

1999 Nebraska Tax Burden Study



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Research Division**

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STATE OF NEBRASKA

DEPARTMENT OF REVENUE
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Tax Commissioner



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December 4, 2002

Letter of Introduction to the 1999 Nebraska Tax Burden Study

As mandated in Section 77-3116, the Nebraska Department of Revenue has prepared the fourth tax burden study. This report deals with tax data from the 1999 tax year, and expands on the 1991 study published in December 1994 and the 1995 study published in December 1998. In addition to updating data included in the previous reports, this report provides a comparison of previous study results.

The Department has gained additional insight into the production of tax burden information using federal and state tax data through our efforts on this report. We continue to improve our understanding of the information available from the Internal Revenue Service and how this information relates to the Department of Revenue tax files.

The Department received assistance in this study from the Legislative Fiscal Office (LFO) in providing the Department with a copy of the TRAIN model developed per LB 1373. The preliminary use of this Computable General Equilibrium (CGE) model represents another approach to identifying tax burdens in Nebraska. The Department would like to thank LFO director Michael Calvert, and Dr. Iksoo Cho for their assistance in obtaining a copy of the model. As always, any errors in results or interpretation of the model are the responsibility of the Department of Revenue.

We believe that this project has given the Department an opportunity to develop and refine informational data sets that will aid in the development of a better and more complete view of what the Nebraska tax liability is, and who pays the taxes. If you have any questions regarding this report, please contact David Dearthmont in the Research Division at 471-5700.

A handwritten signature in blue ink, appearing to be "MJ Egr", written over a horizontal line.

Mary Jane Egr
State Tax Commissioner

1999 Nebraska Tax Burden Study

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The 1999 Nebraska Tax Burden Study

December 2, 2002

Introduction

Pursuant to the Nebraska Revised Statutes sections 77-3, 115 and 77-3, 116, the Department of Revenue has completed the *1999 Nebraska Tax Burden Study*. The study was mandated in the second session of the Ninety-second Legislature through LB719A. The Legislature directed the Department of Revenue to gather, prepare, and study material that shall be used as a basis for developing tax policy changes. It was the intention of the Legislature to use such information in analyzing the impact of taxes on different economic sectors and the impact on those sectors of any policy changes in taxes.

This is the fourth Nebraska tax burden study produced by the Department of Revenue in an effort to comply with the Legislature's mandate. The 1999 study will expand on the previous two studies from 1991 and 1995, will present a comparison of the results from the 1991, 1995, and 1999 studies, and will include an updated historical analysis of the Nebraska Individual Income tax burden by adjusted gross income group. In addition, this study will make preliminary use of a computable general equilibrium (CGE) model in tax burden analysis. The genesis of this model was LB1373, passed by the Nebraska Legislature in 1996. The resulting model is referred to as the TRAIN model (Tax and Revenue Analysis In Nebraska), and is currently used by the Legislative Fiscal Office (LFO) for analysis of tax issues. The model will be discussed in more detail later. The Department of Revenue would like to thank the Legislative Fiscal Office for their assistance in providing the model. However, any errors in the use of the model or description of the results are the responsibility of the Department of Revenue.

History

The *1990 Nebraska Tax Burden Study* was published December 1, 1993. This pilot study dealt specifically with actual and imputed taxes paid by the wage and salary employees of Nebraska businesses. The 1990 tax year data was analyzed to determine the legal incidence of each tax type on Nebraska's ten major industry sectors as defined by the Nebraska Business Classification Code. The 1990 study examined jobs, wages, imputed employee sales tax, and imputed employee income tax for each of the ten sectors. Each sector was examined individually by summing the above information for each employer.

The *1991 Nebraska Tax Burden Study*, published December 1, 1994, expanded on the 1990 study by including detailed information on adjusted gross income, deferred compensation, and dependent care. In addition, tax information was detailed by size of employer (based on the

number of employees) and by area of the state.

The *1995 Nebraska Tax Burden Study*, published December 1, 1998, expanded on the previous studies by including detailed information on adjusted gross income, deferred compensation, and dependent care. In addition, tax information was detailed by size of employer (based on the number of employees) and by area of the state. An analysis of the relative Individual Income tax burden by Adjusted Gross Income (AGI) group was added to the study.

Scope and Purpose

Section 77-3115 states that the tax burden study “shall include, but not be restricted to, the following types of information:

(1) Compiling an accurate and dependable set of indicators that show the role each economic sector plays in Nebraska’s economy and each sector’s legal tax incidence by tax types. The purpose is to develop an appropriate share for each economic sector’s responsibility for state and local taxes; (2) The amount of taxes, fees, and other governmental costs imposed on each economic sector which amount shall include those taxes, fees, and other governmental costs imposed on individuals employed in industries in such sector; and (3) If possible, an estimate of those state and local taxes, fees, and other governmental costs which are exported outside the state or offset by provisions of state and federal tax laws.”

The *1999 Nebraska Tax Burden Study* is presented in two major sections: (1) 1999 tax data and analysis, and (2) recommendations for the future of this report. The first section develops the construction and analysis of income tax data from the U.S. Department of the Treasury Internal Revenue Service and the Nebraska Department of Revenue. After these data sets are constructed, they are analyzed and compared against each other and against Nebraska economic data prepared by the U.S. Department of Commerce Bureau of Economic Analysis (BEA). Then the results of the 1991, 1995, and 1999 studies are compared. Next, a history of the Nebraska Individual Income tax by AGI decile is presented. The final part of this section is an analysis of the Nebraska Individual Income tax using a Computable General Equilibrium (CGE) model.

Data and Analysis

Introduction to Data Sources

The *1999 Nebraska Tax Burden Study* is based upon a series of data sets constructed from tax files developed by the Nebraska Department of Revenue and the U.S. Department of the Treasury Internal Revenue Service. These files contain information on Nebraska resident taxpayers and businesses. The four tax files used in this study are the 1999 Federal Information Return Master File (IRMF), the Nebraska Business Master File (NBMF), and the 1999 Nebraska Individual Income Tax Form 1040N. In addition, wage and salary information for the State of Nebraska developed by the U.S. Department of Commerce Bureau of Economic Analysis (BEA) is used in this study for comparison purposes.

The federal IRMF is initially used to develop a data set detailing wage and employment information for Nebraska residents. This file contains information regarding the number of employees, number of jobs, total wages, and the amounts of deferred compensation and dependent care benefits. The IRMF data is used to study employment and compensation summarized by the size of the employer and by the location of employees.

In order to obtain employment and compensation information, the IRMF data is merged with the NBMF data summarized by business sector of the employer. This merged IRMF and NBMF data is merged again with information from the Nebraska Individual Income Tax Form 1040N in order to develop adjusted gross income (AGI) information for each Nebraska household. The AGI data is used to calculate imputed Nebraska income and sales taxes. The results of the calculated taxes can be summarized to study Nebraska taxes by location, employer size, or industrial sector. Finally, the study uses BEA data on wages by industrial sector to compare the results of the study data.

The Form 1040N files from 1996, 1997, 1998, and 1999 are used in the *1999 Nebraska Tax Burden Study* to update the decile analysis first used in the 1995 study. In this section, the Nebraska Individual Income tax data and is used to compare the income tax burden across income deciles. This section provides a history of the income tax burden across income classes from 1986 through 1999.

The table below presents the information used in the preparation of the data sets constructed for this study and the source of the information.

Sources of Information for 1999 Nebraska Tax Burden Study

Information	Source
Individual social security number	IRMF
Federal employer identification number	IRMF
Nebraska Business Classification Code of employer	NBMF
Employer size (number of employees)	Calculated
Employee wages	IRMF
Employee deferred compensation	IRMF
Employee dependent care	IRMF
Employee federal adjusted gross income	1040N
Employee Nebraska liability before credits	1040N
Employee Nebraska liability after credits	1040N
Employee imputed sales tax	Calculated
Employee imputed income tax	Calculated
Employee region	IRMF
Adjusted Gross Income decile	1040N

Construction of the 1999 Nebraska Tax Burden Study Data

1999 Information Returns Master File

The initial data set prepared for the *1999 Nebraska Tax Burden Study* is constructed from elements of the 1999 Information Returns Master File (IRMF), which is obtained annually from the U.S. Department of the Treasury Internal Revenue Service by the Nebraska Department of Revenue. The IRMF consists of all federal forms or schedules submitted by employers and employees with Nebraska addresses. Due to this format, only a portion of the IRMF records pertains to Nebraska residents who are the subjects of this study. Employees who are Nebraska residents are identified in the IRMF using the federal Form W-2. The W-2 form is also the source of information for employers and employee's wages.

