8	
157,000	155,960	65,421	88,179	7,311	45	4.5	32,711	120,890	10,255	68	6.8	
158,000	156,960	65,921	88,679	7,356	45	4.5	32,961	121,640	10,323	68	6.8	
159,000	157,960	66,421	89,179	7,401	45	4.5	33,211	122,390	10,390	68	6.8	
160,000	158,960	66,921	89,679	7,446	45	4.5	33,461	123,140	10,458	68	6.8	
161,000	159,960	67,421	90,179	7,491	45	4.5	33,711	123,890	10,525	68	6.8	
162,000	160,960	67,921	90,679	7,536	45	4.5	33,961	124,640	10,593	68	6.8	
163,000	161,960	68,421	91,179	7,581	45	4.5	34,211	125,390	10,660	68	6.8	
164,000	162,960	68,921	91,679	7,626	45	4.5	34,461	126,140	10,728	68	6.8	
165,000	163,960	69,421	92,179	7,671	45	4.5	34,711	126,890	10,795	68	6.8	
166,000	164,960	69,921	92,679	7,716	45	4.5	34,961	127,640	10,863	68	6.8	
167,000	165,960	70,421	93,179	7,761	45	4.5	35,211	128,390	10,930	68	6.8	
168,000	166,960	70,921	93,679	7,806	45	4.5	35,461	129,140	10,998	68	6.8	
169,000	167,960	71,421	94,179	7,851	45	4.5	35,711	129,890	11,065	68	6.8	
170,000	168,960	71,921	94,679	7,896	45	4.5	35,961	130,640	11,133	68	6.8	
171,000	169,960	72,421	95,179	7,941	45	4.5	36,211	131,390	11,200	68	6.8	
172,000	170,960	72,921	95,679	7,986	45	4.5	36,461	132,140	11,268	68	6.8	
173,000	171,960	73,421	96,179	8,031	45	4.5	36,711	132,890	11,335	68	6.8	
174,000	172,960	73,921	96,679	8,076	45	4.5	36,961	133,640	11,403	68	6.8	
175,000	173,960	74,421	97,179	8,121	45	4.5	37,211	134,390	11,470	68	6.8	
176,000	174,960	74,921	97,679	8,166	45	4.5	37,461	135,140	11,538	68	6.8	
177,000	175,960	75,421	98,179	8,211	45	4.5	37,711	135,890	11,605	68	6.8	
178,000	176,960	75,921	98,679	8,256	45	4.5	37,961	136,640	11,673	68	6.8	
179,000	177,960	76,421	99,179	8,301	45	4.5	38,211	137,390	11,740	68	6.8	
180,000	178,960	76,921	99,679	8,346	45	4.5	38,461	138,140	11,808	68	6.8	
181,000	179,960	77,421	100,179	8,391	45	4.5	38,711	138,890	11,875	68	6.8	
182,000	180,960	77,921	100,679	8,436	45	4.5	38,961	139,640	11,943	68	6.8	
183,000	181,960	78,421	101,179	8,481	45	4.5	39,211	140,390	12,010	68	6.8	
184,000	182,960	78,921	101,679	8,526	45	4.5	39,461	141,140	12,078	68	6.8	
185,000	183,960	79,421	102,179	8,571	45	4.5	39,711	141,890	12,145	68	6.8	
186,000	184,960	79,921	102,679	8,616	45	4.5	39,961	142,640	12,213	68	6.8	
187,000	185,960	80,421	103,179	8,661	45	4.5	40,211	143,390	12,280	68	6.8	
188,000	186,960	80,921	103,679	8,706	45	4.5	40,461	144,140	12,348	68	6.8	
189,000	187,960	81,421	104,179	8,751	45	4.5	40,711	144,890	12,415	68	6.8	
190,000	188,960	81,921	104,679	8,796	45	4.5	40,961	145,640	12,483	68	6.8	
191,000	189,960	82,421	105,179	8,841	45	4.5	41,211	146,390	12,550	68	6.8	
192,000	190,960	82,921	105,679	8,886	45	4.5	41,461	147,140	12,618	68	6.8	
193,000	191,960	83,421	106,179	8,931	45	4.5	41,711	147,890	12,685	68	6.8	
194,000	192,960	83,921	106,679	8,976	45	4.5	41,961	148,640	12,753	68	6.8	
195,000	193,960	84,421	107,179	9,021	45	4.5	42,211	149,390	12,820	68	6.8	
196,000	194,960	84,921	107,679	9,066	45	4.5	42,461	150,140	12,888	68	6.8	
197,000	195,960	85,421	108,179	9,111	45	4.5	42,711	150,890	12,955	68	6.8	
198,000	196,960	85,921	108,679	9,156	45	4.5	42,961	151,640	13,023	68	6.8	
199,000	197,960	86,421	109,179	9,201	45	4.5	43,211	152,390	13,090	68	6.8	
200,000	198,960	86,921	109,679	9,246	45	4.5	43,461	153,140	13,158	68	6.8	

