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COLORADO TAX PROFILE STUDY

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Colorado Legislative Council

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October, 1973

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INTRODUCTION

In Colorado, as throughout the nation, there is widespread citizen concern not only with the level of state and local taxes, but with their distribution among economic classes, social groups and geographic regions of the state. In brief, it is a concern about "who ultimately has to pay the tax bill?" What are the respective burdens borne by the poor, the middle class, the rich? The large family compared with the single individual? Households in highly urbanized counties in contrast to those in rural regions of the state? Such basic questions cannot be answered objectively without empirical data which provide some reasonably accurate picture of the actual distribution of state and local taxes among Colorado's resident taxpayers. In other words, such information attempts to answer the question of "What is?", rather than "What ought to be?" Moreover, the alleged inequities in the distribution of particular taxes, notably the local property tax, have in part been responsible for recent proposals to shift the funding of some public functions from the local to the state level. But the economic effects of any specific proposal to modify the state-local tax structure cannot be fully described or evaluated without some knowledge of the distribution of current state and local taxes. Thus the principal objective of this study is to develop a comprehensive "tax profile" of the State of Colorado which can be used by interested citizens, legislators and public administrators as the basis for assessing the distributional effects of the present tax structure as well as of new tax proposals.

It is generally recognized that Colorado in recent years has experienced marked economic growth. For example, the total income of Colorado residents as measured by the U.S. Department of Commerce personal income series, has more than doubled in the past decade. It increased from \$4,559 million in 1962 to \$10,485 million in 1972, or by almost 130 percent.¹ However, during this same period Colorado's total state and local tax collections rose even faster -- from \$483 million to \$1,172 million, an increase of more than 140 percent for the decade. In terms of overall relative burden, the state and local taxes for fiscal year 1972 represented almost 12 percent of personal income. And when these levies are coupled with an estimated \$1.4 billion of direct federal taxes paid

¹U.S. Department of Commerce, Survey of Current Business, August 1972 and July 1973.

by Colorado taxpayers in that same fiscal year,² the combined tax burden on the state's residents amounted to about \$2.5 billion, or approximately one-fourth of the estimated total personal income received before tax.

²Estimates of direct federal taxes on Colorado residents for fiscal year 1972 were: \$944 million of individual income taxes; \$248 million of payroll taxes; and \$188 million of federal excise taxes. Estimates were based on data derived from Colorado Tax Profile Study individual income tax analysis and U.S. Office of Management and Budget, The United States Budget in Brief, Fiscal Year 1974, Washington, D.C., 1973.

I. THE STATE-LOCAL TAX BURDEN

The detailed state and local tax collections officially reported by Colorado state agencies for fiscal year 1972, and the corresponding taxes adjusted to a resident tax burden basis for the purposes of this study, are shown in Tables I, II and III. Total net collections for the year amounted to \$1,172.0 million of which state taxes reported by the Department of Revenue were \$584.8 million or almost 50 percent of the total,³ local property taxes reported by the Division of Property Taxation were \$492.0 million or 42 percent, and all other local taxes as reported by the Division of Local Government were \$95.2 million or 8 percent. In contrast, on an adjusted basis which more closely corresponds to the actual tax liability borne by Colorado residents, the combined total of state-local taxes amounts to \$1,097.3 million, or 6 percent less than the reported collections. The difference of \$74.7 million between these two bases represents adjustments for the following factors:

	<u>Amount</u> <u>(millions)</u>
Exclusion of:	
Non-tax revenues and non-allocable taxes	\$33.8
Non-resident tax collections	33.2
Excess of tax collections over liabilities	19.5
Inclusion of:	
Vendor discounts on tax collections	<u>-11.8</u>
Total Adjustments	\$74.7

The major non-allocable levy was the state inheritance and gift tax, the excess of collections over liabilities was on the state income tax, and the vendor discounts were on state and local retail sales and cigarette tax collections.⁴

³Exclusive of state hunting and fishing license fees and pari-mutuel taxes not collected by the Department of Revenue.

⁴See Appendix A of this report for a detailed description of the individual adjustments and the reconciliation of reported state and local tax collections with the specific tax liabilities used as the basis for the resident tax burden analysis.

TABLE 1. SUMMARY OF COLORADO STATE AND LOCAL TAXES,
FISCAL YEAR 1972

	State Agency Reports (000)	Colorado Tax Profile Study ^d	
		Amount (000)	Percent Distribution
<u>State Taxes</u>			
Colorado Department of Revenue ^a			
Income Taxes	\$ 210,041	\$ 186,921	17.0
Sales and Use Taxes	187,812	176,944	16.1
Highway User Taxes	114,603	109,132	10.0
Inheritance and Gift Taxes	16,346	--	--
Insurance Taxes	16,200	16,200	1.5
Cigarette Taxes	14,408	13,573	1.2
Alcoholic Beverage Taxes	13,379	11,747	1.1
Regulatory and Business Taxes	8,628	8,628	.8
Misc. Charges and Non-tax Revenue	<u>3,362</u>	<u>--</u>	<u>--</u>
Total State Taxes	\$ 584,779	\$ 523,145	47.7
<u>Local Taxes</u>			
Colorado Division of Property Taxation ^b			
Property Taxes	492,008	492,008	44.8
Colorado Division of Local Government ^c			
Sales and Use Taxes	72,048	68,304	6.2
Franchise and Business Taxes	10,947	10,947	1.0
Denver Occupation Tax	9,195	--	--
Cigarette Taxes	<u>2,993</u>	<u>2,880</u>	<u>.3</u>
Total Non-property Taxes	95,183	82,131	7.5
Total Local Taxes	\$ <u>587,191</u>	\$ <u>574,139</u>	<u>52.3</u>
Total State and Local Taxes	\$ <u>1,171,970</u>	\$ <u>1,097,284</u>	<u>100.0</u>
Addendum:			
Federal Individual Income Tax ^e	--	\$ 944,007	--

^aColorado Department of Revenue, Annual Report, 1972. Net tax collections for fiscal year 1972, exclusive of hunting and fishing license fees and pari-mutual taxes not collected by Department of Revenue.

^bColorado Division of Property Taxation, Annual Report, 1972. Calendar year 1971 property taxes collected in 1972.

^cColorado Division of Local Government, Local Government Financial Compendium, 1971. Tax collections for calendar year 1971.

^dSee Appendix A for reconciliation of the Colorado State Agencies' reported tax collections with the CTPS tax liabilities used as basis for resident tax burden analysis.

^eFederal tax deductions taken on 1971 Colorado individual income tax returns. Excluded were \$6.5 million which represented Federal income tax deductions reported on non-resident Colorado income tax returns.

TABLE II. SUMMARY OF MAJOR TAXES ON
 COLORADO HOUSEHOLDS AND BUSINESS,
 FISCAL YEAR 1972

	State Taxes (000)	Local Taxes (000)	Total Taxes (000)
A. Major Taxes on Households (Direct Taxes): ^a			
Residential Property Taxes	\$ --	\$254,235	\$ 254,235
Sales and Use Taxes	104,325	42,185	146,510
Individual Income Taxes	153,612	--	153,612
Highway User Taxes	68,660	--	68,660
Cigarette Taxes	13,573	2,880	16,453
Alcoholic Beverage Taxes	<u>11,747</u>	<u>--</u>	<u>11,747</u>
Total Direct Taxes	\$351,917	\$299,300	\$ 651,217
B. Major Taxes on Business (Indirect Taxes): ^a			
Non-residential Property Taxes	--	237,773	237,773
Sales and Use Taxes	72,619	26,119	98,738
Corporation Income Taxes	33,309	--	33,309
Highway User Taxes	40,472	--	40,472
Insurance Taxes	16,200	--	16,200
Other Business Taxes	<u>8,628</u>	<u>10,947</u>	<u>19,575</u>
Total Indirect Taxes	\$171,228	\$274,839	\$ 446,067
C. Total Taxes on Households and Business:			
Property Taxes	--	492,008	492,008
Sales and Use Taxes	176,944	68,304	245,248
Income Taxes	186,921	--	186,921
Highway User Taxes	109,132	--	109,132
Cigarette Taxes	13,573	2,880	16,453
Alcoholic Beverage Taxes	11,747	--	11,747
Insurance Taxes	16,200	--	16,200
Other Business Taxes	<u>8,628</u>	<u>10,947</u>	<u>19,575</u>
Total Taxes	<u>\$523,145</u>	<u>\$574,139</u>	<u>\$1,097,284</u>

^aSee Appendix A for detailed allocation of tax liabilities between households and business.

TABLE III. PERCENTAGE DISTRIBUTION OF MAJOR TAXES
ON COLORADO HOUSEHOLDS AND BUSINESS,
FISCAL YEAR 1972

	State Taxes (Percent)	Local Taxes (Percent)	Total Taxes (Percent)
A. Major Taxes on Households (Direct Taxes):			
Residential Property Taxes	--	84.9	39.0
Sales and Use Taxes	29.6	14.1	22.5
Individual Income Taxes	43.7	--	23.6
Highway User Taxes	19.5	--	10.6
Cigarette Taxes	3.9	1.0	2.5
Alcoholic Beverage Taxes	<u>3.3</u>	<u>--</u>	<u>1.8</u>
Total Direct Taxes	100.0	100.0	100.0
B. Major Taxes on Business (Indirect Taxes):			
Non-residential Property Taxes	--	86.5	53.3
Sales and Use Taxes	42.4	9.5	22.1
Corporation Income Taxes	19.5	--	7.5
Highway User Taxes	23.6	--	9.1
Insurance Taxes	9.5	--	3.6
Other Business Taxes	<u>5.0</u>	<u>4.0</u>	<u>4.4</u>
Total Indirect Taxes	100.0	100.0	100.0
C. Total Taxes on Households and Business:			
Property Taxes	--	85.7	44.8
Sales and Use Taxes	33.8	11.9	22.3
Income Taxes	35.7	--	17.0
Highway User Taxes	20.9	--	10.0
Cigarette Taxes	2.6	0.5	1.5
Alcoholic Beverage Taxes	2.2	--	1.1
Insurance Taxes	3.1	--	1.5
Other Business Taxes	<u>1.7</u>	<u>1.9</u>	<u>1.8</u>
Total Taxes	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

The importance of each of the major tax categories on this adjusted basis was as follows:

- The local property tax was quantitatively the largest single levy in the state-local tax structure. It amounted to \$492.0 million and accounted for 45 percent of the combined revenues and 86 percent of the total local taxes.

- The retail sales and use tax ranked next in importance. It amounted to \$245.2 million, net of \$14.4 million of state food tax credit. It accounted for 22 percent of the combined state-local total taxes, almost 34 percent of the total state taxes, but only 12 percent of the local burden.

- The state income tax represented the third of the "big three" taxes imposed on the state-local level. The total tax on a liability rather than a collection basis amounted to \$186.9 million, of which the individual income tax on residents was \$153.6 million.⁵ The non-resident portion was comparatively small, amounting to less than one million dollars or about two-thirds of one percent of the total. The combined corporation and individual income tax represented 17 percent of the state-local tax total, but 36 percent of the state burden and actually exceeded the state sales and use tax.

- The state highway user tax category which includes the motor fuel and the ton-mile tax, as well as vehicle and operator's license fees, amounted to \$109.1 million. These levies accounted for 10 percent of the state-local tax burden and almost 21 percent of the state portion.

⁵An estimate of the federal individual income tax for Colorado residents was based on the federal tax deductions taken against state tax returns. For fiscal year 1972 it amounted to \$944.0 million, or almost exactly 1 percent of the total federal income tax receipts of \$94,737 million reported for the nation (see op. cit., p. 63). Hence, the state income tax liability of Colorado residents amounted to 16.3 percent of their federal liability, or the ratio of federal to state income taxes was about six to one.

● The remaining state and local taxes -- cigarettes, alcoholic beverages, insurance and all other business taxes -- amounted to \$64.0 million or less than 6 percent of the combined state-local tax burden. However, on the state level the excises on cigarettes and liquor amounted to \$25.3 million, the insurance and regulatory business taxes were \$24.8 million. Together they represented 10 percent of the state total, but less than 3 percent of the local tax burden.

II. THE DIRECT AND INDIRECT TAX ALLOCATION

A distinction is often made between the "impact" and "incidence" of a tax -- the former is where the tax is imposed, the latter where the tax finally comes to rest. Although the incidence of all taxes theoretically can be traced back to individuals it is useful for purposes of tax burden analysis to classify taxes into the two general categories of household or direct taxes and business or indirect taxes since the distribution of taxes requires specific shifting assumptions with regard to their final incidence.

Household taxes as defined for purposes of this study are those imposed on or directly shifted to individuals comprising the family or household unit and alternatively are based on the earning of income, the purchase of consumer goods and services, or the ownership of particular forms of wealth (for example, real estate). In this **sense**, direct taxes include the individual income tax, retail sales and consumer excises, and the residential property taxes. As direct taxes they are generally characterized by the fact that the household has no opportunity to shift the tax to others through the pricing system. In contrast, it is assumed that taxes imposed on business firms are ultimately borne by individuals as consumers or owners of resources since such taxes represent either business costs that are reflected in market prices or decreases in after-tax profits, dividends or undistributed corporate earnings. The corporation income tax, non-residential property taxes, sales and highway user taxes paid on the purchases made by business firms, severance taxes and all other franchise and regulatory business taxes clearly fall into the indirect category.⁶

Further, it should be noted that in deriving the resident tax burden for a particular state or local taxing jurisdiction it is practically impossible on an empirical basis to allocate the business taxes of firms engaged in interstate or interlocal commerce. For this study, it has been assumed that the export of Colorado state and local business taxes has been approximately balanced by the import of taxes from jurisdictions outside Colorado. However, a similar off-setting assumption was not required with regard to the direct taxation

⁶See Appendix A of this report for the methodology and assumptions used for the allocation of specific Colorado taxes between households and business.

of non-residents. As indicated an estimate of the taxes paid by non-residents (for example, tourists in Colorado) has been excluded from the adjusted totals of state and local taxes. And correspondingly, the taxes paid by Coloradoans as out-of-state tourists (for example, in Nevada) also are not considered to be part of the Colorado resident tax burden since they cannot be attributed to Colorado's tax structure or policy.

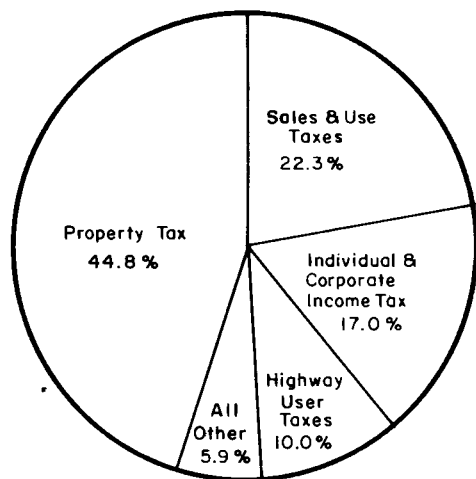
Based on the above assumptions the allocations of Colorado state and local taxes between those levied on households and those levied on business are shown in Tables II and III and Chart I. Of the combined total, \$651.2 million or almost three-fifths were classified as household taxes, and \$446.1 million as business or indirect taxes. The property tax represented the largest single levy in both categories. Residential property taxes were estimated to be \$254.2 million or 39 percent of total direct taxes. Although not quite as large, non-residential property taxes amounted to \$237.8 million and represented more than 53 percent of the total taxes on business. The state individual income tax, amounting to \$153.6 million or almost one-fourth of the total direct tax burden, was the next most important tax levied directly on Colorado resident taxpayers. In contrast, the state corporation income tax, including fiduciaries, amounted to \$33.3 million and accounted for less than 8 percent of the total taxes on business. Finally, sales and use taxes levied on households were estimated to be \$146.5 million, or about 23 percent of total direct taxes. On this basis, the "big three" -- residential property, individual income and retail sales taxes -- represented more than 85 percent of the combined state-local tax burden imposed directly on Colorado resident taxpayers.

On the state level, taxes amounting to \$321.9 million or slightly more than two-thirds of the adjusted state total were classified as household taxes. The individual income tax alone represented 44 percent, while retail sales and highway user taxes accounted for 30 and 20 percent respectively. State taxes on business were estimated to be \$171.2 million. The sales and highway user taxes levied on business represented 42 percent and 24 percent, respectively, whereas the corporation income tax accounted for less than 20 percent.

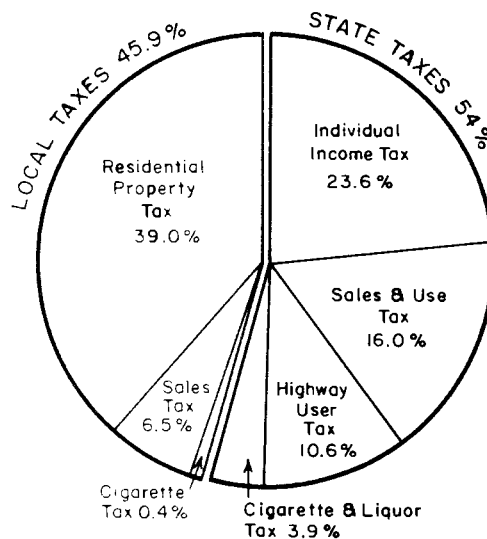
The local taxes were divided almost equally between households and business. Direct taxes were estimated to be \$299.3 million or 52 percent of the total, while the indirect portion amounted to \$274.8 million or 48 percent. Of course, because of the overwhelming significance of the property tax this allocation of local taxes between households and business reflects the classification of the property tax into residential and non-residential categories.

CHART I. MAJOR TAXES LEVIED ON COLORADO HOUSEHOLDS AND BUSINESS, FISCAL YEAR 1972

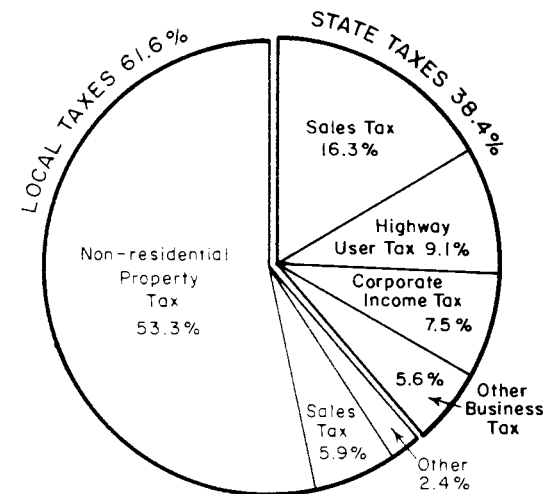
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MAJOR STATE AND LOCAL TAXES ON HOUSEHOLDS AND BUSINESS



MAJOR STATE AND LOCAL TAXES ON HOUSEHOLDS (DIRECT TAXES)



MAJOR STATE AND LOCAL TAXES ON BUSINESS (INDIRECT TAXES)

The distributions of each of the above major taxes by household income, size of family and geographic region are presented in the following sections of this report. They provide a general "tax profile" of who paid the more than one billion dollars of state and local taxes imposed on Colorado resident taxpayers in fiscal year 1972.

III. A PROFILE OF COLORADO TAXES BY INCOME CLASSES

The distribution of Colorado state and local taxes for more than 800,000 resident taxpayers, classified by five major income categories based on the adjusted gross income reported on state income tax returns,⁷ are presented in Tables IV through IX. The adjusted gross income on the 1971 resident tax returns filed in 1972 amounted to \$7,453 million, and as such represented 78.8 percent of the corresponding 1971 state personal income of \$9,457 million estimated by the U.S. Department of Commerce.⁸ The difference of slightly less than \$2 billion between these two measures is partly reflected by the fact that about 5 percent of Colorado households did not file state income tax returns. However, it is mainly due to conceptual differences between the economic and

⁷This section of the report is based on an estimate of 808,364 resident taxpayers who filed 1971 income tax returns in fiscal year 1972. It includes 53,764 part-year residents but excludes 21,422 non-residents. The average number of normal exemptions per return was 2.68 and on this basis the returns represented a population of 2,164,693 or 95 percent of the estimated total population of the state. (See U.S. Bureau of the Census, Current Population Reports, Series P-25, Washington, D.C., 1973.)

It also should be noted that the Colorado income tax does not have a "split-income" provision for married taxpayers such as provided under the federal income tax. As a result more than 31 percent of the state income tax returns filed in 1972 were "married-separate" returns, that is, the husband and wife each filed a separate return on the respective shares of their combined income. For the purposes of this study the "married-separate" returns of a husband and wife were merged and treated as a single tax return in order to place the income and taxes of resident households on a comparable basis. See Appendix C of this report for a description of the individual income tax sample developed for this study.

⁸U.S. Department of Commerce, Survey of Current Business, August 1973.

statutory tax definitions of income.⁹ The latter (adjusted gross income) excludes various forms of money income which are considered to be transfer payments, such as public and private welfare, social security payments, unemployment compensation and portions of private pensions and retirement income. On the other hand, the economic concept of household income (the Department of Commerce personal income measure) includes sundry forms of imputed income (such as imputed rental income on owner-occupied residences, imputed interest, and employer contributions to pension funds), in addition to money transfer payments.

In order to obtain an alternative measure for tax burden analysis which more closely corresponds to the conventional concept of income, an adjusted broad income measure was developed for the purposes of this study.¹⁰ It excludes imputed income but includes an estimate for non-taxable money transfers as well as that part of realized capital gains not included in adjusted gross income. On an overall basis, the total adjusted broad income for Colorado resident taxpayers amounted to \$8,451 million, or 13.4 percent more than the corresponding adjusted gross income for this period. The largest relative adjustments required to place resident households on a broad income base were for those in the lowest and highest income categories since the former were the major recipients of non-taxable money transfer income and the latter were the principal beneficiaries of preferential capital gains treatment under the state income tax.

Table IV presents, for each of the five income classes, the total dollar amounts of resident taxpayer income in terms of both adjusted gross and adjusted broad income, as well as the dollar amounts of state and local taxes. The tax burden

⁹The total adjusted gross income reported nationally on federal income tax returns for 1970 was \$631.7 billion which represented 78.3 percent of the corresponding total personal income of \$803.6 billion for that year. (See U.S. Internal Revenue Service, Statistics of Income-1970, Individual Income Tax Returns, Washington, D.C., 1972). The fact that the Colorado and federal ratios of these two measures were practically the same suggests that the under-reporting of income for tax purposes on the Colorado state income tax returns was not significantly different than that on the federal returns.

¹⁰See Appendix A for a description of the derivation of the adjusted broad income measure from adjusted gross income as used in the CTPS analysis.

TABLE IV. DISTRIBUTION OF COLORADO RESIDENT TAXPAYERS,
INCOME AND MAJOR TAXES, CLASSIFIED BY ADJUSTED GROSS INCOME,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
	(Dollar amounts in thousands)					
<u>Number of Resident Taxpayers</u>	296,000	221,626	162,131	99,695	28,912	808,364
<u>Taxpayers Income:</u>						
Adjusted Gross Income	\$ 691,942	\$1,670,838	\$1,993,485	\$1,848,955	\$1,247,698	\$7,452,918
Adjusted Broad Income	1,146,045	1,841,277	2,106,116	1,944,174	1,413,135	8,450,747
<u>Direct Taxes on Households:</u>						
State Taxes						
Individual Income	5,513	23,720	36,001	44,758	43,620	153,612
Sales and Use	18,008	24,467	27,372	22,521	11,957	104,325
Highway User	9,132	17,989	19,499	17,028	5,012	68,660
Cigarette	2,864	3,882	3,828	1,832	1,167	13,573
Alcoholic Beverages	1,457	3,559	2,831	2,596	1,304	11,747
Total	36,974	73,617	89,531	88,735	63,060	351,917
Local Taxes						
Residential Property	42,895	69,932	64,089	52,371	24,948	254,235
Sales and Use	7,340	10,209	11,179	8,943	4,514	42,185
Cigarette	607	824	812	389	248	2,880
Total	50,842	80,965	76,080	61,703	29,710	299,300
Total Direct Taxes	87,816	154,582	165,611	150,438	92,770	651,217
<u>Indirect Taxes on Households:</u>						
State Business Taxes	29,218	38,586	40,935	35,293	27,196	171,228
Local Business Taxes	49,470	65,411	69,809	58,542	31,607	274,839
Total Indirect Taxes	78,688	103,997	110,744	93,835	58,803	446,067
<u>Total State and Local Taxes:</u>						
State Taxes (Direct & Indir.)	66,192	112,203	130,466	124,028	90,256	523,145
Local Taxes (Direct & Indir.)	100,312	146,376	145,889	120,245	61,317	574,139
Total State & Local Taxes	\$ 166,504	\$ 258,579	\$ 276,355	\$ 244,273	\$ 151,573	\$1,097,284
<u>Addendum:</u>						
Federal Individual Income Taxes	\$30,693	\$153,621	\$213,578	\$249,018	\$297,097	\$944,007

comparisons by income class, size of family, geographic region and major counties also are developed on the basis of these alternative income measures.

The percentage distributions of Colorado resident taxpayers, income and taxes, classified by the five major income categories, are shown in Table V and Chart II. First it should be noted that the comparison of households and income provides an approximate measure of the degree of income inequality in the state. For example, about one-third of the resident taxpayers reported adjusted gross incomes of \$10,000 or more but they accounted for more than two-thirds of the total income. In contrast, those at the other end of the scale, households with adjusted gross incomes of less than \$5,000 and representing 37 percent of all households, accounted for only 9 percent of the income on an adjusted gross income basis, and less than 14 percent on the expanded broad income basis.

Although the economic growth of the past decade has resulted in a marked shift of the overwhelming majority of Colorado taxpayers to higher income classes, it has not brought about any significant change in the relative degree of income inequality. A comparison of the Colorado income distribution for 1960 and 1971 is presented in the following tabulation:¹¹

Adjusted Gross Income Classes	Percentage Distributions			
	1960		1971	
	Number of Taxpayers	Adjusted Gross Income	Number of Taxpayers	Adjusted Gross Income
Under \$5,000	61.0%	31.7%	36.6%	9.3%
\$ 5,000 to \$10,000	32.3	44.4	27.4	22.4
\$10,000 to \$15,000	4.2	10.2	20.1	26.8
\$15,000 to \$25,000	1.6	6.2	12.3	24.8
\$25,000 and over	0.9	7.5	3.6	16.7
Total	100.0%	100.0%	100.0%	100.0%

¹¹The standard measure of income inequality is the Gini coefficient which expresses the relative degree the actual distribution of income diverges from an absolute equal distribution of income -- the lower the coefficient, the smaller the degree of income inequality. Based on income data derived from state income tax returns for 1960 and 1971, the Gini coefficients for the distribution of Colorado's adjusted gross income were .401 and .446 for these respective years, indicating that an actual increase in income inequality has occurred in Colorado during the past decade.

