

# **The Study of Nebraska Tax Structure and Tax Burden**

Dr. Iksoo Cho

This is a part of the study of taxes, revenue, and spending in Nebraska, pursuant to AM1896, LB 407 in 2003 Legislative Session.

## **I Introduction**

The State of Nebraska has various taxes to finance appropriate services to citizens. Taxes collected by state and local governments are funded for general purpose or are deposited to cash funds for specific services.

State income taxes are the largest source of revenue for the state general fund. State sales and use tax is the second largest source of state tax revenue that is deposited into the general fund. Some specific sales taxes such as motor vehicle sales tax, motor fuel tax, and cigarette tax generally go to specific cash fund. City sales tax is returned to city treasuries. The property tax is the major revenue source for political subdivisions, especially school districts. Federal grants made up the largest fund among intergovernmental funds and often depend on matching own-source funds.

A tax expenditure is defined by statute as a revenue reduction that occurs in the tax base of the state or political subdivisions as a result of an exemption, deduction, exclusion, tax deferral, credit, or preferential rate introduced into the tax structure. Tax expenditures have significant influence on revenue efforts and generally do not appear on appropriation accounts. Rather, they occur as revenue simply foregone or as a refund or credit reducing tax liability. The Nebraska Department of Revenue has a comprehensive report of tax expenditures in Nebraska, the 'Tax Expenditure Report' published in every even-numbered year.

## **II. COMPARATIVE STUDY (Other State Taxes and Revenue)**

Each state has their own unique tax system, which reflects their desire to raise revenue through taxation, their economic conditions, their need and desire for public services, and state versus local responsibilities.

Table 2-1 presents tax revenue collected by state governments in 2002 as reported to the US Bureau of Census and the Bureau of Economic Analysis. The State of Nebraska collected \$ 2,993 million, which is six percent of personal income. The tax per capita is \$1,731, placing Nebraska 29th among 50 states that ranged from \$1,283 to \$2,748. Nebraska's rank as a percent of personal income is 31<sup>st</sup>.

Table 2-2 details tax revenue collected by neighboring states, the plains region defined by BEA and two bordering states (Colorado and Wyoming), in 1999-2000. South Dakota and Wyoming do not have income taxes while the other states including Nebraska levied income taxes for state revenue. Property tax is generally levied by local governments, and various sales taxes are imposed by states and local governments.

**Table 2-1 2002 State Tax Revenue**

	<b>Total Taxes (\$ million)</b>	<b>Per Capita</b>	<b>Rank</b>	<b>% of Pers. Income</b>	<b>Rank</b>
Alabama	6,879	1,533	42	6.3	25
Alaska	1,090	1,692	34	5.5	40
Arizona	8,477	1,554	40	6.2	30
Arkansas	5,034	1,858	21	8.2	6
California	77,755	2,214	8	6.9	18
Colorado	6,923	1,536	41	4.7	49
Connecticut	9,033	2,610	3	6.2	29
Delaware	2,174	2,693	2	8.4	5
Florida	24,816	1,485	44	5.2	45
Georgia	13,772	1,609	38	5.7	37
Hawaii	3,421	2,748	1	9.6	1
Idaho	2,271	1,694	33	7.0	15
Illinois	22,460	1,782	24	5.4	43
Indiana	9,995	1,623	37	5.9	34
Iowa	5,006	1,705	31	6.3	26
Kansas	4,808	1,770	25	6.2	28
Kentucky	7,975	1,948	19	7.9	7
Louisiana	7,346	1,639	36	6.7	20
Maine	2,627	2,030	14	7.6	9
Maryland	10,821	1,983	16	5.7	36
Massachusetts	14,820	2,306	6	6.0	33
Michigan	21,864	2,176	10	7.3	13
Minnesota	12,936	2,577	4	7.9	8
Mississippi	4,729	1,647	35	7.6	10
Missouri	8,679	1,530	43	5.5	42
Montana	1,443	1,587	39	6.7	21
	<b>Total Taxes (\$ million)</b>	<b>Per Capita</b>	<b>Rank</b>	<b>% of Pers. Income</b>	<b>Rank</b>
<b>Nebraska</b>	<b>2,993</b>	<b>1,731</b>	<b>29</b>	<b>6.0</b>	<b>31</b>
Nevada	3,945	1,816	22	6.3	27
New Hampshire	1,884	1,478	45	4.4	50
New Jersey	18,329	2,134	12	5.6	39
New Mexico	3,628	1,956	18	8.6	4
New York	43,262	2,258	7	6.3	24
North Carolina	15,535	1,867	20	6.9	17