The IRMF provides information on employee identification number (or social security number), employer identification number (FEIN), total wages (including employee wages and employee allocated tips), employee deferred compensation, employee dependent care, and employee zip code. The IRMF initially contained 1,083,067 resident records. The original IRMF was edited to eliminate duplicate and amended records. A number of jobs were eliminated in the editing process by summing the wage and compensation information from

W-2s that indicate that the same person worked for the same business and had been issued more than one Form W-2. Information on the numbers of jobs, and the numbers of employees and employers, and total wages contained in the edited IRMF, is summarized in the table below, labeled Record Information from the Edited IRMF. Note that the number of jobs is identified with the number of records in the edited IRMF. For the purpose of this study, a job is defined as a Form W-2 containing a unique employee social security number and a unique employer ID. The number of employees refers to the number of employee identification numbers (social security numbers).

Record Information from the Edited IRMF

Number of Records (jobs)	1,083,043
Employee identification numbers	711,690
Employer identification numbers	99,104
Total wages	\$20,344,247,617

Nebraska Tax Files: Nebraska Business Master File and 1999 Form 1040N

In order to identify the business sector that provided the wages on which Nebraska taxes were paid, and to determine the Nebraska taxes paid by these employees, the federal information must be merged with Nebraska Department of Revenue tax files containing information on businesses and Nebraska Individual Income tax. This section outlines the construction of the final *1999 Nebraska Tax Burden Study* data set.

At this point in the process, the IRMF-based data set contains an employer identification number (FEIN) for each individual job. The next step involves merging the IRMF-based data set with the Nebraska Business Master File. The NBMF data set contains the FEIN and the Nebraska Business Classification Code used to identify the employer’s industrial sector. The FEINs are used to assign each individual job record in the IRMF-based data set an industry classification code. All of the records in the NBMF contain a Nebraska Business Classification Code, which is based on the first four digits of the six-digit North American Industrial Classification System (NAICS) code. In this study we will aggregate to the same industrial sectors used in the 1991 and 1995 studies. Working at this level of aggregation prevents the disclosure of individual taxpayer information and allows for comparison with previous years. Each record in the IRMF-NBMF file now contains primary and secondary SSNs, FEIN, Nebraska Business Classification Code, wages, deferred compensation, dependent care, and employee region.

The next step in constructing the *1999 Nebraska Tax Burden Study* data set involves merging Nebraska Individual Income tax information with the IRMF-NBMF data. Preparation of the 1999 Nebraska Form 1040N requires eliminating duplicate records and accounting for amended returns. In addition, steps must be taken to ensure that the employees who were identified by a primary social security number on one form and by a secondary number on another form are not double-counted. This occurs for a number of reasons, but most often

occurs for members of households whose filing status on their Form 1040N is “married, filing separately.” However, if filing status is considered when building the data sets, much of this problem is easily eliminated. Once this is completed, the Nebraska income tax data is merged with IRMF-NBMF data set. The edited Nebraska income tax data is developed from the 1999 Nebraska Form 1040N file. Form 1040N information includes primary and secondary social security numbers, federal adjusted gross income, Nebraska liability before credits, Nebraska liability after credits, and zip code. The final data set is constructed by matching records in the last data set with records in the 1040N file. The employee social security numbers in the IRMF-NBMF data are first matched with the primary social security numbers in the 1040N file. Then the employee social security number in the IRMF-NBMF data set is matched with the secondary social security number in the 1040N file. The results of the two matches are combined and then summed to construct federal adjusted gross income records in the final merged data series. The AGI is then used to calculate imputed Nebraska individual income tax liability and sales tax liability.

The merged IRMF-NBMF-1040N data set contains 1,083,067 jobs. Of these, 947,618 had matching records in the Form 1040N file, indicating that approximately 12.5 percent of the jobs did not result in a Form 1040N, or were otherwise lost in the process of constructing the final data set. The table below describes the merged data set in terms of jobs, and Nebraska Individual Income tax before and after credits.

Record Information from the Merged IRMF-NBMF-1040N Data Set

Number of records (jobs)	1,083,067
Primary social security numbers	721,777
Secondary social security numbers	225,841
Total primary and secondary SSNs	947,618
Nebraska income tax liability	
before credits	\$1,236,782,329
Liability after nonrefundable credits	\$1,099,168,555
Liability after credits and refundable	
child care credit	\$1,094,920,692

In the 1991 and 1995 studies, the NBMF was edited prior to merging with the IRMF to eliminate records with invalid or missing FEINs and records for businesses that withheld no Nebraska income tax in the study year. The remaining NBMF records were merged with the IRMF. Editing the NBMF in this manner reduced the number of businesses that could be merged with the IRMF, because this procedure had the effect of removing businesses that did not withhold income tax—and employees who did not file a 1040N—from the final study.

This procedure was changed in the *1999 Nebraska Tax Burden Study*. The reason for changing the procedure in is that the elimination of non-filers from the final data set removes these employees from our consideration of the impact of the sales tax. In previous studies the process of merging files from the IRMF through Form 1040N resulted in the loss of approximately 20 percent of the original IRMF records. The new procedure used in this study resulted in the loss of 135,449 of the total 1,083,067 records, or approximately 12.5 percent of the original records. The 135,449 records can be interpreted as the number of jobs that did not contribute to the Nebraska Individual Tax liability. In terms of employees, the number of lost records is 83,023 of 711,690 employees, or 11.7 percent. There are several reasons for the loss of records between withholding and filing of Nebraska Form 1040N. One reason is that federal withholding was deducted but not Nebraska withholding, which can occur when total wages are low enough to cause a federal liability but not a Nebraska liability. Another reason is that the taxpayer simply did not file a Nebraska (or possibly a federal) return. In this case federal income taxes were withheld from the employee's wages, but the taxpayer did not make a final Nebraska payment or receive a refund. A final reason is that data processing errors occurred in either the IRS or the Nebraska files that prevented a match between FEIN or social security number.

Imputed Income and Sales Tax Liability

The final step in constructing the *1999 Nebraska Tax Burden Study* data set is calculating imputed sales and income tax paid by the individual and attributable to the wages earned from each business. The income tax calculation is made by dividing wages earned by federal adjusted gross income and multiplying the result by Nebraska income tax liability minus nonrefundable credits. This simple formula ensures that only income taxes from wage income is counted toward the tax burden of each industrial sector, and not income from other sources. In equation form:

$$T_I = (W/Y_F) * L_{Nebr}$$

where:

T_I = Imputed Nebraska Liability

W = Total Job Wages

Y_F = Federal Adjusted Gross Income

L_{Nebr} = Nebraska Liability minus Nonrefundable Credits and Refundable Child Care Credit

Imputed sales tax paid by individuals is calculated using the same approach as in previous studies. This approach recognizes that the sales tax is regressive to the extent that lower income households devote a larger portion of their income to consumption of goods and services that are subject to the Sales and Use tax than do higher income households. Federal AGI is used to assign a sales tax rate based on household income. The rate is then multiplied by wages earned from each individual's W-2 form. The rate schedule is presented in the table below.

Adjusted Gross Income Group	Final Imputed Sales & Use Tax Rate
Less than \$5,000	8.56%
\$5,000 to \$9,999	2.81%
\$10,000 to \$14,999	2.22%
\$15,000 to \$19,999	1.82%
\$20,000 to \$29,999	1.63%
\$30,000 to \$39,999	1.35%
\$40,000 to \$49,999	1.20%
\$50,000 to \$69,999	1.11%
More than \$70,000	0.98%

The imputed Nebraska Sales and Use tax is calculated using the Consumer Expenditure Report from the U.S. Department of Labor Bureau of Labor Statistics. The results of the consumer expenditure survey of households from the Midwest regional report for the years 1999-2000 are used for this study. The expenditure categories chosen represent taxable expenditures from categories that most closely represent Nebraska's Sales and Use tax base, and are listed in the first column of Table 1 on page 16. These expenditures are summed to represent the total taxable expenditures by income group. These totals approximate nonmotor vehicle net taxable sales, and are multiplied by the appropriate sales tax rate to calculate the total sales tax paid by income group. The total sales tax for each income group is divided by the median AGI to arrive at the Sales and Use tax as a percentage of AGI. The median AGI is taken from the Nebraska income tax data. The final imputed Sales and Use tax rate is based on the fact that during calendar year 1999 the Nebraska Sales and Use tax rate was 4.5 percent from January through June, and 5 percent for the rest of the year.