TABLE V. PERCENTAGE DISTRIBUTION OF COLORADO RESIDENT TAXPAYERS,
INCOME AND MAJOR TAXES, CLASSIFIED BY ADJUSTED GROSS INCOME,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
<u>Number of Resident Taxpayers</u>	36.6	27.4	20.1	12.3	3.6	100.0
<u>Taxpayers Income:</u>						
Adjusted Gross Income	9.3	22.4	26.8	24.8	16.7	100.0
Adjusted Broad Income	13.6	21.8	24.9	23.0	16.7	100.0
<u>Direct Taxes on Households:</u>						
State Taxes						
Individual Income	3.6	15.5	23.4	29.1	28.4	100.0
Sales and Use	17.3	23.4	26.2	21.6	11.5	100.0
Highway User	13.3	26.2	28.4	24.8	7.3	100.0
Cigarette	21.1	28.6	28.2	13.5	8.6	100.0
Alcoholic Beverages	<u>12.4</u>	<u>30.3</u>	<u>24.1</u>	<u>22.1</u>	<u>11.1</u>	<u>100.0</u>
Total	10.5	20.9	25.4	25.2	17.9	100.0
Local Taxes						
Residential Property	16.9	27.5	25.2	20.6	9.8	100.0
Sales and Use	17.4	24.2	26.5	21.2	10.7	100.0
Cigarette	<u>21.1</u>	<u>28.6</u>	<u>28.2</u>	<u>13.5</u>	<u>8.6</u>	<u>100.0</u>
Total	17.0	27.1	25.4	20.6	9.9	100.0
Total Direct Taxes	13.5	23.7	25.4	23.1	14.3	100.0
<u>Indirect Taxes on Households:</u>						
State Business Taxes	17.1	22.5	23.9	20.6	15.9	100.0
Local Business Taxes	<u>18.0</u>	<u>23.8</u>	<u>25.4</u>	<u>21.3</u>	<u>11.5</u>	<u>100.0</u>
Total Indirect Taxes	17.7	23.3	24.8	21.0	13.2	100.0
<u>Total State and Local Taxes:</u>						
State Taxes (Direct & Indir.)	12.7	21.4	24.9	23.7	17.3	100.0
Local Taxes (Direct & Indir.)	<u>17.5</u>	<u>25.5</u>	<u>25.4</u>	<u>20.9</u>	<u>10.7</u>	<u>100.0</u>
Total State & Local Taxes	<u>15.2</u>	<u>23.6</u>	<u>25.2</u>	<u>22.3</u>	<u>13.8</u>	<u>100.0</u>
<u>Addendum:</u>						
Federal Individual Income Taxes	3.2	16.3	22.6	26.4	31.5	100.0

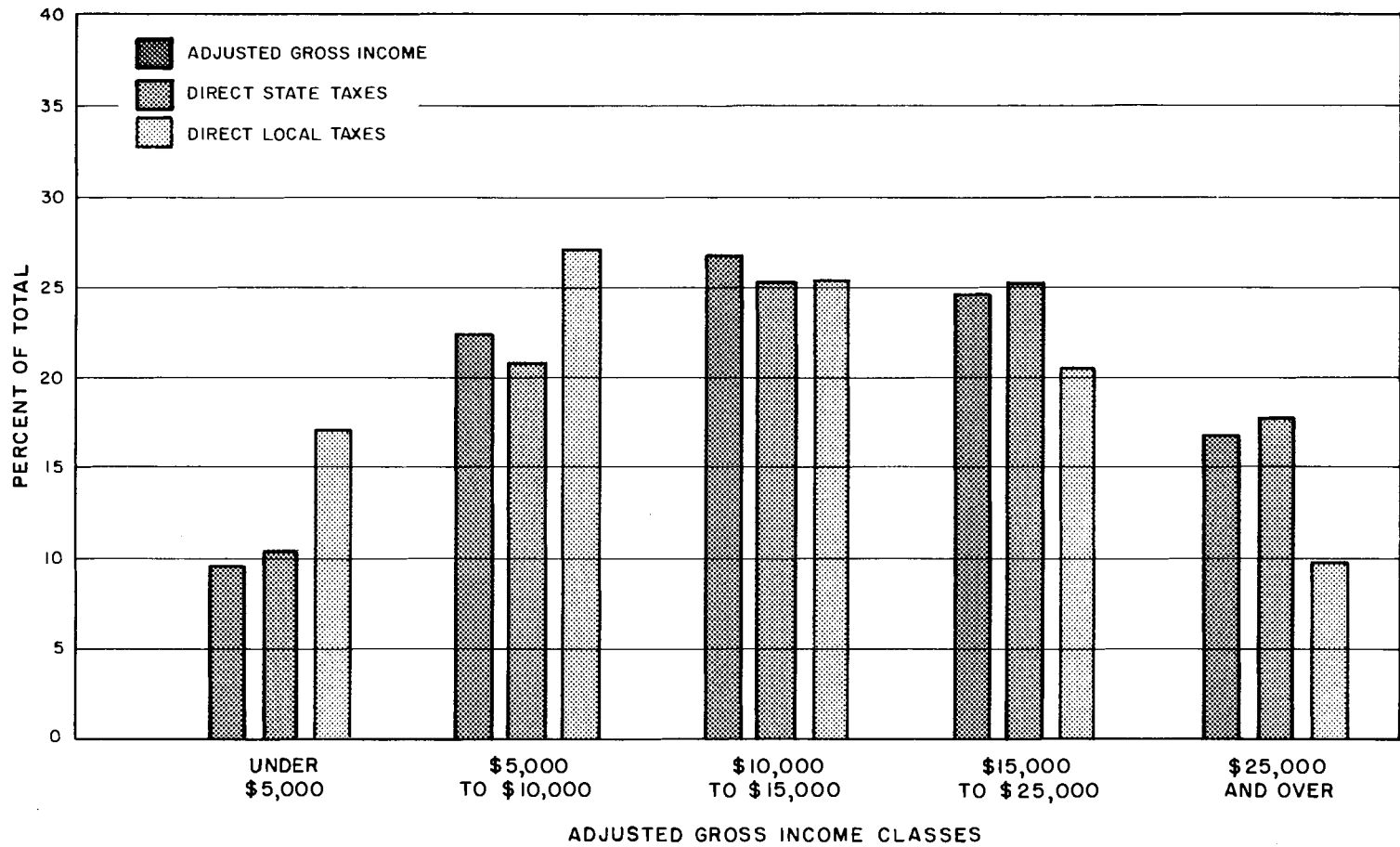
With regard to the allocation of the overall state tax burden (combined direct and indirect taxes) it appears that for all major income classes except the lowest the respective shares of the state tax correspond with the distribution of adjusted gross income. For example, in rounded percentages the highest income category accounted for 17 percent of both the total income and tax; the next highest had 25 percent of the adjusted gross income and 24 percent of the tax; the middle-income group accounted for 27 percent of the income and 25 percent of the tax; the fourth category had 22 and 21 percents, respectively; and only the lowest income category had a tax share significantly larger than its adjusted gross income -- 13 percent compared with 9 percent. As noted, however, the adjusted gross income measure understates the total money income actually received by the households in this category. When the comparisons were made on the basis of adjusted broad income, the share of the total tax burden borne by the households in the lowest income groups was less than their respective income share -- 13 percent of the tax compared with 14 percent of the income. In short, on the adjusted broad income basis the relative shares of the total state tax burden worked out to be almost proportional to the income shares for every one of the five major income categories.

The allocation of the combined direct state taxes (individual income, retail sales, and consumer excises) also shows the same pattern. However, the proportionality achieved in the distribution of both the overall and direct portion of the state tax burden reflects a balancing of the state's major taxes since similar distributions do not hold for any of the specific taxes.

In the case of the individual income tax, taxpayers in the two lowest income categories, those with incomes of less than \$10,000 and representing almost two-thirds of the returns, accounted for 32 percent of the reported adjusted gross income and paid 19 percent of the tax. In contrast, the taxpayers in the two top categories, with incomes of \$15,000 or more and comprising one-sixth of the households, accounted for 42 percent of the income and paid 58 percent of the tax. And the distribution of the federal income tax paid by Coloradans classified on the same income basis turns out to be similar to the state income tax distribution -- for those with incomes of less than \$10,000 their federal tax share was 19.5 percent compared with 19.1 percent for the state income tax; for those with incomes of \$15,000 and above the federal share was 57.9 percent compared with 57.5 percent state share.

On the other hand, the distribution patterns of the other state taxes are all in the opposite direction -- tax

CHART II. DISTRIBUTION OF ADJUSTED GROSS INCOME AND DIRECT TAXES
ON COLORADO RESIDENT TAXPAYERS, FISCAL YEAR 1972



shares that are relatively high for the lowest income groups are relatively small for those with the highest incomes. For example, notwithstanding the \$7 per person food tax credit, the lowest income group's share of the state sales tax was almost twice as great as its share of income. Hence, the magnitude and progressivity of the Colorado state income tax offset the regressivity of all the other state taxes resulting in an overall proportional state tax structure.¹² With regard to the allocation of the local tax burden, the data clearly indicate that it was highly regressive, primarily because of the property tax.

Table VI and Chart III show the average dollar incomes and taxes of Colorado resident taxpayers classified by the five major income categories. As is to be expected the average tax in almost every instance rises directly, but not proportionately, with the increases in the levels of income. This relationship can be expressed by the ratio of the average income or tax for those in the highest income bracket to that of households in the lowest income group. For example, the average adjusted gross income of taxpayers in the top category was \$43,155, or almost 19 times larger than the \$2,338 average income for those at the other end of the scale. However, when the data are adjusted to a broad income basis, the ratio falls to 13 to 1. More strikingly, the average state income tax liability was \$1,509 for taxpayers with incomes of \$25,000 and over, or more than 79 times larger than the \$19 average income tax for those with incomes of less than \$5,000.¹³ For all direct state taxes the ratio of the average of the highest to the lowest income class was about 17 to 1; but for the direct local taxes it was only 6 to 1.

Table VII and Charts IV and V show the relative burdens of state and local taxes based on the taxpayers' "ability-to-pay" -- that is, expressed as percentages of adjusted gross income for the five major income categories of Colorado resident taxpayers. Table VIII presents the same tax data in

¹²A detailed analysis of the Colorado individual income tax returns for 1971 filed in 1972, classified on the basis of 9 adjusted gross income categories ranging from \$3,000 or less to \$100,000 and over, is presented in Appendix B of this report.

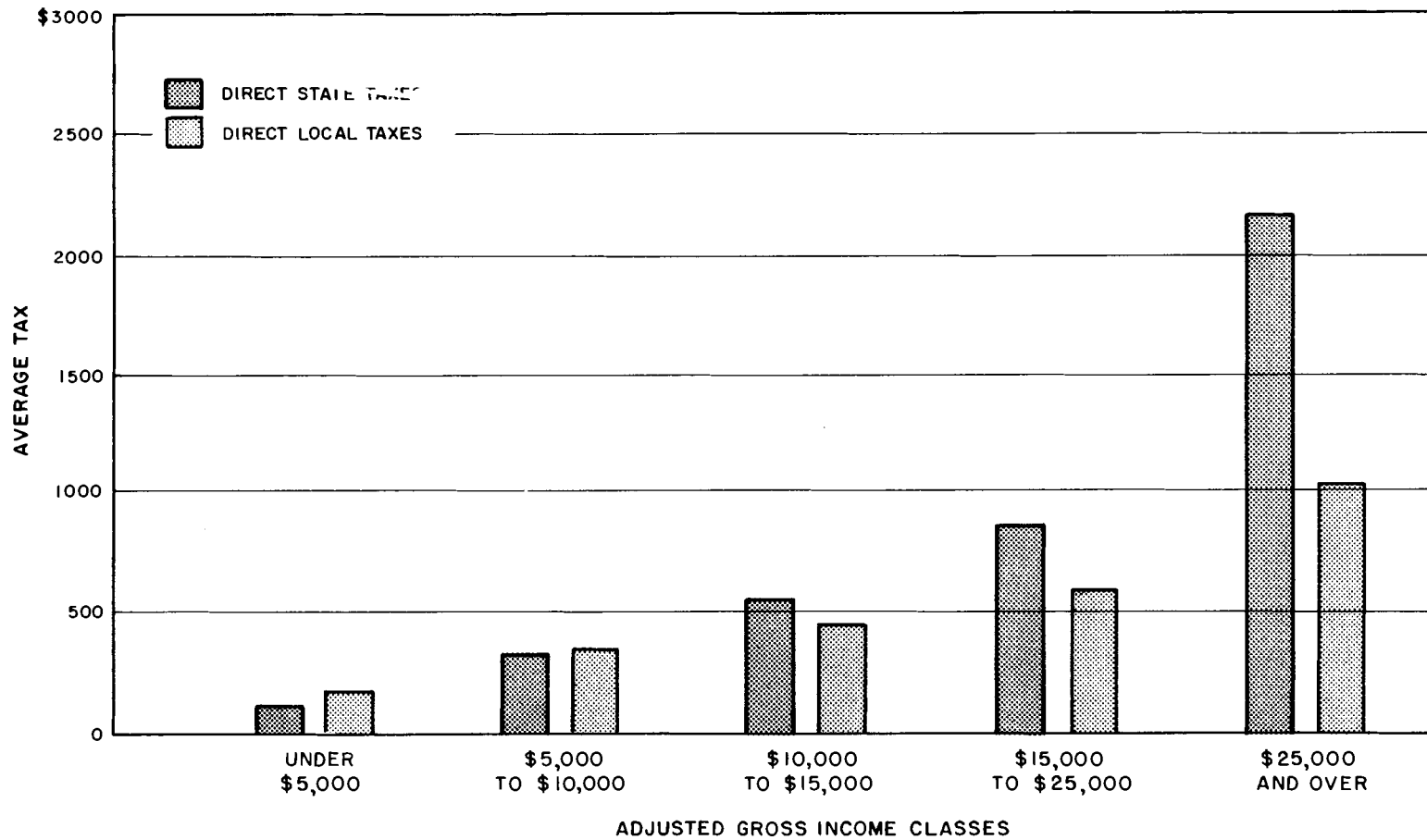
¹³The relatively small average income tax for this category is partly due to the fact that 51.5 percent of the returns filed were non-taxable.

TABLE VI. AVERAGE INCOME AND TAXES FOR COLORADO RESIDENT TAXPAYERS
CLASSIFIED BY ADJUSTED GROSS INCOME,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
<u>Average Taxpayers Income:</u>						
Adjusted Gross Income	\$ 2,338	\$ 7,539	\$12,296	\$18,546	\$43,155	\$ 9,220
Adjusted Broad Income	3,872	8,308	12,990	19,501	48,877	10,454
<u>Average Direct Taxes on Households:</u>						
State Taxes						
Individual Income	19	107	222	449	1,509	190
Sales and Use	61	110	169	226	414	129
Highway User	31	81	120	171	173	85
Cigarette	10	18	24	18	40	17
Alcoholic Beverages	5	16	17	26	45	15
Total ^a	125	332	552	890	2,181	435
Local Taxes						
Residential Property	145	315	395	525	862	315
Sales and Use	25	46	69	90	156	52
Cigarette	2	4	5	4	9	4
Total ^a	172	365	469	619	1,028	370
Total Direct Taxes	297	697	1,021	1,509	3,209	805
<u>Average Indirect Taxes on Households:</u>						
State Business Taxes	99	174	252	354	941	212
Local Business Taxes	167	295	431	587	1,093	440
Total Indirect Taxes	266	469	683	941	2,034	552
<u>Average Combined State and Local Taxes:</u>						
State Taxes (Direct & Indir.)	224	506	804	1,244	3,122	647
Local Taxes (Direct & Indir.)	339	660	900	1,206	2,121	710
Total State & Local Taxes	\$ 563	\$ 1,166	\$ 1,704	\$ 2,450	\$ 5,243	\$ 1,357
<u>Addendum:</u>						
Federal Individual Income Tax	\$ 104	\$ 693	\$ 1,317	\$ 2,498	\$10,276	\$ 1,168

^aTotals may not equal sum of items because of rounding.

CHART III. AVERAGE DIRECT STATE AND LOCAL TAXES ON COLORADO RESIDENT TAXPAYERS, FISCAL YEAR 1972



terms of adjusted broad income. As was shown on the basis of the preceding analysis, the combined state-local tax burden (including both the direct and indirect levies) proved to be regressive -- the relative tax burden for households in the lowest income category was twice as large as that for those in the highest. More specifically, it was 24.1 percent for taxpayers reporting adjusted gross incomes of less than \$5,000 and only 12.2 percent for those with incomes of \$25,000 or more. However, the overall regressivity must be attributed primarily to the local tax portion, and particularly to the residential property tax. For example, the local tax burden for the lowest income category was almost 3 times larger than that for the highest -- 14.5 percent compared with 4.9 percent. And in the case of the residential property tax the disparity between the relative burdens of the lowest and highest income classes was even greater, since the corresponding percentages were 6.2 and 2.0, respectively.

In contrast, on the state level the progressivity of the state individual income tax almost wholly offsets the regressivity of the state sales and consumer excise taxes. The relative tax burden of the income tax rose successively from 0.8 percent for households with adjusted gross incomes of less than \$5,000 to 3.5 percent for those with incomes of \$25,000 or more, whereas the total burden for all the other direct state taxes (combined) ranged from 4.5 percent for the lowest class to only 1.6 for the highest. Thus the net effect was that the total direct state tax burden on the adjusted gross income basis was regressive only between the two lowest categories, and then became progressive through the next four income classes. But, as already indicated, the adjusted gross income measure significantly understates the actual money income received by the households in the lowest class and therefore overstates their tax burden relative to other taxpayers.

On the adjusted broad income basis (Table VIII) the direct state taxes actually worked out to be slightly progressive. Relative tax burdens successively increased from 3.2 percent for households in the lowest category to 4.5 percent for those in the highest. A similar pattern is also revealed for the total state taxes -- a range from 5.8 percent to 6.4 percent. As noted, however, this pattern for the state tax structure is essentially due to the magnitude and progressivity of the state income tax. In terms of adjusted broad income, the relative burden of the income tax rose from a low of 0.5 percent for households with reported incomes of less than \$5,000, to a high of 3.1 percent for those with incomes of \$25,000 or more. Stated differently, the progressivity of the Colorado state individual income tax is perhaps most clearly revealed by the fact that taxpayers in the highest income stratum had a relative tax burden which on the

TABLE VII. RELATIVE BURDEN OF MAJOR TAXES ON COLORADO RESIDENT TAXPAYERS,
TAXES EXPRESSED AS PERCENT OF ADJUSTED GROSS INCOME,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
<u>Direct Taxes on Households:</u>						
State Taxes						
Individual Income	0.80	1.42	1.81	2.42	3.50	2.06
Sales and Use	2.60	1.46	1.37	1.22	0.96	1.40
Highway User	1.32	1.08	0.98	0.92	0.40	0.92
Cigarette	0.41	0.23	0.19	0.10	0.09	0.18
Alcoholic Beverages	<u>0.21</u>	<u>0.21</u>	<u>0.14</u>	<u>0.14</u>	<u>0.11</u>	<u>0.16</u>
Total ^a	5.34	4.41	4.49	4.80	5.06	4.72
Local Taxes						
Residential Property	6.20	4.19	3.21	2.83	2.00	3.41
Sales and Use	1.06	0.61	0.56	0.48	0.36	0.57
Cigarette	<u>0.09</u>	<u>0.05</u>	<u>0.04</u>	<u>0.02</u>	<u>0.02</u>	<u>0.04</u>
Total ^a	7.35	4.84	3.82	3.34	2.38	4.02
Total Direct Taxes	12.69	9.25	8.31	8.14	7.44	8.74
<u>Indirect Taxes on Households:</u>						
State Business Taxes	4.22	2.31	2.05	1.91	2.18	2.30
Local Business Taxes	<u>7.15</u>	<u>3.92</u>	<u>3.50</u>	<u>3.16</u>	<u>2.53</u>	<u>3.69</u>
Total Indirect Taxes	11.37	6.23	5.55	5.07	4.71	5.99
<u>Total State and Local Taxes:</u>						
State Taxes (Direct & Indir.)	9.56	6.72	6.54	6.71	7.24	7.02
Local Taxes (Direct & Indir.)	<u>14.50</u>	<u>8.76</u>	<u>7.32</u>	<u>6.50</u>	<u>4.91</u>	<u>7.70</u>
Total State & Local Taxes	<u>24.06</u>	<u>15.48</u>	<u>13.86</u>	<u>13.21</u>	<u>12.15</u>	<u>14.72</u>
<u>Addendum:</u>						
Federal Individual Income Tax	4.44	9.19	10.71	13.47	23.81	12.67

^aTotals may not equal sum of items because of rounding.

CHART IV. RELATIVE BURDEN OF STATE AND LOCAL TAXES ON COLORADO RESIDENT TAXPAYERS EXPRESSED AS PERCENT OF ADJUSTED GROSS INCOME, FISCAL YEAR 1972

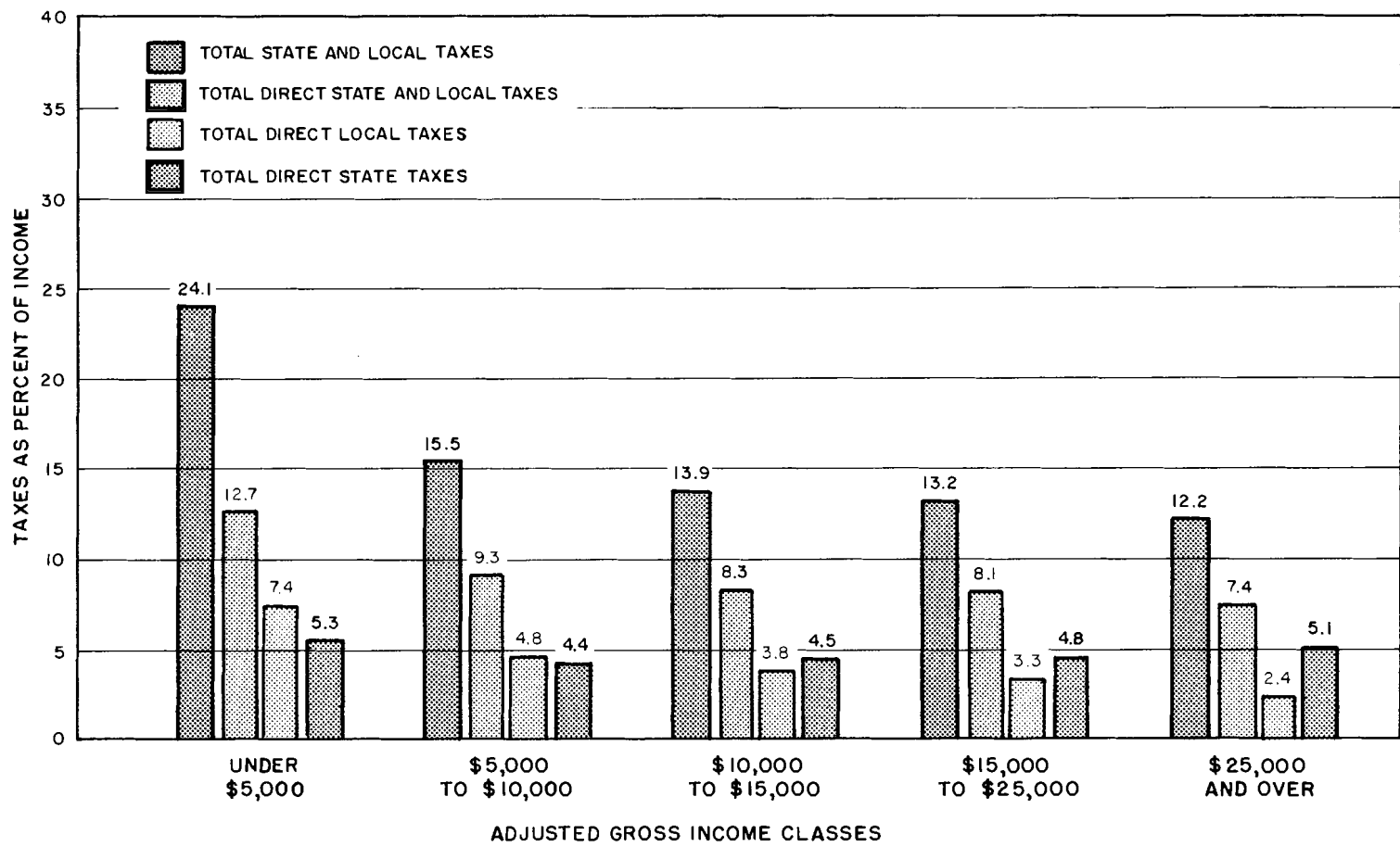


CHART V. RELATIVE BURDEN OF DIRECT STATE AND LOCAL TAXES ON COLORADO RESIDENT TAXPAYERS, EXPRESSED AS A PERCENT OF ADJUSTED GROSS INCOME, FISCAL YEAR 1972

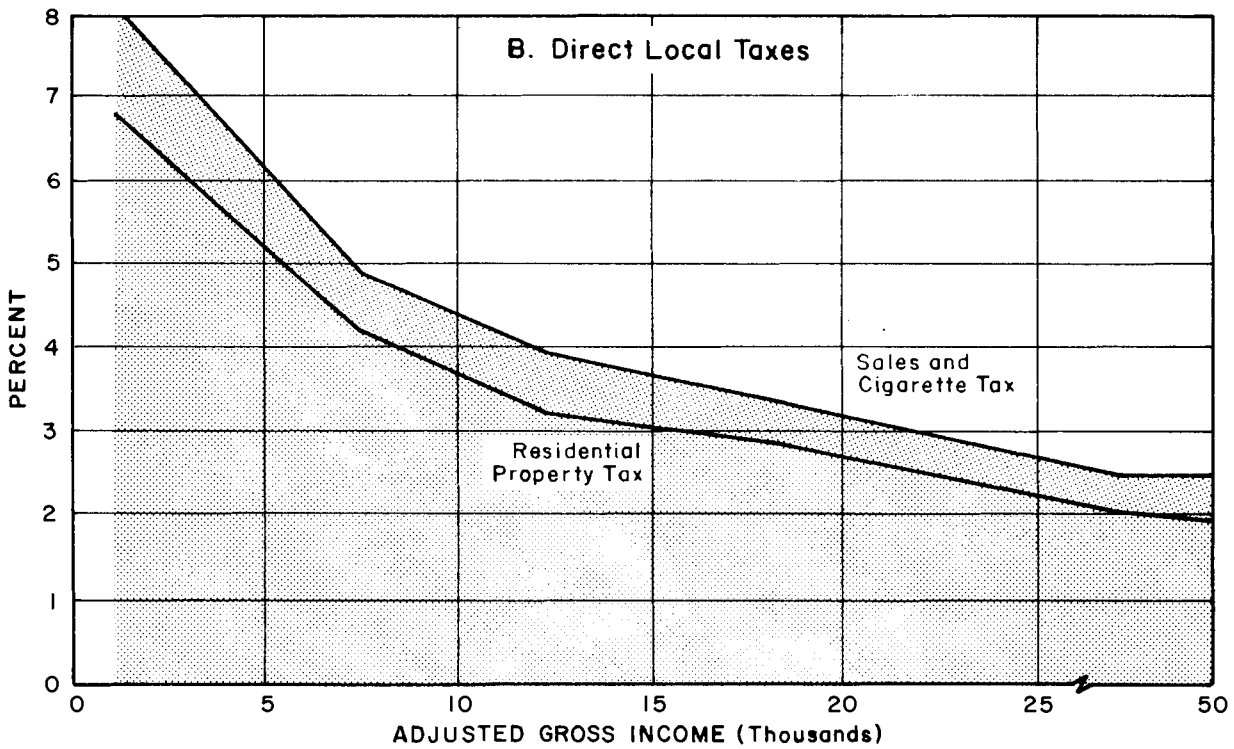
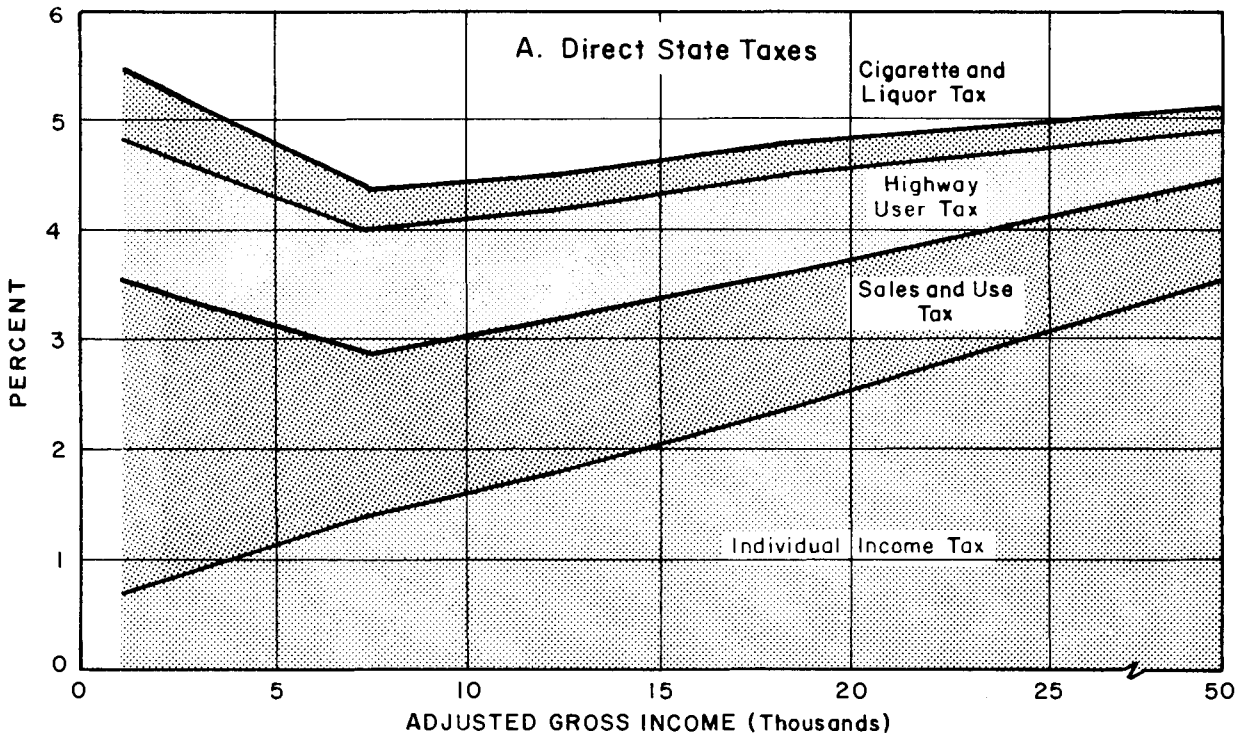