North Dakota	1,117	1,762	26	6.8	19
Ohio	19,617	1,718	30	6.0	32
Oklahoma	6,053	1,732	28	7.0	16
Oregon	5,139	1,459	46	5.3	44
Pennsylvania	22,136	1,795	23	5.9	35
Rhode Island	2,128	1,988	15	6.6	22
South Carolina	5,749	1,400	47	5.7	38
South Dakota	977	1,283	50	4.8	47
Tennessee	7,798	1,345	48	5.0	46
Texas	28,662	1,316	49	4.7	48
Utah	3,925	1,695	32	7.2	14
Vermont	1,534	2,486	5	8.8	2
Virginia	12,781	1,752	27	5.5	41
Washington	12,629	2,081	13	6.6	23
West Virginia	3,552	1,971	17	8.6	3
Wisconsin	11,814	2,171	11	7.5	12
Wyoming	1,094	2,193	9	7.5	11
<b>U.S. Total</b>	<b>533,432</b>	<b>1,853</b>		<b>6.1</b>	

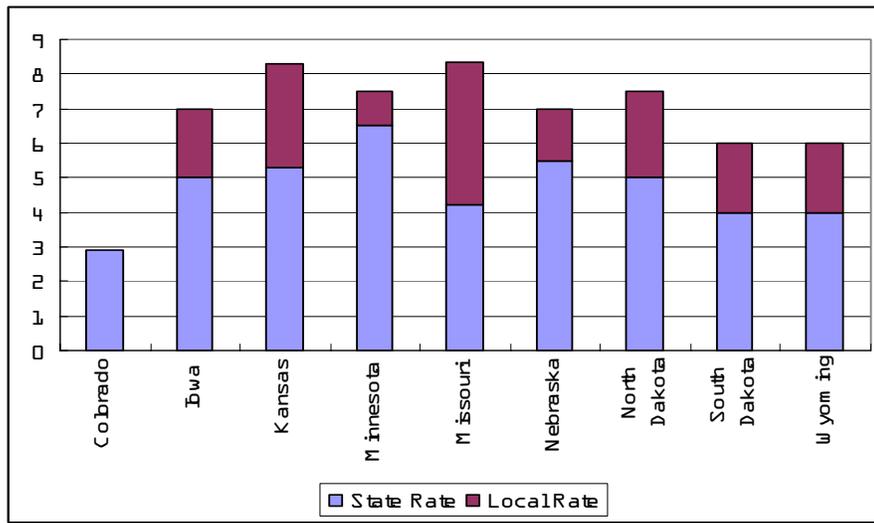
*Source: U.S. Bureau of the Census and Bureau of Economic Analysis.*

### **The System of Sales Taxes in the Plains Region**

Table 2-3 presents state and local sales tax rates in the plains region states. For state revenue, Minnesota applies the highest rate, 6.5 percent, and Colorado applies the lowest rate, 2.9 percent. The state sales tax rate of Nebraska places on the second highest rate, 5.5 percent, among nine states. Food is now taxed in Kansas, Missouri, South Dakota, and Wyoming, while Kansas, South Dakota, and Wyoming allow income tax credits to offset sales tax on food.

All the plains region states enable local governments to impose local option sales taxes on top of the state rate. Colorado and Missouri allow local governments to impose higher local options, 5.0 and 4.125 percent, respectively. Other states allow moderate local options, ranging from 1 percent to 3 percent. The maximum combined state and local rates are shown in Figure 2-1. The combined tax rate of Nebraska is in the middle of the rates in the plains region which range from 6 percent to 8.35 percent.

