Assessment of<br>NORTH DAKOTA'S STATE AND LOCAL TAX BURDEN with Statistical Appendix



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## Highlights

Compared to their neighbors (Minnesota, Montana, Wyoming, South Dakota, Nebraska) North Dakota's taxpayers' burden is about average. In real terms, state and local tax collections in North Dakota increased by 66.5 percent (1.6 percent per year) from 1960 to 1992. However, personal income increased by 200 percent ( 2.2 percent per year) over the same time period. The percent of personal income paid in state and local taxes decreased by 17 percent ( 0.5 percent per year) during this period.

Tax collections per capita rose by 66.5 percent (1.6 percent per year) from $\$ 1100$ in 1960 to $\$ 1800$ in 1992. Both personal income and overall tax collections increased but population did not change appreciably over this time period.

Taxable values of real property decreased 62.5 percent while property taxes collected decreased only 1 percent ( 1960 to 1992). Taxable values of agricultural real property decreased 67.7 percent and residential real property decreased 26.5 percent (1960 to 1992).

North Dakota relies heavily on the sales tax (37 percent). Historically, property tax was the largest source of tax collections. By 1973, it fell into second place and remains there today (34 percent). North Dakota relies heavily ( 71 percent) on inelastic tax sources (property and sales taxes). During a stable or declining economy, this benefits the state, but does not aid state revenues during a period with a growing economy.

North Dakota's heavy reliance on sales (37 percent) and property (34 percent) tax no doubt distorts private sector economic decisions and resource allocation, but the effects are difficult to estimate. A broad mix of taxes permits raising revenue without undue dependence on any one tax.

Energy (9.3 percent) and corporate (3.4 percent) taxes are generally hidden taxes. Sales tax is not hidden at the time of purchase, but the annual total is unknown to taxpayers. Property (34 percent) is somewhat hidden if it is escrowed into the monthly mortgage payment.

State collected taxes amount to 64 percent of total tax collected compared to 36 percent for local collections during 1992. In 1960 state collection was 45 percent compared to 55 percent for local.

Energy taxes have varied from a low of 1.43 percent in 1973 to a high of 25.6 percent during 1982. Today energy tax amounts to 9.3 percent of total collections. Some of the burden is borne by North Dakota residents in the form of resource owner costs, shareholder costs, or higher energy prices. The rapid increase during the late 1970s and early 1980s provided a revenue increase for state government. Since 1983, the percentage share of energy taxes has fallen causing the state government to shift the tax burden to other sources.

# Assessment of NORTH DAKOTA'S STATE AND LOCAL TAX BURDEN 

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Taxpayers often contend they pay more taxes than their neighbors or more than they did in the past. The impact of the actual burden often is difficult to assess due to the effects of inflation and the complexities of the overall tax system. The purpose of this study is to objectively assess the state and local tax burden in North Dakota.

The burden of a tax system can be measured using at least three concepts: (1) the types of tax collected, (2) tax collections as a percentage of personal income, and (3) per capita tax collections. The type of tax collected can be used to identify shifting of the tax burden among jurisdictions and among groups of taxpayers. The type of tax collected relates to the reliance on four primary tax bases--income, sales, property, and energy--over time. Tax collections expressed as a percentage of personal income illustrates how the overall tax burden may have changed relative to personal income. Changes in tax collections per capita show if the tax liability of each citizen has changed.

Personal income is the money value of the net increase to an individual's power to consume during a period, which includes the amount actually consumed during the period plus net additions to wealth (Rosen 1988).
Personal income is estimated annually and reported by United States Department of Commerce.

This study does not address the issue of whether taxpayers are getting more or less for their money now than in the past. It is difficult to assess the benefits received from government over time and among states. Nor does this study attempt to describe changes in tax laws over time, other than to highlight those that resulted in substantial shifts in the burden. The biennial North Dakota Tax Guide (Hanson 1994) and Dorow et al. (1988) are helpful sources for that type of tax information.

## PROCEDURE

Tax revenue data were assembled for a 33-year period, from 1960 to 1992. North Dakota's tax situation was compared over time and to those of neighboring states: Minnesota, Nebraska, South Dakota, Montana, and Wyoming.

[^0]Comparing trends in tax collections over time may be misleading because of changes in the value of the dollar. For example, $\$ 10$ in 1979 would buy 13.4 percent more goods or services than would $\$ 10$ in 1980 (Appendix Table G1). A $\$ 300$ tax per capita in 1960 reduced a person's wealth more than a $\$ 1400$ tax did in 1992. Comparisons using nominal values are misleading because of a lack of a common denominator--a 1960 dollar is not worth the same (in terms of purchasing power) as a 1992 dollar. Expressing tax collections in real dollars facilitates comparisons by expressing the worth of all dollars in a common dollar's worth. Tax collections measured in nominal dollars were converted to real 1994 dollars using the consumer price index (CPI) (United States Department of Commerce).

Nominal dollars are dollars that are received during a specific period of time.
Real dollars are nominal dollars adjusted for changes in the price level and expressed in terms of a base year.

Tax revenue data were assembled into tables, graphs, and charts, depicting the three comparative concepts. Observations were made relative to trends or patterns of these data. Tax revenue trends and tax burden shifts were assessed using selected tax evaluation standards. Assessment was accomplished by comparisons across time and among states.

## Data

Most of the tax data came from the Statistical Abstract of the United States (1961-1992). North Dakota's tax information was supplemented with information from Report of 1992 Property Valuations and Property Taxes Levied in North Dakota (State Tax Department 1992) and from State and Local Taxes in North Dakota (State Tax Department 1994). Robert Cordingly, appraiser, Ad Valorem Tax Division, provided supplemental information on Wyoming's taxes. The gaps in Montana's data were filled by Brad Simshaw, Office of Research and Information, Montana Department of Revenue. Wyoming's energy tax collections were provided by Richard Marble, Director of Mineral Tax Division, Wyoming Department of Revenue and Taxation.

A STATISTICAL APPENDIX (Appendices A through F) contains most of the time series nominal figures used to develop the graphs and charts, as well as selected graphs and charts not included in the main text.

## Tax Evaluation Criteria

There are many standards for evaluating taxes, some are from taxpayers' perspectives, some from a public finance theory perspective, and some from the perspective of elected decision makers. A specific tax is not likely to rate well in more than a few criteria, and may rate very high in one standard and very low in another. However, the tax system overall should
reflect the combination of tax instruments that achieves the highest overall rating when judged against the set of standards, given the norms of the community.

Taxpayers. Those who pay taxes judge taxes and tax systems on (1) fairness or equity, (2) the ability to understand their obligations, (3) the compliance costs, and (4) the stability of the tax system over time.

Fairness or equity. ${ }^{2}$ Equity is based on either benefits received or ability to pay. A tax usually complies with only one or the other of these concepts, not both. One concept of fairness is if the tax is levied proportional to the benefits the taxpayer receives from government expenditure of the tax revenue collected. The tax on gasoline is a good example of a tax based on benefits received. The other fairness concept, ability to pay, uses some measure of a person's wealth or income as an indicator of their fair share of the tax burden. Income taxes are a good example of a tax based on ability to pay, especially where "income" is adjusted to account for things that may reduce someone's ability to pay, such as excessive health care costs or taxes paid to other jurisdictions. Progressive taxes--those where the percentage paid in taxes increases with greater ability to pay--are thought to be most fair (based on ability to pay), while regressive taxes--those where the percentage paid in taxes decreases with greater ability to pay--are thought to be most unfair.

Understandable. Taxpayers should be able to understand the tax they are expected to pay. They should know why they are taxed and what the tax is based on. Also, the use of the tax revenue should be understandable.

Compliance costs. The amount taxpayers pay to comply with tax laws, in addition to the amount of tax paid, should be kept to a minimum.

Stability. Tax system stability facilitates incorporation of tax burden expectations into future business and personal planning. Tax systems that fluctuate make personal or business financial planning more difficult.

Public finance theory. From a public finance perspective, a tax system should (5) have low administrative costs, (6) result in minimal shifting, (7) be reliable, (8) be adequate, (9) be neutral, and (10) be efficient.

[^1]Low administrative costs. The cost to collect/administer a tax should be low relative to the amount collected.

Minimal shifting. The statutory incidence (who pays according to law) should equal economic incidence (who pays in reality). Some taxes, such as personal income and residential property, are not shiftable; while others, such as sales tax and corporate income taxes, can be partly or entirely shifted to others.

Reliable. A tax system that can generate reliable revenue over a range of economic conditions is preferred to one where collections are erratic. The "elasticity" concept is used to assess reliability. Personal income taxes are elastic (collections vary with the state of the economy), while property taxes are relatively inelastic (collections do not change much, in the short run, with changes in the economy).

Adequate. The tax should generate sufficient revenue to meet government's needs. This is almost an accounting criterion, in that the rates and base should be designed to collect adequate revenue.

Neutral. Taxes should not affect decision making, unless that is the intention, such as with " $\sin$ " taxes. Sin taxes are, in part, designed to reduce the consumption of items; for example, tobacco and alcohol. Another example of non-neutral tax policy is exemptions and, especially, credits against income taxes that encourage desired behavior, such as energy credits or deductions for donations to charity.

Efficient. Tax efficiency occurs when the economic loss to taxpayers is no greater than the amount of taxes. There are certain taxes that cause economic losses beyond the tax revenue; these losses are called "deadweight" losses (Hyman 1990). Broad based and direct taxes are the most efficient, while taxes with many exemptions and exclusions are the least efficient. Poll taxes are efficient, while narrowly-based sales taxes are inefficient.

Elected decision makers. Politicians are influenced by a variety of forces, including looking out for the economic well-being of their constituents. With respect to taxes, they prefer taxes that are (11) exportable, (12) competitive, and (13) balanced. The first two of these can be described and quantified, the third is largely perception or relative to some personal standard.

Exportable. Taxes that are borne by those outside of the collecting jurisdiction reduce the burden within the jurisdiction, such as lodging tax, energy tax, or sales tax paid by nonresidents.

Competitive. Taxes that are low relative to taxes in neighboring jurisdictions are thought to attract and retain businesses and residents.

Balanced. Balance can mean proportional or equal collections across bases, across geographic areas, between rural and urban; to be balanced relative in some respect to the other 12 evaluation criteria; or to whatever is in the mind of the evaluator.

## TAX COLLECTIONS BY SOURCE/TYPE

Revenues from specific tax types, related to tax bases, are expressed as a percentage of state and local taxes to illustrate how the overall tax burden is shared among tax types or sources. The five tax bases used in North Dakota are (1) property, (2) sales or consumption, (3) income, (4) sin (alcohol and tobacco), and (5) gambling (gullibility). Energy taxes based on production, extraction, or severance are a variation of income taxes; while energy taxes based on estimated resources still in the ground are a variation of property taxes.

Specific taxes addressed include property, sales, individual income, corporate income, and energy/mineral. Taxes also are grouped according to state-local source, including all local, all state, and all state and local. Comparisons are made between current and former levels in North Dakota, and between North Dakota and neighboring states.

## Trend

In 1992, state sales and use taxes accounted for about 37 percent of state and local taxes in North Dakota, followed by property tax, which accounted for 34 percent (Figure 1).


Figure 1. North Dakota's tax shares, 1960 and 1992.

All state-collected taxes are 66 percent of all state and local taxes, almost opposite of what they were in 1960, when local tax collections accounted for 55 percent of all state and local tax collections (Figure 2).


Figure 2. North Dakota's state vs. local tax share, 1960-1992.

During the period from 1960 to 1984, the local share of overall tax burden decreased steadily. In 1969, the state and local burdens of taxes were about equal. In 1984, the state share was at 73 percent, a maximum for the period from 1960 through 1992. Since 1984, the trend has reversed with the local portion of tax collections increasing and the state portion decreasing.

The relative share of tax collections among specific taxes also shifted over the past three decades (Figure 3). The most notable change is the decreasing share property tax from 1960 through 1984 is of the total tax collected. The steepest decline in property tax collections occurred after 1969 when personal property was exempted from the property tax base. Increases in the sales tax rate and in individual income tax collections offset the decline in local government revenue from the personal property exemption. Energy tax collections had a sharp peak in 1982 due to high energy prices. Decreasing energy tax revenues after 1982 were replaced by increasing sales tax and individual income tax revenues.

Percent of All State and Local Taxes


Figure 3. North Dakota's tax shares, 1960-1992.
Energy taxes levied within the state are not directly paid by citizen taxpayers. The tax is paid by the owners of energy resources, energy industry shareholders, and by consumers when taxed energy or other products where taxed energy was an input are used within the state. The share of any tax paid by ultimate consumers is a function of demand and supply elasticities in the industry. When energy prices are determined on a global scale, consumers bear little of the tax placed on energy by small producers like North Dakota. But to the extent North Dakotans are owners of energy resources or share in the returns of the industry, they bear the burden of energy taxes. The proportion of North Dakota energy tax paid by residents is difficult to estimate, but it may be in the range from 30 to 70 percent. When energy prices are regulated, such as electricity, taxes may be shifted entirely to consumers.