TABLE VIII. RELATIVE BURDEN OF MAJOR TAXES ON COLORADO RESIDENT TAXPAYERS,
TAXES EXPRESSED AS PERCENT OF ADJUSTED BROAD INCOME,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
<u>Direct Taxes on Households:</u>						
State Taxes						
Individual Income	0.48	1.29	1.71	2.30	3.09	1.82
Sales and Use	1.57	1.33	1.30	1.16	0.85	1.23
Highway User	0.80	0.98	0.93	0.88	0.35	0.81
Cigarette	0.25	0.21	0.18	0.09	0.08	0.16
Alcoholic Beverages	<u>0.13</u>	<u>0.19</u>	<u>0.13</u>	<u>0.13</u>	<u>0.09</u>	<u>0.14</u>
Total ^a	3.23	4.00	4.25	4.56	4.46	4.16
Local Taxes						
Residential Property	3.74	3.80	3.04	2.69	1.76	3.01
Sales and Use	0.64	0.55	0.53	0.46	0.32	0.50
Cigarette	<u>0.05</u>	<u>0.05</u>	<u>0.04</u>	<u>0.02</u>	<u>0.02</u>	<u>0.03</u>
Total ^a	4.43	4.40	3.61	3.17	2.10	3.54
Total Direct Taxes	7.66	8.40	7.86	7.73	6.56	7.70
<u>Indirect Taxes on Households:</u>						
State Business Taxes	2.55	2.10	1.94	1.82	1.92	2.03
Local Business Taxes	<u>4.32</u>	<u>3.55</u>	<u>3.32</u>	<u>3.01</u>	<u>2.24</u>	<u>3.25</u>
Total Indirect Taxes	6.87	5.65	5.26	4.83	4.16	5.28
<u>Total State and Local Taxes:</u>						
State Taxes (Direct & Indir.)	5.78	6.09	6.19	6.38	6.39	6.19
Local Taxes (Direct & Indir.)	<u>8.75</u>	<u>7.95</u>	<u>6.93</u>	<u>6.18</u>	<u>4.34</u>	<u>6.79</u>
Total State and Local Taxes	<u>14.53</u>	<u>14.04</u>	<u>13.12</u>	<u>12.56</u>	<u>10.73</u>	<u>12.98</u>
<u>Addendum:</u>						
Federal Individual Income Tax	2.68	8.34	10.14	12.81	21.01	11.17

^aTotals may not equal sum of items because of rounding.

average was 6.4 times larger than the corresponding burden on households in the lowest income category. On a comparable basis, the relative tax burden of the highly progressive federal income tax for Colorado taxpayers in the top income category was 7.8 times larger than that of those in the lowest income class. Thus, the Colorado state individual income tax was about four-fifths as progressive as the federal income tax. A similar analysis and index of relative tax burdens for the combined state-local retail sales and consumer excise taxes are shown in Table IX and Chart VI.

In order to summarize the degree of progressivity or regressivity of each of the taxes, the relative tax burden imposed on the lowest income group can be expressed as a ratio of the relative burden on the highest, calculated in terms of both the adjusted gross and adjusted broad income measures. If the ratio is approximately equal to 1.0, the tax should be considered proportional; if less than 1.0, progressive; and if more than 1.0, regressive. Such progressivity/regressivity factors for the federal income tax and Colorado's major state and local taxes are presented in the following tabulation:

	<u>Tax Burden Ratios of Lowest to Highest Income Class</u>	
	<u>Adjusted Gross Income</u>	<u>Adjusted Broad Income</u>
<u>Federal Income Tax</u>	.19	.13
<u>State Taxes:</u>		
Individual Income	.23	.16
Sales and Use (Direct)	2.71	1.85
Highway User (Direct)	3.30	2.29
Cigarette	4.56	3.13
Alcoholic Beverages	<u>1.91</u>	<u>1.44</u>
Total Direct	1.06	.72
Total Indirect	<u>1.94</u>	<u>1.33</u>
Total State Taxes	1.32	.90
<u>Local Taxes:</u>		
Residential Property	3.10	2.13
Sales and Use (Direct)	2.94	2.00
Cigarette	<u>4.50</u>	<u>2.50</u>
Total Direct	3.09	2.11
Total Indirect	<u>2.83</u>	<u>1.93</u>
Total Local Taxes	2.95	2.02
<u>Total State and Local Taxes</u>	1.98	1.35

TABLE IX. RELATIVE BURDEN OF COMBINED
STATE AND LOCAL TAXES ON COLORADO RESIDENT TAXPAYER,
FISCAL YEAR 1972

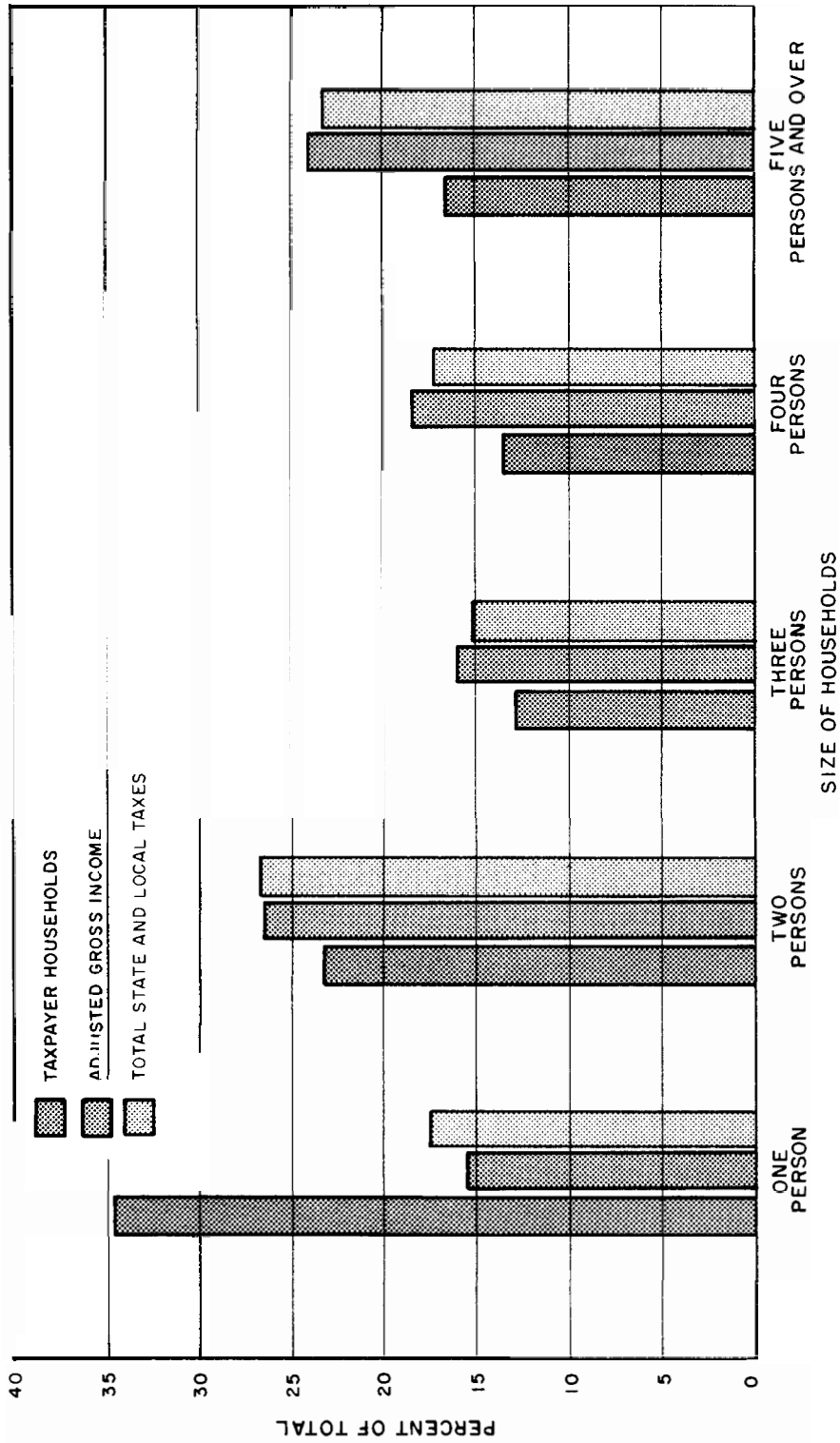
	Adjusted Gross Income Classes					Total Resident Taxpayers
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
A. Tax as Percent of Adjusted <u>Gross</u> Income:						
Individual Income	0.80	1.42	1.81	2.42	3.50	2.06
Sales and Use	3.66	2.08	1.94	1.70	1.32	1.97
Excise Taxes ^a	2.03	1.57	1.35	1.18	0.62	1.30
Residential Property	<u>6.20</u>	<u>4.19</u>	<u>3.21</u>	<u>2.83</u>	<u>2.00</u>	<u>3.41</u>
Totals ^b	12.69	9.25	8.31	8.14	7.44	8.74
B. Index of Tax Burden Based on Adjusted <u>Gross</u> Income: ^c						
Individual Income	100	178	226	303	438	
Sales and Use	100	57	53	46	36	
Excise Taxes ^a	100	77	67	58	31	
Residential Property	<u>100</u>	<u>68</u>	<u>52</u>	<u>46</u>	<u>32</u>	
Total Combined Tax	100	73	65	64	59	
Total Direct State Tax	100	83	84	90	95	
Total Direct Local Tax	100	66	52	45	32	
C. Tax as Percent of Adjusted <u>Broad</u> Income:						
Individual Income	0.48	1.29	1.71	2.31	3.09	1.82
Sales and Use	2.21	1.88	1.83	1.62	1.16	1.73
Excise Taxes ^a	1.23	1.43	1.28	1.12	0.55	1.15
Residential Property	<u>3.74</u>	<u>3.80</u>	<u>3.04</u>	<u>2.69</u>	<u>1.76</u>	<u>3.01</u>
Totals ^b	7.66	8.40	7.86	7.74	6.56	7.71
D. Index of Tax Burden Based on Adjusted <u>Broad</u> Income: ^c						
Individual Income	100	269	356	479	644	
Sales and Use	100	85	83	73	52	
Excise Taxes ^a	100	116	104	91	45	
Residential Property	<u>100</u>	<u>102</u>	<u>81</u>	<u>72</u>	<u>47</u>	
Total Combined Tax	100	110	103	101	86	
Total Direct State Tax	100	124	132	141	138	
Total Direct Local Tax	100	99	81	72	47	

includes highway user, cigarette, and alcoholic beverage taxes.

Totals may not equal sum of items because of rounding.

Index of relative tax burdens expressed as percentage of tax burden on lowest income group.

CHART VI. DISTRIBUTION OF COLORADO TAXPAYERS ADJUSTED GROSS INCOME AND COMBINED STATE AND LOCAL DIRECT TAXES, FISCAL YEAR 1972



IV. A PROFILE OF COLORADO TAXES BY HOUSEHOLD SIZE

Table X and Chart VII show the distribution of Colorado taxpayers, income and combined state-local direct taxes, classified by size of household. The categories range from one-person households to those with five or more and were based on the number of normal exemptions reported on their state income tax returns.¹⁴ About one-third of the returns represented one-person households, but they accounted for one-sixth of the total income and tax burden. At the other end of the scale, the largest family category, those with five exemptions or more, represented one-sixth of the households but accounted for one-fourth of the income. The intermediate sized households also had a relative share of the income larger than their proportionate representation.

The average dollar amounts of income and taxes varied directly with the size of household and the largest break occurred between the one-person and two-person categories. For the former, the average adjusted gross income of \$4,069 and average total direct taxes of \$400 represented only about two-fifths of the respective averages for the two-person household category. In part this is due to the fact that more than two-thirds of the tax returns with only one exemption had adjusted gross incomes of less than \$5,000. For the multi-person households the average adjusted gross income by family size categories ranged from \$10,446 for a two-person household to \$13,237 for the largest sized households. Similarly, the average total direct tax burden showed a narrow range from \$916 for the two-person household to \$1,114 for the five-person or more household. Perhaps one of the most interesting findings of this part of the analysis is that the overall percentage distributions of the tax burden by family size parallels the distribution of adjusted gross income. Of course, the average adjusted broad incomes for all of these

¹⁴This section is based on an estimate of 829,267 tax returns which is 2.5 percent larger than that of the preceding section. It includes a relatively small number of non-resident returns but excludes those which had no information on size of household (normal exemptions). As noted earlier in the report, the "married-separate" returns filed by a husband and wife were merged and treated as a single household. However, in a limited number of cases, other members of households may have filed separate returns, for example, to obtain withholding refunds.

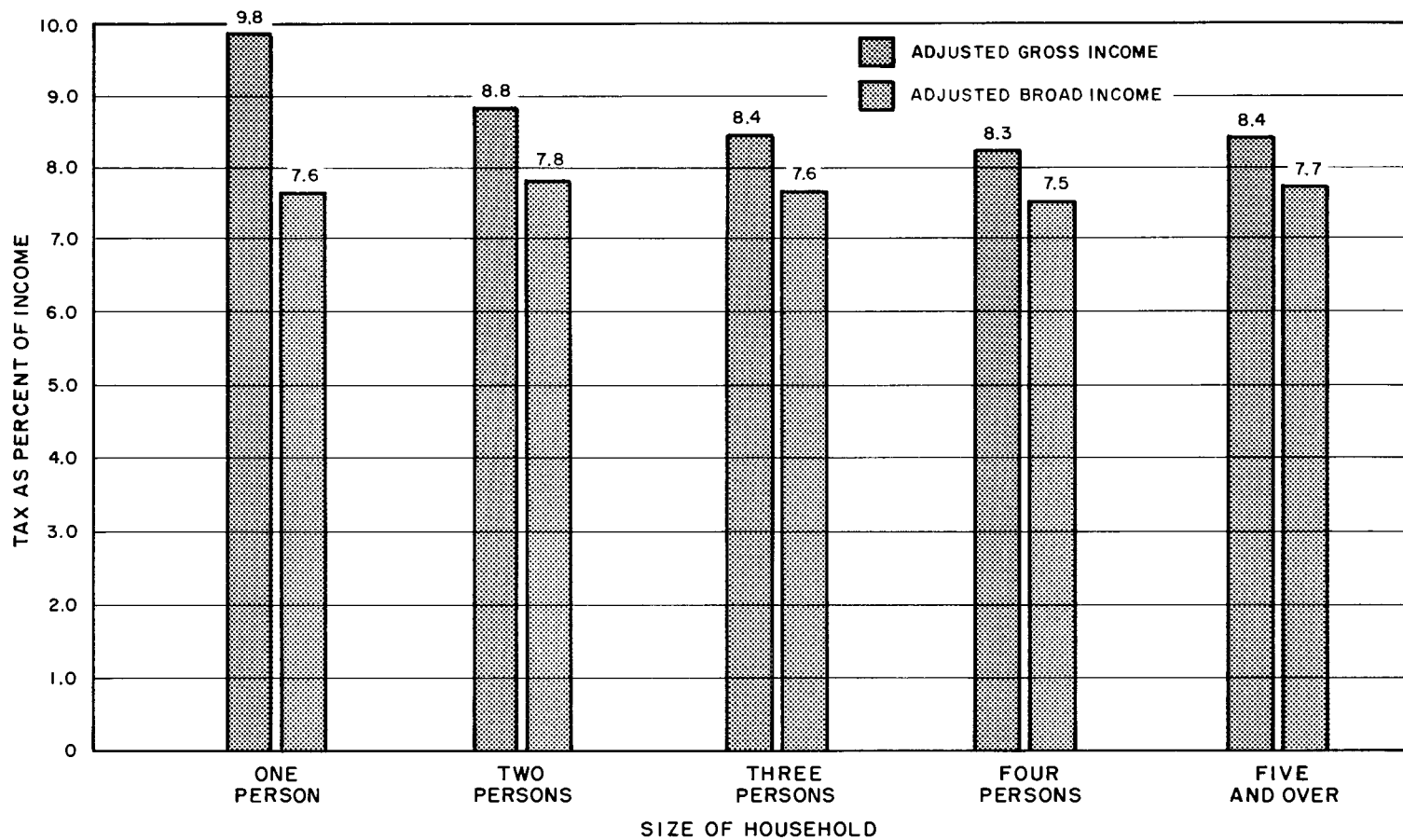
TABLE X. DISTRIBUTION OF COLORADO TAXPAYERS, INCOME AND COMBINED STATE AND LOCAL DIRECT TAXES CLASSIFIED BY SIZE OF HOUSEHOLD, FISCAL YEAR 1972

	Size of Household					
	One Person	Two Persons	Three Persons	Four Persons	Five and Over	All Households
A. Dollar Amounts in Thousands:						
Number of Households ^a	286,473	191,270	105,053	111,558	134,913	829,267
Household Income:						
Adjusted Gross Income	\$1,165,794	\$1,998,053	\$1,179,869	\$1,365,378	\$1,785,725	\$7,494,889
Adjusted Broad Income	1,509,722	2,245,989	1,306,331	1,500,100	1,948,734	8,510,876
State and Local Direct Taxes:						
Individual Income	22,942	47,086	24,680	28,040	31,718	154,466
Sales and Use	25,726	40,359	22,635	25,090	32,700	146,510
Excise Taxes ^b	14,392	25,125	14,296	15,132	27,915	96,860
Residential Property	51,454	62,362	37,662	44,714	58,043	254,235
Total Taxes	<u>\$ 114,514</u>	<u>\$ 174,932</u>	<u>\$ 99,273</u>	<u>\$ 112,976</u>	<u>\$ 150,376</u>	<u>\$ 652,071</u>
B. Percentage Distribution:						
Number of Households	34.5	23.1	12.7	13.4	16.3	100.0
Household Income:						
Adjusted Gross Income	15.5	26.6	15.7	18.2	23.8	100.0
Adjusted Broad Income	17.7	26.4	15.4	17.6	22.9	100.0
State and Local Direct Taxes:						
Individual Income	14.9	30.5	16.0	18.1	20.5	100.0
Sales and Use	17.6	27.5	15.5	17.1	22.3	100.0
Excise Taxes ^b	14.9	25.9	14.8	15.6	28.8	100.0
Residential Property	20.3	24.5	14.8	17.6	22.8	100.0
Total Taxes	<u>17.6</u>	<u>26.8</u>	<u>15.2</u>	<u>17.3</u>	<u>23.1</u>	<u>100.0</u>
C. Average Income and Taxes per Household:						
Household Income:						
Adjusted Gross Income	\$ 4,069	\$10,446	\$11,231	\$12,239	\$13,237	\$ 9,038
Adjusted Broad Income	5,270	11,743	12,435	13,447	14,444	10,263
State and Local Direct Taxes:						
Individual Income	80	246	235	251	235	18
Sales and Use	90	211	215	225	242	17
Excise Taxes ^b	50	131	136	136	207	11
Residential Property	180	326	359	401	430	30
Total Taxes	<u>\$ 400</u>	<u>\$ 914</u>	<u>\$ 945</u>	<u>\$ 1,013</u>	<u>\$ 1,114</u>	<u>\$ 787</u>

^aNumber includes non-residents and part-year resident taxpayers, excludes those without exemption information.

^bIncludes highway user, state and local cigarette, and alcoholic beverage taxes.

CHART VII. RELATIVE BURDEN OF COMBINED STATE AND LOCAL DIRECT TAXES ON COLORADO TAXPAYERS, CLASSIFIED BY SIZE OF HOUSEHOLD, FISCAL YEAR 1972



categories were higher than their respective adjusted gross incomes, but for the single-person household the difference represented almost 30 percent, whereas for each of the other multi-person categories it averaged about 11 percent. Thus, in terms of adjusted broad income the correspondence between the distributions of income and taxes was almost identical. For example, in rounded percentages, the one-person households accounted for 18 percent of both the total income and total tax; the two-person households had 26 percent of the income and 27 percent of the tax; the three-person category accounted for 15 percent of both; the four-person households had 18 and 17 percents, respectively; and those with five or more persons accounted for 23 percent of both the income and tax.

This neutrality in the apportionment of the state and local taxes directly levied on Colorado households is also evidenced by Table XI and Chart VI (page 37) which shows the relative tax burdens classified by household size. Once again it will be noted that on an adjusted gross income basis the total state-local tax burden was approximately uniform for all the multi-person categories -- ranging between 8.3 and 8.8 percent. Only the single-person households had a relatively heavier burden -- 9.8 percent. However, when the taxes are expressed as a percentage of adjusted broad income, even the variance between the single and multiple-persons households is eliminated. On this basis the relative tax burdens for all categories were remarkably similar, ranging from 7.3 to 7.7 percent. In brief, the distribution of the major state and local taxes -- personal income, retail sales, consumer excises and residential property -- worked out to be generally neutral with regard to the size of the household or family.

TABLE XI. RELATIVE BURDEN OF COMBINED STATE AND LOCAL TAXES
ON COLORADO TAXPAYERS, CLASSIFIED BY SIZE OF HOUSEHOLD,
FISCAL YEAR 1972

	Size of Household					All Households
	One Person	Two Persons	Three Persons	Four Persons	Five and Over	
A. Taxes as a Percentage of Adjusted <u>Gross</u> Income:						
Individual Income	1.97	2.37	2.09	2.05	1.78	2.06
Sales and Use	2.21	2.02	1.92	1.84	1.83	1.95
Excise Taxes ^a	1.23	1.26	1.21	1.11	1.56	1.29
Residential Property	<u>4.41</u>	<u>3.12</u>	<u>3.19</u>	<u>3.27</u>	<u>3.25</u>	<u>3.39</u>
Totals ^b	9.82	8.76	8.41	8.27	8.42	8.70
B. Index of Burden Based on Adjusted <u>Gross</u> Income:^c						
Individual Income	100	120	106	104	90	
Sales and Use	100	91	87	83	83	
Excise Taxes ^a	100	102	98	90	127	
Residential Property	<u>100</u>	<u>71</u>	<u>72</u>	<u>74</u>	<u>74</u>	
Totals	100	89	86	84	86	
C. Taxes as a Percentage of Adjusted <u>Broad</u> Income:						
Individual Income	1.52	2.10	1.89	1.87	1.63	1.81
Sales and Use	1.70	1.80	1.73	1.67	1.68	1.72
Excise Taxes ^a	0.95	1.12	1.09	1.01	1.43	1.14
Residential Property	<u>3.41</u>	<u>2.78</u>	<u>2.88</u>	<u>2.98</u>	<u>2.98</u>	<u>2.99</u>
Totals ^b	7.58	7.80	7.60	7.53	7.72	7.66
D. Index of Burden Based on Adjusted <u>Broad</u> Income:^c						
Individual Income	100	138	124	123	107	
Sales and Use	100	106	102	98	99	
Excise Taxes ^a	100	118	115	106	151	
Residential Property	<u>100</u>	<u>82</u>	<u>84</u>	<u>87</u>	<u>87</u>	
Totals	100	96	100	99	102	

^aIncludes highway user, state and local cigarette, and alcoholic beverage taxes.

^bTotals may not equal sum of items because of rounding.

^cIndex of relative tax burdens expressed as percentage of tax burden on lower income group.

V. A REGIONAL PROFILE OF COLORADO TAXES

The distribution of Colorado resident taxpayers, income and combined state-local direct taxes on a regional basis is covered in Tables XII - XIV. For the purposes of this study the state was divided into three major economic and geographic regions designated as the Eastern Plains, the Front Range, and the Western Slope.¹⁵ As shown on Chart VIII, these regions consisted of the following contiguous counties:

Eastern Plains Region:

Baca	Huerfano	Logan	Sedgwick
Bent	Kiowa	Morgan	Washington
Cheyenne	Kit Carson	Otero	Yuma
Crowley	Las Animas	Phillips	
Elbert	Lincoln	Prowers	

Front Range Region:

Adams	Denver	Jefferson	Weld
Arapahoe	Douglas	Larimer	
Boulder	El Paso	Pueblo	

Western Slope Region:

Alamosa	Eagle	La Plata	Rio Blanco
Archuleta	Fremont	Mesa	Rio Grande
Chaffee	Garfield	Mineral	Routt
Clear Creek	Gilpin	Moffat	Saguache
Conejos	Grand	Montezuma	San Juan
Costilla	Gunnison	Montrose	San Miguel
Custer	Hinsdale	Ouray	Summit
Delta	Jackson	Park	Teller
Dolores	Lake	Pitkin	

¹⁵This and the following section on the county analysis are based on an estimate of 788,832 tax returns, or 2.4 percent less than the number of resident taxpayers used in the first section of this report. Part-year residents who left the state during the year, as well as non-residents, were excluded.