**Figure 2-1 The Combined State and Local Sales Tax Rates in the Plains Region**



**Table 2-3 Comparison of State and Local Sales Tax Rates  
(January 2003)**

	Food Items [1] Taxable (T) Exempt (E)	State Rate	Maximum Local Rate [2]	Maximum State/Local Rate [2]
Colorado	E	2.90	5.00	7.90
Iowa	E	5.00	2.00	7.00
Kansas	T*	5.30	3.00	8.30
Minnesota	E	6.50	1.00	7.50
Missouri	T	4.225	4.125	8.350
<b>Nebraska</b>	<b>E</b>	<b>5.50</b>	<b>1.50</b>	<b>7.00</b>
North Dakota	E	5.00	2.50	7.50
South Dakota	T*	4.00	2.00	6.00
Wyoming	T*	4.00	2.00	6.00

[1] Food purchased for consumption off-premises.

[2] Highest local rate known to be actually levied by at least one jurisdiction. Includes local taxes for general purposes and those earmarked for specific purposes (e.g. transit). Taxes applying only to specified sales (e.g. lodging or meals) are excluded.

\* Income tax credit allowed offsetting sales tax on food.

Source: Compiled by the Federation of Tax Administrators from various sources.

## The System of Individual Income Taxes in the Plains Region

South Dakota and Wyoming in the plains region do not impose income taxes, while Colorado imposes a simple flat rate, 4.63 percent, with no personal exemptions. The other states including Nebraska have more complicated income tax systems.

Iowa imposes the lowest and highest rate, ranges from 0.36 to 8.98, with nine brackets. Missouri applies ten brackets from 1.5 percent to 6 percent, while the other four states have 3 to 5 brackets. The effective marginal tax rate in each state depends on deductions, exemptions and other specific provisions.

**Table 2-4 STATE INDIVIDUAL INCOME TAXES**  
(Tax rates for tax year 2003 – as of January 1, 2003)

State	Tax Rates-		# of Brackets	Income Brackets		Personal Exemption		
	Low	High		Low	High	Single	Married	Child.
COLORADO	4.63		1	----Flat rate----		-----None-----		
IOWA (a)	0.36	- 8.98	9	1,211	- 54,495	40 (c)	80 (c)	40 (c)
KANSAS	3.5	- 6.45	3	15,000 (b)	- 30,000 (b)	2,250	4,500	2,250
MINNESOTA (a)	5.35	- 7.85	3	18,710 (e)	- 61,461 (e)	3,000 (d)	6,000 (d)	3,000 (d)
MISSOURI	1.5	- 6.0	10	1,000	- 9,000	2,100	4,200	2,100
NEBRASKA (a)	2.56	- 6.84	4	2,400 (f)	- 26,500 (f)	94 (c)	188 (c)	94 (c)
NORTH DAKOTA	2.1	- 5.54 (g)	5	27,050 (g)	- 297,350 (g)	3,000 (d)	6,000 (d)	3,000 (d)
SOUTH DAKOTA	No State Income Tax							
WYOMING	No State Income Tax							

Source: The Federation of Tax Administrators from various sources.

(a) Eight states have statutory provision for automatic adjustment of tax brackets, personal exemption or standard deductions to the rate of inflation. Nebraska indexes the personal exemption amounts only.

(b) For joint returns, the taxes are twice the tax imposed on half the income.

(c) Tax credits.

(d) These states allow personal exemption or standard deductions as provided in the IRC. (e) The tax brackets reported are for single individual. For married couples filing jointly, the same rates apply for income under \$27,350 to over \$108,661.

(f) The tax brackets reported are for single individual. For married couples filing jointly, the same rates apply for income under \$4,000 to over \$46,750.

(g) Rates reported are for short form filers. Long form filers rates range from 2.67% for income under \$3,000 to 12% over \$50,000. Long form filers only can deduct federal income taxes. An additional \$300 personal exemption is allowed for joint returns or unmarried head of households.