## Compared to Neighboring States

The 1992 tax source shares in North Dakota were compared to the 1991 tax source shares of Minnesota, Montana, Nebraska, South Dakota, and Wyoming. Total state tax percentage shares for the study states ranged from 56 percent in South Dakota to 68 percent in Minnesota (Figure 4). North Dakota is above the six-state average, but since the dispersion is so narrow, the difference between the highest state-level-share-tax-sources state (Minnesota) and the lowest (South Dakota) is not great.


Figure 4. Recent year comparison of North Dakota's and neighboring states' total state and property tax balance, 1991.

Percentages for all sales, individual income, corporate income, and energy/mineral taxes for the six study states show some differences in the relative shares among tax bases (Figure 5). Naturally, the states with substantial energy resources tap those sources, allowing them to back off from the other bases. Evaluating state-collected taxes indicates differences among states. North Dakota and South Dakota rely most heavily on sales taxes, while Minnesota relies about evenly on sales and income taxes and Montana relies most heavily on income taxes. Wyoming and Nebraska rely on property taxes more than the other states.

Shifting of the burden away from local sources (primarily property taxes) affects the way tax revenues are collected more than how they are ultimately spent. This study does not address expenditures directly, however.


Figure 5. Share of specific taxes in North Dakota and in neighboring states, 1991.

## Property Tax

Property taxes in North Dakota have been assessed against five types of property (1) agricultural, (2) residential, (3) commercial, (4) centrally assessed (railroads and public utilities), and (5) personal property. These taxes are collected by or for at least five government units (1) counties, (2) townships, (3) school districts, (4) cities, and (5) special districts.

Property tax base. The tax structure for residential, commercial, and centrally assessed properties has remained essentially unchanged since 1960 . Changes that did occur were accounting changes that had little effect on the structure of each tax. After 1981 agricultural real estate was taxed according to its productivity value and not its market value. Personal property tax was discontinued in 1969 because of administrative and other assessment problems. The personal property tax was designed to tax a person's wealth. This was accomplished by having a tax assessor visit each property owner to value the worth of personal items (e.g., cars, boats, furniture, guns, jewelry).

Relative changes within the overall property tax base can be identified by comparing the assessed values of the individual groups. The assessed values of agricultural, residential, and commercial property have all been increasing, while the assessed value of centrally assessed property declined slightly over the period from 1960 to 1991 (Figure 6).

Dollars (millions)


Figure 6. Taxable value (real) of specific property classes, 1960-1991.

Homestead Credit was enacted in 1977. It allowed an exception from property taxes on a person's home, if the home is owned and occupied by a person over 65 years of age, blind, or disabled. There are specified financial limits which entitle homeowners to property tax credits under the homestead property tax credit program.

Property tax burden. Tax base movements have little influence on the shifting of the burden of taxes. The change in tax base is a function of assessed value. The change in tax burden for any group is a function of the rate at which the assessed values change relative to each other. For example, agricultural property was assessed at $\$ 600$ million dollars in 1969 and about $\$ 900$ million in 1981 ( 50 percent increase), while residential property was assessed at $\$ 300$ million in 1969 and about $\$ 500$ million in 1981 ( 66 percent increase). Therefore, residential property had a larger percentage increase than agricultural property, indicating a shift in the tax burden to the residential group. However, the agricultural property base is relatively fixed. The amount of agricultural land has remained constant since 1960 , whereas the residential and commercial property bases have grown.

The share of the total property tax burden borne by specific groups has changed over the past 33 years (Figure 7). Shares for agricultural and centrally assessed property have been steady or slightly declining, while shares for residential and commercial properties have increased. In 1960 residential and commercial properties represented a 10 and 11 percent share respectively; by 1992 that share had increased to 28 percent and 20 percent, respectively.


Figure 7. Specific property classes as a percentage of taxable value, 1960-1991.

Property tax collections. In an attempt to determine the local government unit responsible for property tax changes, county, township, school district, and city revenues were examined to see if any one group had changed relative to the others (Figure 8).

Taxes levied by school districts increased 37 percent between 1960 and 1969, but by 1981 school tax levies fell 39 percent. By 1991 the levies returned to about the same as 1960. Township taxes have declined by 60 percent between 1960 and 1991. County and city levies have increased 16 percent and 14 percent, respectively.

Special assessments have risen to about $\$ 50$ million per year. Special assessment are user fees imposed by local governments primarily for infrastructure (e.g., roads, sidewalks, public utilities) development.

1994 Dollars (millions)


Figure 8. General property and special taxes levied by specific governments of North Dakota (real dollars), 1960-1992.

## Sales and Use Tax

The amount of money collected from sales and use taxes depends on the tax rate and the tax base. Each of the six states levies taxes at a different rate and on a different product and service mix (Table 1), so direct comparisons are difficult.

Table 1. Sales Tax Rate Comparison of Selected Items for North Dakota and Neighboring States

| North Dakota | Minnesota | South Dakota |
| :---: | :---: | :---: |
| 7 Percent | 9 or 6.5 Percent (7) | 4 Percent |
| Alcoholic Beverages | Alcoholic Beverages | Alcoholic Beverages |
| 5 Percent | 6.5 Percent | Retail Sales |
| Retail Sales | Retail Sales (1) | Grocery Foods |
| Restaurant | Restaurant | Restaurant |
| Lodging | Lodging | Lodging |
| Motor Vehicles | Electricity (2)(3) | Electricity |
| Consumables | Natural Gas (2)(3) | Natural Gas (2) |
| 3 Percent | Water/Utilities | Water/Utilities (4) |
| Natural Gas | Motor Vehicles | DMU of |
| DMU of Natural Gas | New Mobile Homes (8) | Consumables |
| Farm Machinery | DMU of Consumables | Natural Gas |
| Farm Machinery Parts | 2.5 Percent | Electricity |
| New Mobile Homes | Farm Machinery | Machinery |
|  |  | 3 Percent |
|  |  | Motor Vehicles |
|  |  | Farm Machinery |
|  |  | Mobile Homes (New and Used) |
| Nebraska | Wyoming | Montana |
| 5 Percent | 4 Percent | 4 Percent |
| Retail Sales | Alcoholic Beverages | Lodging |
| Restaurant | Retail Sales |  |
| Lodging | Grocery Foods |  |
| Electricity | Restaurant |  |
| Natural Gas | Lodging |  |
| Water/Utilities (5) | Electricity (2) |  |
| DMU of | Natural Gas (2) |  |
| Consumables | Motor Vehicles |  |
| Natural Gas (6) | Farm Machinery |  |
| Electricity (6) | Farm Machinery Parts |  |
| Machinery (9) | Mobile Homes (New and | Used) |
|  | DMU of |  |
|  | Consumables |  |
|  | Machinery |  |

The average sales and use tax base is 70 percent as broad as that of the state with the broadest base (South Dakota) (Figure 9). North Dakota's sales and use tax base is slightly broader than the average. Only South Dakota has a broader base. Montana's sales tax is only on lodging.

## Percentage Tax Rates



T = Average general sales and use tax paid by a typical family of four in the state's
largest city (Source: ND State Tax Commission 1994).
Figure 9. North Dakota's and neighboring states' sales tax rates and bases.

The five-state average sales and use tax rate is about 4.9 percent, ranging from 2.5 to 9 percent (Table 1). North Dakota's sales and use tax rate is slightly above average, which when combined with an above average base results in North Dakota's heavier reliance on this base.

Some local governments also collect general sales taxes. However, these have not yet become a substantial revenue source in the six study states. The highest local general sales tax rate in North Dakota is 1 percent (Appendix Table A5) (Office of State Tax Commissioner 1993).

## Assessment

North Dakota's taxpayers pay more state and local taxes than they did 30 years ago, with sales and use tax the primary state source and property taxes the primary local source. Sales taxes are generally thought to be regressive. Since North Dakota's sales tax base is relatively broad, it is likely more regressive than similar taxes with narrower bases in neighboring states. It is difficult to judge the state's sales taxes on the benefits-received principle, but the larger the geographic unit that collects the tax, the less likely it will be based on benefits received. Thus, overall tax collections may (or may not) have become less equitable over time.

A substantial shift occurred in the state vs. local share of the overall tax burden. Where the state formerly collected about one-third of the total, it now collects two-thirds. However, without further work it is difficult to determine if the actual burden on individuals has changed. Since the state's new wealth is generated by so few industries, the ultimate taxpayer may not change much with shifts in tax types. The shift may be only to take the tax from the left pocket instead of the right.

The reliability of a tax system to provide revenue depends on the elasticity of the tax collections relative to the economy. North Dakota has relied heavily on inelastic tax sources, such as sales and property. This is good in times of a stable or declining economy, but does not capture as much of the benefits of a growing economy as would heavier reliance on an elastic tax, such as income tax. Reliance on energy taxes, which are subject to the state of the world economy and the vagaries of the international oil market, also decreases the degree of reliability of the system to generate a given flow of revenue.

Assessing North Dakota's tax system by how the burden is shared among tax bases and between state and local taxpayers indicates a stable, but somewhat regressive structure. North Dakota state and local taxes are inelastic with respect to the economy with the exception of energy taxes. Since nearly 70 percent of the total tax collected comes from sales or property taxes, the system is more regressive than one that relies more heavily on other types of taxes.

## TAX COLLECTIONS AS A PERCENTAGE OF PERSONAL INCOME

The size of the state and local tax burden borne by North Dakotas can be estimated by expressing overall taxes as a percentage of personal income. As personal incomes rise, people generally pay more in taxes. However, while the absolute amount of taxes paid may rise, if the relative amount with respect to personal income is constant, the relative burden has not changed.

## Trend

North Dakotans pay nearly 10 percent of personal income in state and local taxes, down from about 12 percent in the early 1960s (Figure 10). A straight line through the upper curve in Figure 10 (fitted by regression) has a slightly negative slope ( $\mathrm{Y}=-.0318(\mathrm{X})+11.51$ ), indicating a downward trend. Total state taxes have been consuming an increasing share of personal income, while total local taxes have decreased as a share of personal income, reflective of the trends discussed above.

## Percent of Personal Income



Figure 10. Percent of personal income North Dakotans paid in taxes, 1960-1992.

The percentage of personal income paid in taxes varies due to changes in either tax rules or in personal income. If personal income for the present year is lower than it was for the previous year and there were no changes in tax rules, tax collections will represent an increased share of personal income (when the tax system is inelastic). To remove the effects of some of the erratic shifts in year-to-year personal income, a ten-year moving average was used (Figure 11). Personal income levels are slightly lower for the averaged personal income data due to the ten-year lag and the continually increasing personal income levels. When adjusted for year-to-year variability in personal income, taxes collected in North Dakota as a percent of personal income show a smoother but similar downward trend (Figure 12).

## Billion Dollars



Figure 11. Personal income and a ten-year moving average of personal income for North Dakota, 1950-1992.

## Percent of Ten-year Average of Personal Income



Figure 12. Percent of a ten-year moving average personal income that North Dakotans paid in taxes, 1960-1992.

## Compared to Neighboring States

State and local collections as a percentage of personal income ranged from 8 percent in South Dakota to 13 percent in Wyoming (Figure 13). Property tax is the local tax that all of North Dakota's neighbors levy. Property tax collections ranged from North Dakota's 3.6 percent of personal income to Wyoming's 5.2 percent.

A difference not evident in these percentages is the amount of taxes exported. While Wyoming has the highest percentage of personal income paid in taxes, much of that is exported (the energy taxes) and not paid directly by citizen taxpayers. However, as noted above it is difficult to determine how much of the exported taxes finds its way back into the states in the form of higher prices.

Percent of Personal Income


Figure 13. Recent year comparison of state and local tax collections in North Dakota and neighboring states.

Another subtle distinction that could be made is the effect of higher deductible state and local taxes on the amount of federal income taxes paid (Figure 14). For example, a Minnesota taxpayer equal in all ways to one in North Dakota would pay less federal income taxes than the North Dakota resident. This is because a greater share of Minnesota's state and local tax burden is deductible from federal income subject to taxation ( 68 percent compared to 46 percent in North Dakota). Minnesota relies heavily on a progressive state income tax, but a portion of that is exported to other federal taxpayers in the form of federal tax deductions.


Figure 14. Percentage of state and local taxes that are deductible from federal income tax, 1991.


#### Abstract

Assessment Taxes as a percent of personal income do not differ much in absolute percentage terms among the six study states, especially when other factors are considered, such as federal tax liability and energy tax shifting. The difference is mainly the perception of the burden, based on the type of tax. For example, Minnesota's income taxes are highly visible with most taxpayers knowing exactly how much they pay each year. On the other hand, North Dakota's sales taxes, while visible, may not be perceived as onerous, especially when few taxpayers know precisely how much they pay each year. Even less visible are the energy and commercial property and income taxes, which may be hidden in the prices of products, many of which are subject to additional sales taxes or borne by citizen shareholders.

However, on a relative basis, while the differences are small in terms of percentage points, a 1 percentage point difference between 9 and 10 percent is actually an 11 percent difference. Thus, total state and local taxes are 50 percent higher in Nebraska than in South Dakota.


## TAX COLLECTIONS PER CAPITA

Tax collections per capita over time may reflect changes in population as well as changes in tax collections and economic conditions. North Dakota's population changed very little over the past three decades, so the changes witnessed are due mainly to tax law changes and changes in economic activity in the state.