The *1999 Nebraska Tax Burden Study* data is completed by calculating an imputed value for the sales and individual income tax based on the AGI for each record in the merged IRMF-NBMF-1040N data set. An analysis of the final data set is presented in the next section.

Analysis of the 1999 Nebraska Tax Burden Study Data

Three summaries of the final the *1999 Nebraska Tax Burden Study* data are presented in Tables 2 through 4, beginning on page 17. Each summary is discussed below.

Employer Size

The final data set is summarized by employer identification number to calculate the number of employees working for each employer. Employers are classified by size according to the numbers of employees, and each employer is assigned to one of fifteen size classifications. Table 2, on page 17, titled "Summary by Employer Size," presents the final 1999 data set summarized by employer size. The table includes the number of employers in each size classification, as well as the numbers of jobs, employees, total wages, deferred compensation, dependent care, imputed sales and use tax, and imputed net income tax. Total

wages is the sum of salaries and tips. The sum of total wages, deferred compensation, and dependent care is equal to total employee compensation.

Employee Region

For purposes of identifying taxpayers and taxes paid by regions in the state, each IRMF record is assigned to one of ten regions in Nebraska (and one unassigned category), based on the employee's zip code. This information was carried through to the final data set. These nine regions are identified in Table 3, "Summary by Employee Region." The "Other" category includes records with no reported zip code or those located outside the state. For purposes of comparison, the employee regions, as well as the employer size classifications used in the 1999 study, are identical to those defined in the 1991 and 1995 studies. A map illustrating the regions appears at the end of this report. Table 3 contains information on the number of employees, employers, jobs, total wages, deferred compensation, dependent care by region, imputed sales and use tax, and imputed net individual income tax.

Industrial Sector

For purposes of identifying taxpayers and taxes paid by industrial sector, each record of the final data set contained an Nebraska Business Classification Code. Using this code, the final study data set can be summarized by industrial sector. For purposes of comparison, the industrial sectors used in the 1999 study are identical to those defined in the 1991 and 1995 studies. Table 4 on page 19 contains information on the number of employees, employers, jobs, total wages, deferred compensation, dependent care by region, imputed sales and use tax, and imputed net individual income tax. The resulting data details each sector's contribution to the Sales and Use tax, and net Individual Income tax.

Note that the total number of employees and the total number of jobs in these tables are different. This is because an employee is defined as a social security number on a Form W-2, and a job is defined as a unique employee social security number matched to a unique employer identification number. The difference in these numbers reflects the fact that some employees work for more than one employer during the tax year, either because an employee moves from one employer to another, or works for more than one employer during the same time period. Because Form W-2 contains no information on the period of employment or the number of hours worked per week or month, it is not possible to determine the reason for the differences between the number of employees and the number of jobs using IRMF data.

In addition, note that the total number of jobs is equal between tables, even though the total numbers of employers and employees do not match. The number of jobs match because a job is defined as a Form W-2 containing a unique employee social security number and a unique employer ID, and this will not vary between employer size groups, location, or industrial sector. The number of employers and employees may not match between tables because an employee is defined as an SSN, and an employer is defined as a FEIN and an SSN. The number of employees is different because an employee may work in more than one sector

and more than one location in a year. The number of employers is different when comparing employee regions because regions are defined by employee address. This results in the situation where two employees living in different regions but working at the same place will result in two employers.

Comparison Between BEA and Final Tax Burden Study Data

The *1999 Nebraska Tax Burden Study*, like the previous studies, relies on taxpayer information from the Nebraska Department of Revenue merged with IRS information linked to wages reported by each individual's employer(s) on the federal Form W-2. In so doing, some records were lost, either because there was no Form 1040N filed corresponding to the federal Form W-2, or information was insufficient for the records to be merged successfully. The final tax study data set amounts to more than 87 percent of the original edited federal Individual Return Master File.

The loss of records raises the question of whether there is a pattern in the lost records. In general, the loss of records would not be a problem from a statistical inference perspective if the lost records could be treated as if they were a random sample drawn from the universe of all resident Nebraska taxpayers. This process could be statistically tested if it were possible to draw a sample of the lost records, fill in the missing information to complete the merging process, and test this sample against the final data set. However, it is not possible to do a statistical test on either the IRMF-based data set or the final merged data set. It is useful, though, to make an *ad hoc* comparison between the data constructed for this study and some other independent source of data. One independent source of data is published by the U.S. Department of Commerce Bureau of Economic Analysis (BEA). The BEA data can be thought of as representing a second sample of Nebraska wage and salary information. This approach was used in the previous studies.

Comparison of the Final Tax Burden Data Set with BEA Data

The BEA publishes estimates of the wage and salary component of personal income on an annual basis. This data is published by business sectors for each state. For comparison purposes, the 1999 Nebraska study utilizes one of the BEA's tables, Table SA07—Wage and Salary Disbursements. Figure 1 shows the percentage of wages and salaries for the state by industrial classification and compares the BEA analysis and the *1999 Nebraska Tax Burden Study* estimates of wage proportions by industry.

The figure shows three sectors where the differences between the BEA data and the final tax burden data set appear significant: services; transportation, communications, and utilities (TCU); and manufacturing. The BEA data for the percentage of total wages in the manufacturing sector is significantly higher than the Department of Revenue's estimate in the final tax study data set. Further, the service and TCU sectors of the tax study are greater than

the BEA estimates. The difference in the service sector is particularly large. This pattern was repeated in the 1995 and 1991 studies as well.

This situation could be the result of two problems with the Department of Revenue's data sets. First, there is a problem with the miscoding of businesses in the Nebraska Business Classification Codes. A large number of businesses are coded as "other" when they should in fact match an industrial sector in the BEA data. In addition, a number of businesses are probably listed in the wrong sector. The disparity between the services and government sectors could be explained by miscoding. Nebraska has a large number of public utilities compared to other states. If these employers are classified by the BEA as government employees, rather than as employees in the TCU sector, it could account for some of the disparity between these two sectors.

The second potential source of errors deals with the likelihood that much of the missing data comes from small employer size categories. This observation was made by the Department of Revenue in the previous studies, where it was noted that the greatest portion of the missing records are in the smallest employer group. If employer size is not uniformly distributed across all sectors, and because wages per job is less for the smaller employers, it would tend to skew the tax burden study data sets relative to the BEA data.

Conclusions from Bureau of Economic Analysis Comparison

At the level of disaggregation of data used to divide the data into industrial sectors, there are differences in some industries between the Department of Revenue data and the BEA data for percentages of total wages broken out by industry. These differences are greatest in the manufacturing, transportation, and services sectors.

Comparison of the 1999 to Previous Nebraska Tax Burden Studies

The *1999 Nebraska Tax Burden Study* represents the third time a full tax burden study has been completed. Although there were some modifications in the process of constructing the 1999 study data, the 1999 report purposely used the same criteria for summarizing data by employer size, industrial sector, and region. This allows for comparisons between the 1999 and previous studies. Tables 6 through 8 compare the IRMF-based data set in Tables 2 through 4 to the corresponding tables in the 1991 and 1995 reports. Table 6 indicates that the numbers of employers identified in the IRMF-based data sets increased between 1995 and 1999 in all but the smallest size classifications. The total number of employers identified in the IRMF data decreased by 10,096 or 9.2 percent. The number of jobs identified grew by over 84,024 or by 8.4 percent. Total wages identified grew by 27.0 percent. Table 7 indicates that the numbers of jobs identified in the IRMF data increased in all regions, reversing the trend from the 1991 to 1995 period.

Table 8 shows job gains in all industrial sectors between 1995 and 1999. Similarly, wages grew in all sectors. This trend did not continue, however, through all sectors in terms of imputed Sales and Use tax. Manufacturing, TCU, wholesale trade, and government contributions to the sales tax base fell between 1995 and 1999. Two factors would account for this. First, there was the temporary sales tax rate reduction in the first half of 1999, which resulted in a rate cut of 5 percent. The second factor may be due to the re-estimation of the imputed sales tax rates. Finally imputed net income taxes increased between 1995 and 1999 in all sectors. Overall, imputed individual income tax grew by 33.8 percent between the 1995 and 1998 study years.