TABLE XII. REGIONAL DISTRIBUTION OF COLORADO RESIDENT TAXPAYERS,
INCOME AND STATE AND LOCAL DIRECT TAXES,
FISCAL YEAR 1972

	Eastern Plains Region ^a	Front Range Region ^b	Western Slope Region ^c	State ^d
A. Dollar Amounts in Thousands:				
Number of Resident Taxpayers	54,334	640,714	93,784	788,832
Taxpayer Income:				
Adjusted Gross Income	\$390,911	\$6,201,417	\$734,270	\$7,325,598
Adjusted Broad Income	458,595	6,990,878	846,663	8,296,136
Direct State and Local Taxes:				
Individual Income	7,668	130,521	13,813	152,002
Sales and Use	5,563	127,394	13,553	146,510
Excise Taxes ^e	5,906	79,433	11,521	96,860
Residential Property	<u>11,538</u>	<u>210,322</u>	<u>20,629</u>	<u>242,489</u>
Totals	30,675	547,670	59,516	637,861
Total State Taxes	18,608	295,232	36,467	350,307
Total Local Taxes	12,067	252,438	23,049	287,554
Addendum:				
Federal Individual Income Tax	\$ 41,550	\$ 803,303	\$ 82,486	\$ 927,339
B. Percentage distribution:				
Number of Resident Taxpayers	6.9	81.2	11.9	100.0
Taxpayers Income:				
Adjusted Gross Income	5.3	84.7	10.0	100.0
Adjusted Broad Income	5.5	84.3	10.2	100.0
Direct State and Local Taxes:				
Individual Income	5.0	85.9	9.1	100.0
Sales and Use	3.8	87.0	9.2	100.0
Excise Taxes ^e	6.1	82.0	11.9	100.0
Residential Property	<u>4.8</u>	<u>86.7</u>	<u>8.5</u>	<u>100.0</u>
Totals	4.8	85.9	9.3	100.0
Total State Taxes	5.3	84.3	10.4	100.0
Total Local Taxes	4.2	87.8	8.0	100.0
Addendum:				
Federal Individual Income Tax	4.5	86.6	8.9	100.0

^aComprises 18 counties in eastern half of state. See text for listing.

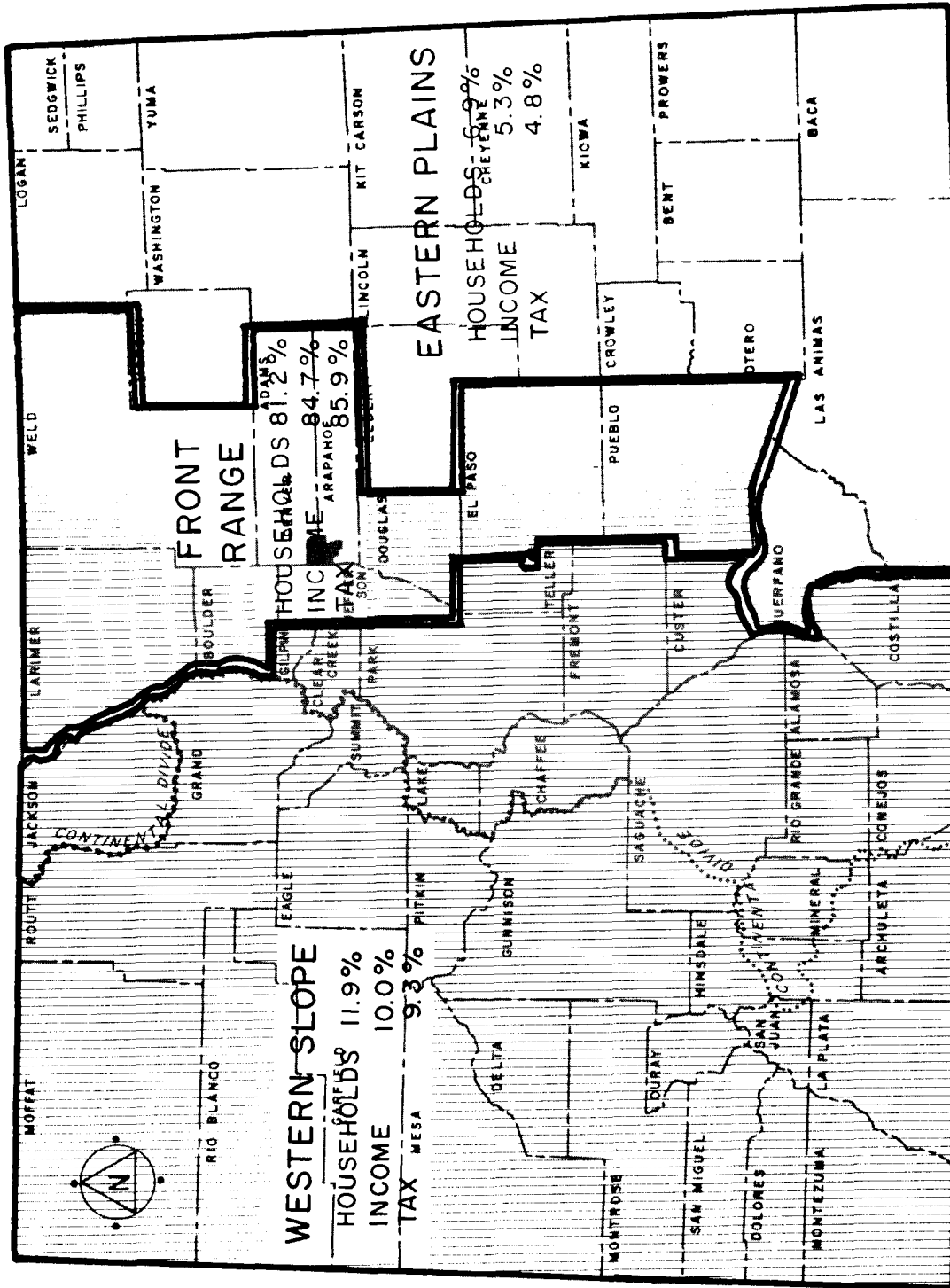
^bComprised of the following ten counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld.

^cComprises 35 counties in western half and southwest part of state.

^dExcludes from total households the non-residents and part-year out residents.

^eIncludes highway user, state and local cigarette, and alcoholic beverage taxes.

CHART VIII. ECONOMIC REGIONS, COLORADO TAX PROFILE STUDY



As is generally recognized the overwhelming majority of the state's population is concentrated in the Front Range Region -- the 10 counties along the eastern slope of the continental divide in the center of the state. The total number of resident taxpayers in this region is estimated to have been almost 640,000 and as such represented more than 81 percent of the state's total. Their reported adjusted gross income exceeded \$6.2 billion, and their state and local direct taxes amounted to \$295.2 million and \$252.4 million, respectively. On this basis these 10 counties accounted for almost 85 percent of the total state income, 84 percent of the total state taxes, and 88 percent of the total local taxes.

The Eastern Plains Region, consisting of 18 predominantly agricultural counties, had about 54,000 resident taxpayers who represented slightly less than 7 percent of the state's total. The reported adjusted gross income for the households in this region amounted to \$390.9 million, and their shares of the state and local direct taxes were \$18.6 million and \$12.1 million, respectively. Thus the Eastern Plains counties as a region with about 7 percent of the state's resident households accounted for about 5 percent of the reported income and state taxes, and slightly more than 4 percent of the local taxes.

Finally on this comparative basis, the Western Slope Region consisting of the remaining 35 counties of the state, had almost 94,000 resident taxpayers. Their reported adjusted gross income amounted to \$734.3 million, and their state and local taxes totalled \$36.5 million and \$23.0 million, respectively. In percentage terms, the Western Slope as a region, representing about 12 percent of the state's resident taxpayers, accounted for 10 percent of the total reported income and state taxes, and only 8 percent of the total local taxes.

This close correspondence between the distribution of income to taxes, particularly in the case of the state direct taxes, indicates that the present state tax structure does not impose a relatively greater tax burden on the resident taxpayers of any particular large geographic region of the state.

Table XIII and Chart IX show the dollar averages of regional income and taxes for Colorado resident taxpayers in fiscal year 1972. As expected the Front Range counties had the highest average income and taxes. The average adjusted gross income reported by resident taxpayers was \$9,679 and represented 104 percent of the statewide average. In contrast, the averages for the Eastern Plains and Western Slope regions were \$7,195 and \$7,829, and as such represented only 78 percent and 84 percent of the state average. On the adjusted broad income basis the dollar averages are higher for

TABLE XIII. AVERAGE INCOME AND STATE AND LOCAL DIRECT TAXES
OF COLORADO RESIDENT TAXPAYERS IN THREE MAJOR REGIONS,
FISCAL YEAR 1972

	Eastern Plains Region ^a	Front Range Region ^b	Western Slope Region ^c	State ^d
A. Average Income and Tax Per Household:				
Taxpayers Income:				
Adjusted Gross Income	\$7,195	\$ 9,679	\$7,829	\$ 9,288
Adjusted Broad Income	8,440	10,911	9,028	10,517
State and Local Direct Taxes:				
Individual Income	141	204	147	193
Sales and Use	102	199	145	186
Excise Taxes ^e	109	124	123	123
Residential Property	<u>212</u>	<u>328</u>	<u>220</u>	<u>307</u>
Totals	564	855	635	809
Total State Taxes	342	461	389	444
Total Local Taxes	222	394	246	365
Addendum:				
Federal Individual Income Tax	\$ 765	\$ 1,254	\$ 880	\$ 1,176
B. Regional Averages as Percent of State Average:				
Taxpayers Income:				
Adjusted Gross Income	77.5	104.2	84.3	100.0
Adjusted Broad Income	80.2	103.7	85.8	100.0
State and Local Direct Taxes:				
Individual Income	73.2	105.7	76.4	100.0
Sales and Use	55.1	107.0	77.8	100.0
Excise Taxes ^e	88.5	101.0	100.0	100.0
Residential Property	<u>69.1</u>	<u>106.8</u>	<u>71.6</u>	<u>100.0</u>
Totals	69.8	105.7	78.5	100.0
Total State Taxes	77.1	103.8	87.6	100.0
Total Local Taxes	60.9	108.1	67.4	100.0
Addendum:				
Federal Individual Income Tax	65.1	106.6	74.8	100.0

^aComprises 18 counties in eastern half of state. See text for listing.

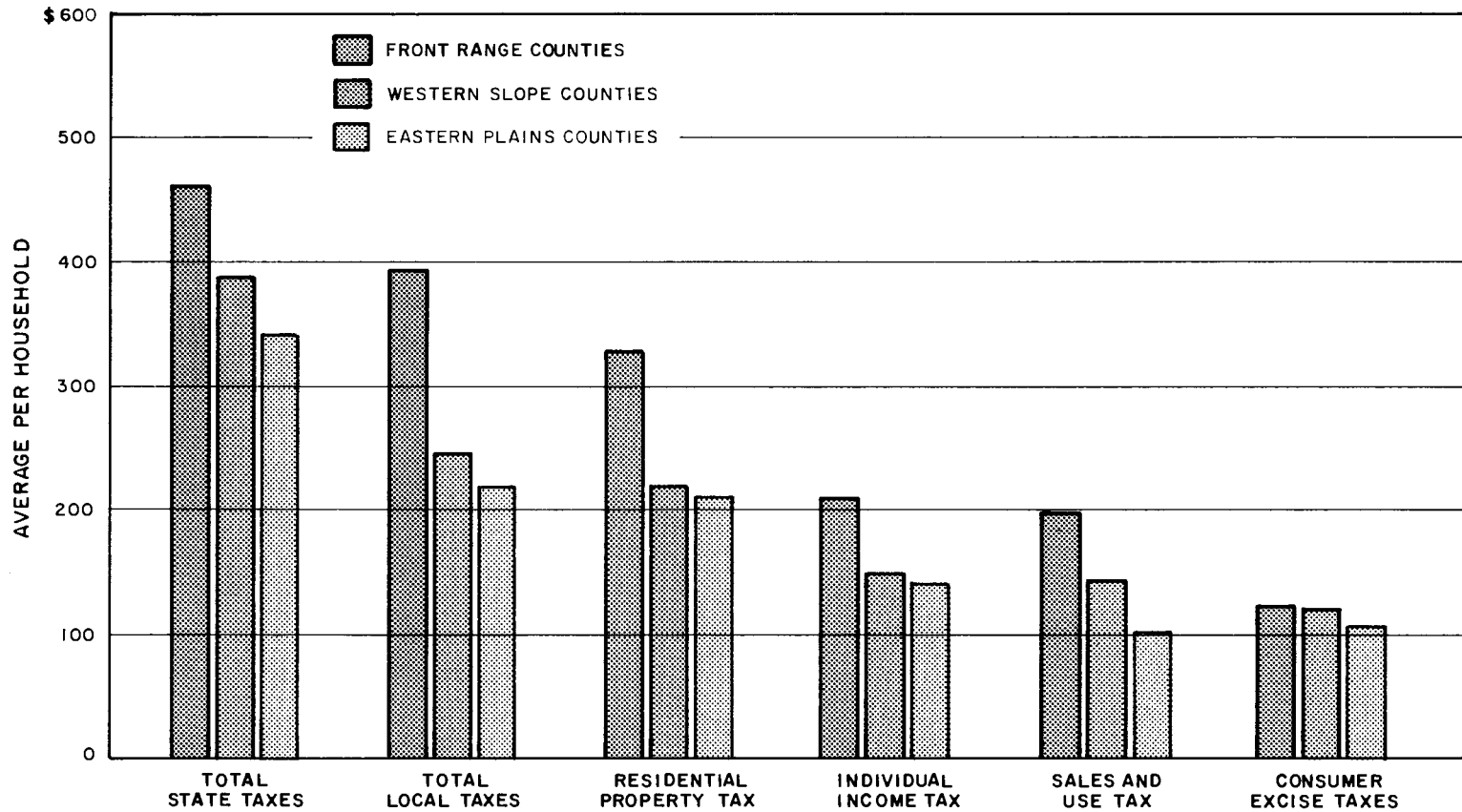
^bComprised of the following ten counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld.

^cComprises 35 counties in western half and southwest part of state.

^dExcludes from total households the non-residents and part-year out residents.

^eIncludes highway user, state and local cigarette, and alcoholic beverage taxes.

CHART IX. AVERAGE STATE AND LOCAL DIRECT TAXES ON COLORADO RESIDENT TAXPAYERS IN THREE MAJOR REGIONS, FISCAL YEAR 1972



all three regions, but the variance among them is reduced. With regard to the combined state-local tax for these regions, the average for the Front Range was \$855, compared with \$563 for the Eastern Plains and \$685 for the Western Slope regions. On this basis the Front Range average tax represented 106 percent of the statewide average, whereas the Eastern Plains and Western Slope tax averages represented 70 and 79 percents, respectively.

When the combined tax burden is broken down into the state and local components, the variance among the regions is significantly smaller in the case of the state taxes and correspondingly greater for the local taxes. For example, the average of total state taxes for the Front Range was \$461 or 104 percent of the statewide average, a percentage almost exactly equivalent to that by which the average income for the region exceeded the statewide average. For the Eastern Plains region the average of state taxes was \$342 or 77 percent of the statewide average, or slightly less than its ratio of average income to state average income. And for the Western Slope the average of state taxes was \$389 or 88 percent of the state average, and as such slightly more than its ratio of average income to state income. In short, although the incomes of the taxpayers in the Front Range counties were significantly greater than those in the rest of the state, their state tax burdens also were proportionately larger.

The average local tax burden for resident taxpayers in the Front Range counties amounted to \$394, compared with \$222 and \$246 for those in the Eastern Plains and Western Slope regions, respectively. Expressed as percentages of the statewide average these regional local taxes represented 108 percent for the Front Range and 61 percent and 67 percent for the Eastern Plains and Western Slope regions. As such, the local taxes show considerably greater variance among the regions than do the state taxes. Of course, this variance basically reflects the marked difference between the local government expenditures of the highly urbanized counties compared with the rural counties.

The regional differences in the average dollar amounts of specific tax burdens were even greater than that of the aggregate taxes. The variation is summarized in the following tabulation which presents the average incomes and tax burdens

of resident taxpayers in the Eastern Plains and Western Slope regions as percentages of the averages of those in the Front Range region:

	Index of Dollar Averages for:		
	<u>Front</u> <u>Range</u>	<u>Eastern</u> <u>Plains</u>	<u>Western</u> <u>Slope</u>
<u>Average Income:</u>			
Adjusted Gross Income	100.0	74.3	80.9
Adjusted Broad Income	100.0	77.4	82.7
<u>Average Direct Taxes:</u>			
Individual Income	100.0	69.1	72.1
Retail Sales (State and Local)	100.0	51.3	72.9
Consumer Excises (State and Local)	100.0	87.9	99.2
Residential Property	<u>100.0</u>	<u>64.6</u>	<u>65.1</u>
Total State and Local	100.0	66.0	74.3
<u>Federal Individual Income Tax</u>	100.0	61.0	70.2

Table XIV and Chart X show the relative burden of state and local taxes as percentages of income for each of the three regions. When the regional taxes are compared on this basis a general pattern emerges similar to that of the preceding average tax analysis. The relative tax burden for resident taxpayers in the Front Range region was the highest in every instance, except for the consumer excise category. The combined state-local tax burden for the Front Range was 8.8 percent compared with burdens of 7.9 and 8.1 percents respectively for the Eastern Plains and Western Slope regions. With regard to the state tax component, the greatest burden was borne by residents in the Western Slope regions -- 5.0 percent in contrast to a 4.8 percent burden for both the Front Range and Eastern Plains. This ordering, however, is mainly due to the fact that the resident taxpayers in the Western Slope also had the highest relative burden of consumer excise taxes which primarily consist of highway user taxes. In other words, their relatively heavier state tax burden reflects the greater importance of automotive transportation outlays in their consumption pattern.

TABLE XIV. RELATIVE BURDEN OF STATE AND LOCAL DIRECT TAXES
ON COLORADO RESIDENT TAXPAYERS IN THREE MAJOR REGIONS
FISCAL YEAR 1972

	Eastern Plains Region ^a	Front Range Region ^b	Western Slope Region ^c	Stated ^d
A. Taxes as a Percent of Adjusted <u>Gross</u> Income:				
State and Local Direct Taxes:				
Individual Income	1.96	2.11	1.88	2.08
Sales and Use	1.42	2.05	1.85	2.00
Excise Taxes ^e	1.51	1.28	1.57	1.32
Residential Property	<u>2.95</u>	<u>3.39</u>	<u>2.81</u>	<u>3.31</u>
Total Combined Taxes ^f	7.85	8.83	8.11	8.71
Total State Taxes	4.76	4.76	4.97	4.78
Total Local Taxes	3.09	4.07	3.14	3.93
Addendum:				
Federal Individual Income Tax	10.63	12.95	11.23	12.66
B. Taxes as a Percent of Adjusted <u>Broad</u> Income:				
State and Local Direct Taxes:				
Individual Income	1.67	1.87	1.63	1.83
Sales and Use	1.21	1.82	1.60	1.77
Excise Taxes ^e	1.29	1.14	1.36	1.17
Residential Property	<u>2.52</u>	<u>3.01</u>	<u>2.44</u>	<u>2.92</u>
Total Combined Taxes ^f	6.69	7.83	7.03	7.69
Total State Taxes	4.06	4.22	4.31	4.22
Total Local Taxes	2.63	3.61	2.72	3.47
Addendum:				
Federal Individual Income Tax	9.06	11.49	9.74	11.18

^aComprises 18 counties in eastern half of state. See text for listing.

^bComprised of the following ten counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld.

^cComprises 35 counties in western half and southwest part of state.

^dExcludes from total households the non-residents and part-year out residents.

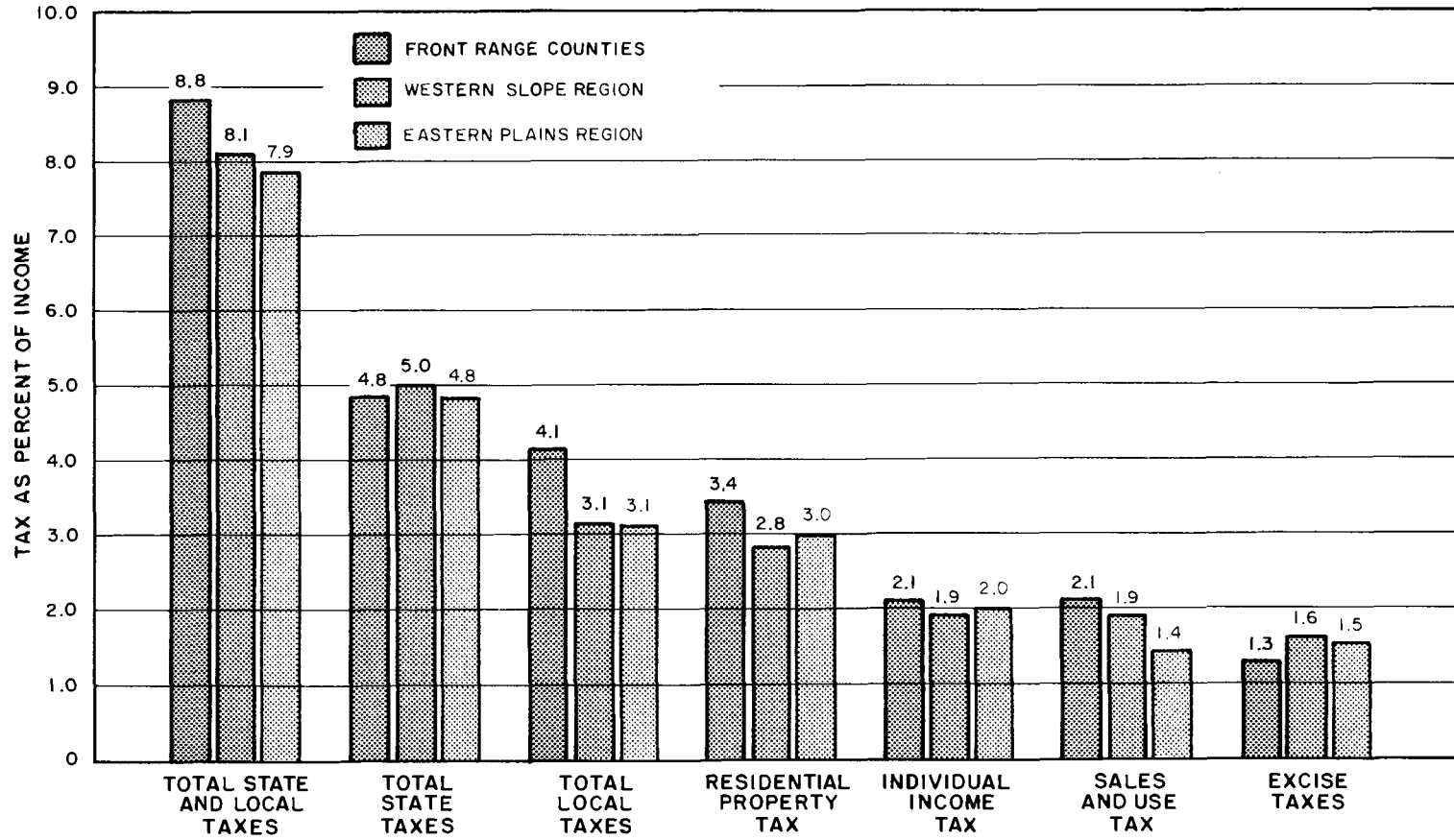
^eIncludes highway user, state and local cigarette, and alcoholic beverage taxes.

^fTotals may not equal sum of items because of rounding.

The variance among the regions in state income tax burdens is also small -- the burden was only 2.1 percent of adjusted gross income for the Front Range compared with 2.0 and 1.9 percents for the Eastern Plains and Western Slope regions. In contrast, for all regions the heaviest single tax burden proved to be the residential property tax. It was the highest for taxpayers in the Front Range counties, amounting to 3.4 percent of their adjusted gross income; next highest at 3.0 percent for the Eastern Plains regions; and lowest at 2.8 percent for those on the Western Slope. It should be noted once again that on an adjusted broad income basis the relative tax burdens of all taxes, both in the aggregate and individually, were significantly smaller but the same regional pattern of distribution prevailed.

In brief, the regional tax profile indicates that although there was a marked variance on the local level, there were no significant differences in the relative burdens imposed by the state tax structure.

CHART X. RELATIVE BURDEN OF STATE AND LOCAL DIRECT TAXES BASED ON ADJUSTED GROSS INCOME FOR THREE MAJOR REGIONS, FISCAL YEAR 1972



VI. A PROFILE OF COLORADO TAXES BY MAJOR COUNTIES

Tables XV - XVII show the distribution of Colorado resident taxpayers, income and combined state-local direct taxes among the nine most populous counties of the state. Together they represented more than 81 percent of the total number of Colorado resident taxpayers, and accounted for about 85 percent of both the income and tax.¹⁶

The first five counties listed in Table XV -- Denver, Jefferson, Arapahoe, Adams and Boulder -- constitute the Denver Metropolitan Area and as such represented almost 60 percent of the state's total resident taxpayers. The City and County of Denver alone accounted for almost one-fourth of the state's taxpayers, followed by Jefferson County with almost one-eighth of the total. El Paso and Pueblo counties also have been designated by the U.S. Bureau of the Census as Standard Metropolitan Statistical Areas and accounted for 8 and 5 percent of the state taxpayers. The other two counties included in this part of the analysis were Larimer and Weld which represented 5 and 4 percents, respectively, of the total.

The reported adjusted gross income for these counties was almost \$6.2 billion, and for the five-county Denver metro area it amounted to \$4.7 billion or 64 percent of the state's total income. The total adjusted gross incomes for the nine individual counties ranged from a high for Denver of \$1.9 billion to a low for Weld County of \$240 million. Jefferson was the only other county with reported income in excess of one billion. The other six counties, ranked by total income (in millions), were: Arapahoe (\$675), El Paso (\$610), Adams (\$537), Boulder (\$481), Pueblo (\$323), and Larimer (\$295).

The combined state-local taxes for these major counties amounted to \$541 million or, as noted, 85 percent of the state total. For the Denver metro area alone it was \$413 million or 65 percent of the state total. When the nine counties are ranked in accordance with the dollar magnitude of their combined state-local taxes, the ordering is the same as the county income ranking described above. Perhaps of more importance is the fact that the percentage distribution

¹⁶The remaining 54 counties were not treated on an individual basis because of their relatively small populations and the low statistical reliability of the sample data.