### III TAX BURDEN STUDY

#### 1. COMPARATIVE TAX BURDENS

Tax burden among states is commonly measured and compared in three ways: taxes per capita, taxes as a percent of personal income, and the comparison of nominal tax rates. However, none of them are perfect. Taxes per capita fail to capture variations in the ability to pay taxes as measured by income. Taxes as a share of personal income may not reflect burdens actually felt by households. Comparisons of nominal tax rates is another useful measurement for tax burden, but it also has a problem that differences in tax base affect tax burdens as much as differences in rates. Moreover, regardless of the measure used, the fact is that some taxes are borne by non-residents of the state, such as with taxes paid by tourists, so traditional measures of burden may not adequately capture the taxes paid by residents of the state. Since none of methods are perfect, the study combined various measurements of tax burden would provides better understanding to the real burden of taxes in the Nebraska tax system.

#### Per Capital Tax Burden

Table 3-1 presents state and local taxes per capita in Nebraska and the plains region states. Nebraska state and local taxes per capita totaled \$1048 in 1981-82, placing at 89 percent of the U.S. average. In the plains region, Missouri, and South Dakota generally experienced lower tax burdens in 1981-82. The average tax burden in the Plains is higher than the national average due to an extremely high burden in Wyoming.

**Table 3-1 State and Local Taxes Per Capita:  
Nebraska and Plains Region**

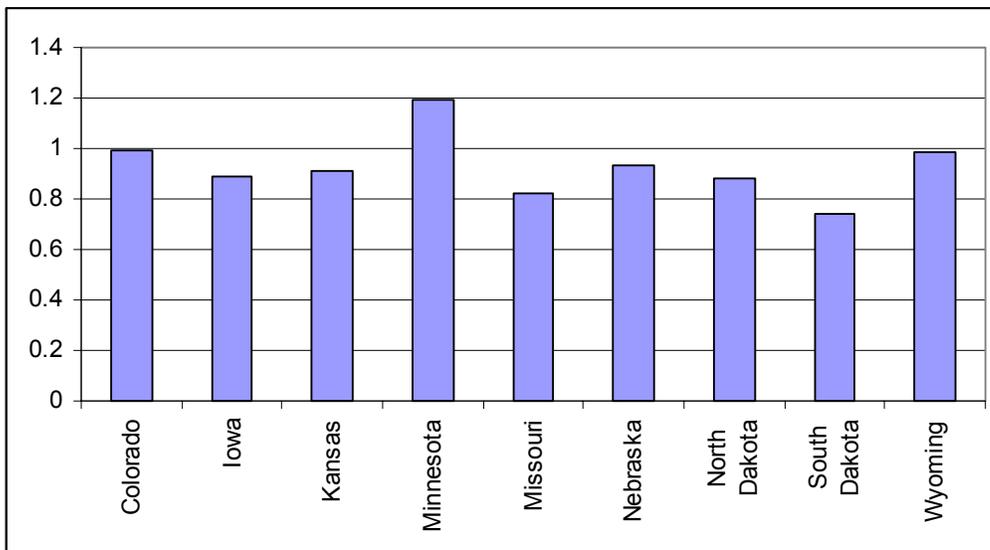
	State and Local		
	1981-1982	1991-1992	1999-2000
Colorado	1191	2094	3091
Iowa	1130	2059	2768
Kansas	1054	1993	2836
Minnesota	1291	2510	3706
Missouri	846	1673	2564
<b>Nebraska</b>	<b>1048</b>	<b>2025</b>	<b>2910</b>
North Dakota	1132	1668	2751
South Dakota	917	1570	2305
Wyoming	2565	2354	3052
Plains	1242	1994	2887
United States	1175	2322	3109

Source: U.S. Census Bureau, Census of Governments ,1981-1982, and 1991-1992.

Calculated for 1999-2000 from U.S. Census Bureau, Government finances. Population and personal income from Bureau of Economic Analysis.

In 1991-92, the average tax burden in Plains states is lower than the National average, and Missouri, North Dakota, and South Dakota experienced lower tax burdens. The tax burden for a Nebraskan is \$2025, which is below the national average, but higher than the Plains' average.