Historical Analysis of Nebraska Income Tax by Decile, 1995-1999

Table 9, Federal Adjusted Gross Income and Nebraska Income Tax after Credits by Deciles, presents Nebraska income tax records by decile from 1995 through 1999. This was accomplished by sorting all Form 1040N returns by adjusted gross income (AGI), dividing the total number of returns by ten, and analyzing each group. For convenience, the first seven deciles, or 70 percent of the returns, are treated as a single group. Thus, the tenth decile in 1999 represents the 75,722 returns reporting the highest adjusted gross income. This represents \$12,666.5 million in AGI and \$576.7 million in Nebraska individual income tax. The lower two blocks of the table present the same information as a percentage of the total AGI or as a percentage of the total Nebraska income tax after credits. Thus, summing the numbers across all ten deciles will result in 100 percent of the AGI or of the Nebraska Income Tax. The last column in each block, labeled "Top 500 Returns," represents the 500 returns with the highest AGI. This is presented because generally there is a great difference between the characteristics of returns at the extremes, compared to a larger group at the top decile or quartile level. For example, in 1999 the top decile begins at an AGI of \$77,690 compared to the top 500, which begins at an AGI of \$1,345,486. This column in Table 9 indicates that in 1999, the top 500 returns represent 6.94 percent of the total reported AGI, and they pay 6.83 percent of the total Nebraska personal income tax.

Table 10 is based on the information in Table 9. The block labeled "effective tax rate," is calculated as a percentage of the Nebraska income tax paid by the decile class divided by the AGI total for that class. This effective tax rate reflects the rate at which all the AGI in the decile is taxed. That is, if there were a flat tax rate on all AGI, with no credits or exemptions, the effective rate would produce the amount of tax paid by the returns in that decile class.

The block in Table 10, labeled "tax burden index," is calculated by dividing the numbers in the lower right block of Table 9, labeled "Nebraska Income Tax after Credits as percent of Total," by the numbers in the lower left block of Table 9, labeled "Federal Adjusted Gross as percent of total." This results in a share index that relates the percent share of income in each decile to the percent share of tax paid in the same decile group. For example, a hypothetical decile group with a tax burden index of 1.00, reporting 20 percent of the AGI, would have paid 20 percent of the tax. Similarly, if this decile paid less than 20 percent of the tax, the tax burden index would be less than one. As a final example, consider the tenth decile

in 1999. This 10 percent of the returns reported 41.61 percent of the AGI and paid 56.55 percent of the individual income tax, resulting in a tax burden index of 1.36.

Reading these index numbers across a row for a single year shows that the index increases as one moves up the decile numbers. This demonstrates that the Nebraska Individual Income tax is progressive, in that lower income taxpayers pay a lower percentage of the total tax than do higher income taxpayers. Reading down the columns, one can follow the history of the tax burden on the decile in question. The stability of the index through most years indicates that the progressivity of the income tax has not changed significantly through the years. The possible exception is that the lower two decile groups presented (the first 7, and the eight deciles) appear to have had their income tax burden lowered through the period of the analysis. The other exception is in 1993, after LB 240 was enacted to shift a portion of the income tax burden to the upper income taxpayers, and in 1993 and 1994 the burden index increased for the tenth decile.

TRAIN Model Analysis

This section contains some examples of dynamic effects of the Nebraska Tax system. These dynamic impacts were determined by using a version of the TRAIN model that was developed jointly by the Legislature's Fiscal Office and the University of Nebraska. The TRAIN model is a computable general equilibrium (CGE) model. The basis for the TRAIN model is a social accounting matrix (SAM) that contains 72 sectors that detail interactions within the Nebraska economy and how the Nebraska economy interacts with the rest of the world. Of the 72 sectors in the economy, 26 sectors deal with industries, 33 government sectors, 9 sectors represent households, and 1 sector each to represent capital, labor, investment, and the rest of the world. In the model, the rest of the world is everything outside of Nebraska. The model uses these variables in a series of nonlinear equations that are solved simultaneously.

The model is useful for studying tax burdens because after the model solves for the base case, changes to tax policy can be evaluated for their effect on the whole economy. In the *1999 Nebraska Tax Burden Study*, we are going to look at a simple case of the impacts of changing the per household income taxes paid by Nebraskans and how this effects their consumption patterns.

Table 11 on page 26 contains a list of the industry sectors that are contained in the TRAIN model. The numbers presented as percentages represent the percent change in household demand from a 10 percent decrease in per household income taxes. That is, each household sector is defined by AGI group, and for each group Nebraska Individual Income tax is reduced by ten percent. Read down the columns in the table, the percent changes represent the changes in the demand for goods from that various industrial sectors by that particular income group. As illustrated in Table 11, the household group that shows the greatest impact of this simulated change in income tax is the over \$70,000 income group. For example, a 10 percent reduction in individual income taxes results in a 2.86 percent increase in the final

consumption of products from the printing and publishing industry, 8.33 percent increase in consumption from the metals and machinery industry, and 1.25 percent increase in final consumption from the retail sector.

This simulation did not show as great an impact on other income groups. The effect of the simulated tax cut for other AGI groups on the industrial sectors of the Nebraska economy was much less. Rounding nearest 100th percent, only seven sectors had a non-zero change in final consumption due to the simulated tax cut in the \$50,000 to \$70,000 AGI group. Similarly, only three sectors were impacted by the cut in the \$15,000 to \$19,999, and the \$40,000 to \$49,000 groups. One possible explanation for this could relate to the progressivity of the Nebraska Individual Income tax. In this analysis, each AGI group had its tax liability reduced by 10 percent. As the decile analysis demonstrates, the total number of dollars for the cut at the upper level is much larger than at the lower AGI levels. This can be seen in the effective tax rate on page 24. The simulation shows the impact of reducing income taxes 10 percent, which is approximately the same as reducing the effective rates by 10 percent. Because the top group in the TRAIN model is approximately the same as the 10th decile, the reduction in effective rates for this group is larger than the reduction for any other group. Also, the Tax Burden Index on the same table indicates that AGI in the top decile is taxed at a rate nearly one-third higher than the income at the 9th decile.

1999 Nebraska Tax Burden Study Recommendations

This section of the *1999 Nebraska Tax Burden Study* presents the recommendations of the Nebraska Department of Revenue for future tax burden studies. These recommendations are based on the Department's experience in producing the current study, and considers an alternative approach to the current study.

The *1999 Nebraska Tax Burden Study* represents something of a departure from previous studies. The most important difference is in the way the Nebraska NBMF and Form 1040N were edited prior to merging with the federal IRMF data. This resulted in two major differences from previous studies: the first is the loss of the direct comparison between the IRMF and final data sets, highlighted in previous studies; and the second is the difference in interpretation of the records lost between the IRMF and the final data set. The change was due to the idea that editing the NBMF to eliminate businesses that did not withhold Nebraska Individual Income tax resulted in the elimination of many individuals where there was no income tax paid but, a sales tax liability would have accrued. We believe that this is a better interpretation of the tax code and should be continued.

A second departure from previous tax burden studies is in the use of a model to estimate tax burdens. Previous studies attempted to meet the requirements of section 77-3115 in its entirety by directly calculating the tax burden on each economic sector. This approach was natural given that the statute asks for a compilation of indicators showing the role of each sector the Nebraska economy, and that the Department has access to individual tax records to serve as the basis for constructing the final tax burden information by sector. However, this approach requires a high degree of correspondence between identification numbers from different sources of data. The results of the 1999 study, as well as the previous tax burden studies, indicate that the degree of correspondence between data sets is not great enough to provide a highly "accurate and dependable set of indicators" as required by the statute. We do believe that the data sources are improving—largely due to the electronic filing of W-2 information; however, this approach still results in a large amount of lost records. If the data sets could be improved upon, calculation would be the preferred method of constructing data sets for examining tax policy.

In the recommendations in the *1995 Nebraska Tax Burden Study*, we suggested that the use of the CGE model being developed pursuant to LB 1373 should be explored. The Department took its first steps toward making use of this approach in this study. We believe that this approach has merit. However, due to time constraints, and the steep learning curve in using this model, we were not able to make full use of the TRAIN model in this study. We recommend that the Department continue to work with this model, and make full use of it in the next report, due in December 2006. In our initial work with the TRAIN model, we identified a number of alternative types of analyses relative to the tax burden study that should be completed for the next study.

In the 1995 study, the Department of Revenue recommended that the Department of Revenue be charged with calculating and providing specific sets of data and coefficients necessary for the TRAIN model. These data sets may be used as substitutes or complements for federal data used in the model, or they may be used to calibrate the model. The data sets for the model could be published in the Nebraska Statistics of Income. The specifics of this should be discussed through consultation with the Legislative Fiscal Office. The Department extends this recommendation for future studies.