TABLE XV
 COUNTY DISTRIBUTION OF COLORADO RESIDENT TAXPAYERS, INCOME AND STATE AND LOCAL DIRECT TAXES,
 FISCAL YEAR 1972

	Denver	Jefferson	Arapahoe	Adams	Boulder	Denver SMSA	El Paso	Pueblo	Larimer	Weld	Rest of State	State Total
A. Dollar Amounts in Thousands:												
Number of Resident Taxpayers	191,453	96,780	66,711	61,995	48,665	465,604	64,566	35,816	38,667	32,424	151,755	733,532
Taxpayers Income:												
Adjusted Gross Income	\$1,929,206	\$1,073,963	\$674,508	\$535,523	\$481,008	\$4,695,208	\$610,429	\$322,786	\$294,941	\$240,027	\$1,163,207	\$7,325,593
Adjusted Broad Income	2,180,644	1,192,337	758,905	605,372	542,674	5,279,932	688,912	362,375	342,340	275,351	1,347,226	8,295,136
Direct State and Local Taxes:												
Individual Income	43,291	23,110	14,726	9,660	10,276	101,063	12,130	6,217	5,543	4,706	22,343	152,002
Sales and Use	42,232	19,632	13,916	11,166	9,633	96,579	10,780	7,218	5,697	4,381	21,855	145,510
Excise Taxes ^a	23,580	12,502	7,881	7,899	5,951	57,313	9,236	4,505	3,983	3,672	17,646	95,350
Residential Property	57,149	37,317	25,214	19,617	18,069	157,366	23,255	9,559	10,755	6,534	33,130	240,599
Totals	166,252	92,561	61,737	48,342	43,929	412,821	55,401	27,499	25,983	19,293	94,974	635,971
Total State Taxes	92,444	50,664	31,416	26,312	22,357	223,193	29,504	15,254	13,838	11,656	56,862	350,307
Total Local Taxes	73,808	41,897	30,321	22,030	21,572	189,628	25,897	12,245	12,145	7,637	38,112	285,664
Addendum:												
Federal Individual Income Tax	\$ 280,305	\$ 136,494	\$ 90,626	\$ 57,248	\$ 57,750	\$ 622,423	\$ 77,818	\$ 37,021	\$ 32,133	\$ 29,328	\$ 128,616	\$ 927,339
B. Percentage Distribution by Counties:												
Number of Resident Taxpayers	24.3	12.3	8.4	7.9	6.2	59.1	8.2	4.5	4.9	4.1	19.2	100.0
Taxpayers Income:												
Adjusted Gross Income	26.3	14.7	9.2	7.3	6.6	64.1	8.3	4.4	4.0	3.3	15.9	100.0
Adjusted Broad Income	26.3	14.4	9.2	7.3	6.5	63.6	8.3	4.4	4.1	3.3	16.2	100.0
Direct State and Local Taxes:												
Individual Income	28.5	15.2	9.7	6.3	6.8	66.5	8.0	4.1	3.6	3.1	14.7	100.0
Sales and Use	28.8	13.4	9.5	7.6	6.6	65.9	7.4	4.9	3.9	3.0	14.9	100.0
Excise Taxes ^a	23.3	12.9	8.1	8.2	6.2	59.7	9.5	4.7	4.1	3.8	18.2	100.0
Residential Property	23.7	15.5	10.5	8.2	7.5	65.4	9.7	4.0	4.4	2.7	13.8	100.0
Totals	26.1	14.6	9.7	7.6	6.9	64.9	8.7	4.3	4.1	3.0	15.0	100.0
Total State Taxes	26.4	14.4	9.0	7.5	6.4	63.7	8.4	4.4	4.0	3.3	16.2	100.0
Total Local Taxes	25.8	14.7	10.6	7.7	7.6	66.4	9.1	4.3	4.2	2.7	13.3	100.0
Addendum:												
Federal Individual Income Tax	30.2	14.7	9.8	6.2	6.2	67.1	8.4	4.0	3.5	3.2	13.8	100.0

^aIncludes state highway user taxes, state and local cigarette taxes, and state alcoholic beverage taxes.

of the state tax burden by counties shows a remarkably close correspondence with the income distribution based on either the adjusted gross or broad income measures (see Chart XI). In contrast, with regard to the local tax burden it appears that for Arapahoe, Boulder and El Paso counties the percentages of local taxes were significantly larger than their respective shares of income; while for Denver and Weld counties they were smaller. The county distributions of income and taxes are summarized below:

<u>Counties:</u>	<u>Percentage of State Totals:</u>			
	<u>Adjusted Income</u>		<u>Direct Taxes</u>	
	<u>Gross</u>	<u>Broad</u>	<u>State</u>	<u>Local</u>
Denver	26.3	26.3	26.4	25.8
Jefferson	14.7	14.4	14.4	14.7
Arapahoe	9.2	9.2	9.0	10.6
Adams	7.3	7.3	7.5	7.7
Boulder	<u>6.6</u>	<u>6.5</u>	<u>6.4</u>	<u>7.6</u>
Denver Metro Area	64.1	63.7	63.7	66.4
El Paso	8.3	8.3	8.4	9.1
Pueblo	4.4	4.4	4.4	4.3
Larimer	4.0	4.1	4.0	4.2
Weld	3.3	3.3	3.3	2.7
Rest of State	<u>15.9</u>	<u>16.2</u>	<u>16.2</u>	<u>13.3</u>
Non-Denver Metro Area	35.9	36.3	36.3	33.6
Total State	100.0	100.0	100.0	100.0

It is evident that relative to the individual counties "ability-to-pay," their respective total state tax burdens were neither disproportionately large nor small. In other words, the overall state tax structure worked out to be neutral for these nine major counties of the state. And, as noted, this did not hold for the local tax structure. Moreover, a similar correspondence with income does not hold for any of the specific direct tax categories. For example, with regard to the state income tax, the three counties with the highest average incomes -- Jefferson, Arapahoe and Denver -- accounted for shares of the total tax burden relatively larger than their respective income shares; while the four counties with the lowest average incomes -- Pueblo, Adams, Larimer and Weld -- accounted for disproportionately smaller shares of the income tax. Of course, this pattern of distribution is to be expected on the basis of the preceding analysis since it reflects the progressivity of the Colorado state income tax structure.

Table XVI and Chart XII show the dollar amounts of average taxes for Colorado residents taxpayers in each of the major counties. The average taxes for the counties generally followed the ordering of the respective county average incomes. The three counties with the highest average state taxes were Jefferson (\$523), Denver (\$483) and Arapahoe (\$471); and the three with the lowest were Adams (\$424), Weld (\$360) and Larimer (\$358). However, with regard to the average local taxes, the data do not show a similar pattern. For example, Denver drops to fifth place (\$385), and the three counties with the highest averages were Arapahoe (\$454), Boulder (\$443) and Jefferson (\$433); while those with the lowest were Pueblo (\$342), Larimer (\$314) and Weld (\$235).

In more general terms the variance in average tax among the counties can be shown by expressing each county's tax as a percentage of the statewide average. On this basis five counties, and in the following order -- Jefferson, Denver, Arapahoe, Boulder and El Paso, all had both average state and local taxes greater than the statewide averages; whereas the other four -- Pueblo, Adams, Weld and Larimer -- all had smaller averages.

With regard to the specific tax categories, the greatest variation in average taxes among the counties occurred in the residential property tax. Based on the statewide average the index for this tax ranged from a high of 127 percent for Jefferson to a low of 66 percent for Weld County. Next in the degree of variance was the state income tax, and Jefferson again was high with an index of 125 percent compared with a low of 75 percent for Larimer County. Both the retail sales and the consumer excise categories exhibited a lesser degree of variation in average county taxes. The average county sales tax index ranged from a high of 119 percent for Denver to a low of 73 percent for Weld County; and the smallest variation occurred in the county averages of consumer excises -- a high of 116 percent for El Paso compared with a low of 84 percent for Larimer. Thus, those counties of the state which are highly urbanized and economically affluent generally have the higher average taxes; and those that are mainly rural or have below average incomes generally have the lowest average taxes in the state.

Table XVII and Chart XIII show the relative burden of state and local taxes as a percentage of income for each of the major counties. As in the case of the regional analysis these data indicate that the relative burden of the direct state taxes levied on resident taxpayers on a county basis were remarkably uniform. In terms of adjusted gross income the state tax burden was slightly less than 5 percent for every one of the nine counties; and in terms of adjusted broad

CHART XI. PERCENTAGE DISTRIBUTION OF INCOME AND TAXES BY MAJOR COLORADO COUNTIES, FISCAL YEAR 1972

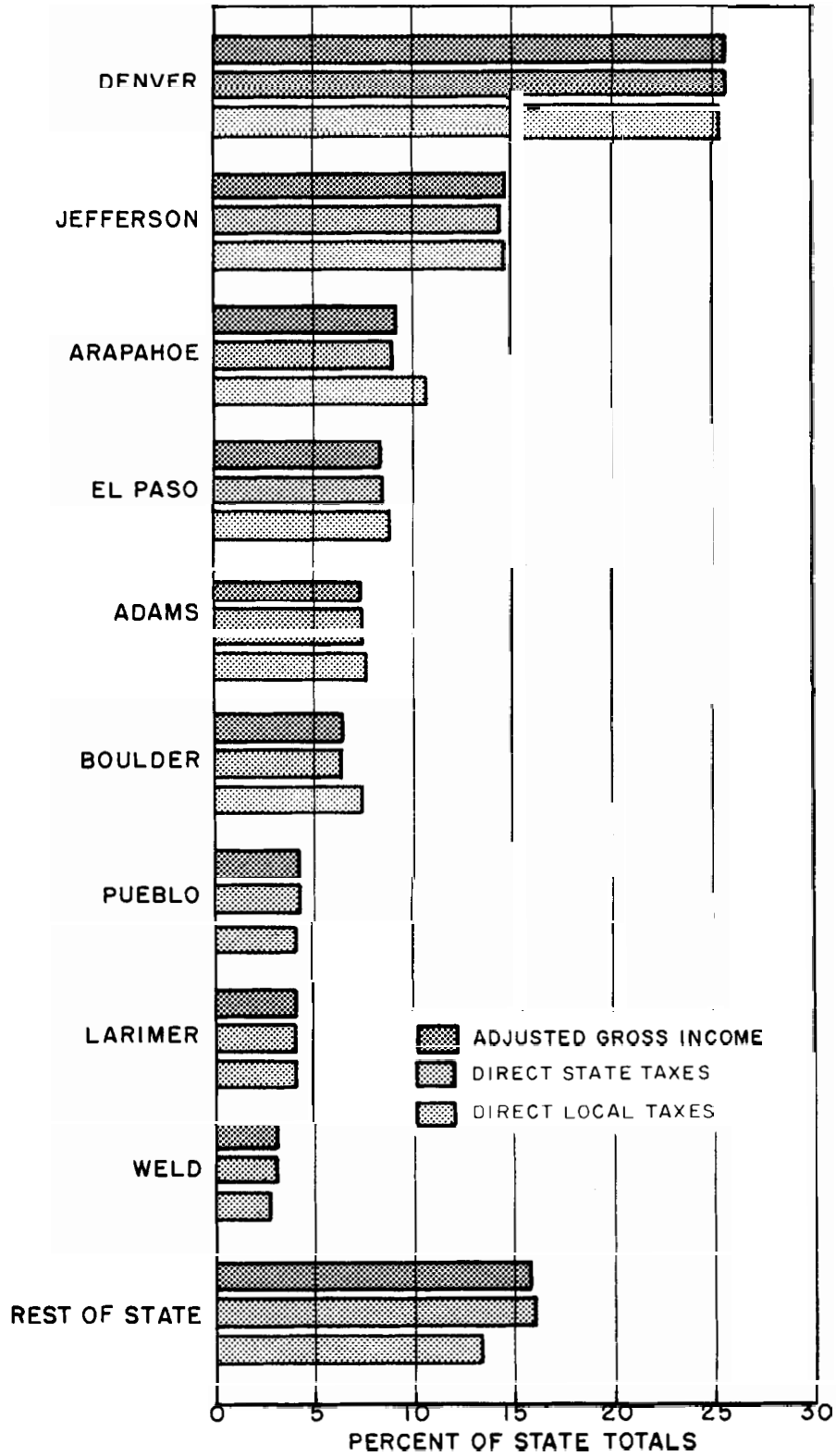


TABLE XVI

AVERAGE INCOME AND STATE AND LOCAL DIRECT TAXES ON COLORADO RESIDENT TAXPAYERS, CLASSIFIED BY MAJOR COUNTIES,
FISCAL YEAR 1972

	Denver	Jefferson	Arapahoe	Adams	Boulder	Denver SMSA	El Paso	Pueblo	Larimer	Weld	Rest of State	State Total
A. Average Income and Tax for Resident Taxpayer:												
Taxpayers Income:												
Adjusted Gross Income	\$ 10,077	\$ 11,097	\$ 10,111	\$ 8,654	\$ 9,884	\$ 10,084	\$ 9,454	\$ 9,012	\$ 7,628	\$ 7,403	\$ 7,664	\$ 9,238
Adjusted Broad Income	11,390	12,320	11,376	9,763	11,151	11,340	10,670	10,118	8,954	8,492	8,873	10,517
State and Local Direct Taxes:												
Individual Income	226	239	221	156	211	217	188	174	144	145	147	192
Sales and Use	221	203	209	180	198	207	167	202	147	135	144	186
Excise Taxes ^a	123	129	118	127	122	124	143	126	103	113	116	123
Residential Property	<u>299</u>	<u>386</u>	<u>378</u>	<u>316</u>	<u>371</u>	<u>338</u>	<u>360</u>	<u>267</u>	<u>278</u>	<u>202</u>	<u>213</u>	<u>303</u>
Totals ^b	868	956	925	780	903	887	858	768	672	595	626	806
Total State Taxes	483	523	471	424	459	479	457	426	358	360	375	444
Total Local Taxes	385	433	454	355	443	407	401	342	314	235	251	362
Addendum:												
Federal Individual Income Tax	1,464	1,410	1,358	923	1,187	1,337	1,205	1,034	831	905	948	1,176
B. County Average as Percent of State Average:												
Taxpayers Income:												
Adjusted Gross Income	108.5	119.5	108.9	93.2	106.4	108.6	101.8	97.0	82.1	79.7	82.5	100.0
Adjusted Broad Income	108.3	117.1	108.2	92.8	106.0	107.3	101.5	96.2	84.2	80.7	94.4	100.0
State and Local Direct Taxes:												
Individual Income	117.7	124.5	115.1	81.3	109.9	113.0	97.9	90.6	75.0	75.5	76.6	100.0
Sales and Use	118.8	109.1	112.4	96.8	106.5	111.3	89.8	108.6	79.0	72.6	77.4	100.0
Excise Taxes ^a	100.0	104.9	95.9	103.3	99.2	100.8	116.3	102.4	83.7	91.9	94.3	100.0
Residential Property	<u>98.0</u>	<u>126.6</u>	<u>123.9</u>	<u>103.6</u>	<u>121.6</u>	<u>110.8</u>	<u>118.0</u>	<u>87.5</u>	<u>91.1</u>	<u>66.2</u>	<u>71.5</u>	<u>100.0</u>
Totals	107.7	118.6	114.8	96.8	112.0	110.0	106.5	95.3	83.4	73.8	77.7	100.0
Total State Taxes	108.8	117.8	106.1	95.5	103.4	107.9	102.9	95.9	80.6	81.1	84.5	100.0
Total Local Taxes	106.4	119.6	125.4	98.1	122.4	112.4	110.8	94.5	86.7	64.9	69.3	100.0
Addendum:												
Federal Individual Income Tax	124.5	119.9	115.5	78.5	100.9	113.7	102.5	87.9	70.7	77.0	72.1	100.0

^aIncludes state highway user taxes, state and local cigarette taxes, and state alcoholic beverage taxes.

^bTotals may not equal sum of items because of rounding.

TABLE XVII
RELATIVE BURDEN OF STATE AND LOCAL DIRECT TAXES ON COLORADO RESIDENT TAXPAYERS,
CLASSIFIED BY MAJOR COUNTIES,
FISCAL YEAR 1972

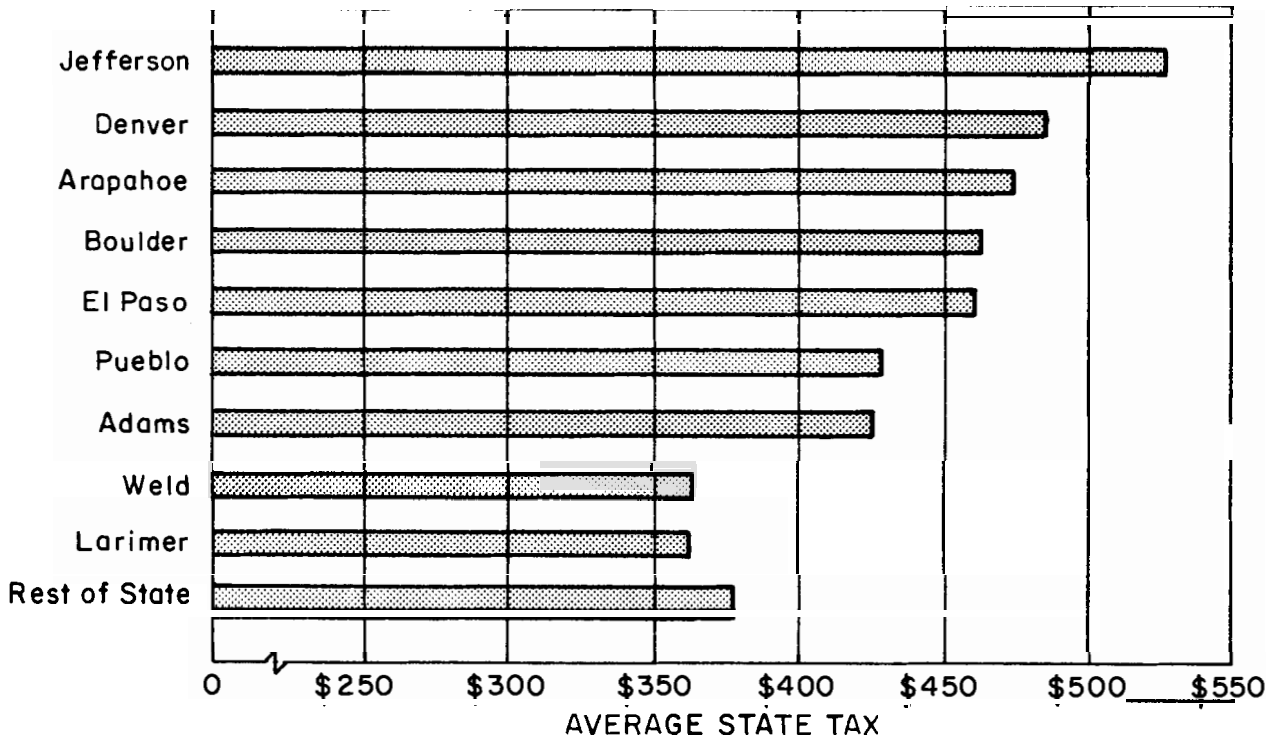
	Denver	Jefferson	Arapahoe	Adams	Boulder	Denver SMSA	El Paso	Pueblo	Larimer	Weld	Rest of State	State Total
A. Taxes as a Percent of Adjusted <u>Gross</u> Income:												
State and Local Direct Taxes:												
Individual Income	2.24	2.15	2.18	1.80	2.14	2.15	1.99	1.93	1.88	1.96	1.92	2.07
Sales and Use	2.19	1.83	2.06	2.08	2.00	2.06	1.77	2.24	1.93	1.83	1.88	2.00
Excise Taxes ^a	1.22	1.16	1.17	1.47	1.24	1.23	1.51	1.40	1.35	1.53	1.52	1.32
Residential Property	<u>2.96</u>	<u>3.47</u>	<u>3.74</u>	<u>3.66</u>	<u>3.76</u>	<u>3.35</u>	<u>3.81</u>	<u>2.96</u>	<u>3.65</u>	<u>2.72</u>	<u>2.85</u>	<u>3.28</u>
Total State & Local Taxes ^b	8.62	8.62	9.15	9.01	9.13	8.79	9.08	8.52	8.81	8.04	8.17	8.68
Total State Taxes	4.79	4.72	4.66	4.90	4.65	4.75	4.83	4.73	4.69	4.86	4.89	4.78
Total Local Taxes	3.83	3.90	4.49	4.11	4.48	4.04	4.24	3.79	4.12	3.18	3.28	3.90
Addendum:												
Federal Individual Income Tax	14.53	12.71	13.44	10.67	12.01	13.26	12.75	11.47	10.89	12.22	11.06	12.66
B. Taxes as a Percent of Adjusted <u>Broad</u> Income:												
State and Local Direct Taxes:												
Individual Income	1.99	1.94	1.94	1.60	1.89	1.91	1.76	1.72	1.62	1.71	1.66	1.83
Sales and Use	1.94	1.65	1.83	1.84	1.78	1.83	1.56	1.99	1.66	1.59	1.62	1.77
Excise Taxes ^a	1.08	1.05	1.04	1.31	1.10	1.10	1.34	1.24	1.17	1.33	1.31	1.17
Residential Property	<u>2.62</u>	<u>3.13</u>	<u>3.32</u>	<u>3.24</u>	<u>3.33</u>	<u>2.98</u>	<u>3.38</u>	<u>2.64</u>	<u>3.14</u>	<u>2.37</u>	<u>2.46</u>	<u>2.90</u>
Total State & Local Taxes ^b	7.62	7.76	8.14	7.99	8.10	7.82	8.04	7.59	7.59	7.00	7.05	7.67
Total State Taxes	4.24	4.25	4.14	4.35	4.12	4.23	4.28	4.21	4.04	4.23	4.22	4.22
Total Local Taxes	3.38	3.51	4.00	3.64	3.98	3.59	3.76	3.38	3.55	2.77	2.83	3.45
Addendum:												
Federal Individual Income Tax	12.85	11.45	11.94	9.46	10.64	11.79	11.30	10.22	9.39	10.65	9.55	11.18

^a Includes state highway user taxes, state and local cigarette taxes, and state alcoholic beverage taxes.

^b Totals may not equal sum of items because of rounding.

CHART XII . AVERAGE STATE AND LOCAL DIRECT TAXES BY MAJOR COUNTIES, FISCAL YEAR 1972

A. DIRECT STATE TAXES



B. DIRECT LOCAL TAXES

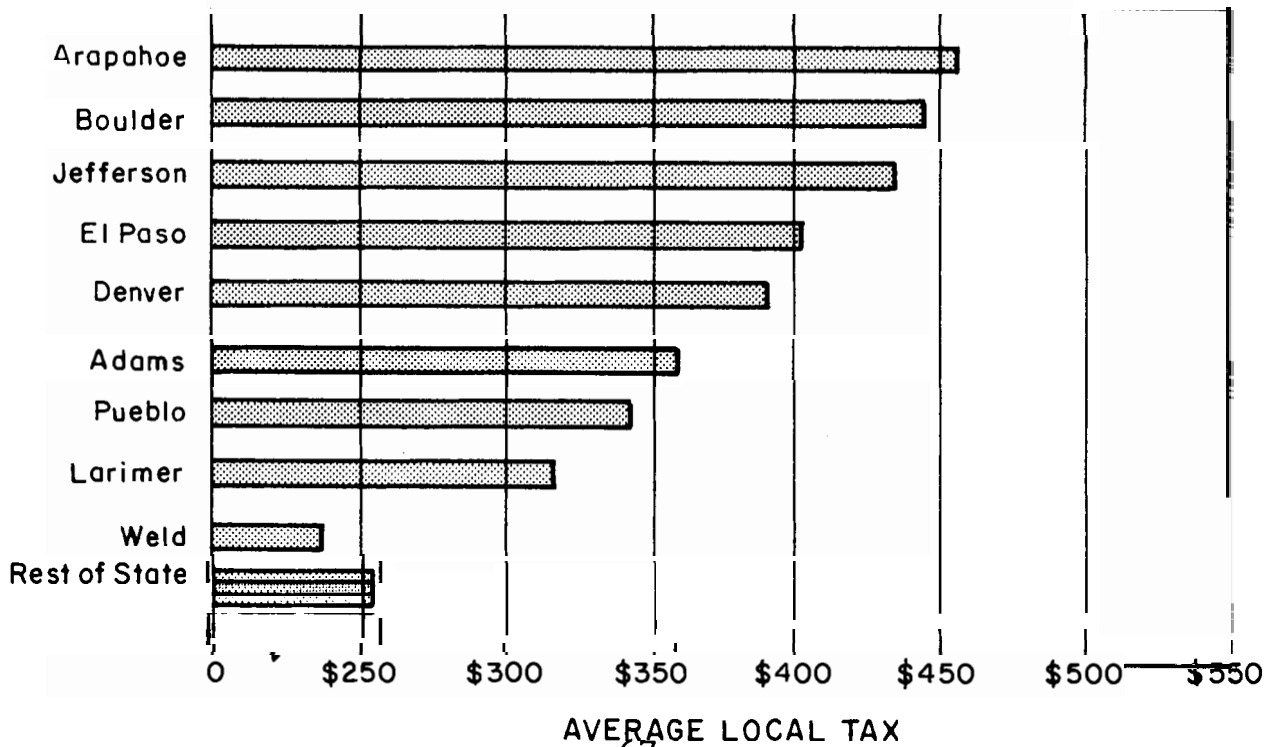
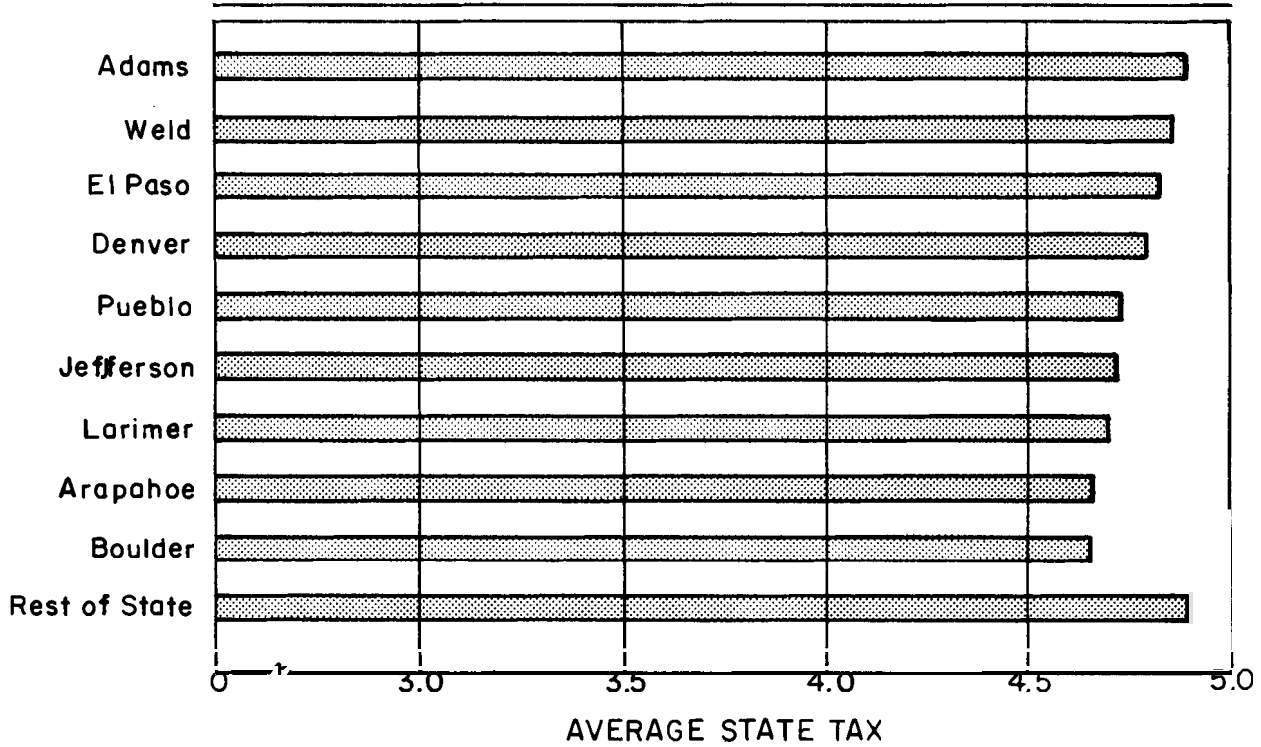
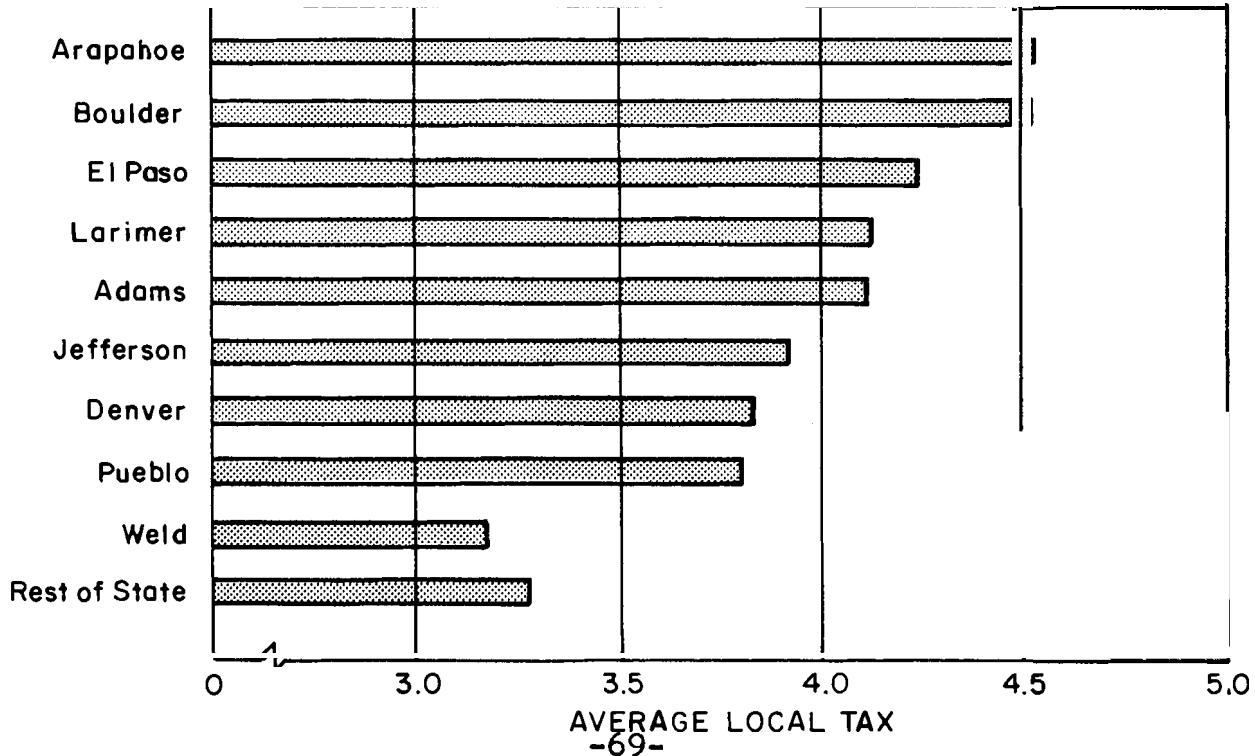


CHART XIII. RELATIVE BURDEN OF STATE AND LOCAL DIRECT TAXES BY MAJOR COLORADO COUNTIES, FISCAL YEAR 1972

A. DIRECT STATE TAXES



B. DIRECT LOCAL TAXES



income the state burden proved to be slightly more than 4 percent for every county. The limited variance in the total state taxes imposed on these counties is further revealed by the fact that the difference between the counties with the "heaviest" and "lightest" burdens was only one-quarter of 1 percent on the adjusted gross income basis, and was less than one-third of 1 percent on the adjusted broad income basis. In contrast, the direct local taxes showed a significantly greater variance among the counties. On the adjusted gross income basis the burdens ranged from a high of 4.5 percent for Arapahoe County to a low of 3.2 percent for Weld; and in terms of adjusted broad income they were 4.0 and 2.8 percent for these same counties.