**Figure 3-1 State and Local Taxes in the Plains  
as a Percent of the National Average, 1999-2000.**



Nebraska's tax burden in 1999-2000 still shows the same pattern as in previous period. The state and local taxes per capita in Nebraska is totaled \$2887, which is below the national average and higher than the Plains' averages. Figure 3-1 shows state and local tax burdens for states in the plains relative to national average. All states' burden except Minnesota is lower than the national average, and Missouri and South Dakota enjoyed lower tax burden than other states.

Table 3-2 presents the detailed figures of the burdens of specific taxes. Over the last 20 years, the property tax burden in Nebraska is generally higher than the national average while the burdens on sales and an income taxes are slightly lower than the national averages. The tax burdens of major taxes in the plains region are generally lower than the national averages.

When comparing the tax burden in Nebraska to those in the plains region, the burden on the sales tax in Nebraska is slightly lower than the plains average, but the burdens on income and property taxes are higher than the plains average in 1999 – 2000.

During last 20 years, the Nebraska tax burdens calculated by tax per capita have not been changed dramatically. The tax burden has been slightly lower than the national average and slightly higher than the plains’ average. When comparing the burdens of major taxes, Nebraska levied more burdens on property tax rather than sales and income taxes, but the differences are not significant.

### **Tax Burden as a Share of Personal Income**

States taxes as a percent of personal income is a measure of tax burden with the following advantages: First, it better reflects tax payments relative to state resident’s ability to pay. Second, personal income is a broad measure of the size of the overall economy, so taxes as a share of personal income reflects the size of tax-financed state government relative to the size of the private sector economy.

Table 3-3 presents state and local taxes as a percent of personal income for the plains region in 1981 – 2000. Nebraska state and local taxes as a share of personal income totaled 9.51 percent in 1981-82, 10.51 percent in 1991-92, and 10.71 percent in 1999-2000. The tax burden as a share of personal income in Nebraska slightly increased over the last 20 years, which is the same pattern as the national average.

**Table 3-2 Major Taxes per Capital: Nebraska and the Plain Regions**

	<b>General Sales Tax</b>			<b>Individual Income Tax</b>			<b>Property tax</b>		
	1981-1982	1991-1992	1999-2000	1981-1982	1991-1992	1999-2000	1981-1982	1991-1992	1999-2000
Colorado	360	558	1134	189	477	850	418	695	860
Iowa	179	376	923	247	506	660	437	729	889
Kansas	216	471	1075	177	334	693	429	746	809
Minnesota	215	497	1205	380	676	1131	343	792	931
Missouri	231	505	1045	180	399	689	233	399	610
<b>Nebraska</b>	<b>214</b>	<b>484</b>	<b>989</b>	<b>144</b>	<b>409</b>	<b>687</b>	<b>449</b>	<b>725</b>	<b>906</b>
North Dakota	225	391	1111	54	188	309	307	538	820
South Dakota	293	538	1160	0	0	0	386	611	840
Wyoming	580	512	1184	0	0	0	908	991	1040
Plains	279	481	1092	152	332	558	434	692	856
United States	267	547	1102	223	464	754	362	748	888

**Table 3-3 Taxes as a share of Personal Income**

<b>State and Local Taxes</b>			
	1981-1982	1991-1992	1999-2000
Colorado	9.08	9.88	9.74
Iowa	10.24	11.18	10.74
Kansas	8.96	10.21	10.59
Minnesota	10.96	11.85	11.87
Missouri	7.85	8.75	9.61
<b>Nebraska</b>	<b>9.51</b>	<b>10.51</b>	<b>10.71</b>
North Dakota	10.43	9.83	11.46
South Dakota	9.49	8.97	9.15
Wyoming	18.49	12.24	11.26
Plains	9.68	10.31	10.51
United States	9.97	10.72	10.78