FIGURE I

COMPARISON OF KANSAS MARGINAL RATES

SINGLE TAXPAYER, STD DEDUCTION



Married Filing Joint Return with Three Exemptions

Table II

Federal Adjusted Gross Income	CURRENT LAW (WITHOUT BOOSTER TAX)						WITH BOOSTER TAX					
	Federal Taxable Income	Federal Income Tax Liability	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	
\$1,000	\$0	\$0	\$0	\$0	\$0	0.0%	\$0	\$0	\$0	\$0	0.0%	
2,000	0	0	0	0	0	0.0	0	0	0	0	0.0	
3,000	0	0	0	0	0	0.0	0	0	0	0	0.0	
4,000	880	0	0	0	0	0.0	0	0	0	0	0.0	
5,000	1,880	0	0	0	0	0.0	0	0	0	0	0.0	
6,000	2,880	0	900	18	18	1.8	0	900	18	18	1.8	
7,000	3,880	41	1,859	37	19	1.9	41	1,859	37	19	1.9	
8,000	4,880	161	2,739	55	18	1.8	161	2,739	55	18	1.8	
9,000	5,880	259	3,641	73	18	1.8	259	3,641	73	18	1.8	
10,000	6,880	379	4,521	98	25	2.5	379	4,521	98	25	2.5	
11,000	7,880	499	5,401	129	31	3.1	499	5,401	129	31	3.1	
12,000	8,880	638	6,262	160	31	3.1	638	6,262	160	31	3.1	
13,000	9,880	778	7,122	195	34	3.4	778	7,122	195	34	3.4	
14,000	10,880	918	7,842	224	29	2.9	918	7,842	224	29	2.9	
15,000	11,880	1,058	8,542	252	28	2.8	1,058	8,542	252	28	2.8	
16,000	12,880	1,208	9,232	279	28	2.8	1,208	9,232	279	28	2.8	
17,000	13,880	1,368	9,912	306	27	2.7	1,368	9,912	306	27	2.7	
18,000	14,880	1,528	10,672	344	37	3.7	1,528	10,672	344	37	3.7	
19,000	15,880	1,688	11,512	386	42	4.2	1,688	11,512	386	42	4.2	
20,000	16,880	1,852	12,348	427	42	4.2	1,852	12,348	427	42	4.2	
21,000	17,880	2,032	13,168	468	41	4.1	2,032	13,168	468	41	4.1	
22,000	18,880	2,212	13,988	509	41	4.1	2,212	13,988	509	41	4.1	
23,000	19,880	2,392	14,808	562	53	5.3	2,392	14,808	562	53	5.3	
24,000	20,880	2,572	15,628	616	53	5.3	2,572	15,628	616	53	5.3	
25,000	21,880	2,787	16,413	667	51	5.1	2,787	16,413	667	51	5.1	
26,000	22,880	3,007	17,193	718	51	5.1	3,007	17,193	718	51	5.1	
27,000	23,880	3,227	17,973	768	51	5.1	3,227	17,973	768	51	5.1	
28,000	24,880	3,447	18,753	819	51	5.1	3,447	18,753	819	51	5.1	
29,000	25,880	3,675	19,525	869	50	5.0	3,675	19,525	869	50	5.0	
30,000	26,880	3,925	20,275	921	52	5.2	3,925	20,275	921	52	5.2	
31,000	27,880	4,175	21,025	977	56	5.6	4,175	21,025	977	56	5.6	
32,000	28,880	4,425	21,775	1,033	56	5.6	4,425	21,775	1,033	56	5.6	
33,000	29,880	4,675	22,525	1,089	56	5.6	4,675	22,525	1,089	56	5.6	
34,000	30,880	4,925	23,275	1,146	56	5.6	4,925	23,275	1,146	56	5.6	
35,000	31,880	5,198	24,002	1,200	55	5.5	5,198	24,002	1,200	55	5.5	
36,000	32,880	5,478	24,722	1,254	54	5.4	5,478	24,722	1,254	54	5.4	
37,000	33,880	5,758	25,442	1,308	54	5.4	5,758	25,442	1,308	54	5.4	
38,000	34,880	6,038	26,162	1,362	54	5.4	6,038	26,162	1,362	54	5.4	
39,000	35,880	6,318	26,882	1,416	54	5.4	6,318	26,882	1,416	54	5.4	
40,000	36,880	6,610	27,590	1,469	53	5.3	6,610	27,590	1,469	53	5.3	
41,000	37,880	6,940	28,260	1,519	50	5.0	6,940	28,260	1,519	50	5.0	
42,000	38,880	7,270	28,930	1,570	50	5.0	7,270	28,930	1,570	50	5.0	
43,000	39,880	7,600	29,600	1,620	50	5.0	7,600	29,600	1,620	50	5.0	
44,000	40,880	7,930	30,270	1,670	50	5.0	7,930	30,270	1,670	50	5.0	
45,000	41,880	8,260	30,940	1,720	50	5.0	8,260	30,940	1,720	50	5.0	
46,000	42,880	8,590	31,610	1,771	50	5.0	8,590	31,610	1,771	50	5.0	
47,000	43,880	8,920	32,280	1,821	50	5.0	8,920	32,280	1,821	50	5.0	
48,000	44,880	9,250	32,950	1,871	50	5.0	9,250	32,950	1,871	50	5.0	
49,000	45,880	9,580	33,620	1,921	50	5.0	9,580	33,620	1,921	50	5.0	
50,000	46,880	9,910	34,290	1,972	50	5.0	9,910	34,290	1,972	50	5.0	