As noted, the uniformity of the state tax burdens for the counties essentially reflects the progressivity of the state income tax offsetting the regressivity of the state retail sales and consumer excise taxes; whereas, the variance in the local tax burdens among the counties can be mainly attributed to the residential property tax. County comparisons of the relative burdens for each of the specific major tax categories, based on adjusted gross income and expressed as percentages of the overall statewide tax burden for each category is shown in the following comparison:

Index of County Tax Burdens: (Statewide average = 100.0)				
<u>Counties</u>	<u>State Income Tax</u>	<u>Sales and Use Taxes</u>	<u>Con- sumer Excise Taxes</u>	<u>Resi- dential Property Tax</u>
Denver	108.2	109.5	92.4	99.3
Jefferson	103.9	91.5	87.9	99.3
Arapahoe	105.3	103.0	88.6	105.4
Adams	87.0	104.0	111.4	103.8
Boulder	<u>103.4</u>	<u>100.0</u>	<u>93.9</u>	<u>105.2</u>
Denver Metro Area	103.9	103.0	93.2	101.3
El Paso	96.1	88.5	114.4	104.6
Pueblo	93.2	112.0	106.1	98.2
Larimer	90.8	96.5	102.3	101.5
Weld	94.7	91.5	115.9	92.6
Rest of State	<u>92.8</u>	<u>94.0</u>	<u>115.2</u>	<u>94.1</u>
Non-Denver Metro Area	93.7	95.0	112.1	96.3

On the basis of the above analysis it should be evident that it is not feasible to designate particular counties as having either "high" or "low" tax burdens without specifying the tax measures used and the specific tax or spectrum of taxes being compared.

VII. SUMMARY OF FINDINGS

The major findings of the Colorado Tax Profile Study may be summarized as follows:

1. During the past decade, Colorado state and local taxes increased by more than 140 percent and as such exceeded the rate of growth of both personal income and federal taxes for Colorado resident taxpayers.

2. The total state-local tax bill on a collection basis for fiscal year 1972 amounted to almost \$1.2 billion. When added to the direct federal taxes paid by Coloradans, the combined tax burden was more than \$2.5 billion, or one-fourth of the total personal income.

3. State taxes alone amounted to \$523 million or 48 percent of the total state-local tax burden. Of these state taxes, two-thirds were levied directly on households and one-third on business. Quantitatively, the largest single state tax paid by individuals was the personal income tax, which accounted for 44 percent of the direct state levies. In contrast, the corporation income tax represented less than 20 percent of the state business taxes.

4. Local taxes for the same fiscal year amounted to \$574 million. More than one-half of the local taxes were imposed directly on households, mainly in the form of residential property taxes estimated to have been \$254 million. The most important single business tax on the local level was the non-residential property tax which amounted to \$238 million. Overall the property tax represented 86 percent of the local tax burden.

5. Colorado's combined state-local tax structure was regressive whether measured on the basis of adjusted gross or adjusted broad income. The latter concept, developed for purposes of this study, takes cognizance of non-taxable money income not included in adjusted gross income -- mainly money transfers for the lowest income class and non-taxable capital gains for the highest. On the adjusted gross income basis the total state-local tax burden for households in the lowest income category was twice as great as that for those in the highest category. However, the regressivity was significantly reduced when the burdens were expressed as percentages of adjusted broad income -- 14.5 percent for taxpayers reporting incomes of less than \$5,000 and 10.7 percent for those with incomes of \$25,000 or more.

6. In contrast, the state tax structure considered by itself proved to be approximately proportional or slightly progressive dependent upon the income measure used. On the adjusted gross income basis the state tax burden was regressive between the two lowest categories and then became successively progressive through the next four income classes. However, when based on adjusted broad income the total state tax burden (direct and indirect) was actually progressive -- ranging from 5.8 percent for taxpayers in the lowest category to 6.4 percent for those in the highest.

7. The general proportionality achieved in the distribution of the overall state tax burden essentially reflects a balancing of the state's major taxes since similar patterns were not evident for any of the specific taxes. The state individual income tax was progressive throughout the entire range of income categories. On the adjusted gross income basis, the relative income tax burden for households with incomes under \$5,000 averaged less than one-fourth that of taxpayers with incomes of \$25,000 or more; and on the adjusted broad income basis it was less than one-sixth. Moreover, in terms of either income measure, the Colorado state income tax was approximately four-fifths as progressive as the federal income tax on Colorado residents.

8. On the other hand, and notwithstanding the \$7 per person food tax credit, the state retail sales tax proved to be highly regressive. On the adjusted gross income basis the relative sales tax burden was almost three times as heavy for the lowest income group as for the highest; and when measured against adjusted broad income it was about twice as great. The other major tax categories on the state level -- highway user, cigarette, alcoholic beverages and business taxes -- also proved to be regressive. In brief, the magnitude and progressivity of the state income tax was large enough to offset the regressivity of all the other state taxes resulting in an overall proportional state tax structure.

9. The local tax structure, accounting for more than one-half of the combined state-local tax burden, was highly regressive, primarily because of the overwhelming importance of the property tax on this level. As a percentage of adjusted gross income the local tax burden for the lowest income class was almost 3 times larger than that for the highest. In the case of the residential property tax the disparity was even greater -- 6.2 percent compared with 2.0 percent. On the adjusted broad income basis the regressivity of both the total local tax and the property tax burdens were somewhat smaller -- approximately twice as heavy for the lower income group as for the highest category.

10. When the combined state-local tax burden was apportioned among Colorado households classified by size of family (one-person to five-or-more-person households) the tax distribution closely paralleled the income distribution. This neutrality of the Colorado tax structure was also evidenced by the fact that when tax burdens were measured in terms of adjusted gross income they were approximately uniform for all multi-person categories and relatively higher only for the single-person household. However, when the taxes were expressed as a percentage of adjusted broad income even the variance between single and multi-person household categories was eliminated and the relative burdens ranged from 7.3 to 7.7 percent. Thus the distribution of the combined state-local taxes levied directly on Colorado taxpayers -- the individual income tax, retail sales tax, consumer excises and residential property tax -- worked out to be essentially neutral with regard to family size.

11. Similarly, the regional tax profile indicates that the present state tax structure, particularly the personal income tax, does not impose a disproportionate tax burden on the resident taxpayers of any large section of the state. But there were significant differences in local burdens, mainly reflecting a regional variance in residential property tax burdens. The Front Range Region, consisting of 10 contiguous counties on the eastern slope of the continental divide, had 81 percent of the resident taxpayers and accounted for almost 85 percent of the state income, 84 percent of the state taxes and 88 percent of the total local taxes. The Eastern Plains Region, made up of 18 agricultural counties, represented 7 percent of the taxpayers but accounted for about 5 percent of both the state income and state taxes, and 4 percent of the local taxes. The Western Slope, representing the remaining 35 counties, had 12 percent of the taxpayers, 10 percent of the income and state taxes, and 8 percent of the local taxes. Accordingly, the local tax burden was relatively high for the Front Range -- 4.1 percent compared with 3.1 percent for the other two regions. On the other hand, the direct state tax burdens amounted to slightly less than 5 percent and were approximately uniform for all three regions.

12. Finally, the overall state tax structure also proved to be essentially neutral with regard to the relative burdens imposed on resident taxpayers in each of the nine most populous counties of the state -- all within the Front Range Region and together accounting for more than four-fifths of the state's population, income and taxes. The percentage distribution of the state tax burden among these counties closely corresponded with the distribution of income. However, a similar pattern did not hold for the local tax burden. In terms of average taxes per household, five counties

-- Jefferson, Denver, Arapahoe, Boulder and El Paso -- all had state and local tax averages greater than the statewide averages; whereas for the other four -- Pueblo, Adams, Weld and Larimer -- the average taxes were smaller. The greatest variation occurred in the residential property tax which ranged from a high of 127 percent of the statewide average for Jefferson County to a low of 66 percent for Weld County. When the taxes were expressed as a percentage of income, the relative state tax burdens again worked out to be highly uniform -- slightly less than 5 percent of adjusted gross income and slightly more than 4 percent of adjusted broad income in every one of the nine counties. In contrast, the relative burden of local taxes showed considerable variance whether based on adjusted gross or adjusted broad income. Thus the uniformity of the state tax burdens for the counties once again reflects the progressivity of state income tax offsetting the regressivity of state sales and consumer excise taxes; while the marked differences in local tax burdens must be mainly attributed to the residential property taxes.

APPENDICES

APPENDIX A

DESCRIPTION OF CTPS METHODOLOGY USED FOR THE ALLOCATION OF STATE AND LOCAL TAXES

The state and local government tax liabilities of Colorado resident taxpayers for fiscal year 1972, used as the basis of the Colorado Tax Profile Study, were derived from an independent sample of state individual income tax returns and from state and local revenues reported on a collection basis by the Colorado Department of Revenue (Annual Report, 1971-1972), the Colorado Division of Property Taxation (Annual Report, 1972) and the Colorado Division of Local Government (Local Government Financial Compendium, 1971). The officially reported data were adjusted for the inclusion of sundry non-tax revenues, non-allocable taxes, and state and local taxes paid by non-resident taxpayers, as well as for the exclusion of vendor discounts paid on sales, cigarette and motor fuel tax collections. The income tax data also were adjusted for the variance between tax collections and liabilities.

Classification and Adjustment of State Taxes

A summary of the adjustments made in state taxes for fiscal year 1972 and the allocation of state taxes between those levied on households (direct taxes) and those levied on business (indirect taxes) is shown in Table 1, this appendix. The base figure of \$584.8 million reported as state net tax collections is exclusive of state hunting and fishing license fees and pari-mutuel taxes which represent the two major levies not collected by the Department of Revenue.¹ The other non-tax revenues and non-allocable taxes collected and reported by the Department of Revenue but excluded from the Colorado Tax Profile Study were: sales tax assessments, penalties and interest of \$2.3 million; motor vehicle property taxes (refunded to counties) of \$0.2 million; other miscellaneous receipts of \$3.4 million; individual income surtax collections of \$2.6 million; and inheritance and gift tax collections of \$16.3 million. The foregoing excluded items amounted to \$24.3 million, or 4.2 percent of the reported total of state net tax collections.

¹In fiscal year 1972 Colorado hunting and fishing license fees amounted to \$8.0 million and pari-mutuel taxes were \$5.1 million. U.S. Bureau of the Census, State Tax Collections in 1972, Series GF72-No. 1, Washington, D.C., December 1972, p. 15.

TABLE 1. SUMMARY OF COLORADO STATE TAXES,
FISCAL YEAR 1972

	Amount (000)
Reported total net tax collections ^a	\$584,779
Adjustments:	
Non-tax revenues and non-allocable taxes	-24,593
Excess of income tax collections over liabilities	-19,537
Non-resident tax collections	-27,144
Vendors discounts on sales and excise taxes	<u>9,640</u>
Total Adjustments	-61,634
Total state taxes on Colorado residents	\$523,145
Household taxes (direct taxes):	
Individual income	153,612
Sales and use	104,325
Highway user ^b	68,660
Cigarette	13,573
Alcoholic beverages	<u>11,747</u>
Total Direct Taxes	\$351,917
Business taxes (indirect taxes):	
Corporation income ^c	33,309
Sales and use	72,619
Highway user ^d	40,472
Other business taxes ^e	<u>24,828</u>
Total Indirect Taxes	\$171,228

^aColorado Department of Revenue, Annual Report, 1971-1972, p. 22.

^bIncludes allocated portion of fuel taxes, motor vehicle licenses and operator's fees, and safety inspections and other motor vehicle fees.

^cIncludes income tax on fiduciaries.

^dIn addition to allocated portion of highway user taxes listed above, includes special fuel and gross ton mile taxes.

^eIncludes insurance, franchise, severance, and all other regulatory and miscellaneous business taxes.

In an expanding economy, income tax collections for any given fiscal year will exceed the actual income tax liability incurred on the previous year's income because of the withholding taxes and declaration of estimated taxes which are collected on current year income. On the basis of the Department of Revenue data, the net collections (individual, corporation and fiduciary) for fiscal year 1972 amounted to \$210 million and the liabilities were only \$186.4 million, resulting in an excess of collections over liabilities of \$23.6 million. During this period, the individual income tax liabilities, inclusive of surtax of \$2.6 million and non-resident taxes of \$1.0 million, amounted to \$153.1 million. On a comparable basis, the CTPS independent estimate of individual income tax liabilities was \$157.2 million, or \$4.1 million larger than the Department of Revenue estimate. Thus, the net adjustment for the excess of income tax collections over liabilities used in the CTPS analysis is \$19.5 million, or \$4.1 million less than that based on the Department of Revenue's liability figure.

The overall adjustment for state taxes paid by non-residents in fiscal year 1972 amounted to \$27.1 million, or 4.8 percent of the reported total for state net tax collections. The broad categories of taxes paid by non-residents were as follows:

<u>Non-Resident Taxes</u>	<u>Amounts (000)</u>
Individual income tax	\$ 989
Retail sales tax	15,000
Motor fuel taxes	7,765
Cigarette taxes	1,758
Alcoholic beverage taxes	<u>1,632</u>
Total	\$27,144

The non-resident individual income tax was derived from the CTPS income tax analysis. The non-resident sales tax estimate was based on tourist and recreational spending information provided by the Travel Marketing Section of the Colorado Division of Commerce and Development and the Colorado Visitors Bureau. The ratio of non-resident sales tax collections to total net sales tax collections directly allocated to households was used as the basis for estimating excise taxes on motor fuel, cigarettes and alcoholic beverages purchased by non-residents in Colorado.

The final adjustment made for purposes of resident tax burden analysis was the inclusion of vendor discounts on sales, motor fuel and cigarette taxes retained by merchants as compensation for their costs of tax collection. Although not included in either the gross or net taxes reported by the Department of Revenue in its Annual Report, these discounts constitute part of the overall Colorado state tax burden. In fiscal year 1972, they amounted to \$9.6 million, or almost two percent of the total state taxes levied that year. The discounts in effect were: 3 1/3 percent on gross sales tax collections (\$6.4 million); about 2 1/2 percent on gross motor fuel tax collections (\$2.3 million); and 6 percent on gross cigarette tax collections (\$0.9 million).

On the basis of all of the above adjustments which amounted to \$61.6 million, the total tax liabilities of Colorado resident taxpayers in fiscal year 1972 amounted to \$523.1 million, or 90 percent of the reported net state tax collections. Table 2 shows the reconciliation of the Department of Revenue and the CTPS dollar amounts for each of the major state taxes.

It will be noted (Table 1) that \$321.9 million, or more than two-thirds of the estimated CTPS state taxes were classified as household or direct taxes and \$171.2 million were classified as business or indirect taxes. The latter, of course, are ultimately borne by individuals since such taxes either represent business costs that are reflected in market prices or decreases in after-tax profits, dividends or undistributed corporate earnings. For the purposes of this study, the individual income tax and the excises on cigarettes and alcoholic beverages (after adjustment for non-resident taxes) were treated as direct levies on Colorado resident households. The corporation income tax and insurance, gas and oil, severance and all other franchise and regulatory business taxes were classified as indirect or business taxes. The remaining major state taxes -- the sales and use tax and the highway user taxes -- were apportioned between these two broad categories of tax revenues on the basis of information provided by the Research and Statistics Section of the Colorado Department of Revenue and Colorado business firms. The specific ratios used and the apportionment of state sales and use tax and highway user taxes between households and business firms for fiscal year 1972 are shown in Table 3.

It should be further noted that on the basis of the ratio method the total resident sales and use tax allocated to households amounted to \$104.3 million. An independent check on this estimate was provided by the CTPS individual income tax analysis data which showed the combined state and local sales tax deductions taken against the 1972 income tax and by

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TABLE 2. RECONCILIATION OF OFFICIALLY REPORTED COLORADO
STATE AND LOCAL TAXES WITH COLORADO TAX PROFILE STUDY TAXES,
FISCAL YEAR 1972

	Amount (000)
<u>State Income Tax</u>	
Department of Revenue reported net tax collections ^a	\$210,041
Less: Excess of DOR collections over liabilities	-23,609
DOR reported net tax liabilities	186,432
Less: Corporation and fiduciary tax liabilities	-33,309
DOR reported individual income tax liabilities	153,123
Less: Surtax collections	-2,594
DOR reported individual income normal tax	150,529
Less: CTPS non-resident income taxes	-989
Plus: CTPS computed tax liability difference	4,072
CTPS individual income tax liabilities	153,612
Plus: Corporation and fiduciary tax liabilities	33,309
CTPS Total Income Tax	<u>\$186,921</u>
<u>State Sales and Use Tax</u>	
Department of Revenue reported net sales and use tax collections ^a	\$187,812
Less: DOR reported net use tax	-15,815
Penalties and interest on sales tax collections	-2,291
Net sales tax collections	169,706
Equal: DOR reported net sales tax by source	184,141
Less: Reported food tax credit	-14,435
Less: CTPS estimated non-resident tax	-15,000
Equal: Resident sales tax	154,706
Plus: Net use tax	15,815
Resident net sales and use tax	170,521
Plus: Computed vendors discounts	6,423
CTPS Total State Sales and Use Tax	<u>\$176,944</u>
<u>Local Sales and Use Tax</u>	
Division of Local Government reported taxes ^b	
City of Denver sales tax	\$ 38,460
Other municipal sales taxes	33,105
County sales taxes	483
Total reported local sales taxes	72,048
Less: CTPS estimated non-resident tax	-5,687
Plus: Computed vendor discounts	1,943
CTPS Total Local Sales and Use Tax	<u>\$ 68,304</u>

TABLE 2. (continued)

	Amount (000)
<u>State Highway User Taxes</u>	
Department of Revenue reported net collections ^a	
Motor and special fuel taxes	\$ 85,505
Motor vehicle licenses and operators fees	15,060
Ton mile tax and other motor vehicle fees	14,038
Total reported highway user taxes	<u>114,603</u>
Less: CTPS estimated non-resident motor fuel tax	-7,765
Plus: Computed vendors discount	<u>2,294</u>
CTPS Total Highway User Tax	<u>\$109,132</u>
<u>State Cigarette Taxes</u>	
Department of Revenue reported net collections ^b	\$ 14,408
Less: CTPS estimated non-resident tax	-1,758
Plus: Computed vendors discount	<u>923</u>
CTPS Total State Cigarette Tax	<u>\$ 13,573</u>
<u>Local Cigarette Taxes</u>	
Division of Local Government reported taxes ^b	
City of Denver cigarette taxes	\$ 1,254
Other municipal cigarette taxes	1,739
Total reported local cigarette taxes	<u>2,993</u>
Less: CTPS estimated non-resident tax	-365
Plus: Computed vendor discounts	<u>252</u>
CTPS Total Local Cigarette Tax	<u>\$ 2,880</u>
<u>State Alcoholic Beverage Taxes</u>	
Department of Revenue reported net collections ^a	\$ 13,379
Less: CTPS estimated non-resident tax	<u>-1,632</u>
CTPS Total Alcoholic Beverage Tax	<u>\$ 11,747</u>

^aColorado Department of Revenue, Annual Report, 1971-1972.

^bColorado Division of Local Government, Local Government Financial Compendium, 1971.

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TABLE 3. APPORTIONMENT OF COLORADO STATE SALES AND
HIGHWAY USER TAXES BETWEEN HOUSEHOLDS AND BUSINESS,
FISCAL YEAR 1972

	Ratio of Households to Business	Dollar Amounts (000)		
		Total	Households	Business
A. Sales and Use Taxes:				
Food, eating & drinking places, apparel, furn., appliances	100/0	\$ 57,216	\$ 57,216	\$ --
General merchandise, autos, auto parts & accessories	90/10	43,890	39,501	4,389
Miscellaneous retail trade	75/25	16,774	12,581	4,193
Personal and custodial services	67/33	7,433	4,958	2,475
Communication, elec., gas, transportation, utilities	46/54	12,005	5,490	6,515
Building materials, hardware & farm equipment	25/75	13,144	3,286	9,858
Agr., mining, constr., mfg., whsle trade, bus. serv., NCE	0/100	33,679	--	33,679
Net Sales Tax	67/33	\$184,141	\$123,032	\$61,109
Less:				
Food tax credit	100/0	-14,435	-14,435	--
Non-resident sales tax	100/0	-15,000	-15,000	--
Plus:				
Net use tax	41/59	15,815	6,437	9,378
Vendor discounts	67/33	6,423	4,291	2,132
Total Resident Sales and Use Tax	<u>59/41</u>	<u>\$176,944</u>	<u>\$104,325</u>	<u>\$72,619</u>
B. Highway User Taxes:				
Motor fuel taxes	80/20	\$ 79,555	\$ 63,644	\$15,911
Motor veh. & operators licenses & other fees	70/30	15,811	11,068	4,743
Special fuel & ton-mile taxes	0/100	19,237	--	19,237
Total reported hwy. user taxes	65/35	\$114,603	\$ 74,712	\$39,891
Less:				
Non-resident motor fuel taxes	100/0	-7,765	-7,765	--
Plus:				
Vendor discounts on motor fuel	80/20	2,141	1,713	428
Vendor discounts on spec. fuel	0/100	153	--	153
Total Resident Highway User Taxes	<u>63/37</u>	<u>\$109,132</u>	<u>\$ 68,660</u>	<u>\$40,472</u>

the local sales tax collections reported by the Colorado Division of Local Government. On the basis of these data the total resident sales and use tax for fiscal year 1972 amounted to \$103.8 million, derived as follows:

	Amount (in millions)
Combined state and local resident sales tax deductions based on CTPS income tax analysis	\$160.4
Less: Local sales tax allocated to households (total local tax of \$72.0 million x household allocation factor of .586)	<u>-42.2</u>
State share of combined state/local sales tax	118.2
Less: State food tax credit	<u>-14.4</u>
Total Resident State Sales and Use Tax	\$103.8

Classification and Adjustment of Local Taxes

For the purposes of the Colorado Tax Profile Study, the tax collections of local governments were treated in a manner similar to that described above for adjusting and allocating state taxes. Colorado local governments generally operate on a calendar year basis and the most recent data available on a uniform statewide basis were for calendar year 1971 which overlaps fiscal year 1972 by six months. In consideration of the relative importance of the property tax component in the total local tax picture and the fact that such taxes were paid in 1972, the reported data were used as the base for local taxes for fiscal year 1972. A summary of the adjustments made to these levies and their apportionment between households and business are shown in Table 4.

The total reported local taxes for fiscal year 1972 amounted to \$587.2 million, of which \$492.0 million or almost 84 percent of the total was local property tax, and only \$95.2 million represented all other local levies (sales, cigarette, utility, franchise and other regulatory business taxes). The adjustments made for non-allocable taxes, non-resident tax collections and vendor discounts amounted to \$13.1 million. Thus, on an adjusted basis the total local tax on Colorado residents amounted to \$574.1 million or almost 10 percent more than the total state tax burden. The reconciliation of the reported local tax collections with the adjusted amounts used for the CTPS analysis is shown in Table 2.

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TABLE 4. SUMMARY OF COLORADO LOCAL TAXES,
FISCAL YEAR 1972

	Amount (000)
Property tax collections ^a	\$492,008
Non-property tax collections ^b	<u>95,183</u>
Reported total local taxes	587,191
Adjustments:	
Non-allocable taxes ^c	-9,195
Non-resident sales and excise tax collections	-6,052
Vendor discounts on sales and excise taxes	<u>2,195</u>
Total adjustments	-13,052
Total local taxes on Colorado residents	\$574,139
Household taxes (direct taxes):	
Residential property	254,235
Sales and use	42,185
Cigarette	<u>2,880</u>
Total direct taxes	\$299,300
Business taxes (indirect taxes):	
Non-residential property	237,773
Sales and use	26,119
Other business taxes ^d	<u>10,947</u>
Total indirect taxes	\$274,839

^aColorado Division of Property Taxation, 2nd Annual Report, 1972, p. 10.

^bColorado Division of Local Government, Local Government Financial Compendium, 1971.

^cCity of Denver occupation tax collections for 1971.

^dIncludes local utility and franchise taxes.