## Trend

Real total state and local tax collections in North Dakota have risen from about $\$ 1100$ per capita in 1960 to $\$ 1800$ per capita in 1992 (Figure 15) which is 96 percent of the national average (Tax Foundation 1994). The rise in tax liability per capita is due to increases in state-level taxes, since property taxes are essentially the same as 32 years ago (Figure 15).

Of the specific North Dakota taxes, sales tax and energy tax have been the most dynamic. Sales tax collections per capita more than doubled since 1960, reflecting a change in the rate (from 2 percent to 5 percent) and in consumption. Energy taxes per capita ranged from nearly nothing in 1960 to more than $\$ 400$ in 1982 and back to approximately $\$ 200$ in 1992 (Figure 15).

1994 Real Dollars Per Capita


Figure 15. North Dakota tax collections per capita, 1960-1992.

## Compared to Neighboring States

Comparison of North Dakota with its neighboring states shows that North Dakota collects an average amount of tax per capita. Minnesota, Wyoming, and Nebraska collect more taxes per capita, while Montana and South Dakota collect less (Figure 16). Minnesota collects the most per capita. Wyoming collects nearly as much per capita as Minnesota, with much of that, about 25 percent, in energy taxes.

North Dakotans paid the highest percentage of their income in state and local taxes during the 1960-63 period with Nebraska paying the lowest (Figure 17). During the 1974-77 period, Minnesota, Montana, and Wyoming residents paid more than North Dakotans. One possible reason is during the early to mid 1970s increases in crop prices raised personal income more than tax collections in North Dakota, South Dakota and Nebraska. By the 198891 period Wyoming was most heavily taxed. North Dakota and Montana fell to third.


Note: North Dakota's figures are for 1992.
Figure 16. State and local per capita tax collections for North Dakota and neighboring states, 1991.

## Percent of Personal Income



Figure 17. Total state and local tax collections by state, four-year average.

## Assessment

As a percentage of personal income, taxes in North Dakota have fallen from 11.7 percent in 1960 to 11.2 percent in 1991. The only other state with a reduction is South Dakota.
Wyoming's tax burden has increased the most of any of the six states. A major portion of the increase is due to energy taxes which are not directly paid by the residents.

## SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Results of this study provide a near-term history of relative state and local tax collections for North Dakota and five of its neighboring states. Some conclusions can be drawn about the changes in the system over time and compared to other states.

## Summary and Conclusions

The source of North Dakota tax collections shifted between 1960 and 1992. In 1960, 55 percent were local collections, and in 1992, local collections fell to 34 percent of total state and local tax collections.

Energy taxes remained stable at about 3 percent of total state and local taxes, between 1960 and 1975. After 1975 they rose to 26 percent of total state and local taxes in 1982. By 1992 they fell to 10 percent of state and local taxes.

North Dakota relies on sales taxes more than the other states except for South Dakota. North Dakota's average sales and use taxes paid by a typical family of four is the highest of any state in the study.

North Dakota's reliance on property tax is the lowest of the six states in the study. The burden of property taxes has remained steady for agriculture and centrally assessed property and has increased for residential and commercial property.

Taxes levied by specific government units have changed during the last three decades. School taxes levied in 1960 were at the same real dollar level as 1992, although they varied considerably over time. In 1969, levies were 37 percent higher than 1960. By 1981, school tax levies fell to 70 percent of the 1960 level.

When compared to a ten-year moving average of personal income, in 1960 the total state and local tax required 15 percent of personal income and in 1992 it required 12 percent of personal income.

Assessment of the size of the tax dollar, its burden on taxpayers, and its adherence to the principles of public finance depend in large part on perspective. North Dakota's burden has shifted from local to state sources while increasing in real terms and, at the same time, decreasing in relative terms. Compared to their neighbors, North Dakota taxpayers face a tax structure that is about average in amount collected and in distribution of the burden (Figure 18).


Figure 18. Comparison of percent of personal income and per capita tax burden for North Dakota and neighboring states.

## Implications

Any change in a tax or a tax system's status quo is likely to affect some people favorably and others adversely. In addition, any change is likely to be an improvement with respect to one evaluation standard and a detriment with respect to another.

The tax burden is spread in different ways by our neighbors, for different reasons. If we want to be like them, we must also endorse their standards of tax fairness and adherence to other tax standards.

In a state with few basic sectors generating new wealth, many tax shifts are merely from one pocket to another pocket of the same taxpayer.

Changes to specific taxes would have implications across the 13 evaluation criteria. Improvements in the tax system relative to several of the criteria are obvious, such as changes that would improve understandability or reduce compliance costs.

Changes to enhance fairness include (1) narrowing the sales tax base to exclude "necessities," (2) reducing the sales tax rate, (3) having a uniform sales tax rate, (4) reducing or eliminating corporate income taxes, or (5) making the individual income tax more progressive.

Ways to reduce tax shifting include less reliance on shiftable or hidden taxes, such as (1) corporate income tax, (2) business property tax, and (3) to some extent, sales tax.

Changes to improve reliability from a revenue perspective include less reliance on tax sources that fluctuate widely with changes in economic conditions, such as (1) energy tax or (2) income taxes; or increased reliance on (1) property taxes, (2) sin taxes, and (3) to a lesser extent, sales taxes.

Tax system adequacy would be enhanced by (1) increasing rates, (2) broadening bases, (3) minimizing exemptions, or (4) identifying additional tax sources.

Ways to make taxes more neutral and efficient include (1) broadening tax bases, (2) minimizing exemptions, or (3) using fewer indirect taxes.

Means to increase tax exportability include (1) increased reliance on sales taxes, (2) introducing excise taxes on "tourist" items, (3) tourism-related gambling taxes, and (4) increasing reliance on taxes that are deductible from federal taxable income.

State or local competitiveness could be improved by reducing one, some, or all tax rates, which is a double-edged sword because competitiveness depends on the provision of adequate government/public goods and services as well.

These, or other, changes could be revenue neutral (no overall increase in taxes), revenue enhancing (an overall increase in tax revenues), or revenue reducing (an overall reduction in state and local tax revenues) depending on the relative extent of changes.

## Epilogue

Most of the data series used in this analysis ended in 1991, with some going into 1992. In order to make the study current, each of the study states' tax departments were contacted to see if any tax changes had been made that would affect the trends through 1991/92. While some states were anticipating changes in the near future, none reported any substantial recent changes in tax law that would affect our conclusions.

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## STATISTICAL APPENDIX

Appendix A North Dakota Tax Data<br>Appendix B Minnesota Tax Data<br>Appendix C Montana Tax Data<br>Appendix D Nebraska Tax Data<br>Appendix E South Dakota Tax Data<br>Appendix F Wyoming Tax Data<br>Appendix G Consumer Price Index Conversion

Appendix A - North Dakota Tax Data

Appondix Tabla A1. Annul Noninal Tax Collections in North Dakota, 1960-1992

| Year | Total state and Local | $\begin{aligned} & \text { Total } \\ & \text { Local } \end{aligned}$ | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { sales } \end{aligned}$ | Local share of 8ales | $\begin{gathered} \text { Individual } \\ \text { Incoes } \end{gathered}$ | Corporate Incons | Energy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | -- | do |  |  |  |  |
| 1960 | 137 | 76 | 76 | 61 | 36 |  | 5 | 1 | 3 |
| 1961 | 141 | 79 | 79 | 62 | 31 |  | 5 | 2 | 3 |
| 1962 | 148 | 4 | 04 | 64 | 36 |  | 4 | 2 | 4 |
| 1963 | 156 | 47 | 47 | 69 | 41 |  | 6 | 2 | 4 |
| 1964 | 167 | 91 | 91 | 76 | 45 |  | 7 | 2 | 4 |
| 1965 | 175 | 93 | 93 | 82 | 50 |  | 0 | 2 | 4 |
| 1966 | 182 | 98 | 98 | 3 | 51 |  | 3 | 3 | 4 |
| 1967 | 193 | 102 | 102 | 91 | 50 |  | 11 | 3 | 4 |
| 1968 | 210 | 108 | 108 | 102 | 61 |  | 13 | 4 | 4 |
| 1969 | 222 | 117 | 117 | 105 | 66 |  | 14 | 2 | 4 |
| 1970 | 22 | 106 | 105 | 122 | 77 |  | 15 | 3 | 4 |
| 1971 | 252 | 110 | 110 | 142 | 92 |  | 17 | 4 | 4 |
| 1972 | 272 | 114 | 114 | 15 | 102 |  | 21 | 4 | 4 |
| 1973 | 292 | 112 | 112 | 180 | 113 |  | 32 | 5 | 4 |
| 1974 | 339 | 120 | 120 | 219 | 126 |  | 30 | 7 | 6 |
| 1975 | 393 | 135 | 135 | 264 | 141 |  | 71 | 5 | 7 |
| 1976 | 434 | 147 | 147 | 207 | 162 |  | 57 | 10 | 15 |
| 1977 | 456 | 160 | 160 | 296 | 165 |  | 62 | 12 | 18 |
| 1978 | 480 | 170 | 170 | 310 | 15 |  | 75 | 24 | 22 |
| 1979 | 508 | 183 | 183 | 325 | 176 |  | 63 | 10 | 30 |
| 1980. | 572 | 200 | 200 | 372 | 192 |  | 33 | 26 | 49 |
| 1981 | 554 | 203 | 203 | 451 | 197 |  | 62 | 30 | 106 |
| 1982. | 756 | 223 | 223 | 333 | 218 |  | 35 | 32 | 193 |
| 1983 | 765 | 238 | 239 | 526 | 219 |  | 35 | 28 | 192 |
| 1984 | 941 | 257 | 257 | 684 | 305 |  | 14 | 42 | 214 |
| 1985 | 965 | 273 | 271 | 692 | 294 | 2 | 76 | e3 | 194 |
| 1986 | 305 | 289 | 213 | 616 | 280 | 6 | 73 | 54 | 163 |
| 1987 | 076 | 303 | 294 | 573 | 300 | 9 | 18 | 31 | 111 |
| 1988 | . 948 | 315. | 305 | 633 | 326 | 10 | 114 | 39 | 109 |
| 1989 | 998 | 334 | 322 | 665 | 370 | 13 | 106 | 41 | 97 |
| $1990$ | 1031 | 354 | 337 | 677 | 380 | 16 | 111 | 40 | 105 |
| 1991 | 1121 | 366 | 347 | 755 | 420 | 15 | 114 | 49 | 125 |
| 1992 | 1082 | 382 | 364 | 693 | 395 | 25 | 119 | 37 | 101 |

Appendix Table 12. Anpual Real Tax Collectiono in Yorth Dakota, 1960-1992, 1994-100

| Year | Total state and Local | Total <br> Local | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { Bales } \\ & \hline \end{aligned}$ | Local 8hare of Balen | $\begin{aligned} & \text { Individual } \\ & \text { Inci } \end{aligned}$ | Corporate Incone | Inercy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | dol | )----m- |  |  |  |
| 1960 | 684 | 380 | 310 | 305 | 17 |  | 24 | 7 | 14 |
| 1961 | 699 | 392 | 392 | 306 | 186 |  | 21 |  | 17 |
| 1962 | 121 | 409 | 409 | 313 | 176 |  | 22 | 10 | 17 |
| 1963 | 78 | 417 | 417 | 332 | 198 |  | 27 | . | 18 |
| 1964 | 190 | 436 | 436 | 362 | 215 |  | 35 | 10 | 18 |
| 1965 | 220 | 435 | 435 | 384 | 233 |  | 31 | 12 | 18 |
| 1966 | -2t | 416 | 445 | 312 | 230 |  | 42 | 14 | 10 |
| 1967 | 053 | 452 | 452 | 403 | 222 |  | 49 | 15 | 18 |
| 1966 | 81 | 457 | 457 | 434 | 260 |  | 56 | 16 | 17 |
| 1969 | 48 | 471 | 471 | 423 | 265 |  | 56 | 9 | 16 |
| 1970 | 68 | 405 | 405 | 46 | 293 |  | 5 | 11 | 25 |
| 1971 | 321 | 403 | 48 | 518 | 336 |  | 62 | 13 | 15 |
| 1972 | 362 | 404 | 404 | 538 | 360 |  | 73 | 15 | 15 |
| 1973 | 970 | 372 | 372 | 598 | 376 |  | 105 | 16 | 14 |
| 1974 | 1015 | 359 | 359 | 637 | 371 |  | 211 | 20 | 17 |
| 1975 | 1096 | 371 | 371 | 725 | 387 |  | 194 | 24. | 20 |
| $1976$ | 1126 | 318 | 311 | 745 | 420 |  | 14 | 27 | 40 |
| $1977$ | 1112 | 390 | 390 | 722 | 402 |  | 151 | 23 | 43 |
| . 197 | 1087 | 315 | 315 | 702 | 35 |  | 168 | 12 | 50 |
| 1979 | 1033 | 372 | 372 | 661 | 351 |  | 128 | 37 | 60 |
| 1980 | 1025 | 358 | 351 | 667 | 344 |  | 96 | 47 | 8 |
| 1981 | 1062 | 330 | 330 | 733 | 320 |  | 101. | 48 | 172 |
| 1982 | 1258 | 342 | 342 | 116 | 335. |  | 54 | 48 | 296 |
| 1913 | 1134 | 354 | 354 | 710 | 325 |  | 52 | 43 | 285 |
| 1981 | 1338 | 366 | 366 | 972 | 434 |  | 105. | 60 | 304 |
| 1915 | 1325 | 375 | 372. | 250 | 404 | 3 | 105. | 114 | 267 |
| 1986 | 1220 | 390 | 382 | -30 | 377 | - | 98 | 72 | 220 |
| 1987 | 1134 | 394 | 382 | 744 | 390 | 12 | 104 | 40 | 145 |
| $198$ | 1318 | 393 | 311 | 781 | 407 | 12 | 148 | 19 | 136 |
| Ig8 | 1181 | 398 | 313 | 79 | 451 | 15 | 126 | 4 | 116 |
| 1990 | 1165 | 400 | 381 | 766 | 430 | 18 | 126 | 46 | 119 |
| 1991 | 1216 | 397 | 376 | 829 | 455 | 21. | 124 | 53 | 136 |
| 1992 | 1139 | 408 | 38.3 | 730 | 416 | 26 | 125 | 38 | 106 |