**Table 3-4 Major Taxes as a Share of Personal Income**

	<b>Sales Tax</b>			<b>Income Tax</b>		
	1981-1982	1991-1992	1999-2000	1981-1982	1991-1992	1999-2000
Colorado	3.56	3.58	3.57	1.69	2.42	2.68
Iowa	2.68	3.17	3.58	2.70	3.13	2.56
Kansas	2.77	3.54	4.01	1.95	2.12	2.59
Minnesota	3.25	3.68	3.86	3.90	3.65	3.62
Missouri	3.23	3.66	3.92	1.90	2.32	2.58
<b>Nebraska</b>	<b>3.18</b>	<b>3.69</b>	<b>3.64</b>	<b>1.59</b>	<b>2.46</b>	<b>2.53</b>
North Dakota	3.12	3.79	4.63	1.03	1.47	1.29
South Dakota	4.60	4.38	4.60	0.00	0.00	0.00
Wyoming	5.03	3.36	4.36	0.00	0.00	0.00
Plains	3.24	3.60	3.83	2.23	2.58	2.68
United States	3.50	3.79	3.82	2.46	2.67	2.62

Tax burdens in the plains region show the same pattern: increasing slightly over the last 20 years, but lower than the national average. When comparing the tax burden of Nebraska with the burdens in the plains regions, Nebraska's burden in 1981-92 is lower than the plains', but the burdens in Nebraska are higher than the plains in 1991-92 and 1999-2000.

Table 3-4 presents the sales and income taxes as a share of personal income. Last 20 years, the burdens on sales and income taxes in Nebraska as a share of personal income are generally lower than the averages in the plains region and the nation.

### Other Measures of Tax Burden

While business receives sales tax exemptions on goods purchased for resale and on inputs directly embodied in manufactured products, many other purchased inputs and expenses are subject to sales tax. Generally a business will pay sales tax on building materials, supplies, furniture, computer equipment, etc. It has been estimated that business pay in as much as 40 percent of general sales tax in Nebraska. As shown in Table 3-5, the share producers pay in Nebraska is almost same as that in the national average. Since state sales collections were \$958 million in 2002, the business share of the tax was approximately \$383 million.

**Table 3-5 Consumers' Share and Producers' Share of Sales Tax Burden**

	Consumers' Share	Producers' Share
Colorado	60	40
Iowa	59	41
Kansas	67	33
Minnesota	56	44
Missouri	64	36
<b>Nebraska</b>	<b>60</b>	<b>40</b>
North Dakota	60	40
South Dakota	61	39
Wyoming	54	46
United States	59	41

Note: Estimates are for 1989. Producers' share includes sales to government and nonprofit entities.

Source: Raymond J. Ring, Jr., "Consumers' Share and Producers' Share of the General Sales Tax," National Tax Journal 52 (1999): 79-90.

The Nebraska Department of Revenue has calculated *imputed Sales and Use tax rate* by income group. These imputed rates are similar to the tax as a share of personal income. It provides information of effective rates of the tax each individual faces under their income level. As shown in table 3-6, the sales tax is regressive in that lower income households tend to pay a larger portion of their household income in sales taxes than do higher income households.

**Table 3-6 Imputed Sales and Use Tax Rate by Income Group**

1995		1999	
Adjust Gross Income Group	Imputed Sales Tax Rate	Adjust Gross Income Group	Imputed Sales Tax Rate
0 - 13,000	4.2	Less than 5,000	8.56
13,000 - 20,000	2.55	5,000 - 10,000	2.81
20,000 - 28,000	2.22	10,000 - 15,000	2.22
28,000 - 36,000	2.04	15,000-20,000	1.82
36,000 - 50,000	1.82	20,000-30,000	1.63
50,000 and over	1.48	30,000-40,000	1.35
		40,000-50,000	1.2
		50,000-70,000	1.11
		More than 70,000	0.98

Source: Department of Revenue 'Nebraska Tax Burden Study 1995 and 1999'

## 2. TRAIN ANALYSIS OF TAX BURDEN

In the previous section the discussion is concerned with a nominal tax burden faced under current tax law and how it compared with the tax burden of other states. However, these measurements are not precise when one considers who ultimately bears the burden or incidence of a tax. For example, corporations may nominally pay income taxes, but some of this tax burden might be shifted forward to consumers in the form of higher prices, or shifted backward to workers in the form of lower wages. In such an instance, the firm's statutory tax liability overstates its true economic tax liability or the *economic incidence* of the tax.