Finally, the Department of Revenue recommended in the 1995 study that the decile analysis be updated annually. This has been done, and appears annually in the Nebraska Statistics of Income report.

Table 1: Imputed Sales Tax Rates

Expenditure Category	Income Group--Adjusted Gross Income (AGI)								
	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$69,999	More than \$70,000
Food away from home	1,160	714	1,003	1,209	1,709	2,118	2,446	3,192	4,168
Alcoholic beverages	257	121	171	192	300	346	339	463	748
Utilities, fuel and public services	1,273	1,582	1,878	1,980	2,219	2,365	2,525	2,833	3,439
Laundry and cleaning supplies	63	68	85	126	133	109	143	181	224
Other household products	79	105	127	182	191	236	315	419	462
Household furnishings and equipment	622	444	824	824	1,109	1,320	1,868	2,140	3,378
Apparel: men and boys	318	111	162	258	348	553	379	591	1,084
women and girls	253	286	312	393	497	594	700	792	1,351
children	25	30	38	50	50	92	124	111	146
Footwear	151	139	161	185	291	297	254	378	524
Medical supplies	68	45	132	87	89	120	112	137	187
Fees and admissions	204	151	178	237	366	338	505	712	1,358
Television, radios, and sound equipment	338	299	364	436	470	642	649	868	1,147
Pets, toys and playground equipment	125	119	189	241	289	346	497	528	643
Tobacco products and smoking supplies	340	270	245	315	365	409	466	430	375
Total Expenditure	5,276	4,484	5,869	6,715	8,426	9,885	11,322	13,775	19,234
Sales Tax	\$263.80	\$224.20	\$293.45	\$335.75	\$421.30	\$494.25	\$566.10	\$688.75	\$961.70
Median AGI	\$2,926.00	\$7,593.00	\$12,585.00	\$17,527.00	\$24,608.00	\$34,669.00	\$44,699.00	\$58,750.50	\$93,458.00
Sales Tax Rate @ 5%	9.02%	2.95%	2.33%	1.92%	1.71%	1.35%	1.27%	1.17%	1.03%
Final Imputed Sales & Use Tax Rate*	8.56%	2.81%	2.22%	1.82%	1.63%	1.35%	1.20%	1.11%	0.98%

The Nebraska Sales and Use Tax rate during calendar 1999 was 4.5% from January 1 through June 30, and 5% for the remainder of the year.

Table 2: Summary by Employer Size

Employer Size (# of Employees)	Employer Class Size	Number of Employers	Number of Employees	Number of Jobs	Total Wages	Deferred Compensation	Dependent Care	Imputed Sales and Use Tax	Imputed Net Income Tax
1 - 5	1	77,966	113,768	134,322	\$2,076,788,358	\$33,963,169	\$859,503	\$30,324,376	\$38,114,527
6 - 10	2	8,917	63,838	67,704	1,065,326,188	17,265,801	419,626	15,090,655	30,329,031
11 - 15	3	3,507	42,544	44,426	698,899,264	12,773,906	410,775	9,848,597	21,146,103
16 - 20	4	1,981	34,086	35,291	592,467,635	13,859,738	318,358	8,247,902	18,238,973
21 - 25	5	1,295	28,678	29,555	568,562,234	12,592,096	487,626	7,587,472	17,475,701
26 - 50	6	2,636	87,820	94,620	1,669,415,186	48,251,790	2,074,062	22,862,485	52,008,956
51 - 75	7	996	57,498	60,781	1,137,738,952	33,520,960	1,389,923	15,417,854	31,671,175
76 - 100	8	479	40,099	41,561	782,135,316	27,747,507	994,762	10,579,564	23,104,220
101 - 250	9	873	119,088	131,113	2,479,610,552	89,583,605	4,420,936	33,103,610	76,066,404
251 - 500	10	222	71,039	76,255	1,358,710,042	45,821,607	2,406,924	18,379,628	42,356,989
501 - 750	11	84	49,366	52,098	944,193,439	45,249,091	1,515,547	12,688,793	28,620,268
751 - 1000	12	50	41,046	43,016	895,220,639	37,236,655	2,271,173	11,382,093	29,513,653
1001 - 3000	13	74	111,115	120,320	2,291,291,816	90,046,763	4,321,889	29,806,359	70,917,165
3001 - 5000	14	13	48,889	50,005	1,233,118,075	54,118,595	2,549,244	15,468,206	39,518,519
over 5000	15	11	93,712	102,000	2,550,769,921	77,986,952	4,642,326	32,131,364	79,335,550
Total	Total	99,104	1,002,586	1,083,067	\$20,344,247,617	\$640,018,235	\$29,082,674	\$272,918,960	\$598,417,237

Table 3: Summary by Region

Region	Number of Employees	Number of Employers	Number of Jobs	Total Wages	Deferred Compensation	Dependent Care	Imputed Sales & Use Tax	Net Individual Income Tax
West	25,713	5,292	37,542	\$562,814,793	\$14,108,973	\$351,965	\$8,594,836	\$16,082,277
Midwest	28,850	6,384	41,085	669,551,011	19,337,695	428,703	9,748,985	19,481,112
Southwest	9,328	2,727	13,417	175,891,739	4,461,690	181,302	2,861,968	4,549,692
North Cent	3,074	1,089	4,459	51,603,839	924,281	12,276	913,977	1,245,951
Central	58,240	10,232	84,413	1,323,240,532	35,673,746	1,503,314	19,328,888	38,839,089
South Cent	27,799	6,387	39,707	581,539,135	15,237,837	453,954	8,586,711	16,613,870
Northeast	47,340	9,809	67,841	998,688,995	24,699,402	968,297	15,224,082	25,542,869
Mideast	29,912	6,661	43,161	629,164,570	19,544,302	513,445	9,396,729	17,353,973
East	279,658	28,489	419,714	9,219,493,114	313,061,454	15,216,818	115,884,018	316,521,199
Southeast	156,459	19,809	230,129	4,146,411,566	141,143,495	8,098,353	55,017,743	133,850,575
Subtotal	666,373	96,879	981,468	18,358,399,294	588,192,875	27,728,427	245,557,937	590,080,607
Other	68,012	50,097	101,599	1,985,848,323	51,825,360	1,354,247	27,361,023	8,336,630
Total	734,385	146,976	1,083,067	*****	\$640,018,235	\$29,082,674	\$272,918,960	\$598,417,237

Table 4: Summary by Industrial Sector

Industry Sector	Number of Employees	Number of Employers	Number of Jobs	Total Wages	Deferred Compensation	Dependent Care	Imputed Employee Sales and Use Tax	Imputed Employee Net Income Tax
Agriculture	31,460	6,171	34,161	\$374,601,456	\$4,721,075	\$157,700	\$6,507,119	\$9,551,245
Mining	2,085	125	2,123	46,983,717	1,746,514	5,430	651,782	1,266,594
Construction	41,548	4,832	50,315	1,112,510,648	24,078,365	345,912	14,453,058	34,945,350
Manufacturing	83,367	2,144	89,940	2,466,158,078	101,887,860	2,174,338	31,625,880	69,596,767
Transportation, Communications, and Utilities	63,656	2,424	67,336	2,037,579,640	80,752,750	1,744,075	24,267,469	66,203,651
Wholesale Trade	43,298	1,912	45,397	940,035,083	30,152,502	1,115,798	12,247,677	28,424,296
Retail Trade	140,236	8,680	167,298	1,805,041,282	43,205,437	1,302,835	29,523,594	49,571,011
Finance, Insurance, and Real Estate	51,967	3,008	55,513	1,481,781,307	67,341,372	5,071,157	17,778,679	52,102,737
Services	260,523	16,017	322,551	5,871,194,475	171,907,816	11,552,973	77,516,897	196,960,343
Government	102,301	883	113,208	2,279,388,817	65,854,357	3,963,112	30,071,085	64,609,727
Other	110,515	52,908	135,225	1,928,973,114	48,370,187	1,649,344	28,275,721	25,185,516
Total	930,956	99,104	1,083,067	*****	\$640,018,235	\$29,082,674	\$272,918,960	\$598,417,237
Imputed Net Income Tax: Imputed Individual Income Tax liability net of refundable credits minus refundable child care credit								