| Year | rotal stato and Local | rotal <br> Local | Property | $\begin{aligned} & \text { Yotal } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { rotal } \\ & \text { sales } \end{aligned}$ | $\begin{aligned} & \text { Cocal share } \\ & \text { of salea } \end{aligned}$ | Incom | $\begin{aligned} & \text { Corp } \\ & \text { Income } \end{aligned}$ | Inergy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| 1960 | 11.90 | 6.60 | 6.60 | 5.30 | 3.09 |  | 0.42 | 0.12 | 0.25 |
| 1961 | 23.38 | 7.51 | 7.51 | 5.87 | 3.57 |  | 0.45 | 0.14 | 0.32 |
| 1962 | 10.04 | 5.69 | 5.69 | 4.35 | 2.45 |  | 0.31 | 0.13 | 0.24 |
| 1963 | 11.35 | 6.31 | 6.31 | 5.03 | 2.99 |  | 0.41 | 0.13 | 0.20 |
| 1964. | 12.29 | 6.71 | 6.71 | 5.58 | 3.32 |  | 0.53 | 0.15 | 0.26 |
| 1965 | 11.00 | 5.84 | 5.84 | 5.16 | 3.13 |  | 0.50 | 0.16 | 0.24 |
| 1966 | 11.29 | 6.03 | 6.08 | 5.21 | 3.13 |  | 0.57 | 0.19 | 0.24 |
| 1967 | 11.95 | 6.32 | 6.32 | 5.63 | 3.12 |  | 0.69 | 0.21 | 0.25 |
| 1968 | 12.51 | 6.42 | 6.42 | 6.09 | 3.65 |  | 0.78 | 0.23 | 0.23 |
| 1969 | 11.99 | 6.32 | 6.32 | 5.67 | 3.57 |  | 0.75 | 0.12 | 0.21 |
| 1970 | 11.4 | 5.52 | 5.52 | 6.32 | 3.99 |  | 0.80 | 0.16 | 0.20 |
| 1971 | 11.33 | 4.95 | 4.95 | 6.38 | 4.13 |  | 0.76 | 0.16 | 0.18 |
| 1972 | 10.19 | 4.20 | 4.26 | 5.81 | 3.81 |  | 0.77 | 0.16 | 0.15 |
| 1973 | 7.69 | 2.95 | 2.95 | 4.74 | 2.98 |  | 0.83 | 0.12 | 0.11 |
| 2974 | 9.03 | 3.19 | 3.19 | 5.84 | 3.36 |  | 1.34 | 0.18 | 0.15 |
| 1975 | 10.26 | 3.47 | 3.47 | 6.79 | 3.63 |  | 1.82 | 0.22 | 0.19 |
| 1976 | 11.31 | 3.03 | 3.3 | 7.49 | 4.23 |  | 1.48 | 0.27 | 0.40 |
| 1977 | 11.46 | 4.02 | 4.02 | 7.44 | 4.15 |  | 1.56 | 0.29 | 0.45 |
| 197 | 9.48 | 3.35 | 3.35 | 6.12 | 3.12 |  | 1.47 | 0.27 | 0.43 |
| 1979 | 3.70 | 3.49 | 3.49 | 6.21 | 3.36 |  | 1.21 | 0.35 | 0.56 |
| 1980 | 11.43 | 3.99 | 3.99 | 7.44 | 3.84 |  | 1.07 | 0.52 | 0.98 |
| 1981 | 10.07 | 3.23 | 3.13 | 6.95 | 3.03 |  | 0.96 | 0.46 | 1.63 |
| 1982 | 10.72 | 3.17 | 3.17 | 7.56 | 3.11 |  | 0.50 | 0.45 | 2.74 |
| 1983 | 10.10 | 3.15 | 3.15 | 6.94 | 2.89 |  | 0.46 | 0.31 | 2.54 |
| 1984 | 11.80 | 3.23 | 3.23 | 6.57 | 3.82 |  | 0.93 | 0.53 | 2.68 |
| 1985 | 11.74 | 3.32 | 3.29 | 0.42 | 3.38 | 0.03 | 0.93 | 1.01 | 2.36 |
| $1986$ | 10.86 | 3.47 | 3.40 | 7.39 | 3.36 | 0.07 | 0.81 | 0.64 | 1.86 |
| 1987 | 10.31 | 3.57 | 3.46 | 6.74 | 3.53 | 0.12 | 0.94 | 0.36 | 1.31 |
| 1988 | 11.97 11.26 | 3.97 3.77 | 3.85 | 6.00 7.49 | 4.12 4.26 | 0.12 | 1.44 | 0.49 | 1.38 |
| 1989 | 11.26 10.56 | 3.77 3.62 | 3.62 3.46 | 7.49 | 4.26 3.89 | 0.14 | 1.20 1.14 | 0.16 | 1.10 |
| 1991 | 11.18 | 3.65 | 3.46 | 7.53 | 1.89 4.19 | 0.17 0.19 | 1.14 1.14 | 0.41 0.49 | 1.08 1.25 |
| 1992 | 9.89 | 3.56 | 3.33 | 6.34 | 3.61 | 0.23 | 1.09 | 0.34 | 0.92 |




| 1960 | 100.00. | 55.49 | 55.49 | 44.51 | $25: 98$ |  | 3.50 | 1.03 | 2.06 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | 100.00 | 56:16 | 56.16 | 43.84 | 26.66 |  | 3.34 | 1.07 | 2.31 |
| 1962 | 100.00 | 56.65 | 56.65 | 43.35 | 24.45 |  | 3.04 | 1.34 | 2.31 |
| 1963 | 100.00 | 55:64 | 55.64 | 44.36 | 26.36 |  | 3.59 | 1.17 | 2.43 |
| 1964 | 100.00 | 54.59 | 54.59 | 45.11 | 27.01 |  | 4.35 | 1.20 | 2.32 |
| 1965 | 100.00 | 53i12 | 53.12 | 46.38 | 28.47 |  | 4.55 | 1.41 | 2.19 |
| 1965 | 100.00 | 53:16 | 53.86 | 46.14 | 27.74 |  | 5.07 | 1.69 | 2.14 |
| 1967 | 100.00 | 52. 87 | 52.17 | 47.13 | 26.00 |  | 5.74 | 1.73 | 2.07 |
| 1968 | 100.00 | 51.32 | 51.32 | 41. 6 | 29.16 |  | 6.21 | 1. 11 | 1.88 |
| 1969 | 100.00 | 52.68 | 52.68 | 47.32 | 29.79 |  | 6.23 | 0.98 | 1.77 |
| 1970 | 100.00 | 46.60 | 46.60 | 53.40 | 33.70 |  | 6.73 | 1.31 | 1.71 |
| 1971 | 100.00 | 43.71 | 43.71 | 56.29 | 36.47 |  | 6.68 | 1.40 | 1.65 |
| 1972 | 100.00 | 42.01 | 42.01 | 57.39 | 37.44 |  | 7.59 | 1.57 | 1.51 |
| 1973 | 100.00 | 38.33 | 38.33 | 61.67 | 31.72 |  | 10.83 | 1.63 | 1.43 |
| 1974 | 100.00 | 35.33 | 35.33 | 64.67 | 37.21 |  | 14.8 | 1.98 | 1.66 |
| 1975 | 100.00 | 33.84 | 31.84 | 66.16 | 35.33 |  | 17.73 | 2.16 | 1.87 |
| 1876 | 100.00 | 33.12 | 33.82 | 66.18 | 37.36 |  | 13.06 | 2.35 | 3.56 |
| 1977 | 100.00 | 35.07 | 35.07 | 64.23 | 36.19 |  | 13.60 | 2.55 | 3.85 |
| 1978 | 100.00 | 35.39 | 35.39 | 64.51 | 32.93 |  | 15.54 | 2.85 | 4.56 |
| 1979 | 100.00 | 36.01 | 36.01 | 63.99 | 34.65 |  | 12.47 | 3.57 | 5.81 |
| 1980 | 100.00 | 34.93 | 34.93 | 65.07 | 33.58 |  | 5.33 | 4.54 | 0.56 |
| 1981 | 100.00 | 31.02 | 31.02 | 68.98 | 30.13 |  | 9.35 | 4.55 | 16.15 |
| 1982 | 100.00 | 29.52 | 29.52 | 70.48 | 20.96 |  | 4.67 | 4.23 | 25.5 |
| 1983 | 100.00 | 31.22 | 31.22 | 68.78 | 28.64 |  | 4.59 | 3.80 | 25.17 |
| 1984 | 100.00 | 27.33 | 27.33 | 72.67 | 32.40 |  | 7.86 | 4.49 | 22.73 |
| 1985 | 100.00 | 28.29 | 28.07 | 71.71 | 30.47 |  | 7.89 | - 0.62 | 20.14 |
| 1986 | 100.00 | 31.97 | 31.20 | 68.03 | 30.92 | 0.69 | - 8.10 | 5.91 | 18.03 |
| 1987 1988 | 100.00 100.00 | 34.61 33.19 | 31.56 32.17 | 65.39 | 34.24 | 1.05 | 9.15 | 3.52 | 12.72 |
| 1988 | 100.00 100.00 | 33.19 33.16 | 32.17 32.18 | 66.31 | 34.41 37.82 | 1.02 1.27 | 12.03 10.62 | 4.11 4.07 | 11.52 9.74 |
| 1990 | 100.00 | 34.31 | 32.73 | 65.69 | 36.87 | 1.56 | 10.78 | 3.93 | 10.21 |
| 1991 | 100.00 | 32.64 | 30.94 | 67.36 | 37.47 | 1.70 | 10.19 | 4.40 | 11.15 |
| 1992 | 100.00 | 35.94 | 33.65 | 64.06 | 36.51 | 2.29 | 12.00 | 3.10 | 9.32 |

Appendix Table A5. Local Tax Collections, North Dakota 1993.
$\left.\begin{array}{lccc}\text { City } & \begin{array}{c}\text { Tax } \\ \text { Collections }\end{array} & \begin{array}{c}\text { Taxable } \\ \text { Sales }\end{array} & \begin{array}{c}\text { Rate } \\ \text { Rate }\end{array} \\ \hline \text { Fargo } & -\ldots 336352 & \text { (dollars) } & \text { (pa3798483 }\end{array}\right)$



Appendix Figure A3. North Dakota tax collections as percentage of personal income.