Married Filing Joint Return with Three Exemptions

Table II

Federal Adjusted Gross Income	CURRENT LAW (WITHOUT BOOSTER TAX)							WITH BOOSTER TAX						
	Federal Taxable Income	Federal Income Liability	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate			
\$51,000	\$47,880	\$10,251	\$34,949	\$2,021	\$49	4.9%	\$10,000	\$35,200	\$2,040	\$68	6.8%			
52,000	48,880	10,631	35,569	2,068	47	4.7	10,000	36,200	2,115	75	7.5			
53,000	49,880	11,011	36,189	2,114	47	4.7	10,000	37,200	2,190	75	7.5			
54,000	50,880	11,391	36,809	2,161	46	4.6	10,000	38,200	2,265	75	7.5			
55,000	51,880	11,771	37,429	2,207	47	4.7	10,000	39,200	2,340	75	7.5			
56,000	52,880	12,151	38,049	2,254	47	4.7	10,000	40,200	2,417	77	7.7			
57,000	53,880	12,531	38,669	2,300	47	4.7	10,000	41,200	2,502	85	8.5			
58,000	54,880	12,911	39,289	2,347	47	4.7	10,000	42,200	2,587	85	8.5			
59,000	55,880	13,291	39,909	2,393	47	4.7	10,000	43,200	2,672	85	8.5			
60,000	56,880	13,671	40,529	2,445	52	5.2	10,000	44,200	2,757	85	8.5			
61,000	57,880	14,051	41,149	2,498	53	5.3	10,000	45,200	2,842	85	8.5			
62,000	58,880	14,431	41,769	2,550	53	5.3	10,000	46,200	2,927	85	8.5			
63,000	59,880	14,811	42,389	2,603	53	5.3	10,000	47,200	3,012	85	8.5			
64,000	60,880	15,191	43,009	2,656	53	5.3	10,000	48,200	3,097	85	8.5			
65,000	61,880	15,571	43,629	2,708	53	5.3	10,000	49,200	3,182	85	8.5			
66,000	62,880	15,951	44,232	2,760	51	5.1	10,000	50,200	3,268	86	8.6			
67,000	63,880	16,331	44,812	2,809	49	4.9	10,000	51,200	3,358	90	9.0			
68,000	64,880	16,808	45,392	2,858	49	4.9	10,000	52,200	3,448	90	9.0			
69,000	65,880	17,228	45,972	2,908	49	4.9	10,000	53,200	3,538	90	9.0			
70,000	66,880	17,648	46,552	2,957	49	4.9	10,000	54,200	3,628	90	9.0			
71,000	67,880	18,068	47,132	3,006	49	4.9	10,000	55,200	3,718	90	9.0			
72,000	68,880	18,488	47,712	3,056	49	4.9	10,000	56,200	3,808	90	9.0			
73,000	69,880	18,908	48,292	3,105	49	4.9	10,000	57,200	3,898	90	9.0			
74,000	70,880	19,328	48,872	3,154	49	4.9	10,000	58,200	3,988	90	9.0			
75,000	71,880	19,748	49,452	3,203	49	4.9	10,000	59,200	4,078	90	9.0			
76,000	72,880	20,168	50,032	3,253	49	4.9	10,084	60,116	4,160	82	8.2			
77,000	73,880	20,588	50,612	3,305	52	5.2	10,294	60,906	4,232	71	7.1			
78,000	74,880	21,008	51,192	3,357	52	5.2	10,504	61,696	4,303	71	7.1			
79,000	75,880	21,428	51,772	3,410	52	5.2	10,714	62,486	4,374	71	7.1			
80,000	76,880	21,848	52,352	3,462	52	5.2	10,924	63,276	4,445	71	7.1			
81,000	77,880	22,268	52,932	3,514	52	5.2	11,134	64,066	4,516	71	7.1			
82,000	78,880	22,688	53,512	3,566	52	5.2	11,344	64,856	4,587	71	7.1			
83,000	79,880	23,108	54,092	3,618	52	5.2	11,554	65,646	4,658	71	7.1			
84,000	80,880	23,528	54,672	3,671	52	5.2	11,764	66,436	4,729	71	7.1			
85,000	81,880	23,948	55,252	3,723	52	5.2	11,974	67,226	4,800	71	7.1			
86,000	82,880	24,368	55,832	3,775	52	5.2	12,184	68,016	4,871	71	7.1			
87,000	83,880	24,788	56,412	3,827	52	5.2	12,394	68,806	4,943	71	7.1			
88,000	84,880	25,208	56,992	3,879	52	5.2	12,604	69,596	5,014	71	7.1			
89,000	85,880	25,628	57,572	3,932	52	5.2	12,814	70,386	5,085	71	7.1			
90,000	86,880	26,048	58,152	3,984	52	5.2	13,024	71,176	5,156	71	7.1			
91,000	87,880	26,468	58,732	4,036	52	5.2	13,234	71,966	5,227	71	7.1			
92,000	88,880	26,888	59,312	4,088	52	5.2	13,444	72,756	5,298	71	7.1			
93,000	89,880	27,332	59,892	4,138	50	5.0	13,666	73,534	5,368	70	7.0			
94,000	90,880	27,782	60,419	4,188	50	5.0	13,891	74,309	5,438	70	7.0			
95,000	91,880	28,232	60,969	4,237	50	5.0	14,116	75,084	5,508	70	7.0			
96,000	92,880	28,682	61,519	4,287	50	5.0	14,341	75,859	5,577	70	7.0			
97,000	93,880	29,132	62,069	4,336	50	5.0	14,566	76,634	5,647	70	7.0			
98,000	94,880	29,582	62,619	4,386	50	5.0	14,791	77,409	5,717	70	7.0			
99,000	95,880	30,032	63,169	4,435	50	5.0	15,016	78,184	5,787	70	7.0			
100,000	96,880	30,482	63,719	4,485	50	5.0	15,241	78,959	5,856	70	7.0			