Another consideration is an "excess burden" of a tax. Changes in tax policy will distort economic decisions; it brings on an excess burden – a loss of welfare above and beyond the tax revenues collected. Consider the following simplest economy: two commodities (food and manufactures) and two factors (labor and capital). When a sales tax on manufactures is imposed, its relative price increases. Consumers are thereby induced to substitute food for manufactures. The change of consumers' choice due to taxes makes them worse off and causes an excess burden.

Consequently, less manufactured goods and more food are produced. As manufactures production falls, some of the capital and labor formerly used in manufacturing are forced to find use or employment in food production. Because the capital-labor ratios probably differ between two sectors, the relative prices of capital and labor have to

change for food to be willing to absorb the unemployed factors from manufacturing production.

For example, assume that manufactures is the capital-intensive sector. Therefore, relatively large amounts of capital must be absorbed in food. The only way for all this capital to find employment in the food sector is for the relative price of capital to fall. In a new equilibrium, then, all capital is relatively worse off, not just capital in the food sector. More generally a tax on the output of a particular sector induces a decline in relative price of the input used intensively in that sector.

Thus, on the sources side of the budget, the manufactures tax tends to hurt those who received a proportionately large share of their income from capital. Clearly, those people who consumed proportionately large amount of manufactures would tend to bear relatively large burdens. The total incidence of the manufacture tax then depends on both the sources and uses sides. For example, a capitalist who eats a lot of food is worse off on both counts. On the other hand, a laborer that eats a lot of food is better off from the point of view of the sources of income, but worse off on the uses side.

Since the general equilibrium analysis using the TRAIN model could examine dynamic interactions among agents described above, the TRAIN analysis of policy changes would bring up better analysis of who actually bears burden or incidence of a tax. TRAIN models 72 distinct sectors, simulates the tax changes and produces numeric results related to tax burden on Nebraska taxpayers as the change filters through the model of the Nebraska economy.

### **The Subject of the Study**

In the 2003 session, the Nebraska sales and use tax rate will remain at 5.5 percent as extended by LB 759 following the initial rate increase from five implemented beginning October 1, 2002. For purposes of this paper, revenue from this act is assumed to be about \$100 million under the current tax base.

This study first examines the tax burdens by each income group and associated economic impacts induced by a 0.5 percent increase in sales and use tax rate. Second, this study examines a hypothetical increase in individual income tax rates that is equivalent to increase in sales and use tax that generates the additional \$ 100 million tax revenue.

The model using this study is updated to a 2000–2001 database, new parameters

regarding the legislative changes in sales tax exemptions, and the empirical study of investment elasticity conducted by the Fiscal Office.

In addition, the model assumes that all state expenditures are endogenously determined by state revenue. Therefore, an increase in tax revenue by the changes in the tax rates automatically transfers into public spending according to the shares in the original data. In local government, TRAIN explicitly modeled local sales taxes. However, this analysis does not explicitly take into account the changes in city sales tax.

**The Impact on Income and the Tax Burden**

Increasing the tax will reduce disposable income, with the apparent consequence that Nebraskans pay more taxes and receive less real income due to the negative economic effects of tax increases. Table 3-5 presents an income loss and an additional tax burden in each income group by sales and use tax increase.

**Table 3-5 Change in Sales and Use Tax Rate**

	Changes in Disposable Income (million)	Additional Tax Paid (million)	Tax Burden Per Income
Group 1 ( 0 - 5,000)	-0.211	2.63	2.505%
Group 2 ( 5,000 - 10,000)	-2.553	5.031	1.360%
Group 3 ( 10,000 - 15,000)	-5.215	6.918	0.594%
Group 4 ( 15,000 - 20,000)	-7.229	8.239	0.432%
Group 5 ( 20,000 - 30,000)	-22.177	17.712	0.296%
Group 6 ( 30,000 - 40,000)	-25.604	16.769	0.228%
Group 7 ( 40,000 - 50,000)	-22.518	12.998	0.190%
Group 8 ( 50,000 - 70,000)	-33.324	17.641	0.189%
Group 9 ( above 70,000 )	-29.067	10.261	0.101%
Total	-147.898	98.199	