## Appendix B - Minnesota Tax Data

Appendix Table B1. Annual Mominal Tax Collectione In Minnesota, 1960-1990


| 1960 | 771 | 419 | 352 | 124 | 3 | 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | E33 | 450 | 383 | 133 | 98 | 32 |
| 1962 | 884 | 485 | 403 | 137 | 127 | 33 |
| 1963 | 963 | 520 | 443 | 145 | 162 | 37 |
| 1964 | 1030 | 550 | 480 | 164 | 170 | 40 |
| 1965 | 1104 | 584 | 520 | 173 | 170 | 44 |
| 1966 | 1232 | 617 | 615 | 182 | 221 | 67 |
| 1967 | 1314 | 654 | 660 | 194 | 248 | 64 |
| 1963 | 1370 | 555 | 13 | 329 | 273 | 50 |
| 1969 | 1584 | 669 | 915 | 405 | 304 | 74 |
| 1970 | 1786 | 765 | 1021 | 463 | 346 | 70 |
| 1971 | 2012 | 913 | 1099 | 508 | 371 | 64 |
| 1972 | 2164 | 440 | 1324 | 511 | 43 | 57 |
| 1973 | 2493 | 660 | 1639 | 709 | 586 | 156 |
| 1974 | 2735 | 192 | 1843 | 754 | 701 | 173 |
| 1975 | 3242 | 1040 | 2202 | 797 | 107 | 120 |
| 1976 | 3296 | 1077 | 2218 | 905 | +30 | 176 |
| 1977 | 3694 | 1204 | 2486 | 983 | 957 | 230 |
| 1976 | 4019 | 1260 | 2759 | 1085 | 1094 | 263 |
| 1979 | 4467 | 1333 | 3134 | 1192 | 1256 | 324 |
| 1980 | 4533 | 1335 | 3203 | 1216 | 1272 | 345 |
| 1981 | 4747 | 1373 | 3374 | 1226 | 1405 | 296 |
| 1982 | 5504 | 1705 | 3798 | 2528 | 1559 | 295 |
| 1983 | 6223 | 1904 | 4319 | 1698 | 1979 | 229 |
| 1984 | 7241 | 2164 | 5077 | 2042 | 2316 | 276 |
| 1985 | 7455 | 2227 | 5228 | 2163 | 2233 | 353 |
| 1986 | 7267 | 2369 | 4898 | 2209 | 1949 | 326 |
| 1987 | 8096 | 2550 | 5546 | 2407 | 2312 | 404 |
| 1988 | 8933 | 2789 | 6144 | 2703 | 2625 | 411 |
| 1989 | 9436 | 3036 | 6398 | 2950 | 2496 | 486 |
| 1990 | 9969 | 3150 | 6819 | 2966 | 2075 | 479 |
| 1991 | 10397 | 3346 | 7051 | 3037 | 2975 | 45 |
| 1992 |  | 3552 |  | 3283 | 3145 | 423 |

Appendlx Table B2. Angual Real Tax Collections in Rinnesote, 1960-1992. $1994=100$

| Tear | Total state and Local | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { Salen } \\ & \hline \end{aligned}$ | Individual Income | Corporate Incone |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (all) |  |  |  |
| 1960 | 3852 | 2094 | 1757 | 619 | 446 | 199 |
| 1961 | 4115 | 2223 | 1892 | 655 | 484 | 160 |
| 1962 | 4340 | 2371 | 1969 | 671 | 621 | 163 |
| 1963 | 4641 | 2507 | 2134 | 696 | 783 | 180 |
| 1964 | 4908 | 2620 | 2218 | 731 | 09 | 191 |
| 1965 | 5173 | 2737 | 2437 | 911 | 796 | 207 |
| 1966 | 5602 | 2806 | 2796 | 226 | 1006 | 307 |
| 1967 | 5819 | 2896 | 2923 | 45 | 1098 | 284 |
| 1968 | 5824 | 2359 | 3464 | 1399 | 1159 | 247 |
| 1969 | 6377 | 2693 | 3684 | 1629 | 1225 | 299 |
| 1970 | 6794 | 2911 | 3883 | 1761 | 1315 | 267 |
| 1971 | 7347 | 3334 | 4013 | 1155 | 1354 | 232 |
| 1972 | 7639 | 2966 | 4673 | 2051 | 1706 | 343 |
| 1973 | 3304 | 2859 | 5445 | 2357 | 1949 | 518 |
| 1974 | 0199 | 2674 | 5525 | 2260 | 2103 | 524 |
| 1975 | 6902 | 2855 | 6047 | 2119 | 2216 | 496 |
| 1976 | 0555 | 2795 | 5759 | 2349 | 2205 | 457 |
| 1977 | 9010 | 2947 | 6053 | 2397 | 2333 | 519 |
| 1976 | 9105 | 2954 | 6231 | 2458 | 2476 | 609 |
| 1979 | 9085 | 2711 | 6375 | 2437 | 2555 | 659 |
| 1980 | 0135 | 2393 | 5741 | 2180 | 2280 | 619 |
| 1981 | 7712 | 2230 | 5482 | 2090 | 2284 | 481 |
| 1992 | 8425 | 2610 | 5825 | 2339 | 2387 | 452 |
| 1983 | 9227 | 2823 | 6404 | 2518 | 2934 | 339 |
| 1984 | 10292 | 3076 | 7216 | 2902 | 3292 | 392 |
| 1985 | 10235 | 3057 | 7176 | 2970 | 3067 | 485 |
| 1986 | 9792 | 3192 | 6600 | 2976 | 2626 | 439 |
| 1987 | 10517 | 3313 | 7204 | 3127 | 3003 | 524 |
| 1988 | 11161 | 3485 | 7676 | 3377 | 3290 | 513 |
| 1989 | 11246 | 3621 | 7625 | 3516 | 2974 | 579 |
| 1990 | 11275 | 3563 | 1712 | 3354 | 3252 | 542 |
| 1991 | 11276 | 3629 | 7647 | 3294 | 3226 | 497 |
| 1992 |  | 3740 |  | 3457 | 3311 | 445 |

Appendix Table B3. speciflc Taxes an Percentage of Pereonal Income in Minnesota, 1960-1992

| Year | Total state and Local | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \\ & \hline \end{aligned}$ | rotal <br> 8ales | $\begin{aligned} & \text { Ind } \\ & \text { Incone } \end{aligned}$ | $\begin{aligned} & \text { Corp } \\ & \text { Incolm } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | perc | age) |  |  |
| 1960 | 10.53 | 5.72 | 4.80 | 1.69 | 1.22 | 0.54 |
| 1961 | 10.82 | 5.85 | 4.98 | 1.72 | 1.27 | 0.42 |
| 1962 | 10.94 | 5.97 | 4.96 | 1.69 | 1.56 | 0.41 |
| 1963 | 11.13 | 6.04 | 5.14 | 1.69 | 1.88 | 0.43 |
| 1964 | 11.4 | 6.13 | 5.35 | 1.83 | 1.ts | 0.45 |
| 1965 | 11.11 | 5.88 | 5.24 | 1.74 | 1.71 | 0.44 |
| 1966 | 11. 44 | 5.73 | 5.71 | 1.69 | 2.05 | 0.63 |
| 1967 | 11.34 | 5.64 | 5.70 | 1. 67 | 2.14 | 0.55 |
| 1968 | 10.75 | 4.36 | 6.39 | 2.58 | 2.14 | 0.46 |
| 1969 | 11.30 | 4.77 | 6.52 | 2.89 | 2.17 | 0.53 |
| 1970 | 11.74 | 5.03 | 6.71 | 3.04 | 2.27 | 0.46 |
| 1971 | 12.43 | 5.64 | 6.79 | 3.14 | 2.29 | 0.39 |
| 1972 | 12.33 | 4.79 | 7.54 | 3.31 | 2.75 | 0.55 |
| 1973 | 12.10 | 4.17 | 7.93 | 3.43 | 2.84 | 0.75 |
| 1974 | 12.29 | 4.01 | 0.23 | 3.39 | 3.15 | 0.75 |
| 1975 | 13.61 | 4.37 | 9.25 | 3. 35 | 3.39 | 0.76 |
| 1976 | 12.68 | 4.14 | 0.54 | 3.48 | 3.27 | 0.61 |
| 1977 | 12.61 | 4.12 | 6.4 | 3.35 | 3.26 | 0.81 |
| 1976 | 12.20 | 3.82 | 0.37 | 3.29 | 3.32 | 0.82 |
| 1979 | 12.12 | 3.62 | -. 51 | 3.25 | 3.41 | 0.8 |
| 1980 | 11.13 | 3.27 | 7.85 | 2.98 | 3.12 | 0.85 |
| 1981 | 10.56 | 3.05 | 7.51 | 2.86 | 3.13 | 0.66 |
| 1982 | 11.53 | 3.57 | 7.96 | 3.20 | 3.27 | 0.62 |
| 1983 | 12.20 | 3.73 | e. 47 | 3.33 | 3.88 | 0.45 |
| 1984 | 12.81 | 3.83 | c.91 | 3.61 | 4.10 | 0.45 |
| 1985 | 12.43 | 3.71 | 0.72 | 3.61 | 3.72 | 0.59 |
| 1986 | 11.44 | 3.73 | 7.71 | 3.48 | 3.07 | 0.51 |
| 1987 | 11.98 | 3.77 | 0.21 | 3.56 | 3.42 | 0.60 |
| 1988 | 12.57 | 3.92 | 0.64 | 3.80 | 3.69 | 0.58 |
| 1989 | 12.20 | 3.93 | -. 27 | 3.81 | 3.23 | 0.63 |
| 1990 | 12.11 | 3.83 | *.27 | 3.60 | 3.49 | 0.55 |
| 1991 | 12.19 | 3.92 | - 6.27 | 3.56 | 3.49 | 0.54 |
| 1992 |  | 3.88 |  | 3.59 | 3.44 | 0.46 |



# Appendix C - Montana Tax Data 

Appondix Tabie C1. Annual Nominal Tax Collections In Montana,


|  |  |  |  | 411 | art |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | 151 | 86 | 65 | 10 | 11 | 5 | 2 |
| 1961 | 162 | 93 | 69 | 31 | 17 | 5 | 2 |
| 1962 | 164 | 92 | 72 | 32 | 14 | 5 | 2 |
| 1963 | 171 | 97 | 74 | 34 | 14 | 5 | 2 |
| 1964 | 177 | 101 | 76 | 35 | 15 | 5 | 2 |
| 1965 | 187 | 107 | 10 | 36 | 17 | 6 | 2 |
| 1966 | 205 | 114 | 91 | 38 | 21 | 7 | 2 |
| 1967 | 212 | 119 | 93 | 38 | 24 | - | 2 |
| 1964 | 239 | 134 | 105 | 41 | 30 | 7 | 3 |
| 1969 | 247 | 115 | 122 | 43 | 31 | - | 4 |
| 1970 | 279 | 150 | 129 | 4 | 38 | 10 | 4 |
| 1971 | 302 | 166 | 136 | 50 | 42 | 10 | 3 |
| 1972 | 361 | 185 | 183 | 62 | 68 | 12 | 4 |
| 1973 | 379 | 192 | 187 | 63 | 77 | 12 | 4 |
| 1974 | 445 | 225 | 220 | 66 | 79 | 16 | 9 |
| 1975 | 460 | 227 | 233 | 70 | 89 | 22 | 14 |
| 1976 | 542 | 264 | 278 | 77 | 98 | 23 | 32 |
| 1977 | 587 | 275 | 312 | 83 | 112 | 25 | 44 |
| 1978 | 647 | 109 | 331 | 19 | 124 | 29 | 44 |
| 1979 | 735 | 334 | 401 | 102 | 142 | 36 | 52 |
| 1980 | 794 | 351 | 436 | 95 | 135 | 46 | 91 |
| 1981 | 881 | 414 | 467 | 95 | 146 | 53 | 97 |
| 1982 | 987 | 458 | 529 | 103 | 144 | 45 | 147 |
| 1983 | 911 | 457 | 514 | 107 | 152 | 36 | 124 |
| 1984 | 106 | 485 | 583 | 135 | 170 | 35 | 141 |
| 1985 | 1162 | 521 | 641 | 140 | 181 | 63 | 146 |
| 1986 | 1150 | 533 | 617 | 141 | 172 | 59 | 123 |
| 1987 | 1125 | 534 | 591 | 149 | 195 | 35 | 99 |
| 1988 | 1254 | 539 | 715 | 182 | 244 | 46 | 108 |
| 1989 | 1275 | 547 | 720 | 179 | 266 | 56 | 79 |
| 1990 | 1343 | 485 | 858 | 183 | 280 | 80 | 89 |
| 1991 | 1241 | 423 | 818 | 183 | 283 | 71 | 73 |

Appendix Table C2. Mnnul Real Tax Collections in Montana, 1960-1991, 1994100
(nn Montana.
Total state
Total Total Individual Corporate
Year and focal property state Salea Incom Incom Ineror

| 1960 | 752 | 428 | 325 | 150 | 53 | 23 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | 798 | 457 | 341 | 152 | 82 | 23 | 10 |
| 1962 | 799 | 447 | 352 | 156 | 69 | 22 | 10 |
| 1963 | 821 | 465 | 356 | 164 | 67 | 23 | 10 |
| 1964 | 844 | 482 | 362 | 165 | 70 | 24 | 10 |
| 1965 | 678 | 503 | 375 | 167 | 71 | 28 | 10 |
| 1966 | 932 | 518 | 416 | 174 | 96 | 32 | 10 |
| 1967 | 938 | 526 | 412 | 167 | 107 | 34 | 11 |
| 1968 | 1014 | 56 | 446 | 173 | 126 | 31 | 11 |
| 1969 | 933 | 542 | 451 | 172 | 126 | 33 | 14 |
| 1970 | 1062 | 570 | 491 | 183 | 148 | 37 | 13 |
| 1971 | 1103 | 606 | 497 | 133 | 153 | 37 | 12 |
| 1972 | 1298 | 633 | 646 | 219 | 240 | 42 | 13 |
| 1973 | 1260 | 638 | 622 | 209 | 256 | 40 | 13 |
| 1974 | 1334 | 675 | 660 | 198 | 237 | 4 | 27 |
| 1975 | 1263 | 623 | 640 | 192 | 244 | 60 | 31 |
| 1976 | 1407 | 685 | 722 | 200 | 254 | 60 | e 3 |
| 1977 | 1432 | 671 | 761 | 202 | 273 | 61 | 102 |
| 1978 | 1466 | 700 | 766 | 202 | 281 | 66 | 99 |
| 1979 | 1495 | 679 | -16 | 207 | 289 | 73 | 107 |
| 1980 | 1423 | 642 | 71 | 170 | 242 | 82 | 162 |
| 1981 | 1431 | 673 | 759 | 154 | 237 | 66 | 15 |
| 1982 | 1511 | 701 | -10 | 158 | 220 | 69 | 225 |
| 1983 | 1440 | 676 | 762 | 159 | 225 | 53 | 189 |
| 1984 | 1518 | 689 | 829 | 192 | 242 | 50 | 202 |
| 1985 | 1595 | 715 | - 80 | 192 | 249 | 86 | 203 |
| 1986 | 1550 | 71 1 | 831 | 190 | 232 | 79 | 172 |
| 1987 | 1461 | 694 | 768 | 194 | 253 | 45 | 129 |
| 1988 | 1567 | 673 | 893 | 227 | 305 | 57 | 134 |
| 1989 | 1520 | 652 | 868 | 213 | 317 | 67 | 34 |
| 1990 | 1519 | 549 | 970 | 207 | 317 | 90 | 100 |
| 1991 | 1346 | 459 | 837 | 198 | 307 | 77 | 12 |