Married Filing Joint Return with Three Exemptions

Table II

Federal Adjusted Gross Income	CURRENT LAW (WITHOUT BOOSTER TAX)						WITH BOOSTER TAX					
	Federal Taxable Income	Federal Income Tax Liability	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Kansas Income Tax	Effective Marginal Rate	
\$101,000	\$97,880	\$30,932	\$64,269	\$4,534	\$50	5.0%	\$15,466	\$79,734	\$5,926	\$70	7.0%	
102,000	98,880	31,382	64,819	4,584	50	5.0	15,691	80,509	5,996	70	7.0	
103,000	99,880	31,832	65,369	4,633	50	5.0	15,916	81,284	6,066	70	7.0	
104,000	100,880	32,282	65,919	4,683	50	5.0	16,141	82,059	6,135	70	7.0	
105,000	101,880	32,732	66,469	4,732	50	5.0	16,366	82,834	6,205	70	7.0	
106,000	102,880	33,182	67,019	4,782	50	5.0	16,591	83,609	6,275	70	7.0	
107,000	103,880	33,632	67,569	4,831	50	5.0	16,816	84,384	6,345	70	7.0	
108,000	104,880	34,082	68,119	4,881	50	5.0	17,041	85,159	6,414	70	7.0	
109,000	105,880	34,532	68,669	4,930	50	5.0	17,266	85,934	6,484	70	7.0	
110,000	106,880	34,982	69,219	4,980	50	5.0	17,491	86,709	6,554	70	7.0	
111,000	107,880	35,432	69,769	5,029	50	5.0	17,716	87,484	6,624	70	7.0	
112,000	108,880	35,882	70,319	5,079	50	5.0	17,941	88,259	6,693	70	7.0	
113,000	109,880	36,332	70,869	5,128	50	5.0	18,166	89,034	6,763	70	7.0	
114,000	110,880	36,782	71,419	5,178	50	5.0	18,391	89,809	6,833	70	7.0	
115,000	111,880	37,232	71,969	5,227	50	5.0	18,616	90,584	6,903	70	7.0	
116,000	112,880	37,682	72,519	5,277	50	5.0	18,841	91,359	6,972	70	7.0	
117,000	113,880	38,133	73,067	5,326	49	4.9	19,066	92,134	7,042	70	7.0	
118,000	114,880	38,623	73,577	5,372	46	4.6	19,311	92,889	7,110	68	6.8	
119,000	115,880	39,113	74,087	5,418	46	4.6	19,556	93,644	7,178	68	6.8	
120,000	116,880	39,603	74,597	5,464	46	4.6	19,801	94,399	7,246	68	6.8	
121,000	117,880	40,093	75,107	5,510	46	4.6	20,046	95,154	7,314	68	6.8	
122,000	118,880	40,583	75,617	5,556	46	4.6	20,291	95,909	7,382	68	6.8	
123,000	119,880	41,073	76,127	5,601	46	4.6	20,536	96,664	7,450	68	6.8	