Figure 1: Comparison of BEA & Final Data Set Salary by Industry

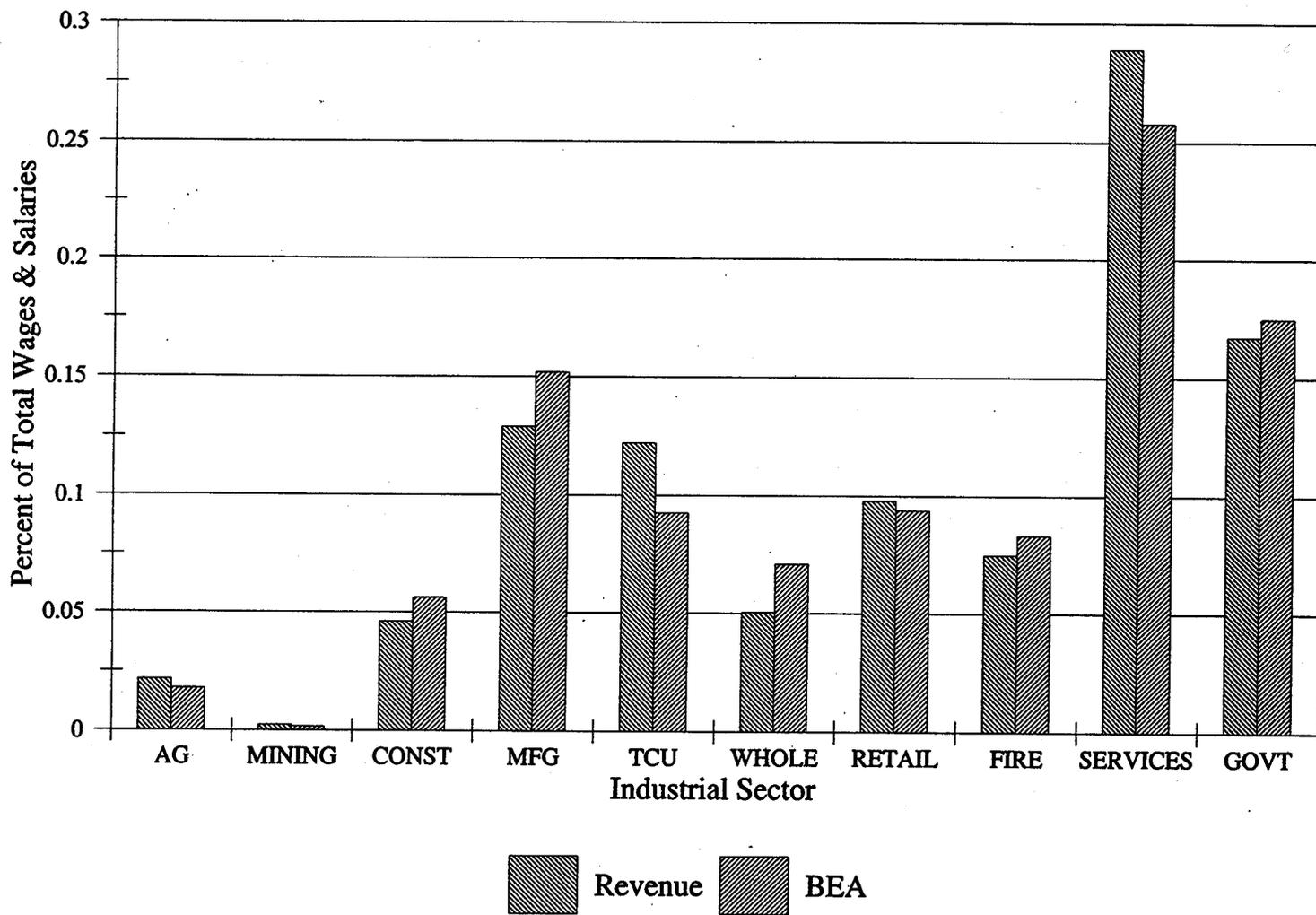


Table 5: Comparison of 1991, 1995, and 1999 IRMF File Summary by Employer Size

Employer Size (Number of Employees)	Employer Size Grouping Number	Number of Employers			Number of Jobs			Total Wages		
		1991	1995	1999	1991	1995	1999	1991	1995	1999
1 - 5	1	88,231	88,705	77,966	147,503	148,410	134,322	\$2,016,273,250	\$1,955,352,064	\$2,076,788,358
6 - 10	2	8,738	8,888	8,917	65,988	67,365	67,704	791,092,728	874,845,604	1,065,326,188
11 - 15	3	3,439	3,469	3,507	43,625	44,186	44,426	606,547,398	633,414,611	698,899,264
16 - 20	4	1,766	1,823	1,981	31,479	32,533	35,291	414,798,555	498,535,938	592,467,635
21 - 25	5	1,121	1,164	1,295	25,628	26,574	29,555	329,706,835	398,135,649	568,562,234
26 - 50	6	2,433	2,590	2,636	86,388	91,858	94,620	1,124,963,259	1,349,758,080	1,669,415,186
51 - 75	7	891	938	996	54,649	57,770	60,781	726,568,804	859,529,017	1,137,738,952
76 - 100	8	398	483	479	34,354	42,011	41,561	500,346,965	657,553,460	782,135,316
101 - 250	9	678	731	873	101,682	110,886	131,113	1,429,374,507	1,750,615,925	2,479,610,552
251 - 500	10	185	218	222	64,992	76,271	76,255	930,891,645	1,135,382,715	1,358,710,042
501 - 750	11	63	75	84	38,573	46,469	52,098	577,749,182	717,619,619	944,193,439
751 - 1000	12	27	35	50	22,564	30,175	43,016	395,117,010	562,267,017	895,220,639
1001 - 3000	13	67	63	74	111,261	104,058	120,320	1,608,634,791	1,861,667,298	2,291,291,816
3001 - 5000	14	8	12	13	29,993	49,850	50,005	687,496,447	1,034,262,016	1,233,118,075
over 5000	15	8	6	11	83,085	70,627	102,000	1,776,092,761	1,733,405,150	2,550,769,921
Total	Total	108,053	109,200	99,104	941,764	999,043	1,083,067	\$13,915,654,137	\$16,022,344,163	\$20,344,247,617

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Table 5: Comparison of 1991, 1995, and 1999 IRMF File Summary by Employer Size (Continued)

Employer Size (Number of Employees)	Employer Size Grouping Number	Deferred Compensation			Dependent Care		
		1991	1995	1999	1991	1995	1999
1 - 5	1	\$19,633,667	\$32,365,638	\$33,963,169	\$971,842	\$1,186,287	\$859,503
6 - 10	2	6,591,425	11,102,304	17,265,801	324,267	489,816	419,626
11 - 15	3	6,308,197	8,818,261	12,773,906	301,299	365,719	410,775
16 - 20	4	4,783,861	9,215,966	13,859,738	209,717	437,849	318,358
21 - 25	5	4,069,128	7,428,498	12,592,096	162,127	310,513	487,626
26 - 50	6	19,102,650	32,414,369	48,251,790	870,707	1,650,701	2,074,062
51 - 75	7	15,500,009	23,428,806	33,520,960	2,158,221	886,446	1,389,923
76 - 100	8	11,873,482	18,599,539	27,747,507	479,660	897,780	994,762
101 - 250	9	34,714,229	55,260,048	89,583,605	1,374,506	2,727,433	4,420,936
251 - 500	10	23,656,693	43,376,851	45,821,607	1,362,040	2,491,363	2,406,924
501 - 750	11	19,512,937	26,417,136	45,249,091	1,080,772	1,549,622	1,515,547
751 - 1000	12	12,821,286	24,730,201	37,236,655	583,305	1,129,086	2,271,173
1001 - 3000	13	51,990,329	76,241,967	90,046,763	1,781,482	3,669,176	4,321,889
3001 - 5000	14	22,634,002	38,900,760	54,118,595	1,482,079	2,058,375	2,549,244
over 5000	15	29,930,620	42,045,683	77,986,952	1,824,679	3,452,756	4,642,326
Total	Total	\$283,122,525	\$450,346,027	\$640,018,235	\$14,966,703	\$23,302,922	\$29,082,674

Table 6: Comparison of Final Tax Burden Study Data Sets Summary by Employee Region 1991, 1995, and 1999