| Year | Total state and Local | Property | $\begin{aligned} & \text { rotal } \\ & \text { state } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Totad } \\ & \text { Salea } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Ind } \\ & \text { Income } \end{aligned}$ | $\begin{aligned} & \text { Corp } \\ & \text { Incom } \end{aligned}$ | Energy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | cent |  |  |  |
| 1960 | 10.77 | 6.13 | 4.65 | 2.14 | 0.76 | 0.34 | 0.15 |
| 1961 | 11.54 | 6.61 | 4.93 | 2.20 | 1.19 | 0.34 | 0.14 |
| 1962 | 10.00 | 5.60 | 4.40 | 1.95 | 0.87 | 0.28 | 0.13 |
| 1963 | 10.51 | 5.95 | 4.56 | 2.09 | 0.06 | 0.29 | 0.13 |
| 1964 | 10.71 | 6.11 | 4.60 | 2.09 | 0.89 | 0.32 | 0.13 |
| 1965 | 10.50 | 6.02 | 4.48 | 2.00 | 0.84 | 0.33 | 0.12 |
| 1966 | 10.70 | 5.95 | 4.75 | 2.00 | 1.20 | 0.31 | 0.12 |
| 1967 | 10.11 | 6.06 | 4.75 | 1.92 | 1.24 | 0.39 | 0.12 |
| 1960 | 11.62 | 6.50 | 5.11 | 1.97 | 1.44 | 0.36 | 0.13 |
| 1969 | 21.07 | 6.04 | 3.03 | 1.92 | 1.40 | 0.36 | 0.16 |
| 1970 | 11.27 | 6.06 | 5.21 | 1.95 | 1.57 | 0.39 | 0.14 |
| 1971 | 11.57 | 6.36 | 5.21 | 1.92 | 1.61 | 0.38 | 0.13 |
| 1972 | 12.11 | 6.09 | 6.02 | 2.04 | 2.24 | 0.39 | 0.12 |
| 1973 | 10.71 | 5.42 | 5.28 | 1.76 | 2.18 | 0.34 | 0.11 |
| 1974 | 11.39 | 5.86 | 5.73 | 1.72 | 2.06 | 0.42 | 0.24 |
| 1975 | 10.97 | 5.41 | 5.56 | 1.67 | 2.12 | 0.52 | 0.33 |
| 1976 | 12.00 | 5.85 | 6.16 | 1.71 | 2.17 | 0.51 | 0.71 |
| 1977 | 11.97 | 5.61 | 6.36 | 1.69 | 2.28 | 0.51 | 0.90 |
| 1978 | 11.13 | 5.32 | 5.81 | 1.53 | 2.13 | 0.50 | 0.75 |
| 1979 | 11.70 | 5.32 | 6.38 | 1.62 | 2.26 | 0.57 | 0.35 |
| 1980 | 11.53 | 5.20 | 6.33 | 1.31 | 1.96 | 0.67 | 1.32 |
| 1981 | 11.36 | 5.34 | 6.02 | 1.22 | 1.88 | 0.68 | 1.25 |
| 1982 | 12.02 | 5.58 | 6.44 | 1.25 | 1.75 | 0.35 | 1.79 |
| 1983 | 11.16 | 5.25 | 5.91 | 1.23 | 1.75 | 0.11 | 1.47 |
| 1984 | 11.73 | 5.33 | 6.40 | 1.48 | 1.87 | 0.38 | 1.55 |
| 1985 | 12.49 | 5.60 | 6.89 | 1.50 | 1.94 | 0.68 | 1.59 |
| 1986 | 111.65 | 5.40 | 6.25 | 1.43 | 1.74 | 0.60 | 1.30 |
| 1987 | 111.08 | 5.26 | 5.82 | 1.47 | 1.92 | 0.34 | 0.97 |
| 1988 | 12.16 | 5.23 | 6.94 | 2.77 | 2.37 | 0.45 | 1.04 |
| 1989 | 11.27 | 4.83 | 6.43 | 1.58 | 2.35 | 0.49 | 0.70 |
| 1990 | 11.38 | 4.12 | 7.27 | 1.55 | 2.31 | 0.68 | 0.75 |
| 1991 | 19.80 | 3.34 | 6.46 | 1.45 | 2.24 | 0.56 | 0.59 |


| Iear | Total 8tate and Local | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { Sales } \end{aligned}$ | $\begin{aligned} & \text { Ind } \\ & \text { Incone } \end{aligned}$ | $\begin{gathered} \text { Corp } \\ \text { Incom } \\ \hline \end{gathered}$ | Energy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 1960 | 100.00 | 56.87 | 43.13 | 19.91 | 7.10 | 3.12 | 1.39 |
| 1961 | 100.00 | 57.21 | 42.72 | 19.07 | 10.28 | 2.91 | 1.24 |
| 1962 | 100.00 | 55.96 | 44.04 | 19.51 | 0.69 | 2.75 | 1.28 |
| 1963 | 100.00 | 56.60 | 43.40 | 19.94 | 0.15 | 2.76 | 1.23 |
| 1964 | 100.00 | 57.06 | 42.94 | 19.55 | - 0.31 | 2.te | 1.19 |
| 1965 | 100.00 | 57.31 | 42.69 | 19.00 | 0.91 | 3.15 | 1.12 |
| 1966 | 100.00 | 55.61 | 44.39 | 18.68 | 10.29 | 3.41 | 1.12 |
| 1967 | 100.00 | 56.07 | 43.93 | 17.61 | 11.43 | 3.59 | 1.13 |
| 196 | 100.00 | 55.98 | 44.01 | 17.02 | 12.41 | 3.06 | 1.09 |
| 1969 | 100.00 | 54.58 | 45.42 | 17.32 | 12.65 | 3.26 | 1.42 |
| 1970 | 100.00 | 53.75 | 46.25 | 17.28 | 13.95 | 3.4 | 1.25 |
| 1971 | 100.00 | 54.97 | 45.03 | 16.56 | 13.91 | 3.31 | 1.13 |
| 1972 | 100.00 | 50.27 | 49.73 | 16.85 | 18.48 | 3.26 | 0.96 |
| 1973 | 100.00 | 30.66 | 49.34 | 16.62 | 20.32 | 3.17 | 1.00 |
| 1974 | 100.00 | 50.56 | 49.44 | 14.83 | 17.75 | 3.60 | 2.04 |
| 1975 | 100.00 | 49.35 | 50.65 | 15.22 | 12.35 | 4.78 | 3.04 |
| 1976 | 100.00 | $44^{4} 71$ | 51.29 | 14.21 | 18.08 | 4.24 | 5.89 |
| 1977 | 100.00 | 46.85 | 53.15 | 14.14 | 19.04 | 4.26 | 7.51 |
| 1976 | 100.00 | 47.76 | 52.24 | 13.76 | 19.17 | 4.48 | 6.77 |
| 1979 | 100.00 | 45.44 | 54.56 | 13.89 | 19.32 | 4.90 | 7.13 |
| 1980 | 100.00 | 45.09 | 54.91 | 11.96 | 17.00 | 5.79 | 11.41 |
| 1981 | 100.00 | 46.99 | 53.01 | 10.71 | 16.57 | 6.02 | 11.02 |
| 1982 | 100.00 | 46.40 | 53.60 | 10.44 | 14.59 | 4.56 | 14.90 |
| 1983 | 100.00 | 47.06 | 52.94 | 11.02 | 15.65 | 3.71 | 13.16 |
| 1984 | 100.00 | 45.41 | 54.59 | 12.64 | 15.92 | 3.20 | 13.24 |
| 1985 | 100.00 | 44.84 | 55.16 | 12.05 | 15.56 | 5.42 | 12.73 |
| 1986 | 100.00 | 46.35 | 53.65 | 12.26 | 14.96 | 5.13 | 12.11 |
| 1987 | 100.00 | 47.47 | 52.53 | 13.24 | 17.33 | 3.11 | B. 80 |
| 2988 | 100.00 | 42.98 | 57.02 | 14.51 | 19.46 | 3.67 | 1.5 |
| 1989 | 100.00 | 42.90 | 57.10 | 14.04 | 20.86 | 4.39 | 6.20 |
| 1990 | 100.00 | 36.11 | 63.89 | 13.63 | 20.85 | 5.96 | 6.59 |
| 1991 | 100.00 | 34.09 | 65.91 | 14.75 | 22.80 | 5.72 | 6.06 |



## Appendix D - Nebraska Tax Data



Appendix Table D2. Annual Real Tax Collectiona in Mabraske, 1960-1991, 1994=100

| Year | Total 8tate and local | Property | $\begin{array}{r} \text { Total } \\ \text { state } \\ \hline \end{array}$ | Total sales | Individual Income | Corporate Incom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (ndllion | doll |  |  |
| 1960 | 1306.6 | 052.3 | 454.3 | 253.1 |  |  |
| 1961 | 1403.6 | 939.4 | 464.3 | 260.3 |  |  |
| 1962 | 1379.4 | 915.2 | 464.2 | 254.1 |  |  |
| 1963 | 1483.3 | 1006.4 | 476.9 | 262.1 |  |  |
| 1964 | 1573.2 | 1044.1 | 529.2 | 294.6 |  |  |
| 1965 | 1606.8 | 1067.9 | 539.9 | 307.9 |  |  |
| 1966 | 1745.3 | 1168.0 | 577.4 | 317.6 |  |  |
| 1967 | 1861.1 | 1254.3 | 606.8 | 338.4 |  |  |
| 1968 | 1973.6 | 1149.0 | 824.7 | 618.5 | 57.4 | 6.0 |
| 1969 | 2046.2 | 1172.5 | 873.7 | 614.0 | 147.4 | 27.8 |
| 1970 | 2171.3 | 1170.7 | 992.7 | 550.4 | 168.9 | 32.7 |
| 1971 | 2293.2 | 1219.6 | 1073.6 | 697.5 | 197.2 | 32.5 |
| 1972 | 2354.2 | 122 . 3 | 1225.9 | 751.* | 190.6 | 35.3 |
| 1973 | 2463.4 | 1216.8 | 1246.7 | 767.9 | 282.6 | 46.5 |
| 1974 | 2413.2 | 1196.2 | 1217.1 | 770.4 | 236.8 | 66.0 |
| 1975 | 2358.8 | 1191.8 | 1167.1 | 746.9 | 214.2 | 71.4 |
| 1976 | 2553.8 | 1284. | 1269.2 | 783.8 | 275.1 | 75.3 |
| 1977 | 2646.0 | 1350.4 | 1417.6 | 836.5 | 419.5 | 102.4 |
| 1978 | 2780.0 | 1239.3 | 1540.7 | 199.5 | 392.0 | 106.5 |
| 1979 | 2707.4 | 1196.0 | 1511.3 | 846.2 | 425.1 | 101.7 |
| 1980 | 2591.9 | 1127.4 | 1464.4 | 801.2 | 423.0 | 104.0 |
| 1981 | 2365.8 | 1059.4 | 1306.4 | 757.2 | 326.5 | 87.7 |
| 1982 | 2397.0 | 1079.1 | 1317.9 | 751.6 | 347.5 | 73.5 |
| 1983 | 2590.3 | 1126.9 | 1463.4 | 031.8 | 416.6 | 77.1 |
| 1904 | 2676.4 | 1157.0 | 1519.4 | 848.5 | 432.1 | 95.2 |
| 1985 | 2621.1 | 1193.1 | 1427.9 | 717.1 | 438.0 | 67.3 |
| 1986 | 2755.4 | 1247.7 | 1507.7 | 015.2 | 474.3 | 74.1 |
| 1987 | 2879. e | 1317.1 | 1562.6 | 862.5 | 467.6 | 87.0 |
| 1988 | 2967.1 | 1289.3 | 1677.8 | 908.3 | 539.7 | 92.4 |
| 1989 | 3067.8 | 1339.6 | 1724.2 | 930.8 | 564.9 | 96.5 |
| 1990 | 3028.7 | 1317.6 | 1712.2 | 935.3 | 561.0 | 11.4 |
| 1991 | 3201.5 | 1285.2 | 1916.3 | 1040.1 | 654.0 | 88.9 |