124,000	120,880	41,563	76,637	5,647	46	4.6	20,781	97,419	7,518	68	6.8	
125,000	121,880	42,053	77,147	5,693	46	4.6	21,026	98,174	7,586	68	6.8	
126,000	122,880	42,543	77,657	5,739	46	4.6	21,271	98,929	7,654	68	6.8	
127,000	123,880	43,033	78,167	5,785	46	4.6	21,516	99,684	7,722	68	6.8	
128,000	124,880	43,523	78,677	5,831	46	4.6	21,761	100,439	7,789	68	6.8	
129,000	125,880	44,013	79,187	5,877	46	4.6	22,006	101,194	7,857	68	6.8	
130,000	126,880	44,503	79,697	5,923	46	4.6	22,251	101,949	7,925	68	6.8	
131,000	127,880	44,993	80,207	5,969	46	4.6	22,496	102,704	7,993	68	6.8	
132,000	128,880	45,483	80,717	6,015	46	4.6	22,741	103,459	8,061	68	6.8	
133,000	129,880	45,973	81,227	6,060	46	4.6	22,986	104,214	8,129	68	6.8	
134,000	130,880	46,463	81,737	6,106	46	4.6	23,231	104,969	8,197	68	6.8	
135,000	131,880	46,953	82,247	6,152	46	4.6	23,476	105,724	8,265	68	6.8	
136,000	132,880	47,443	82,757	6,198	46	4.6	23,721	106,479	8,333	68	6.8	
137,000	133,880	47,933	83,267	6,244	46	4.6	23,966	107,234	8,401	68	6.8	
138,000	134,880	48,423	83,777	6,290	46	4.6	24,211	107,989	8,469	68	6.8	
139,000	135,880	48,913	84,287	6,336	46	4.6	24,456	108,744	8,537	68	6.8	
140,000	136,880	49,403	84,797	6,382	46	4.6	24,701	109,499	8,605	68	6.8	
141,000	137,880	49,893	85,307	6,428	46	4.6	24,946	110,254	8,673	68	6.8	
142,000	138,880	50,383	85,817	6,474	46	4.6	25,191	111,009	8,741	68	6.8	
143,000	139,880	50,873	86,327	6,519	46	4.6	25,436	111,764	8,809	68	6.8	
144,000	140,880	51,363	86,837	6,565	46	4.6	25,681	112,519	8,877	68	6.8	
145,000	141,880	51,853	87,347	6,611	46	4.6	25,926	113,274	8,945	68	6.8	
146,000	142,880	52,343	87,857	6,657	46	4.6	26,171	114,029	9,013	68	6.8	
147,000	143,880	52,833	88,367	6,703	46	4.6	26,416	114,784	9,081	68	6.8	
148,000	144,880	53,323	88,877	6,749	46	4.6	26,661	115,539	9,148	68	6.8	
149,000	145,880	53,813	89,387	6,795	46	4.6	26,906	116,294	9,216	68	6.8	
150,000	146,880	54,303	89,897	6,841	46	4.6	27,151	117,049	9,284	68	6.8	