Employee Region	Employees			Jobs			Total Wages		
	1991	1995	1999	1991	1995	1999	1991	1995	1999
West	23,173	21,380	24,949	32,274	29,829	37,542	\$396,076,370	\$432,787,043	\$562,814,793
Midwest	25,580	22,874	28,062	34,804	31,722	41,085	445,416,292	477,521,567	669,551,011
Southwest	8,431	7,341	9,039	11,371	10,094	13,417	129,839,116	129,359,047	175,891,739
North Central	2,781	2,338	2,973	3,813	3,240	4,459	33,759,260	34,479,135	51,603,839
Central	50,534	47,704	56,396	70,018	66,666	84,413	850,446,158	953,235,876	1,323,240,532
South Central	25,731	23,134	27,070	37,824	31,787	39,707	402,642,742	426,243,819	581,539,135
Northeast	40,958	39,255	45,986	55,486	54,454	67,841	636,021,863	750,706,661	998,688,995
Mideast	25,724	24,185	29,081	34,653	33,290	43,161	401,441,696	452,092,823	629,164,570
East	247,450	244,656	274,504	350,937	361,926	419,714	5,721,884,834	6,684,446,641	9,219,493,114
Southeast	132,809	131,255	152,216	183,059	186,462	230,129	2,614,894,721	3,039,446,792	4,146,411,566
Subtotal	583,171	564,122	650,276	811,239	809,470	981,468	11,632,423,052	*****	18,358,399,294
Other	100,702	138,740	61,414	130,525	189,573	101,599	2,283,231,085	2,642,024,759	1,985,848,323
Total	683,873	702,862	711,690	941,764	999,043	1,083,067	\$13,915,654,137	*****	\$20,344,247,617

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Table 6: Comparison of Final Tax Burden Study Data Sets Summary by Employee Region 1991, 1995, and 1999 (Continued)

Employee Region	Deferred Compensation			Dependent Care		
	1991	1995	1999	1991	1995	1999
West	\$5,665,720	\$8,526,740	\$14,108,973	\$135,553	\$205,856	\$351,965
Midwest	5,858,495	9,952,950	19,337,695	156,631	163,334	428,703
Southwest	2,113,255	2,800,618	4,461,690	50,060	57,957	181,302
North Central	395,627	406,242	924,281	1,485	2,660	12,276
Central	17,179,954	22,671,480	35,673,746	746,563	963,436	1,503,314
South Central	6,167,772	9,335,379	15,237,837	217,633	196,377	453,954
Northeast	11,999,171	17,672,087	24,699,402	256,854	557,289	968,297
Mideast	8,895,439	10,820,665	19,544,302	207,057	313,284	513,445
East	132,456,333	214,963,722	313,061,454	7,476,144	10,558,483	15,216,818
Southeast	51,963,555	83,565,711	141,143,495	3,550,474	5,854,174	8,098,353
Subtotal	242,695,321	380,715,594	588,192,875	12,798,454	18,872,850	27,728,427
Other	40,427,204	69,630,433	51,825,360	2,168,249	4,430,072	1,354,247
Total	\$283,122,525	*****	\$640,018,235	\$14,966,703	*****	\$29,082,674

Table 7: Comparison Final Tax Burden Study Data Sets Summary by Industry Sector 1991, 1995, and 1999

Industry	Number of Employees			Number of Employers			Number of Jobs			Total Wages		
	1991	1995	1999	1991	1995	1999	1991	1995	1999	1991	1995	1999
Agriculture	25,767	25,906	31,460	6,235	6,777	6,171	28,044	28,186	34,161	\$280,655,395	\$291,226,852	\$374,601,456
Mining	1,714	1,652	2,085	180	153	125	1,780	1,697	2,123	31,965,409	33,174,440	46,983,717
Constructio	27,380	30,953	41,548	3,655	4,326	4,832	32,338	36,505	50,315	457,825,319	625,750,099	1,112,510,648
Manufactur	73,564	69,691	83,367	2,065	2,100	2,144	77,229	73,503	89,940	1,597,130,436	1,756,492,825	2,466,158,078
Transportation, Communications, & Utilities	58,925	56,815	63,656	2,065	2,225	2,424	61,469	59,224	67,336	1,500,477,230	1,666,463,218	2,037,579,640
Wholesale	31,149	34,239	43,298	2,010	1,984	1,912	32,169	35,406	45,397	550,201,043	685,276,945	940,035,083
Retail Trad	111,741	115,365	140,236	9,021	9,476	8,680	130,492	138,275	167,298	1,129,296,389	1,333,614,745	1,805,041,282
Finance, In-	36,302	42,601	51,967	2,493	2,756	3,008	37,905	44,563	55,513	768,237,385	1,018,972,242	1,481,781,307
Services	192,177	208,202	260,523	14,173	15,392	16,017	232,030	255,811	322,551	3,050,491,037	3,940,892,702	5,871,194,475
Government	98,153	93,657	102,301	947	917	883	103,286	99,746	113,208	1,763,694,532	1,879,081,560	2,279,388,817
Other	19,426	60,640	110,515	1,811	26,866	52,908	19,766	68,931	135,225	264,950,965	733,139,528	1,928,973,114
Total	676,298	739,721	899,496	44,655	72,972	92,933	756,508	841,847	1,083,067	\$11,394,925,140	\$13,964,085,156	\$20,344,247,617

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Table 7: Comparison Final Tax Burden Study Data Sets Summary by Industry Sector 1991, 1995, and 1999 (Continued)

Industry	Deferred Compensation			Dependent Care			Imputed Employee Sales & Use Tax			Imputed Employee Net Income Tax		
	1991	1995	1999	1991	1995	1999	1991	1995	1999	1991	1995	1999
Agriculture	\$1,588,106	\$1,917,954	\$4,721,075	\$124,143	\$79,422	\$157,700	\$6,258,695	\$6,248,544	\$6,507,119	\$7,445,879	\$7,493,625	\$9,551,245
Mining	244,187	808,293	1,746,514	6,287	66,788	5,430	643,198	631,730	651,782	883,436	950,028	1,266,594
Constructio	2,566,757	7,065,144	24,078,365	1,424,159	272,330	345,912	9,293,260	11,701,744	14,453,058	12,873,724	19,564,246	34,945,350
Manufactur	40,720,149	62,764,495	101,887,860	639,387	1,461,293	2,174,338	31,353,584	32,048,778	31,625,880	46,498,646	54,465,697	69,596,767
Transportation, Communications, & Utilities	37,518,677	59,787,056	80,752,750	963,565	1,407,705	1,744,075	27,491,373	28,476,860	24,267,469	46,243,399	55,901,413	66,203,651
Wholesale	10,227,126	19,528,705	30,152,502	257,663	641,575	1,115,798	10,786,499	12,534,704	12,247,677	15,974,873	21,495,005	28,424,296
Retail Trad	12,435,311	24,340,620	43,205,437	378,288	800,995	1,302,835	25,576,069	28,018,915	29,523,594	29,296,962	37,523,620	49,571,011
Finance, In-	23,898,473	41,844,233	67,341,372	2,469,610	3,981,959	5,071,157	14,364,413	17,583,533	17,778,679	25,139,429	37,846,585	52,102,737
Services	65,675,234	106,077,297	171,907,816	3,851,504	7,588,390	11,552,973	60,544,922	72,412,477	77,516,897	97,533,168	137,624,085	196,960,343
Government	42,830,645	57,799,025	65,854,357	2,303,420	3,711,451	3,963,112	35,915,860	34,133,590	30,071,085	49,359,137	58,092,194	64,609,727
Other	5,491,165	16,514,463	48,370,187	231,487	652,201	1,649,344	5,367,715	14,268,148	28,275,721	7,314,704	16,435,698	25,185,516
Total	\$243,195,830	\$398,447,285	\$640,018,235	\$12,649,513	\$20,664,109	\$29,082,674	\$227,595,588	\$258,059,023	\$272,918,960	\$338,563,358	\$447,392,197	\$598,417,237

Table 8: Federal Adjusted Gross Income and Nebraska Income Tax After Credits by Deciles (Resident Returns)