| Year | Total state and Local | Property | $\begin{aligned} & \text { Total } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { saloa } \\ & \hline \end{aligned}$ | Indivdual Income | Corporate Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (perc | ge ) |  |  |
| 1960 | 8.69 | 5.67 | 3.02 | 1.6 |  |  |
| 1961 | 9.22 | 6.17 | 3.05 | 1.71 |  |  |
| 1962 | 0.43 | 5.59 | 2.84 | 1.55 |  |  |
| 1963 | 8.83 | 6.06 | 2.07 | 1.58 |  |  |
| 1964 | 9.33 | 6.19 | 3.14 | 1.75 |  |  |
| 1965 | 0.78 | 5.34 | 2.94 | 1.6 |  |  |
| 1966 | 9.12 | 6.11 | 3.02 | 1.66 |  |  |
| 1967 | 9.60 | 6.47 | 3.13 | 1.75 |  |  |
| 1968 | 9.97 | 5.80 | 4.17 | 3.12 | 0.29 | 0.03 |
| 1969 | 5.74 | 5.58 | 4.16 | 2.92 | 0.70 | 0.13 |
| 1970 | 10.23 | 5.55 | 4.68 | 3.07 | 0.80 | 0.15 |
| 1971 | 10.27 | 5.46 | 4.81 | 3.12 | 0.88 | 0.15 |
| 1972 | 9.86 | 5.15 | 4.72 | 3.15 | 0.80 | 0.15 |
| 1973 | 9.37 | 4.63 | 4.74 | 2.92 | 1.07 | 0.18 |
| 1974 | 9.77 | 4.14 | 4.83 | 3.12 | 0.96 | 0.27 |
| 1975 | 9.23 | 4.66 | 4.57 | 2.92 | 0.84 | 0.28 |
| 1976 | 10.04 | 3.05 | 4.99 | 3.09 | 1.08 | 0.30 |
| 1977 | 10.99 | 3.25 | 5.75 | 3.23 | 1.62 | 0.40 |
| 1978 | 9.89 | 4.41 | 5.48 | 3.20 | 1.39 | 0.38 |
| 1979 | 9.93 | 4.39 | 5.54 | 3.10 | 1.56 | 0.37 |
| 1980 | 10.23 | 4.45 | 5.71 | 3.16 | 1.67 | 0.41 |
| 1981 | 8.90 | 3.98 | 4.91 | 2.05 | 1.23 | 0.33 |
| 1982 | 9.13 | 4.11 | 5.02 | 2.86 | 1.32 | 0.28 |
| 1983 | 9.83 | 4.28 | 5.56 | 3.16 | 1.58 | 0.29 |
| 1984 | 9.60 | 4.15 | 5.45 | 3.04 | 2.55 | 0.34 |
| 1985 | 9.21 | 4.19 | 5.02 | 2.73 | 1.54 | 0.24 |
| 1986 | 9.56 | 4.33 | 5.23 | 2.83 | 1.64 | 0.26 |
| 1987 | 9.97 | 4.56 | 5.41 | 2.99 | 2.62 | 0.30 |
| 1988 | 10.01 | 4.35 | 5.66 | 3.06 | 1.82 | 0.31 |
| 1989 | 10.19 | 4.45 | 5.74 | 3.09 | 1.88 | 0.32 |
| 1990 | 9.76 | 4.25 | 5.51 | 3.01 | 1.81 | 0.26 |
| 1991 | 10.27 | 4.12 | 6.15 | 3.34 | 2.10 | 0.29 |

Appondix Table D4. Specifle Taxes as Percentage of M1 Taxes in Nobraska, 1960-1991




Appendix Figure D2. Real 1994 Nebraska tax collections.


## Appendix E - South Dakota Tax Data

## Appendix Table E1, Annual Mominal Tax Collectiona in South Dakota, 1960-1991

Total state
Total Total Individual Corporate Year and Local Property state salea Income Income

|  |  | --- | 1111 | dol | )- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | 131 | 7 | 53 | 41 | no | 0.4 |
| 1961 | 143 | 8 | 55 | 43 | Ind. | 0.5 |
| 1962 | 143 | 6 | 57 | 45 | Ino. | 0.5 |
| 1963 | 152 | 4 | 63 | 40 | tax | 0.3 |
| 1964 | 156 | 92 | 64 | 49 |  | 0.5 |
| 1965 | 161 | 97 | 64 | 50 |  | 0.6 |
| 1966 | 182 | 104 | 78 | 62 |  | 0.6 |
| 1967 | 198 | 114 | 4 | 68 |  | 0.6 |
| 1968 | 209 | 121 | 18 | 71 |  | 0.6 |
| 1969 | 226 | 134 | 92 | 75 |  | 1 |
| 1970 | 259 | 146 | 113 | 95 |  | 0.0 |
| 1971 | 293 | 161 | 122 | 103 |  | 1 |
| 1972 | 301 | 168 | 133 | 112 |  | 1 |
| 1973 | 326 | 175 | 152 | 129 |  | 1 |
| 1974 | 336 | 172 | 166 | 143 |  | 1 |
| 1975 | 353 | 182 | 171 | 146 |  | 2 |
| 1976 | 370 | 198 | 172 | 163 |  | 2 |
| 1977 | 411 | 211 | 200 | 174 |  | 3 |
| 1976 | 446 | 222 | 224 | 192 |  | 3 |
| 1979 | 478 | 232 | 246 | 212 |  | 3 |
| 1980 | 513 | 242 | 271 | 233 |  | 3 |
| 1981 | 552 | 254 | 298 | 252 |  | 4 |
| 1982 | 595 | 266 | 329 | 283 |  | 1 |
| 1983 | 597 | 272 | 325 | 279 |  | 3 |
| 1984 | 646 | 287 | 359 | 291 |  | 18 |
| 1985 | 677 | 322 | 355 | 293 |  | 17 |
| 1986 | 742 | 338 | 404 | 319 |  | 24 |
| 1987 | 767 | 351 | 416 | 327 |  | 24 |
| 1988 | 860 | 384 | 476 | 393 |  | 26 |
| 1989 | 857 | 389 | 469 | 379 |  | 26 |
| 1990 | 899 | 399 | 500 | 403 |  | 31 |
| 1991 | 936 | 408 | 528 | 401 |  | 39 |


| Year | Total state and Local | property | Total <br> 8tate | Total Individual sales Income | Carporate Incom |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (-1) | n | dollars)---m- |  |
| 1960 | 652.5 | 387.9 | 264.6 | 204.7 no | 2.0 |
| 1961 | 707.7 | 436.1 | 271.6 | 214.3 ind. | 2.5 |
| 1962 | 700.2 | 421.7 | 278.5 | 221.3 inc. | 2.4 |
| 1963 | 734.2 | 421.1 | 313.1 | 231.7 tax | 2.4 |
| 1964 | 743.7 | 438.6 | 305.1 | 234.6 | 2.4 |
| 1965 | 752.6 | 452.7 | 299.9 | 233.8 | 2.8 |
| 1966 | 123.3 | 473.7 | 354.6 | 282. | 2.7 |
| 1967 | 876.1 | 504.0 | 372.0 | 300.3 | 2.7 |
| 1968 | 888.4 | 514.3 | 374.1 | 303.5 | 2.6 |
| 1969 | 911.6 | 541.1 | . 370.4 | 301.6 | 4.0 |
| 1970 | 984.7 | 554.9 | 429.8 | 361.3 | 3.0 |
| 1971 | 1033.4 | 507.9 | 445.5 | 376.1 | 3.7 |
| 1972 | 1062.4 | 593.0 | 469.4 | 395.3 | 3.5 |
| 1973 | 1093.8 | 581.1 | 502.0 | 42 . 8 | 3.3 |
| 1974 | 1013.3 | 515.6 | 497.6 | 428.7 | 3.0 |
| 1975 | 969.3 | 499.8 | 469.6 | 400.9 | 5.5 |
| 1976 | 960.3 | 513.9 | 446.4 | 423.1 | 5.2 |
| 1977 | 1002.3 | 514.6 | 418.7 | 424.3 | 7.3 |
| 1976 | 1010.5 | 503.0 | 507.5 | 435.0 | 6.8 |
| 1979 | 972.3 | 471.9 | 500.4 | 431.2 | 6.1 |
| 1980 | 919.5 | 433.8 | 485.7 | 417.6 | 5.1 |
| 1981 | \%96. | 412.7 | 484.2 | 409.5 | 6.5 |
| 1982 | 910.7 | 407.2 | 503.6 | 433.2 | 1.5 |
| 1983 | 185.2 | 403.3 | 481.9 | 413.7 | 4.4 |
| 1984 | 918.2 | 407.9 | 310.3 | 413.6 | 25.6 |
| 1985 | 929.5 | 442.1 | 487.4 | 402.3 | 23.3 |
| 1986 | 999. | 455.4 | 544.3 | 429.8 | 32.3 |
| 1987 | 996.3 | 455.9 | 540.1 | 424.6 | 31.2 |
| 1988 | 1074.4 | 479.7 | 594.7 | 491.0 | 32.5 |
| 1989 | 1021.4 | 463.6 | 557. | 451.7 | 31.0 |
| 1990 | 1016.7 | 451.3 | 565.5 | 455.8 | 35.1 |
| 1991 | 1015.1 | 442.5 | 572.6 | 434.9 | 42.3 |

Appendix Table E3. Specific Taxes as Percentage of Personal Income in South Dakote, 1960-1991


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2960 | 10.26 | 6.10 | 4.16 | 1.22 | 0.03 |
| 1961 | 11.14 | 6.07 | 4.20 | 3.37 | 0.04 |
| 1962 | 9.75 | 5.87 | 3.88 | 3.08 | 0.03 |
| 1963 | 10.71 | 6.14 | 4.57 | 3.38 | 0.04 |
| 1964 | 12.19 | 6.60 | 4.59 | 3.53 | 0.04 |
| 1965 | 10.23 | 6.15 | 4.06 | 3.1 ¢ | 0.04 |
| 1966 | 10.71 | 6.13 | 4.59 | 3.66 | 0.04 |
| 1967 | 11.46 | 6.59 | 4.87 | 3.93 | 0.03 |
| 1968 | 11.33 | 6.56 | 4.77 | 3.87 | 0.03 |
| 1969 | 11.53 | 6.84 | 4.60 | 3.81 | 0.05 |
| 1970 | 12.17 | 6.86 | 5.31 | 4.47 | 0.04 |
| 1971 | 12.15 | 6.91 | 5.24 | 4.42 | 0.04 |
| 1972 | 11.21 | 6.26 | 4.95 | 4.17 | 0.04 |
| 1973 | 9.54 | 5.12 | 4.42 | 3.78 | 0.03 |
| 1974 | 9.94 | 5.06 | 4.88 | 4.20 | 0.03 |
| 1975 | 9.53 | 4.91 | 4.62 | 3.94 | 0.05 |
| 1976 | 10.06 | 5.38 | 4.68 | 4.43 | 0.05 |
| 1977 | 9.91 | 5.09 | 4.42 | 4.19 | 0.07 |
| 1978 | 9.23 | 4.59 | 4.63 | 3.97 | 0.06 |
| 1979 | 0.93 | 4.33 | 4.59 | 3.96 | 0.06 |
| 1980 | 9.64 | 4.55 | 5.09 | 4.38 | 0.06 |
| 1981 | 0.96 | 4.12 | 4.84 | 4.09 | 0.06 |
| 1982 | 9.18 | 4.10 | 5.07 | 4.36 | 0.02 |
| 1983 | - 8.85 | 4.03 | 4.82 | 4.14 | 0.04 |
| 1984 | *. 50 | 3.76 | 4.73 | 3.83 | 0.24 |
| 1985 | *.62 | 4.10 | 4.52 | 3.73 | 0.22 |
| 1986 | 8.97 | 4.03 | 4.8 | 3.85 | 0.29 |
| 1987 | 0.77 | 4.01 | 4.76 | 3.74 | 0.27 |
| 1989 | 9.64 | 4.30 | 5.34 | 4.41 | 0.29 |
| 1989 | 0.74 | 3.97 | 4.77 | 3.86 | 0.27 |
| 1990 | +.30 | 3.68 | 4.62 | 3.72 | 0.29 |
| 1991 | . .22 | 3.58 | 4.64 | 3.52 | 0.34 |