The specific adjustments made in local taxes for the CTPS study were as follows: the exclusion of \$9.2 million of Denver city occupation taxes since these levies could not be allocated among taxpayers by either income classes or household size; the exclusion of \$6.1 million of non-resident sales and cigarette taxes based on the estimated method used for computing non-resident state taxes; and the addition of \$2.2 million of vendor discounts on local sales and cigarette taxes not reported in the Financial Compendium of the Colorado Division of Local Government. The specific discounts used for local taxes were: 2 percent on Denver sales tax collections; an average of 3 1/3 percent on the total of all other municipal and county gross sales tax collections; 6 percent on Denver gross cigarette tax collections; and an average of 9 percent on the total of all other municipal cigarette tax collections.

The adjusted local tax total of \$574.1 million also was allocated between households and business firms -- \$299.0 million as direct taxes and \$274.1 million as indirect taxes. Cigarette taxes were classified as direct levies; all utility, franchise and regulatory taxes as indirect. However, the two major sources of local tax revenues -- property and sales taxes -- had to be separately apportioned between households and business. The local sales tax was apportioned on the basis of the ratios described above for allocating the state sales and use taxes.

The property tax allocation was based on an imputation method which assumed that property taxes on renter-occupied housing units are shifted forward and that such average taxes approximate, but are smaller than, those on owner-occupied units of families of comparable income and household size. The CTPS individual income tax analysis provided average household real estate tax deductions on itemized returns classified by adjusted gross income and by size of household. As expected, the ratio of taxpayers reporting such deductions to the total number of taxpayers in each income stratum varied directly and significantly with the level of income -- from five percent for those with an adjusted gross income of less than \$5,000 to 87 percent for those with incomes of \$25,000 or more. For the four highest income strata (adjusted gross incomes of \$5,000 or more), the average real estate tax deductions reported on the itemized returns, adjusted for a consumer preference factor, were then imputed as the residential property tax burden for taxpayers of comparable income and household size who filed non-itemized income tax returns. However, for households in the lowest income stratum, the above method of estimating residential property taxes could not be used because of the relatively small number and low sampling reliability of itemized returns with real estate tax deductions.

Instead, residential property taxes for this income category were estimated on the basis of a computed ratio of real estate taxes to non-taxable housing expenditures (i.e., not subject to sales tax) derived from the U.S. Bureau of Labor Statistics, Survey of Consumer Expenditures, 1961, adjusted to a 1971 basis for this study. Table 5 shows the derivation by income class of the residential portion of the total property tax. Based on the above methodology, it was estimated that Colorado residential property taxes for fiscal year 1972 amounted to \$254.2 million, or 51.7 percent of the total property tax reported for that year.

An independent check on this estimate was made by computing the residential tax on the basis of detailed county property tax data reported in the 2nd Annual Report of the Colorado Division of Property Taxation. A residential-to-total property tax assessment ratio was calculated for each county and applied to the reported tax revenues of the respective counties. However, the Property Tax Division's classification of residential property is limited to housing structures with three or less units. In order to include all multi-unit housing the county tax data were adjusted on the basis of the 1970 Census enumeration of housing which provides a count of all residential structures in each county, classified by number of units.² Computed by the above methodology, the Colorado total residential property tax for fiscal 1972 amounted to \$259.6 million, or only two percent more than the CTPS estimate of \$254.2 million based on the individual income tax data developed for this study. More strikingly, the residential property tax estimate derived from the Division of Property Taxation county data works out to be 52.8 percent of the reported total property tax, whereas the CTPS estimate amounted to 51.7 percent.

Allocation of Taxes for Burden Analysis

The allocations of individual state and local taxes by income class, size of household, regions and counties were made on the following basis:

- Individual income tax -- allocation obtained directly from the CTPS independent computer analysis of a stratified, random sample of 1971 Colorado individual income tax returns filed in 1972. A description of the sample and its statistical reliability is presented in Appendix C.

²U.S. Bureau of the Census, 1970 Census of Housing, Detailed Housing Characteristics for Colorado, U.S. Government Printing Office, Washington, D.C., 1972.

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TABLE 5. DERIVATION OF COLORADO RESIDENTIAL PROPERTY TAXES,
FISCAL YEAR 1972

	Adjusted Gross Income Classes					Total
	Under \$5,000	\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
Total number of taxpayer returns	315,498	222,596	162,480	99,741	28,952	829,267
Percent of total with real estate tax deductions on itemized returns	5.2	34.5	63.8	80.2	87.0	34.6
Average property tax on itemized returns with real estate tax deductions ^a	--	\$ 354	\$ 423	\$ 539	\$ 880	\$ 477
Average property tax imputed to non- itemized returns ^b	\$ 136	\$ 293	\$ 345	\$ 470	\$ 738	\$ 217
Total property taxes (thousands of dollars): ^c						
On itemized returns	\$ --	\$27,182	\$43,779	\$43,075	\$22,169	\$136,205
On non-itemized returns	42,895	42,750	20,310	9,296	2,779	118,030
Total Residential Tax	\$42,895	\$69,932	\$64,089	\$52,371	\$24,948	\$254,235

^aAll returns in the first income stratum were treated as non-itemized returns because of the relatively small number and low sampling reliability of the itemized returns with property tax deductions.

^bThe imputed average tax for the first income stratum was based on housing expenditure ratios derived from U.S. Bureau of Labor Statistics, Survey of Consumer Expenditures, 1961, adjusted to 1971 for CTPS analysis.

^cProduct of the number of returns and average taxes may not equal respective totals because of rounding average taxes to even dollars.

● Sales and use taxes -- the direct portions of state and local sales and use taxes were allocated on the basis of ratios of taxable consumer expenditures to adjusted gross income developed from U.S. Bureau of Labor Statistics, Survey of Consumer Expenditures, adjusted to a 1971 basis for purposes of the CTPS analysis. The indirect portions of these taxes were allocated by use of total consumer expenditure ratios since such taxes represent business costs assumed to have been shifted to the consumer through market prices.

● Excise taxes -- the cigarette, alcoholic beverage and the direct portions of highway user taxes also were allocated on the basis of Survey of Consumer Expenditure data. Ratios of consumer expenditures for these particular items to adjusted gross income were developed and applied to the CTPS tax data. The indirect portion of the highway user taxes was allocated on the basis of total consumer expenditure ratios.

● Property taxes -- the allocations of residential property taxes by income classes, size of household, regions and counties were based on the CTPS independent individual income tax analysis which provided detailed data on the number and amount of real estate tax deductions reported on itemized returns. Non-residential property taxes were allocated on the same basis as other business taxes, i.e., the ratios of total consumer expenditures to adjusted gross income.

● Corporation income tax -- one-half of this tax was assumed to be shifted forward to consumers and allocated on the same basis as the other indirect taxes described above. The remainder was assumed to be borne by equity stockholders and allocated on the basis of the distribution of corporate dividends by adjusted gross income classes as reported by the Internal Revenue Service in the Statistics of Income, Individual Income Tax Returns, 1970.

● Other business taxes -- this category includes insurance, severance, oil and gas, utility, franchise and all other regulatory and miscellaneous business taxes. These levies, as in the case of all other business costs, were assumed to be indirectly borne by households and accordingly were allocated on the basis of the ratios of total consumption expenditures to income.

It should be noted that the analyses of tax burdens by size of household, region and counties were limited to direct taxes -- individual income, sales, excise and residential property taxes. The allocations by size of households were based on ratios of consumer taxable expenditures to income derived from the Survey of Consumer Expenditure data developed for this study. The regional and county allocations were made on the basis of the CTPS independent income tax analysis data.

Income Measures for Tax Burden Analysis

It is generally recognized that the adjusted gross income reported on tax returns is not an adequate measure of income for tax burden analysis because of important differences between economic and legal or statutory definitions of income. The latter excludes various forms of money income which are considered to be primarily transfer payments, such as public and private welfare payments, social security payments, unemployment compensation, and portions of private pensions and retirement income. In contrast, the economic concept of income (e.g., the personal income measure in the national income accounts), in addition to transfer payments, includes sundry forms of imputed income, such as imputed rental income on owner-occupied residences, imputed interest on insurance and savings, and employer contributions to pension funds. The magnitude of the difference between these income concepts on a national basis, for example, is shown by the fact that the total adjusted gross income reported on federal income tax returns represents only about 80 percent of the total personal income computed on a national income accounts basis.³

Intermediate measures of income also have been developed in the form of money income, either before or after tax, as reported by respondents to sample surveys conducted by the Bureau of the Census and other governmental agencies. Such money income measures basically are in accord with the popular concept of income since they generally exclude imputed income but include the major types of non-taxable money transfers.

In order to obtain an alternative measure which would more closely correspond to the conventional concept of income and provide a broader base than the adjusted gross income reported on Colorado income tax returns, an adjusted broad income measure was developed for the purposes of this study. This income measure was based on a recent study by Projector and Bretz⁴ which contains detailed household money transfer income classified by Census money income levels. Ratios of transfer income to adjusted gross income were derived from these data

³J. A. Pechman, Federal Tax Policy, W. W. Norton and Company, New York, 1971, pp. 272-274.

⁴D. S. Projector and J. S. Bretz, "Measurement of Transfer Income in the Current Population Survey," (an unpublished paper prepared for the Conference on Research in Income and Wealth of the National Bureau of Economic Research, 1972).

by first converting the Census money income into corresponding adjusted gross income classes, and then computing a money transfer income ratio on this basis. In turn, by relating these ratios to the absolute levels of adjusted gross income, it was possible to derive ratios which conformed to the appropriate levels of CTPS adjusted gross income.

In addition to the above money transfer income adjustment, the CTPS adjusted broad income measure includes an estimate of the capital gains income statutorily excluded from reported adjusted gross income. An estimate of such income was obtained by computing the ratios of excluded capital gains to adjusted gross income by income classes as reported in the Internal Revenue Service, Statistics of Income, 1970.⁵ These ratios were then applied to the CTPS averages of adjusted gross income reported on Colorado individual income tax returns for fiscal year 1972. In addition to providing a broad income measure for the analysis of tax burdens by income strata, the CTPS expansion ratios were used to obtain adjusted broad income for estimating relative tax burdens by size of households, regions and major counties. Table 6 is a summary of the final adjustments made to the CTPS adjusted gross income in order to derive the corresponding adjusted broad income used as the alternative base for the tax burden analyses.

The Consumer Expenditure Profile

In order to allocate to Colorado resident taxpayers state and local expenditure taxes such as those on retail sales, cigarettes, liquor and gasoline as well as business taxes shifted forward to consumers, it was necessary to develop an appropriate consumer expenditure pattern for Colorado households, classified by income level and family size. A review of the economic literature published during the past two decades on consumer behavior and finances reveals that the most recent and comprehensive empirical study of actual spending patterns of households was the Survey of Consumer Expenditures conducted in the early 1960's by the U.S. Bureau of Labor Statistics.⁶ The detailed household expenditure and income data for the western states contained in this study were used for the CTPS tax burden analysis after the income measures were made comparable and the expenditure outlays were adjusted for price level changes of the past decade.

⁵Internal Revenue Service, Statistics of Income--1970, Individual Income Tax Returns, Washington, D.C., 1972.

⁶U.S. Bureau of Labor Statistics, Survey of Consumer Expenditures: 1960-61 (Detail of Expenditures and Income in the Western Region), Washington, D.C., 1964.

APPENDIX A

TABLE 6. DERIVATION OF ADJUSTED BROAD INCOME FROM
ADJUSTED GROSS INCOME DEVELOPED FOR THE
COLORADO TAX PROFILE STUDY,
FISCAL YEAR 1972

Adjusted Gross Income Classes	(A)	(B)	(C)	(D)	(E)
	Average CTPS Adjusted Gross Income	Ratio of: Excluded Capital Gains to AGI	Transfer Income to AGI	Income Expansion Factor (1+B+C)	Average Adjusted Broad Income (A x D)
Under \$5,000	\$ 2,338	.0160	.6400	1.6560	\$ 3,872
\$5,000 to \$10,000	7,539	.0080	.0940	1.1020	8,308
\$10,000 to \$15,000	12,296	.0075	.0490	1.0565	12,990
\$15,000 to \$25,000	18,546	.0155	.0360	1.0515	19,501
\$25,000 and over	43,155	.1086	.0240	1.1326	48,877

The price adjustments were made by applying individual inflation factors derived from the BLS Consumer Price Index to each corresponding category of consumption expenditures. An alternative method would have been to uniformly apply an overall price level inflation factor based on the CPI "all items" index to all of the specific categories of expenditures. However, the method used for the CTPS analysis accounts for relative price changes as well as for the overall general inflation and implicitly assumes that consumer preferences remained unchanged other than for random shifts. In contrast, the alternative method does not account for relative price changes and therefore implicitly assumes that consumers have altered the product-mix of their expenditure patterns. Also, the BLS-SCE income classes were based on average "money income after tax" and therefore these data were first converted to an adjusted gross income basis and then income classes were developed which correspond to those used in the CTPS study.

On the basis of the definitions of taxable commodities under Colorado's present sales and excise tax laws, the BLS-SCE detailed consumer expenditures, adjusted for inflation, were classified into taxable and non-taxable categories. These data were used to derive ratios of total consumer expenditures and taxable consumer expenditures to adjusted gross income. In turn, the ratios were applied to the 1971 average adjusted gross income of Colorado taxpayers, classified by income level and size of family, in order to obtain the current pattern of consumer expenditures of Colorado households. The specific consumer expenditure-income ratios, classified by income and household size, developed for the CTPS analysis are shown in Table 7.

APPENDIX A

TABLE 7. RATIOS OF CONSUMER EXPENDITURES TO ADJUSTED GROSS INCOME USED IN THE COLORADO TAX PROFILE STUDY, FISCAL YEAR 1972

Size of Household	Consumption Expenditures	Under \$5,000	Adjusted Gross Income Classes				All Households
			\$5,000 to \$10,000	\$10,000 to \$15,000	\$15,000 to \$25,000	\$25,000 and Over	
One Person	Total ^a	1.379	.712	.601	.666	c	.924
	Taxable ^b	.776	.436	.376	.352	c	.544
Two Person	Total	2.021	.927	.775	.693	.745	.942
	Taxable	1.138	.539	.457	.409	.389	.543
Three Person	Total	1.668	.989	.813	.738	.527	.884
	Taxable	.929	.578	.489	.427	.305	.508
Four Person	Total	1.678	1.024	.851	.716	.521	.848
	Taxable	.973	.604	.523	.419	.291	.496
Five and Over	Total	2.180	1.010	.871	.800	.457	.874
	Taxable	1.314	.613	.548	.410	.259	.532
All Households	Total	1.737	.974	.824	.743	.541	.892
	Taxable	.980	.578	.506	.437	.301	.524

^aTotal consumption expenditures based on BLS-SCE survey, adjusted to a 1971 basis.

^bTaxable consumption expenditures were limited to BLS-SCE expenditures subject to 1970 Colorado retail sales tax.

^cNot available because of relatively small number and low sampling reliability.

APPENDIX B

DETAILED ANALYSIS OF COLORADO
INDIVIDUAL INCOME TAX RETURNS

The following set of tables shows the distribution of the 1971 individual income tax returns filed in fiscal year 1972 on both a nine income and five income basis. The specific tables are listed below:

TABLE

- 1 Returns Classified by Tax Status
- 2 Returns Classified by Type of Return
- 3 Returns Classified by Filing Status
- 4 Returns Classified by Residency
- 5 Returns Classified by Tax Class
- 6 Returns Classified by Type of Exemption
- 7 Returns Classified by Itemized Deductions
- 8 Returns Classified by Source of Income
- 9 Returns Classified by Size of Household
- 10 Returns Classified by Major Region
- 11 Returns Classified by Major Counties
- 12 Returns Classified by Major Cities

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TABLE 1. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY TAX STATUS,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Total		Total Non-Taxable		Total Taxable		Net Taxable Income	Normal Tax	Federal Income Tax ^a
	Number of Returns	Adjusted Gross Income	Number of Returns	Adjusted Gross Income	Number of Returns	Adjusted Gross Income			
A. Dollar Amounts (in Thousands) and Number of Returns:									
under \$3,000	211,961	309,135	142,641	159,032	69,320	150,103	53,809	1,412	8,705
\$3,000 to \$5,000	103,536	408,014	19,819	75,162	83,717	332,852	161,409	4,426	25,423
\$5,000 to \$8,000	132,723	865,628	8,963	52,044	123,760	813,584	383,653	11,737	76,564
\$8,000 to \$10,000	90,247	814,043	1,199	10,236	89,048	803,807	373,478	12,233	78,149
\$10,000 to \$15,000	162,480	1,997,527	896	10,934	161,584	1,986,593	998,688	36,102	214,108
\$15,000 to \$25,000	99,878	1,852,742	137	2,414	99,741	1,850,328	1,036,067	44,851	249,478
\$25,000 to \$50,000	23,401	753,060	61	1,988	23,340	751,072	447,741	25,686	135,301
\$50,000 to \$100,000	4,032	264,243	0	0	4,032	264,243	150,922	10,285	72,737
\$100,000 and over	1,528	236,278	13	3,330	1,515	232,948	110,976	7,864	90,042
Total	829,786	7,500,670	173,729	315,140	656,057	7,185,530	3,716,743	154,601	950,507
B. Percentage Distribution:									
under \$3,000	25.5	4.1	82.1	50.5	10.6	2.1	1.4	0.9	0.9
\$3,000 to \$5,000	12.5	5.4	11.4	23.8	12.8	4.6	4.3	2.9	2.7
\$5,000 to \$8,000	16.0	11.6	5.2	16.5	18.9	11.3	10.3	7.6	8.1
\$8,000 to \$10,000	10.9	10.9	0.7	3.2	13.6	11.2	10.1	7.9	8.2
\$10,000 to \$15,000	19.6	26.6	0.5	3.5	24.6	27.6	26.9	23.3	22.5
\$15,000 to \$25,000	12.0	24.7	0.1	0.8	15.2	25.8	27.9	29.0	26.2
\$25,000 to \$50,000	2.8	10.0	0.0	0.6	3.5	10.5	12.0	16.6	14.2
\$50,000 to \$100,000	0.5	3.5	0.0	0.0	0.6	3.7	4.1	6.7	7.7
\$100,000 and over	0.2	3.2	0.0	1.1	0.2	3.2	3.0	5.1	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aBased on all returns.

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TABLE 2. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY TYPE OF RETURN,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Table Returns ^a			Standard Returns			Itemized Returns		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:									
under \$3,000	184,193	275,416	1,184	5,942	6,913	60	21,826	26,806	168
\$3,000 to \$5,000	75,500	296,229	3,550	4,508	17,298	274	23,528	94,487	602
\$5,000 to \$8,000	73,051	473,751	7,580	2,920	16,995	308	56,752	374,882	3,849
\$8,000 to \$10,000	33,833	303,171	5,727	300	2,745	60	56,114	508,127	6,451
\$10,000 to \$15,000	12,534	151,770	3,052	25,969	307,008	7,486	123,977	1,538,749	25,564
\$15,000 to \$25,000	1,623	27,183	657	8,879	162,929	5,238	89,376	1,662,630	38,956
\$25,000 to \$50,000	0	0	0	1,023	32,564	1,407	22,378	720,496	24,279
\$50,000 to \$100,000	0	0	0	164	10,053	460	3,868	254,190	9,825
\$100,000 and over	0	0	0	46	5,938	245	1,482	230,340	7,619
Total	380,734	1,527,520	21,750	49,751	562,443	15,538	399,301	5,410,707	117,313
B. Percentage Distribution:									
under \$3,000	48.4	18.0	5.5	11.9	1.2	0.4	5.5	0.5	0.1
\$3,000 to \$5,000	19.8	19.4	16.3	9.1	3.1	1.8	5.9	1.8	0.5
\$5,000 to \$8,000	19.2	31.0	34.9	5.9	3.0	2.0	14.2	6.9	3.3
\$8,000 to \$10,000	8.9	19.9	26.3	0.6	0.5	0.4	14.0	9.4	5.5
\$10,000 to \$15,000	3.3	9.9	14.0	52.2	54.6	48.2	31.0	28.4	21.8
\$15,000 to \$25,000	0.4	1.8	3.0	17.8	29.0	33.7	22.4	30.7	33.2
\$25,000 to \$50,000	0.0	0.0	0.0	2.1	5.8	9.0	5.6	13.3	20.7
\$50,000 to \$100,000	0.0	0.0	0.0	0.3	1.8	2.9	1.0	4.7	8.4
\$100,000 and over	0.0	0.0	0.0	0.1	1.0	1.6	0.4	4.3	6.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aReturns reported for income classes of \$10,000 and over due to merging of married-separate returns of individual households.

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TABLE 3. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY FILING STATUS,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Single Returns			Joint Returns			Married-Separate Returns		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:									
under \$3,000	156,465	225,350	1,289	54,466	81,548	95	1,030	2,237	28
\$3,000 to \$5,000	60,344	235,604	3,475	37,864	151,141	722	5,328	21,259	229
\$5,000 to \$8,000	55,793	360,376	6,738	64,531	421,744	4,006	12,399	33,508	993
\$8,000 to \$10,000	21,138	189,220	4,172	51,271	461,508	5,890	17,838	163,315	2,176
\$10,000 to \$15,000	17,415	203,176	5,121	87,894	1,072,787	18,726	57,171	721,564	12,255
\$15,000 to \$25,000	5,202	94,909	2,997	46,451	857,174	21,900	48,225	900,659	19,954
\$25,000 to \$50,000	1,560	50,464	1,830	11,911	388,915	14,135	9,930	313,681	9,721
\$50,000 to \$100,000	393	26,311	979	1,952	124,395	5,010	1,687	113,537	4,296
\$100,000 and over	67	13,468	380	266	45,626	1,486	1,195	177,184	5,993
Total	318,377	1,398,878	26,981	356,606	3,604,838	71,970	154,803	2,496,954	55,650
B. Percentage Distribution:									
under \$3,000	49.2	16.1	4.8	15.3	2.3	0.1	0.7	0.1	0.1
\$3,000 to \$5,000	19.0	16.8	12.9	10.6	4.2	1.0	3.4	0.9	0.4
\$5,000 to \$8,000	17.5	25.8	25.0	18.1	11.7	5.6	8.0	3.3	1.3
\$8,000 to \$10,000	6.6	13.5	15.4	14.4	12.8	8.2	11.5	6.5	3.9
\$10,000 to \$15,000	5.5	14.5	19.0	24.6	29.3	26.0	36.9	28.9	22.0
\$15,000 to \$25,000	1.6	6.8	11.1	13.0	23.8	30.4	31.2	36.1	35.3
\$25,000 to \$50,000	0.5	3.6	6.8	3.3	10.8	19.6	6.4	12.6	17.5
\$50,000 to \$100,000	0.1	1.9	3.6	0.6	3.4	7.0	1.1	4.5	7.7
\$100,000 and over	0.0	1.0	1.4	0.1	1.2	2.1	0.8	7.1	12.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY RESIDENCY,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Full Year Resident Returns			Part-Year Resident Returns			Non-Resident Returns		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
under \$3,000	177,301	269,913	1,196	17,825	24,554	71	16,835	14,668	145
\$3,000 to \$5,000	87,821	346,249	3,762	13,053	51,227	484	2,662	10,538	180
\$5,000 to \$8,000	119,579	781,126	10,656	11,800	72,669	826	1,344	8,833	255
\$8,000 to \$10,000	86,388	779,374	11,879	3,859	34,669	359	0	4,043	101
\$10,000 to \$15,000	157,244	1,933,730	35,217	4,887	59,754	784	349	3,787	93
\$15,000 to \$25,000	96,668	1,793,959	43,943	3,027	54,996	815	183	0	0
\$25,000 to \$50,000	22,819	1,733,663	25,278	582	19,397	408	36	2,029	81
\$50,000 to \$100,000	3,913	256,433	10,020	83	5,781	184	13	3,854	134
\$100,000 and over	1,507	231,146	7,707	8	1,278	23	21,422	47,752	989
Total	753,240	7,125,593	149,658	55,124	327,325	3,954	100.0	100.0	100.0
under \$3,000	23.5	3.8	0.8	32.3	7.5	1.8	78.6	30.7	14.7
\$3,000 to \$5,000	11.7	4.9	2.5	23.7	15.6	12.2	12.4	22.1	18.2
\$5,000 to \$8,000	15.9	11.0	7.1	21.4	23.1	20.9	6.3	18.5	25.8
\$8,000 to \$10,000	11.5	10.9	7.9	7.0	10.6	9.1	0.0	0.0	0.0
\$10,000 to \$15,000	20.9	27.1	23.5	8.9	18.3	19.3	1.6	8.5	10.2
\$15,000 to \$25,000	12.8	25.2	29.4	5.5	16.8	20.6	0.8	7.9	9.4
\$25,000 to \$50,000	3.0	10.3	16.9	1.1	5.9	10.3	0.0	0.0	0.0
\$50,000 to \$100,000	0.5	3.6	6.7	0.1	1.8	4.7	0.2	4.2	8.2
\$100,000 and over	0.2	3.2	5.2	0.0	0.4	0.6	0.1	8.1	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

B. Percentage Distribution:

A. Dollar Amounts (in Thousands) and Number of Returns:

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TABLE 5. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY TAX CLASS,
FISCAL YEAR 1972

Tax Class	Number of Returns	Adjusted Gross Income	Net Taxable Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:				
\$0	175,119 ^a	317,578	1,180 ^a	--
\$1 to \$49	129,675	484,998	127,994	3,007
\$50 to \$149	217,803	1,578,191	708,464	20,914
\$150 to \$299	165,893	1,904,961	1,005,236	35,473
\$300 to \$499	79,963	1,304,280	752,102	30,430
\$500 and over	<u>61,333</u>	<u>1,910,662</u>	<u>1,121,767</u>	<u>64,777</u>
Total	829,786	7,500,670	3,716,743	154,601
B. Percentage Distribution:				
\$0	21.1	4.2	0.0	--
\$1 to \$49	15.6	6.5	3.4	2.0
\$50 to \$149	26.3	21.0	19.1	13.5
\$150 to \$299	20.0	25.4	27.1	22.9
\$300 to \$499	9.6	17.4	20.2	19.7
\$500 and over	<u>7.4</u>	<u>25.5</u>	<u>30.2</u>	<u>41.9</u>
Total	100.0	100.0	100.0	100.0

^aDiffers from total number of non-taxable returns in Table I by those returns which had a positive net taxable income but no normal tax liability.

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TABLE 6. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY TYPE OF EXEMPTION,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Normal Exemptions			Extra Exemptions ^a			Total Exemptions		
	Number of Returns	Total Exemp- tions	Average Exemp- tions	Number of Returns	Total Exemp- tions	Average Exemp- tions	Number of Returns	Total Exemp- tions	Average Exemp- tions
under \$3,000	211,961	332,817	1.57	23,806	35,730	1.50	211,961	368,547	1.74
\$3,000 to \$5,000	103,536	214,138	2.07	11,241	15,086	1.34	103,536	229,224	2.15
\$5,000 to \$8,000	132,499	336,764	2.54	11,588	16,080	1.39	132,499	352,844	2.66
\$8,000 to \$10,000	90,097	278,940	3.10	3,549	4,704	1.33	90,097	283,644	3.15
\$10,000 to \$15,000	162,480	568,598	3.50	6,749	8,231	1.22	162,480	576,829	3.55
\$15,000 to \$25,000	99,741	366,851	3.68	5,367	7,125	1.33	99,741	373,976	3.75
\$25,000 to \$50,000	23,401	85,111	3.64	2,652	3,738	1.41	23,401	88,849	3.80
\$50,000 to \$100,000	4,025	14,105	3.50	693	984	1.42	4,025	15,089	3.75
\$100,000 and over	<u>1,527</u>	<u>5,402</u>	<u>3.54</u>	<u>352</u>	<u>526</u>	<u>1.49</u>	<u>1,527</u>	<u>5,928</u>	<u>3.88</u>
Total	829,267	2,202,726	2.66	65,997	92,204	1.40	829,267	2,294,930	2.77

^aFor aged, blind and retarded children.