Tax Year	Federal Adjusted Gross Income						Nebraska Income Tax after Credits*				
	Number of Returns	First 7 Deciles mil.\$	8th Decile mil.\$	9th Decile mil.\$	10th Decile mil.\$	Top 500 Returns mil.\$	First 7 Deciles mil.\$	8th Decile mil.\$	9th Decile mil.\$	10th Decile mil.\$	Top 500 Returns mil.\$
1986	630,513	4,378.2	1,818.6	2,336.0	4,501.2	455.2	68.1	37.3	54.3	168.4	29.7
1987(a)	650,919	4,710.6	2,003.4	2,597.2	5,022.1	422.6	87.1	45.8	65.7	183.4	20.8
1988	662,517	5,062.6	2,123.1	2,762.2	5,897.4	733.3	85.8	47.6	70.0	224.7	35.2
1989	673,048	5,367.8	2,247.8	2,925.6	6,225.4	776.8	88.9	49.1	73.0	225.2	29.0
1990(c)	681,442	5,690.5	2,379.5	3,096.5	6,676.5	860.0	103.5	57.4	85.8	262.0	31.1
1991(c)	690,112	5,766.9	2,471.7	3,228.0	6,714.3	744.9	113.4	64.5	97.8	286.5	30.1
1992(b)	694,041	6,008.2	2,581.9	3,383.7	7,347.1	928.2	117.5	67.7	103.8	318.4	36.4
1993(d)	695,479	6,210.3	2,668.2	3,502.0	7,419.7	804.2	114.6	69.2	107.2	338.0	33.2
1994	706,311	6,275.2	2,771.9	3,657.5	7,794.8	868.8	117.3	72.7	113.6	358.2	36.5
1995	716,195	6,781.4	2,945.4	3,886.9	8,903.6	1,392.1	129.8	79.5	123.6	393.4	39.6
1996	729,023	7,143.2	3,141.0	4,148.7	9,529.3	1,281.8	140.6	86.9	135.6	445.6	49.8
1997(e)	739,103	7,976.3	3,372.4	4,448.8	10,586.5	1,564.1	135.2	84.9	132.8	427.8	48.8
1998(f)	748,163	8,505.6	3,572.1	4,724.8	12,042.1	2,221.4	153.9	97.2	154.3	521.6	59.4
1999	757,222	9,001.7	3,779.8	4,995.6	12,666.5	2,113.2	167.8	106.6	168.6	576.7	69.7

Beginning AGI Level:

1996 Dollars per return	37,687	48,098	66,701	907,097
1999 Dollars per return	43,611	56,781	77,690	*****

Tax Year	Federal Adjusted Gross Income as percent of total					Nebraska Income Tax after Credits* as percent of total				
	First 7 Deciles percent	8th Decile percent	9th Decile percent	10th Decile percent	Top 500 Returns percent	First 7 Deciles percent	8th Decile percent	9th Decile percent	10th Decile percent	Top 500 Returns percent
1986	33.59	13.95	17.92	34.53	3.49	20.77	11.36	16.53	51.34	9.05
1987(a)	32.86	13.98	18.12	35.04	2.95	22.80	11.99	17.20	48.01	5.45
1988	31.95	13.40	17.43	37.22	4.63	20.04	11.11	16.36	52.49	8.23
1989	32.01	13.41	17.45	37.13	4.63	20.37	11.26	16.74	51.62	6.65
1990(c)	31.89	13.34	17.35	37.42	4.82	20.35	11.28	16.87	51.51	6.11
1991(c)	31.72	13.60	17.75	36.93	4.10	20.18	11.47	17.39	50.96	5.35
1992(b)	31.10	13.36	17.51	38.03	4.80	19.34	11.15	17.09	52.43	5.99
1993(d)	31.36	13.48	17.69	37.47	4.06	18.22	11.00	17.04	53.74	5.28
1994	30.61	13.52	17.84	38.02	4.24	17.72	10.99	17.17	54.12	5.52
1995	30.12	13.08	17.26	39.54	6.18	17.87	10.95	17.02	54.16	5.46
1996	29.81	13.11	17.31	39.77	5.35	17.39	10.74	16.77	55.10	6.16
1997(e)	30.23	12.78	16.86	40.12	5.93	17.32	10.88	17.01	54.81	6.25
1998(f)	29.49	12.38	16.38	41.75	7.70	16.60	10.49	16.65	56.27	6.41
1999	29.57	12.42	16.41	41.61	6.94	16.45	10.45	16.53	56.55	6.83

* Represents the net tax liability of the taxpayer after allowance of non-refundable credits such as the personal exemption credit or child dependent care credit, etc.

(a) Tax Reform Act of 1986 (prior to 1987 40 percent of capital gains is included in AGI, starting in 1987, 100 percent of capital gains is included in AGI).

(b) excludes depreciation surcharge

(c) LB1059, effective tax years 1990 and 1991.

(d) LB240, effective tax year 1993.

(e) LB401, Nebraska Individual Income tax rate cut.

(f) For tax years 1998 and after, Nebraska liability includes the effect of the refundable child care credit.

Table 9: Effective Tax Rate and Burden Index by Deciles (Resident Returns)

Tax Year	Effective Tax Rate(g)					Tax Burden Index(h)				
	First 7 Deciles percent	8th Decile percent	9th Decile percent	10th Decile percent	Top 500 Returns percent	First 7 Deciles	8th Decile	9th Decile	10th Decile	Top 500 Returns
1986	1.56	2.05	2.32	3.74	6.52	0.62	0.81	0.92	1.49	2.59
1987(a)	1.85	2.29	2.53	3.65	4.93	0.69	0.86	0.95	1.37	1.85
1988	1.69	2.24	2.54	3.81	4.81	0.63	0.83	0.94	1.41	1.78
1989	1.66	2.18	2.50	3.62	3.73	0.64	0.84	0.96	1.39	1.44
1990(c)	1.82	2.41	2.77	3.92	3.62	0.64	0.85	0.97	1.38	1.27
1991(c)	1.97	2.61	3.03	4.27	4.04	0.64	0.84	0.98	1.38	1.30
1992(b)	1.95	2.62	3.07	4.33	3.92	0.62	0.83	0.98	1.38	1.25
1993(d)	1.85	2.59	3.06	4.56	4.13	0.58	0.82	0.96	1.43	1.30
1994	1.87	2.62	3.11	4.59	4.20	0.58	0.81	0.96	1.42	1.30
1995	1.91	2.70	3.18	4.42	2.85	0.59	0.84	0.99	1.37	0.88
1996	1.97	2.77	3.27	4.68	3.89	0.58	0.82	0.97	1.39	1.15
1997(e)	1.70	2.52	2.99	4.04	3.12	0.57	0.85	1.01	1.37	1.05
1998(f)	1.81	2.72	3.27	4.33	2.67	0.56	0.85	1.02	1.35	0.83
1999	1.86	2.82	3.37	4.55	3.30	0.56	0.84	1.01	1.36	0.98

- (a) Tax Reform Act of 1986 (prior to 1987 40 percent of capital gains is included in AGI, starting in 1987, 100 percent of capital gains is included in AGI).
- (b) excludes depreciation surcharge
- (c) LB1059, effective tax years 1990 and 1991.
- (d) LB240, effective tax year 1993.
- (e) LB401, Nebraska Individual Income tax rate cut.
- (f) For tax years 1998 and after, Nebraska liability includes the effect of the refundable child care credit.
- (g) Effective tax rate is defined as Nebraska Income Tax after Credits as percent of AGI.
- (h) Tax burden index is defined as the share index of Net Nebraska Tax weighted by the share index of AGI.

Table 10: Results from TRAIN Model Exercise.

TRAIN Sector Name	Household Sectors by AGI Group								
	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$69,999	More than \$70,000
Livestock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Crops	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Primary Materials	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Construction	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Meat Packing	0.00%	0.00%	0.00%	0.00%	0.00%	1.52%	0.00%	0.00%	0.00%
Food Processing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.17%
Construction-Oriented Manufacturing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Printing & Publishing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.86%
Chemicals & Related	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.47%
Metals & Machinery	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.33%
Electronic Technology	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.61%
Trans. Equipment & Farm Machinery	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.00%	1.11%
Other Manufacturing	0.00%	0.00%	0.00%	0.78%	0.00%	0.00%	0.00%	0.00%	1.31%
Transportation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.46%
Communication	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.35%
Utilities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.80%
Wholesale Trade	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.47%	1.06%
Retail Trade	0.00%	0.00%	0.00%	0.00%	0.11%	0.00%	0.00%	0.23%	1.25%
Banking	0.00%	0.98%	0.00%	0.00%	0.00%	0.00%	0.54%	0.50%	1.29%
Insurance Carriers	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.48%	1.28%
Real Estate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.99%	1.72%
Other Finance, Insurance, Real Estate	0.00%	0.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Business Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.37%
Health Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.19%	0.30%	1.34%
Entertainment	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.71%
Other Services	0.00%	0.00%	0.00%	0.39%	0.00%	0.00%	0.00%	0.19%	1.27%

1995 Nebraska Tax Burden Study
Employee Regions Based on Three-Digit Zip Code