Appondix Table 84. 8pecific Taxes as a Percentage of Nll Taxea in south Dakota, 1960-1991

| Tear | Total state and Local | Property | $\begin{aligned} & \text { rotal } \\ & \text { state } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { Sales } \\ & \hline \end{aligned}$ | Individual Corporate Incom Income |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ) - --- |  |
| 1960 | 100.00 | 59.45 | 40.55 | 31.37 | 0.31 |
| 1961 | 100.00 | 61.62 | 38.38 | 30.29 | 0.35 |
| 1962 | 100.00 | 60.22 | 39.78 | 31.61 | 0.35 |
| 1963 | 100.00 | 57.35 | 42.65 | 31.56 | 0.33 |
| 1964 | 100.00 | 58.97 | 41.03 | 31.54 | 0.32 |
| 1965 | 100.00 | 60.15 | 39.85 | 31.07 | 0.37 |
| 1966 | 100.00 | 57.19 | 42.81 | 34.14 | 0.33 |
| 1967 | 100.00 | 57.53 | 42.47 | 34.28 | 0.30 |
| 1968 | 100.00 | 57.89 | 42.11 | 34.16 | 0.29 |
| 1969 | 100.00 | 59.36 | 40.64 | 33.0 \% | 0.44 |
| 1970 | 100.00 | 56.35 | 43.65 | 36.69 | 0.31 |
| 1971 | 100.00 | 56.89 | 43.11 | 36.40 | 0.35 |
| 1972 | 100.00 | 53.81 | 44.19 | 37.21 | 0.33 |
| 1973 | 100.00 | 53.68 | 46.32 | 39.57 | 0.31 |
| 1974 | 100.00 | 50.89 | 49.11 | 42.31 | 0.30 |
| 1975 | 100.00 | 51.56 | 48.44 | 41.36 | 0.57 |
| 1976 | 100.00 | 53.51 | 46.49 | 44.05 | 0.54 |
| 1977 | 100.00 | 51.34 | 48.66 | 42.34 | 0.73 |
| 1976 | 100.00 | 49.71 | 50.22 | 43.05 | 0.67 |
| 1979 | 100.00 | $4{ }^{4} .54$ | 31.46 | 44.35 | 0.63 |
| 1980 | 100.00 | 47.17 | 52.43 | 45.42 | 0.58 |
| 1981 | 100.00 | 16.01 | 53.99 | 45.65 | 0.72 |
| 1982 | 100.00 | 44.71 | 55.29 | 47.56 | 0.17 |
| 1983 | 100.00 | 45.56 | 54.44 | 46.73 | 0.30 |
| 1984 | 100.00 | 44.43 | 55.57 | 45.05 | 2.79 |
| 1985 | 100.00 | 47.56 | 52.44 | 43.28 | 2.51 |
| 1986 | 100.00 | 45.55 | 54.45 | 42.99 | 3.23 |
| 1987 | 100.00 | 45.76 | 54.24 | 42.63 | 3.13 |
| 1988 | 100.00 | 44.65 | 53.35 | 45.70 | 3.02 |
| 1989 | 100.00 | 45.39 | 54.61 | 44.22 | 3.03 |
| 1990 | 100.00 | 44.38 | 55.62 | 44.83 | 3.45 |
| 1991 | 100.00 | 13.59 | 56.11 | 42.84 | 4.17 |




Appendix Figure E3. South Dakota tax collections as percentage of personal income.

## Appendix F - Wyoming Tax Data

## Appendix Table F1. Annual Kominal Tax Collectlons in Wyoming, 1960-1991

|  | Totel stato | Total | Total | Individu |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | and Local Property | State | 8alan | Income | Income | Energy |


| 1960 | 84 | 42 | 42 | 24 | no | no |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | 33 | 42 | 41 | 25 | Ind. | corp. |  |
| 1962 | 8 | 44 | 44 | 24 | Inc. | inc. |  |
| 1963 | 92 | 47 | 45 | 25 | tax | tax |  |
| 1964 | 97 | 49 | 48 | 26 |  |  |  |
| 1965 | 100 | 51 | 4 | 27 |  |  |  |
| 1966 | 111 | 55 | 56 | 32 |  |  |  |
| 1967 | 120 | 62 | 5 | 36 |  |  |  |
| 1968 | 136 | 67 | 69 | 43 |  |  |  |
| 1969 | 141 | 63 | 76 | 31 |  |  |  |
| 1970 | 151 | 68 | 03 | 53 |  |  | 4 |
| 1971 | 171 | $7{ }^{\text {7 }}$ | 93 | 61 |  |  | 5 |
| 1972 | 184 | 87 | 97 | 63 |  |  | 5 |
| 1973 | 192 | 4 | 105 | 75 |  |  | 5 |
| 1974 | 219 | 95 | 124 | 63 |  |  | 5 |
| 1975 | 260 | 106 | 154 | 102 |  |  | 18 |
| 1976 | 330 | 137 | 193 | 113 |  |  | 40 |
| 1977 | 396 | 163 | 233 | 133 |  |  | 46 |
| 1978 | 487 | 198 | 289 | 164 |  |  | 63 |
| 1979 | 572 | 229 | 343 | 193 |  |  | 02 |
| 1980 | 648 | 260 | 388 | 215 |  |  | 106 |
| 1981 | 782 | 313 | 469 | 250 |  |  | 139 |
| 1982 | 1181 | 418 | 763 | 280 |  |  | 380 |
| 1983 | 1254 | 318 | 736 | 242 |  |  | 397 |
| 1984 | 1364 | 562 | 802 | 228 |  |  | 387 |
| 1985 | 1367 | 561 | 006 | 230 |  |  | 403 |
| 1986 | 1390 | 595 | 795 | 231 |  |  | 387 |
| 1987 | 1166 | 543 | 623 | 211 |  |  | 259 |
| 1988 | 1011 | 436 | 573 | 203 |  |  | 229 |
| 1989 | 995 | 413 | 582 | 207 |  |  | 231 |
| 1990 | 1029 | 417 | 612 | 217 |  |  | 253 |
| 1991 | 1057 | 420 | 637 | 231 |  |  | 265 |


| Year | Total state |  | Total | Total | Individual | Corporate | Enercy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | and Local | Property | state | Bales | Income | Income |  |
|  |  |  |  | 11108 | 11ars) |  |  |
| 1960 | 417.9 | 208.2 | 209.7 | 119.0 | no | no |  |
| 1961 | 408.9 | 206.4 | 202.5 | 121.0 | ind. | corp. |  |
| 1962 | 429.0 | 214.0 | 215.0 | 118.2 | Inc. | inc. |  |
| 1963 | 441.3 | 224.5 | 216.8 | 119.0 | tax | tex |  |
| 1964 | 462.4 | 233.6 | 22 . 8 | 123.5 |  |  |  |
| 1965 | 465. | 240.9 | 224.9 | 124.6 |  |  |  |
| 1966 | 503.3 | 248.7 | 254.6 | 145.5 |  |  |  |
| 1967 | 529.3 | 272.4 | 256.9 | 1518.2 |  |  |  |
| 1968 | 57.1 | 284. | 293.3 | 184.5 |  |  |  |
| 1969 | 566.5 | 252.5 | 314.1 | 206.2 |  |  |  |
| 1970 | 583.4 | 260.1 | 323.3 | 201.6 |  |  | 15.6 |
| 1971 | 624.4 | 284. | 339.6 | 222.7 |  |  | 17.2 |
| 1972 | 649.4 | 307.1 | 342.4 | 229.4 |  |  | 10.0 |
| 1973 | 638.3 | 289.2 | 349.1 | 249.3 |  |  | 17.3 |
| 1974 | 656.5 | 284. | 371.7 | 248. |  |  | 15.3 |
| 1975 | 714.0 | 291.1 | 422.9 | 280.1 |  |  | 50.0 |
| 1976 | 056.3 | 355.6 | 500.9 | 293.3 |  |  | 104.6 |
| 1977 | 965.7 | 397.5 | 568.2 | 324.3 |  |  | 112.2 |
| 1978 | 1103.4 | 448.6 | 654.8 | 371.6 |  |  | 143.4 |
| 1979 | 1163.5 | 465.8 | 697.7 | 392.6 |  |  | 167.4 |
| 1980 | 1161.5 | 466.0 | 695.5 | 385.4 |  |  | 190.0 |
| 1981 | 1270.6 | $50{ }^{5} .6$ | 762.1 | 406.2 |  |  | 225.3 |
| 1982 | 1807.7 | 639.6 | 1167.9 | 42e.6 |  |  | 511.6 |
| 1983 | 1859.3 | 768.0 | 1091.3 | 358.8 |  |  | 588.6 |
| 1984 | 1938.7 | 798.8 | 1139.9 | 324.1 |  |  | 550.1 |
| 1985 | 1876.9 | 770.3 | 1106.6 | 315.1 |  |  | 553.3 |
| 1986 | 1872.9 | 801.7 | 1071.2 | 320.7 |  |  | 521.4 |
| 1987 | 1514.6 | 705.3 | 809.3 | 274.1 |  |  | 336.4 |
| 1988 | 1263.1 | 547.2 | 715.9 | 253.6 |  |  | 286.1 |
| 1989 | 1185.9 | 492.2 | 693.7 | 246.7 |  |  | 275.3 |
| 1990 | 1163.8 | 471.6 | 692.2 | 245.4 |  |  | 286.1 |
| 1991 | 1146.3 | 455.5 | 690.8 | 250.5 |  |  | 287.4 |

## Appendix Table F3. specific Taxes as a Percentage of Perional

 Income in Wyoming. 1960-1991Total state
Yoar and Local Property State salea Individual Corporate
Income Income Energy

| 1960 | 10.98 | 5.47 | 5.51 | 3.15 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1961 | 10.34 | 5.22 | 5.12 | 3.06 |  |
| 1962 | 10.63 | 5.30 | 5.33 | 2.93 |  |
| 1963 | 10.83 | 5.51 | 5.32 | 2.92 |  |
| 1964 | 11.16 | 5.64 | 5.52 | 2.98 |  |
| 1965 | 10.98 | 5.68 | 5.30 | 2.94 |  |
| 1966 | 11.86 | 5.86 | 6.00 | 3.43 |  |
| 1967 | 11.95 | 6.15 | 5.80 | 3.57 |  |
| 1968 | 12.76 | 6.29 | 6.47 | 4.07 |  |
| 1969 | 12.13 | 5.41 | 6.72 | 4.41 |  |
| 1970 | 12.14 | 5.41 | 6.72 | 4.19 | 0.32 |
| 1971 | 12.15 | 5.54 | 6.61 | 4.34 | 0.33 |
| 1972 | 11.68 | 5.52 | 6.15 | 4.12 | 0.32 |
| 1973 | 10.41 | 4.72 | 5.69 | 4.07 | 0.28 |
| 1974 | 10.18 | 4.42 | 5.76 | 3.66 | 0.24 |
| 1975 | 10.73 | 4.37 | 6.36 | 4.21 | 0.75 |
| 1976 | 12.11 | 5.03 | 7.08 | 4.15 | 1.48 |
| 1977 | 12.44 | 5.12 | 7.32 | 4.18 | 1.45 |
| 1978 | 12.53 | 5.09 | 7.43 | 4.22 | 1.63 |
| 1979 | 12.43 | 4.91 | 1.46 | 4.20 | 1.79 |
| 1980 | 12.02 | 4.82 | 7.20 | 3.99 | 1.97 |
| 1981 | 12.74 | 5.10 | 7.64 | 4.07 | 2.26 |
| 1982 | 18.64 | 6.60 | 12.04 | 4.42 | 6.00 |
| 1983 | 20.22 | 8.35 | 11.87 | 3.90 | 6.40 |
| 1984 | 21.29 | 8.77 | 12.52 | 3.56 | 6.04 |
| 1985 | 20.47 | 0.40 | 12.07 | 3.44 | 6.03 |
| 1986 | 21.01 | 3.99 | 12.01 | 3.60 | 5.85 |
| 1987 | 10.29 | 3.52 | 9.77 | 3.31 | 4.06 |
| 1988 | 15.39 | 6.67 | 8.72 | 3.09 | 3.49 |
| 1989 | 14.38 | 5.97 | 8.41 | 2.99 | 3.34 |
| 1990 | 13.69 | 5.55 | 0.14 | 2.89 | 3.36 |
| 1991 | 13.01 | 5.17 | 7.84 | 2.84 | 3.26 |






Appendix Figure F3. Wyoming tax collections as percentage of personal income.

# Appendix G-Consumer Price Index Conversion 

Appendix Table G1. Consumer Price Index, 1960-1994.

| Year | CPI |
| :--- | ---: |
| 1960 | 27.50 |
| 1961 | 27.80 |
| 1962 | 28.10 |
| 1963 | 28.50 |
| 1964 | 28.80 |
| 1965 | 29.30 |
| 1966 | 30.20 |
| 1967 | 31.00 |
| 1968 | 32.30 |
| 1969 | 34.10 |
| 1970 | 36.10 |
| 1971 | 37.60 |
| 1972 | 38.90 |
| 1973 | 41.30 |
| 1974 | 45.80 |
| 1975 | 50.00 |
| 1976 | 52.90 |
| 1977 | 56.30 |
| 1978 | 60.60 |
| 1979 | 67.50 |
| 1980 | 76.60 |
| 1981 | 84.50 |
| 1982 | 89.70 |
| 1983 | 92.60 |
| 1984 | 96.60 |
| 1985 | 100.00 |
| 1986 | 101.90 |
| 1987 | 105.70 |
| 1988 | 109.90 |
| 1989 | 115.20 |
| 1990 | 121.40 |
| 1991 | 126.60 |
| 1992 | 130.40 |
| 1993 | 134.3 |
| 1994 | 137.3 |
|  |  |


[^0]:    ${ }^{1}$ Professor, former research assistant, and research associate, respectively, Department of Agricultural Economics.

[^1]:    ${ }^{2}$ See James F. Baltezore, Jay A. Leitch, Norbert A. Dorow, and Cole R. Gustafson, 1988, State-Level Tax Equity in North Dakota in 1986, Agricultural Economics Report No. 242, Agricultural Experiment Station, North Dakota State University, Fargo.