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TABLE 7-A. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY ITEMIZED DEDUCTIONS,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Number of Returns	Medical Expense	Contri- butions	Property Tax	Sales Tax	Interest Expense	Other Itemized Deductions	Total Itemized Deductions
under \$3,000	10,932	\$ 3,950	\$ 1,304	\$ 1,259	\$ 580	\$ 2,311	\$ 2,596	\$ 12,000
\$3,000 to \$5,000	21,754	11,677	4,205	4,825	2,391	5,725	7,049	35,872
\$5,000 to \$8,000	55,632	20,183	11,087	12,640	8,350	33,293	15,866	101,419
\$8,000 to \$10,000	56,114	20,887	13,024	14,542	11,711	42,535	19,514	122,213
\$10,000 to \$15,000	123,886	35,834	37,493	43,780	31,357	118,703	52,616	319,783
\$15,000 to \$25,000	89,239	22,680	35,386	43,135	30,194	106,937	39,922	278,254
\$25,000 to \$50,000	22,378	7,361	15,980	16,157	10,147	36,830	16,362	102,837
\$50,000 to \$100,000	3,839	1,215	7,138	3,857	2,436	10,255	4,278	29,179
\$100,000 and over	1,474	643	9,233	2,161	1,233	12,492	5,702	31,464
Total	385,248	124,430	134,850	142,356	98,399	369,081	163,905	1,033,021

A. Dollar Amounts (in Thousands) and Number of Returns:		B. Percentage Distribution:	
under \$3,000	2.8	1.0	0.6
\$3,000 to \$5,000	5.6	3.1	1.5
\$5,000 to \$8,000	14.4	8.2	9.0
\$8,000 to \$10,000	14.6	9.7	11.5
\$10,000 to \$15,000	32.2	27.8	32.2
\$15,000 to \$25,000	23.2	26.2	29.0
\$25,000 to \$50,000	5.8	11.9	10.0
\$50,000 to \$100,000	1.0	5.3	2.8
\$100,000 and over	0.4	6.8	3.4
Total	100.0	100.0	100.0

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TABLE 7-3. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY ITEMIZED DEDUCTIONS,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Total Itemized Deductions	Medical Expense	Contri- butions	Property Tax	Sales Tax	Interest Expense	Other Itemized Deductions
A. Number of Returns:							
under \$3,000	10,932	7,961	5,943	4,001	8,952	3,962	4,950
\$3,000 to \$5,000	21,754	18,796	17,908	12,424	19,683	11,992	18,500
\$5,000 to \$8,000	55,632	45,101	49,358	35,470	54,064	48,761	52,719
\$8,000 to \$10,000	56,114	46,628	52,175	41,268	56,114	52,756	55,215
\$10,000 to \$15,000	123,886	102,597	119,305	103,614	123,612	118,323	122,336
\$15,000 to \$25,000	89,239	73,611	86,215	80,117	89,194	83,566	88,346
\$25,000 to \$50,000	22,378	17,275	21,560	20,315	22,358	19,321	21,638
\$50,000 to \$100,000	3,839	2,597	3,774	3,578	3,832	2,986	3,598
\$100,000 and over	<u>1,474</u>	<u>843</u>	<u>1,417</u>	<u>1,300</u>	<u>1,466</u>	<u>1,138</u>	<u>1,264</u>
Total	385,248	315,409	357,655	302,087	379,275	342,805	368,566
B. Itemized Returns as a Percent of Total Returns:							
under \$3,000	5.2	3.8	2.8	1.9	4.2	1.9	0.9
\$3,000 to \$5,000	21.0	18.2	17.3	12.0	19.0	11.6	17.9
\$5,000 to \$8,000	41.9	34.0	37.2	26.7	40.7	36.7	39.7
\$8,000 to \$10,000	62.2	51.7	57.8	45.7	62.2	58.5	61.2
\$10,000 to \$15,000	76.2	63.1	73.4	63.8	76.1	72.8	75.3
\$15,000 to \$25,000	89.3	73.7	86.3	80.2	89.3	83.7	88.5
\$25,000 to \$50,000	95.6	73.8	92.1	86.8	95.5	82.6	92.5
\$50,000 to \$100,000	95.2	64.4	93.6	88.7	95.0	74.1	89.2
\$100,000 and over	<u>96.5</u>	<u>55.2</u>	<u>92.7</u>	<u>85.1</u>	<u>95.9</u>	<u>74.5</u>	<u>82.7</u>
Total	46.4	38.0	43.1	36.4	45.7	41.3	44.4

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TABLE 7-C. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY STANDARD AND ITEMIZED DEDUCTIONS

Adjusted Gross Income Classes	Standard Deductions ^a			Itemized Deductions ^b			Deduction as a Percent of AGI
	Number of Returns	Adjusted Gross Income	Value of Deductions	Number of Returns	Adjusted Gross Income	Value of Deductions	
under \$3,000	118,835	218,407	69,389	10,932	18,726	12,000	64.1
\$3,000 to \$5,000	76,162	299,024	36,988	21,754	87,380	35,872	41.1
\$5,000 to \$8,000	75,523	489,485	53,431	55,632	367,680	101,419	27.6
\$8,000 to \$10,000	34,132	305,916	31,565	56,114	508,127	122,213	24.1
\$10,000 to \$15,000	38,503	458,778	38,455	123,886	1,537,824	319,783	20.8
\$15,000 to \$25,000	10,502	190,112	10,366	89,239	1,659,956	278,254	16.8
\$25,000 to \$50,000	1,623	32,564	1,023	22,378	720,496	102,837	14.3
\$50,000 to \$100,000	164	10,073	155	3,839	252,558	29,179	11.6
\$100,000 and over	46	5,938	46	1,474	227,386	31,464	13.8
Total	354,890	2,010,277	241,418	385,248	5,380,133	1,033,021	19.2

A. Dollar Amounts (in Thousands) and Number of Returns:		B. Percentage Distribution:	
Adjusted Gross Income	Number of Returns	Adjusted Gross Income	Number of Returns
under \$3,000	33.5	10.9	2.9
\$3,000 to \$5,000	21.5	14.9	5.6
\$5,000 to \$8,000	21.3	24.3	14.5
\$8,000 to \$10,000	9.6	15.3	14.6
\$10,000 to \$15,000	10.8	22.8	14.6
\$15,000 to \$25,000	3.0	9.4	32.1
\$25,000 to \$50,000	0.3	1.6	23.1
\$50,000 to \$100,000	0.0	0.5	5.8
\$100,000 and over	0.0	0.2	1.0
Total	100.0	100.0	100.0

^aIncludes only those table and standard returns which reported a positive standard deduction.

^bIncludes only those itemized returns which reported specific itemized deductions, e.g., non-residents are required to file itemized returns even if they take no deductions.

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TABLE 8. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY SOURCE OF INCOME,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Number of Returns	Primary Wage Income ^a			Primary Non-Wage Income ^b			
		Adjusted Gross Income	Normal Tax	Tax Burden	Number of Returns	Adjusted Gross Income	Normal Tax	Tax Burden
A. Dollar Amounts (in Thousands) and Number of Returns:								
under \$3,000	164,428	235,193	1,198	0.52	47,533	73,942	214	0.29
\$3,000 to \$5,000	82,829	328,336	3,911	1.19	20,707	79,678	515	0.65
\$5,000 to \$8,000	112,773	738,468	10,248	1.39	19,950	127,160	1,489	1.17
\$8,000 to \$10,000	79,227	715,257	10,801	1.51	11,020	98,786	1,437	1.46
\$10,000 to \$15,000	147,534	1,814,482	32,723	1.80	14,946	183,045	3,379	1.85
\$15,000 to \$25,000	85,008	1,567,923	37,194	2.37	14,870	284,819	7,657	2.69
\$25,000 to \$50,000	13,437	419,063	13,846	3.30	9,964	333,997	11,840	3.55
\$50,000 to \$100,000	1,509	99,241	3,797	3.83	2,522	165,002	6,488	3.93
\$100,000 and over	401	47,896	1,541	3.22	1,127	188,382	6,323	3.36
Total	687,146	5,965,859	115,259	1.93	142,639	1,534,811	39,342	2.56
B. Percentage Distribution:								
under \$3,000	23.9	3.9	1.0		33.3	4.8	0.5	
\$3,000 to \$5,000	12.0	5.5	3.4		14.5	5.2	1.3	
\$5,000 to \$8,000	16.4	12.4	8.9		14.0	8.3	3.8	
\$8,000 to \$10,000	11.5	12.0	9.4		7.7	6.4	3.6	
\$10,000 to \$15,000	21.5	30.4	28.4		10.5	11.9	8.6	
\$15,000 to \$25,000	12.4	26.3	32.3		10.4	18.6	19.5	
\$25,000 to \$50,000	2.0	7.0	12.0		7.0	21.8	30.1	
\$50,000 to \$100,000	0.2	1.7	3.3		1.8	10.7	16.5	
\$100,000 and over	0.1	0.8	1.3		0.8	12.3	16.1	
Total	100.0	100.0	100.0		100.0	100.0	100.0	

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^aWage income was 50 percent or more of reported adjusted gross income.

^bNon-wage income (interest, rents, royalties, capital gains, dividends, proprietorship and partnership net income) was 50 percent or more of reported adjusted gross income.

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TABLE 9. COLORADO STATE INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY SIZE OF HOUSEHOLD^a,
FISCAL YEAR 1972

Adjusted Gross Income Classes	One Person			Two Persons			Three Persons			Four Persons			Five or More Persons			All Households		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:																		
under \$5,000	204,065	421,730	4,582	54,839	146,091	819	20,120	60,175	280	20,269	48,987	77	16,205	40,165	80	315,498	717,148	5,338
\$5,000 to \$10,000	63,546	449,772	9,435	58,511	442,700	6,890	34,676	271,035	3,477	29,354	233,336	2,476	36,509	279,739	1,630	222,596	1,676,583	23,908
\$10,000 to \$15,000	13,585	158,690	4,206	42,993	522,871	11,307	28,097	347,428	6,696	34,524	430,081	7,131	43,281	538,457	6,762	162,480	1,997,527	36,102
\$15,000 to \$25,000	3,787	69,493	2,324	26,729	497,412	13,716	17,805	329,980	8,248	21,235	395,026	9,393	30,185	558,632	11,121	99,741	1,850,542	44,302
\$25,000 and over	1,490	66,109	2,395	8,198	388,979	14,154	4,355	171,251	5,979	6,176	257,948	8,963	8,733	368,802	12,125	23,952	1,253,089	43,226
Total	286,473	1,165,794	22,942	191,270	1,998,053	47,086	105,053	1,179,869	24,680	111,558	1,365,378	28,040	134,913	1,785,795	31,718	829,267	7,494,889	154,466
B. Percentage Distribution:																		
under \$5,000	71.2	36.2	20.0	28.6	7.3	1.8	19.2	5.1	1.2	18.2	3.6	0.3	12.0	2.2	0.3	38.1	9.6	3.8
\$5,000 to \$10,000	22.2	38.6	41.1	30.6	22.1	14.6	33.0	23.0	14.1	26.3	17.1	8.8	27.0	15.7	5.1	26.9	22.4	15.5
\$10,000 to \$15,000	4.8	13.6	18.3	22.5	26.2	24.0	26.7	29.4	27.1	31.0	31.5	25.4	32.1	30.2	21.3	19.6	26.6	23.4
\$15,000 to \$25,000	1.3	5.9	10.1	14.0	24.9	29.1	17.0	28.0	33.4	19.0	28.9	33.5	22.4	31.3	35.1	12.0	24.7	29.0
\$25,000 and over	0.5	5.7	10.5	4.3	19.5	30.5	4.1	14.5	24.2	5.5	18.9	32.0	6.5	20.6	3.2	3.5	16.7	23.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aBased on number of normal exemptions.

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TABLE 10. COLORADO STATE RESIDENT INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY MAJOR REGIONS,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Eastern Plains			Front Range			Western Slope			State		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:												
under \$5,000	24,672	61,004	574	222,026	508,258	4,075	38,763	91,767	651	285,461	661,029	5,300
\$5,000 to \$10,000	17,057	126,354	1,701	170,341	1,288,720	18,746	28,552	214,682	2,823	215,950	1,629,756	23,270
\$10,000 to \$15,000	7,863	93,224	1,717	135,520	1,676,006	30,238	16,645	198,310	3,703	160,028	1,967,540	35,658
\$15,000 to \$25,000	3,545	63,328	1,709	87,468	1,628,007	39,264	7,693	140,160	3,492	98,706	1,811,495	44,465
\$25,000 and over	1,197	47,001	1,967	25,359	1,100,426	38,198	2,131	89,351	3,144	29,687	1,236,778	43,309
Total	54,334	390,911	7,668	640,714	6,201,417	130,521	93,784	734,270	13,813	788,832	7,326,598	152,002
B. Percentage Distribution:												
under \$5,000	45.4	15.6	7.5	34.7	8.2	3.1	41.3	12.5	4.7	36.2	9.0	3.5
\$5,000 to \$10,000	31.4	32.3	22.2	26.6	20.8	14.3	30.4	29.2	20.4	27.4	22.2	15.3
\$10,000 to \$15,000	14.5	23.9	22.4	21.1	27.0	23.2	17.8	27.0	26.8	20.3	26.9	23.5
\$15,000 to \$25,000	6.5	16.2	22.3	13.6	26.3	30.1	8.2	19.1	25.3	12.5	25.0	29.2
\$25,000 and over	2.2	12.0	25.6	4.0	17.7	29.3	2.3	12.2	22.8	3.6	16.9	28.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 11. COLORADO STATE RESIDENT INDIVIDUAL INCOME TAX RETURNS,
CLASSIFIED BY MAJOR COUNTIES,
FISCAL YEAR 1972

Adjusted Gross Income Classes	Denver			Jefferson			Arapahoe			Adams			Boulder			Denver Metropolitan Area		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:																		
under \$5,000	63,681	154,109	1,333	26,108	63,336	460	27,214	50,193	336	21,658	53,409	543	17,298	43,201	485	155,959	364,248	3,157
\$5,000 to \$10,000	56,389	425,809	6,871	21,830	159,372	2,363	13,303	103,983	1,470	15,770	120,659	1,646	10,823	85,825	1,270	118,115	895,648	13,620
\$10,000 to \$15,000	38,507	475,987	9,012	24,658	306,889	5,497	11,239	140,997	2,505	16,048	198,538	3,326	10,503	130,594	2,379	100,955	1,252,995	22,719
\$15,000 to \$25,000	23,867	441,754	11,015	19,219	357,209	8,259	11,208	214,727	5,129	7,894	141,335	3,254	8,097	150,126	3,693	70,285	1,305,151	31,350
\$25,000 and over	9,009	431,547	15,060	4,965	187,157	6,531	3,747	164,608	5,286	625	22,582	891	1,944	71,272	2,449	20,290	877,166	30,217
Total	191,453	1,929,206	43,291	96,780	1,073,963	23,110	66,711	674,508	14,726	61,995	536,523	9,660	48,665	481,008	10,276	465,604	4,695,208	101,563
B. Percentage Distribution:																		
under \$5,000	33.3	8.0	3.1	27.0	5.9	2.0	40.8	7.5	2.3	34.9	10.0	5.6	35.6	9.0	4.7	33.5	7.7	3.1
\$5,000 to \$10,000	29.4	22.1	15.9	22.5	14.8	10.2	19.9	15.4	10.0	25.5	22.5	17.1	22.2	17.8	12.4	25.4	19.1	13.5
\$10,000 to \$15,000	20.1	24.7	20.8	25.5	28.6	23.8	16.9	20.9	17.0	25.9	37.0	34.4	21.6	27.2	23.2	21.7	26.7	22.5
\$15,000 to \$25,000	12.5	22.9	25.4	19.9	33.3	35.7	16.8	31.8	34.8	12.7	26.3	33.7	16.6	31.2	35.9	15.1	27.8	31.0
\$25,000 and over	4.7	22.3	34.8	5.1	17.4	28.3	5.6	24.4	35.9	1.0	4.2	9.2	4.0	14.8	23.8	4.3	18.7	29.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 11. Continued

Adjusted Gross Income Classes	El Paso			Pueblo			Larimer			Weld			Rest of State			State		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:																		
Under \$5,000	21,465	47,268	309	10,675	25,206	230	18,597	42,586	212	14,044	26,967	146	64,723	154,752	1,246	285,461	661,029	5,300
\$5,000 to \$10,000	21,200	159,999	1,930	11,885	91,462	1,248	8,945	66,019	858	9,605	70,824	1,011	46,199	345,804	4,603	215,950	1,629,756	23,270
\$10,000 to \$15,000	12,379	154,603	2,692	8,763	105,952	1,963	6,051	73,984	1,238	6,503	77,266	1,430	25,377	302,738	5,616	160,025	1,967,540	35,655
\$15,000 to \$25,000	6,889	130,109	3,091	3,683	68,448	1,626	4,184	78,453	1,988	1,705	31,805	856	11,961	217,531	5,555	98,706	1,831,495	44,465
\$25,000 and over	<u>2,633</u>	<u>118,450</u>	<u>4,108</u>	<u>810</u>	<u>31,718</u>	<u>1,150</u>	<u>890</u>	<u>33,899</u>	<u>1,247</u>	<u>567</u>	<u>33,165</u>	<u>1,263</u>	<u>3,495</u>	<u>142,382</u>	<u>5,321</u>	<u>28,627</u>	<u>1,236,778</u>	<u>43,309</u>
Total	64,566	610,429	12,130	35,816	322,786	6,217	38,667	294,941	5,543	32,424	240,027	4,706	151,755	1,153,207	22,343	788,332	7,326,593	152,002
B. Percentage Distribution:																		
under \$5,000	33.2	7.8	2.5	29.8	7.8	3.7	48.1	14.4	3.8	43.3	11.2	3.1	42.7	13.3	5.6	36.2	9.0	3.5
\$5,000 to \$10,000	32.8	26.2	15.9	33.2	28.4	20.1	23.1	22.4	15.5	29.6	29.5	21.5	30.4	29.7	20.6	27.4	22.2	15.1
\$10,000 to \$15,000	19.2	25.3	22.2	24.5	32.8	31.6	15.7	25.1	22.3	20.1	32.2	30.4	16.7	26.0	25.1	20.3	26.9	23.5
\$15,000 to \$25,000	10.7	21.3	25.5	10.3	21.2	26.1	10.8	26.6	35.9	5.3	13.3	18.2	7.9	18.7	24.9	12.5	25.0	29.2
\$25,000 and over	<u>4.1</u>	<u>19.4</u>	<u>33.9</u>	<u>2.2</u>	<u>9.8</u>	<u>18.5</u>	<u>2.3</u>	<u>11.5</u>	<u>22.5</u>	<u>1.7</u>	<u>13.8</u>	<u>26.8</u>	<u>2.3</u>	<u>12.3</u>	<u>23.8</u>	<u>3.6</u>	<u>16.9</u>	<u>28.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 12. Continued

Adjusted Gross Income Classes	Boulder			Cities with population of 25,000 to 50,000 ^d			Cities with population of 10,000 to 25,000 ^c			All other areas with pop- ulation of less than 10,000			State ^a		
	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax	Number of Returns	Adjusted Gross Income	Normal Tax
A. Dollar Amounts (in Thousands) and Number of Returns:															
under \$5,000	12,359	30,858	318	45,798	104,530	784	26,802	57,912	445	84,399	201,125	1,567	285,462	661,030	5,300
\$5,000 to \$10,000	5,382	39,996	537	25,168	190,291	2,549	19,216	143,107	1,878	64,898	491,987	6,910	215,279	1,625,089	23,204
\$10,000 to \$15,000	4,304	54,944	1,069	29,152	358,256	6,112	13,458	163,045	2,767	43,232	527,115	9,777	159,860	1,965,659	35,616
\$15,000 to \$25,000	4,819	91,177	2,293	21,026	392,679	9,299	6,323	117,956	2,889	22,623	410,099	10,109	98,704	1,831,495	44,466
\$25,000 and over	1,496	52,056	1,760	6,307	261,764	8,985	1,457	60,001	2,214	4,820	201,477	7,195	28,694	1,237,152	43,311
Total	28,360	269,031	5,977	127,451	1,307,520	27,729	67,256	542,021	10,193	219,972	1,831,803	35,558	787,999	7,320,425	151,897
B. Percentage Distribution:															
under \$5,000	43.6	11.5	5.3	35.9	8.0	2.8	39.8	10.7	4.4	38.4	11.0	4.4	36.2	9.0	3.5
\$5,000 to \$10,000	19.0	14.9	9.0	19.7	14.6	9.2	28.6	26.4	18.4	29.5	26.8	19.4	27.3	22.2	15.3
\$10,000 to \$15,000	15.2	20.4	17.9	22.9	27.4	22.1	20.0	30.1	27.2	19.6	28.8	27.5	20.3	26.9	23.4
\$15,000 to \$25,000	17.0	33.9	38.4	16.5	30.0	33.5	9.4	21.7	28.3	10.3	22.4	28.4	12.5	25.0	29.3
\$25,000 and over	5.2	19.3	29.4	5.0	20.0	32.4	2.2	11.1	21.7	2.2	11.0	20.3	3.7	16.2	28.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aTotals for the City and County of Denver are not identical, and the state total for cities does not equal the state totals by region and counties due to taxpayer addressing errors which involved less than 1/10 of one percent of the total returns.

^bIncludes: Arvada, Englewood, Fort Collins, Greeley, Littleton, North Glenn, Wheat Ridge, and Westminster.

^cIncludes: Commerce City, Derby, Durango, Grand Junction, Longmont, Loveland, Sterling, and Thornton.

APPENDIX C

DESCRIPTION AND LIMITATIONS OF STATISTICAL SAMPLE OF COLORADO INDIVIDUAL INCOME TAX RETURNS

An important element of the Colorado Tax Profile Study (CTPS) was the sampling of the 1971 Colorado individual income tax returns filed in 1972. This appendix describes the procedures followed in this sampling program and comments on the degree of reliability of the resulting data. But it should be noted that income tax data as extensive as that required for the CTPS analysis could be obtained only on a sample basis if the data were to be reasonably current and the study completed within the prescribed time limits. On the basis of accepted statistical principles the sample was designed to achieve a high degree of sampling reliability at minimum cost.

The Sample

The sample frame or universe consisted of 976,538 income tax returns filed and on the records of the Revenue Department in early 1973 at the time the sample was designed. According to Revenue Department data, these returns represented \$7,333.8 million in adjusted gross income and \$150.5 million in normal tax liabilities.

To meet the data needs of the CTPS, a replicated stratified random sample consisting of nine income strata and calling for a total sample of approximately 7,700 usable sample returns was designed. A complicating factor in designing the sample, and one of the major reasons for the survey of tax returns, was the need for income and tax data on a "household" rather than on a "return" basis. Current reports by the Revenue Department are on a return basis; no published data were available on a household basis because the Colorado income tax does not have a "split income" provision for married taxpayers such as provided under the federal income tax. As a result more than 31 percent of the state income tax returns filed in 1972 were "married-separate" returns, that is, the husband and wife each filed a separate return on the respective shares of their combined income. For the purposes of this study the "married-separate" returns of a husband and wife were merged and treated as a single return in order to place the income and taxes of resident households on a comparable basis. As a result of the merging of the "married-separate" returns the original sample was reduced to 6,442 on a household basis.

Table 1 presents the number of returns and sample size on a merged basis (for households), and also shows the statistical reliability by income class. For example, the sampling error at one standard deviation on adjusted gross income for the \$10,000 to \$15,000 income stratum was 1.48 percent. This means that the chances are 95 out of 100 that the sample value for total adjusted gross income for this stratum, which was \$1,997 million, will not differ from the true value for this item obtained from a complete census of all returns by more than 2.96 percent in either direction.

Overall Sampling Reliability

Another indication of the reliability of the sample estimates is provided by comparing the values for adjusted gross income and normal tax liability derived from the sample with that computed by the Department of Revenue on the basis of the total amounts reported on all returns from which the sample was drawn. The Department of Revenue figure for the total adjusted gross income on the tax returns filed during fiscal year 1972 was \$7,333.8 million, whereas the aggregated sample value was \$7,500.7 million, or a difference of less than 2.3 percent. Similarly, the respective dollar values for the normal tax liability were \$150.5 million and \$154.6 million, or a difference of 2.7 percent. Moreover, it should be noted that the slight amounts by which the sample estimates exceed the Department of Revenue universe figures in part reflects the fact that the latter were based on preaudited returns, whereas the controlled processing and editing of the sample data partly eliminated computational, recording and tabulating errors. In short, it is believed that the quality of the survey data would not have been improved if based on a complete census of unaudited returns.

Processing of the Data

Revenue Department personnel transcribed to worksheets (not identifiable by taxpayer name) the following types of data from the sample of individual income tax returns:

1. City and county
2. Filing status (single, joint, married-separate)
3. Residency (full year, part-year, non-resident)
4. Number of normal and extra exemptions
5. Type of return (itemized, standard, table)
6. Adjusted gross income
7. Wage income
8. Farm income
9. Standard deductions
10. Total itemized deductions

APPENDIX C

TABLE 1. EXPANSION BASIS AND STATISTICAL RELIABILITY OF
THE COLORADO INDIVIDUAL INCOME TAX SAMPLE

Adjusted Gross Income Classes: ^a	Number of Returns in Sample	Expanded Number of Returns for CTPS	Adjusted Gross Income		Normal Tax Liability	
			Dollar Amounts (000)	Sampling Error (percent)	Dollar Amounts (000)	Sampling Error (percent)
Under \$5,000	554	315,497	\$ 717,149	3.11	\$ 5,838	3.31
\$5,000 - \$10,000	1,111	222,970	1,679,671	1.71	23,975	2.49
\$10,000 - \$15,000	1,430	162,480	1,997,527	1.48	36,102	1.35
\$15,000 - \$25,000	1,533	99,878	1,852,742	2.13	44,851	2.75
\$25,000 and over	<u>1,814</u>	<u>28,961</u>	<u>1,253,581</u>	<u>2.51</u>	<u>43,835</u>	<u>2.13</u>
Totals	6,442	829,786	\$7,500,670	0.88	\$154,601	1.06

^aSample design was based on nine income classes ranging from "under \$3,000" to \$100,000 and over," with the latter on a universe basis. The nine income classes were collapsed into five in order to facilitate and clarify the CTPS analysis as well as improve the statistical reliability of the data for each of the income cells.

11. Net medical expense deductions
12. Deductions for contributions
13. Real estate tax deductions
14. Gasoline tax deductions
15. General sales tax deductions
16. Personal property tax deductions
17. Interest expense deductions
18. Other deductions
19. Federal income tax deduction
20. Value of exemptions
21. Net taxable income
22. Normal tax liability
23. Surtax and oil and gas tax
24. Food tax credit

The transcribed data were edited for computational errors and were verified by Revenue Department personnel and then coded and verified by the study team prior to transmitting the data to the University of Colorado computer. An estimate of the coding and data transmission error was 0.21 percent which falls within the practical limits of the study.