Married Filing Joint Return with Three Exemptions

Table II

Federal Adjusted Gross Income	CURRENT LAW (WITHOUT BOOSTER TAX)						WITH BOOSTER TAX					
	Federal Taxable Income	Federal Income Tax Liability	Kansas Taxable Income	Kansas Income Tax	Marginal Income Tax	Effective Marginal Rate	Federal Income Tax Deduction	Kansas Taxable Income	Kansas Income Tax	Marginal Income Tax	Effective Marginal Rate	
\$151,000	\$147,880	\$54,793	\$90,407	\$6,887	\$46	4.6%	\$27,396	\$117,804	\$9,352	\$68	6.8%	
152,000	148,880	55,283	90,917	6,933	46	4.6	27,641	118,559	9,420	68	6.8	
153,000	149,880	55,773	91,427	6,978	46	4.6	27,886	119,314	9,488	68	6.8	
154,000	150,880	56,263	91,937	7,024	46	4.6	28,131	120,069	9,556	68	6.8	
155,000	151,880	56,753	92,447	7,070	46	4.6	28,376	120,824	9,624	68	6.8	
156,000	152,880	57,243	92,957	7,116	46	4.6	28,621	121,579	9,692	68	6.8	
157,000	153,880	57,733	93,467	7,162	46	4.6	28,866	122,334	9,760	68	6.8	
158,000	154,880	58,223	93,977	7,208	46	4.6	29,111	123,089	9,828	68	6.8	
159,000	155,880	58,713	94,487	7,254	46	4.6	29,356	123,844	9,896	68	6.8	
160,000	156,880	59,203	94,997	7,300	46	4.6	29,601	124,599	9,964	68	6.8	
161,000	157,880	59,693	95,507	7,346	46	4.6	29,846	125,354	10,032	68	6.8	
162,000	158,880	60,183	96,017	7,392	46	4.6	30,091	126,109	10,100	68	6.8	
163,000	159,880	60,673	96,527	7,437	46	4.6	30,336	126,864	10,168	68	6.8	
164,000	160,880	61,163	97,037	7,483	46	4.6	30,581	127,619	10,236	68	6.8	
165,000	161,880	61,653	97,547	7,529	46	4.6	30,826	128,374	10,304	68	6.8	
166,000	162,880	62,143	98,057	7,575	46	4.6	31,071	129,129	10,372	68	6.8	
167,000	163,880	62,633	98,567	7,621	46	4.6	31,316	129,884	10,440	68	6.8	
168,000	164,880	63,123	99,077	7,667	46	4.6	31,561	130,639	10,507	68	6.8	
169,000	165,880	63,613	99,587	7,713	46	4.6	31,806	131,394	10,575	68	6.8	
170,000	166,880	64,103	100,097	7,759	46	4.6	32,051	132,149	10,643	68	6.8	
171,000	167,880	64,593	100,607	7,805	46	4.6	32,296	132,904	10,711	68	6.8	
172,000	168,880	65,083	101,117	7,851	46	4.6	32,541	133,659	10,779	68	6.8	