When sales and use tax is increased from 5.0 percent to 5.5 percent, every income group loses some of their disposable income, which totals \$147 million. Column 3 shows an additional tax paid by each income group and column 4 shows a tax burden as the share of their income. It shows that the increase in sales and use tax is typically regressive, with the highest burden on the lowest income group and the lowest burden on the highest income group

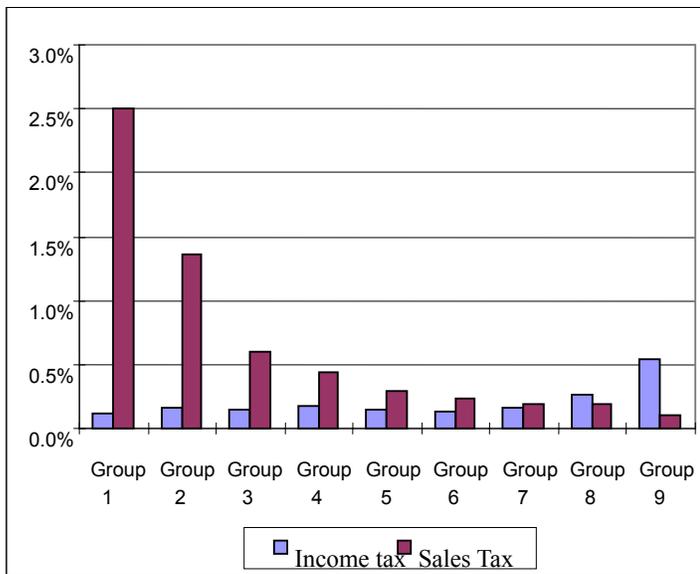
Table 3-5 presents an income loss and an additional tax burden by a change in an individual income tax. Every income group also experience a loss of their disposable income, and pay additional income taxes, but the burden of tax is progressive. Figure 3

– 2 clearly shows that the progressiveness of tax burden of sales and income taxes is in opposite directions.

**Table 3 – 6 Change in Individual Income Tax**

	Changes in Disposable Income (million)	Additional Tax Paid (million)	Tax Burden Per Income
Group 1 ( 0 - 5,000)	0.127	0.129	0.123%
Group 2 ( 5,000 – 10,000)	0.526	0.584	0.158%
Group 3 ( 10,000 – 15,000)	-0.151	1.722	0.148%
Group 4 ( 15,000 – 20,000)	-0.589	3.208	0.168%
Group 5 ( 20,000 – 30,000)	-6.508	8.697	0.145%
Group 6 ( 30,000 – 40,000)	-10.398	9.673	0.132%
Group 7 ( 40,000 – 50,000)	-14.182	10.691	0.157%
Group 8 ( 50,000 – 70,000)	-27.852	25.18	0.270%
Group 9 ( above 70,000 )	-65.531	55.826	0.548%
Total	-124.558	115.71	

**Figure 3-2 the Progressiveness of Tax Changes by Income Group**



**Table 3 – 7 Impacts on Industries**

	Sales Tax	Income Tax
Industrial Output (million)	-161.183	-121.108
Employment (Jobs)	-2649	-2076
Investment (million)	-5.996	-4.154

**Economic Impacts**

Table 3-7 summarizes the economic impacts of the changes in taxes. The increase in the income tax and sales tax reduce industrial output by -\$121 millions and -\$161 millions, respectively. Employment in the private sector decreases by 2,076 jobs in the case of the income tax, and 2,649 jobs in the case of the sales tax.

This result indicates that an increase in the sales tax induces a more negative impact on the Nebraska economy than an increase in income tax. First, by exempting various items, including necessities and various consumer services, the state sales tax distorts consumption choices and allocation of resource so that it reduces the economic efficiency more than with the income tax. Second, the Nebraska economy – in reality and in the model – is considered to be a small open economy. Because the sales tax directly increases prices, the Nebraska economy might lose some competitiveness to the other states. For example, increased prices due to the sales tax encourage out of state mail order sales and cross-border purchases.