173,000	169,880	65,581	101,619	7,896	45	4.5	32,791	134,410	10,847	68	6.8	
174,000	170,880	66,081	102,119	7,941	45	4.5	33,041	135,160	10,914	68	6.8	
175,000	171,880	66,581	102,619	7,986	45	4.5	33,291	135,910	10,982	68	6.8	
176,000	172,880	67,081	103,119	8,031	45	4.5	33,541	136,660	11,049	68	6.8	
177,000	173,880	67,581	103,619	8,076	45	4.5	33,791	137,410	11,117	68	6.8	
178,000	174,880	68,081	104,119	8,121	45	4.5	34,041	138,160	11,184	68	6.8	
179,000	175,880	68,581	104,619	8,166	45	4.5	34,291	138,910	11,252	68	6.8	
180,000	176,880	69,081	105,119	8,211	45	4.5	34,541	139,660	11,319	68	6.8	
181,000	177,880	69,581	105,619	8,256	45	4.5	34,791	140,410	11,387	68	6.8	
182,000	178,880	70,081	106,119	8,301	45	4.5	35,041	141,160	11,454	68	6.8	
183,000	179,880	70,581	106,619	8,346	45	4.5	35,291	141,910	11,522	68	6.8	
184,000	180,880	71,081	107,119	8,391	45	4.5	35,541	142,660	11,589	68	6.8	
185,000	181,880	71,581	107,619	8,436	45	4.5	35,791	143,410	11,657	68	6.8	
186,000	182,880	72,081	108,119	8,481	45	4.5	36,041	144,160	11,724	68	6.8	
187,000	183,880	72,581	108,619	8,526	45	4.5	36,291	144,910	11,792	68	6.8	
188,000	184,880	73,081	109,119	8,571	45	4.5	36,541	145,660	11,859	68	6.8	
189,000	185,880	73,581	109,619	8,616	45	4.5	36,791	146,410	11,927	68	6.8	
190,000	186,880	74,081	110,119	8,661	45	4.5	37,041	147,160	11,994	68	6.8	
191,000	187,880	74,581	110,619	8,706	45	4.5	37,291	147,910	12,062	68	6.8	
192,000	188,880	75,081	111,119	8,751	45	4.5	37,541	148,660	12,129	68	6.8	
193,000	189,880	75,581	111,619	8,796	45	4.5	37,791	149,410	12,197	68	6.8	
194,000	190,880	76,081	112,119	8,841	45	4.5	38,041	150,160	12,264	68	6.8	
195,000	191,880	76,581	112,619	8,886	45	4.5	38,291	150,910	12,332	68	6.8	
196,000	192,880	77,081	113,119	8,931	45	4.5	38,541	151,660	12,399	68	6.8	
197,000	193,880	77,581	113,619	8,976	45	4.5	38,791	152,410	12,467	68	6.8	
198,000	194,880	78,081	114,119	9,021	45	4.5	39,041	153,160	12,534	68	6.8	
199,000	195,880	78,581	114,619	9,066	45	4.5	39,291	153,910	12,602	68	6.8	
200,000	196,880	79,081	115,119	9,111	45	4.5	39,541	154,660	12,669	68	6.8	

FIGURE II

