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Colorado Economic Perspective

December 20, 1999

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The *Colorado Economic Perspective* is a quarterly publication. Any comments or suggestions regarding the *Colorado Economic Perspective* can be directed to the Governor's Office of State Planning and Budgeting, 111 State Capitol Building, 200 East Colfax Avenue, Denver, CO 80203. To subscribe or request an address change, please call (303) 866-3317 or e-mail cheryl.schleyer@state.co.us. This document is provided free of charge.

Executive Summary

The Governor's Office of State Planning and Budgeting (OSPB) is charged with providing estimates of revenues for the purpose of determining the amount of funds available for appropriation. This issue of the *Colorado Economic Perspective* presents the OSPB's December 1999 forecast of General Fund and cash fund revenues. In addition, forecasts for the national and Colorado economies are provided, along with an analysis of the advanced technology sector in Colorado.

The Taxpayer's Bill of Rights

The Taxpayer's Bill of Rights (TABOR) — Article X, Section 20 of the Colorado State Constitution — limits the state's revenue growth to the sum of inflation and population growth in the previous calendar year. Our forecast indicates that the state will exceed its TABOR limit by a wide margin through FY 2004-05.

- ! We forecast that the TABOR surplus will be \$711.2 million in FY 1999-00 and will reach \$1,203.8 million by FY 2004-05.
- ! On average, the TABOR refund will equal \$967 million during the six-year forecast period. All of this surplus revenue must be refunded unless voters allow the state to retain the revenue.

General Fund Revenue

General Fund revenue increased 7.3 percent in FY 1998-99. While the rate of growth was still relatively high in FY 1998-99, it had considerably slowed from FY 1997-98's torrid pace of 15.4 percent. General Fund revenue growth will slow to 5.2 percent in FY 1999-00.

- ! The state's FY 1999-00 year-end reserve is expected to be \$618.2 million. This is \$418.1 million above the statutory 4.0 percent reserve requirement. By FY 2004-05, the General Fund's year-end reserve is expected to grow to \$1,030.7 million, \$763.0 million above the statutory reserve requirements.
- ! The state will transfer \$487.5 million to the capital construction fund from FY 1999-00 through FY 2004-05. In addition, there is \$763.0 million available for new capital projects, tax cuts and/or increased rebates or expenditures.
- ! Because of strong revenue growth, General Fund appropriations may grow at the statutory maximum 6.0 percent throughout the forecast period.

Cash Fund Revenues

Cash Fund revenues comprise 27.5 percent of total funds subject to the spending limitations imposed by TABOR. In total, cash fund revenues are forecast to increase 0.9 percent between FY 1998-99 and FY 1999-00, and to increase at an annual average rate of 3.2 percent from FY 1998-99 through FY 2004-05.

- ! Transportation-related revenues, the largest group of cash funds, are expected to increase 2.5 percent in FY 1999-00 after increasing 4.4 percent in FY 1998-99. The Highway Users Tax Fund, the largest component of the transportation-related cash funds, is expected to grow 2.1 percent, while the remainder of this group will grow 4.9 percent.
- ! Higher education cash funds, the next largest group of cash funds, are expected to grow 3.9 percent in FY 1999-00. They are forecast to increase at a compound annual average rate of 4.6 percent from FY 1998-99 through FY 2004-05.
- ! Unemployment insurance taxes, the largest contributor to the Unemployment Insurance Trust Fund, are forecast to fall 2.3 percent in FY 1999-00. Overall, the Unemployment Insurance Trust Fund is expected to decrease by 0.8 percent in FY 1999-00, but is expected to increase at a compound annual average rate of 2.7 percent in FY 1998-99 through FY 2004-05.

The National Economy

The national economy continued to grow robustly through the third quarter of 1999, especially for this late stage of an economic expansion.

- ! Inflation-adjusted gross domestic product (GDP) growth is expected to increase 3.9 percent in 1999 and then slow to 3.4 percent in 2000.
- ! As a result of increases in oil prices, consumer price inflation has accelerated slightly. We expect the inflation rate to be 2.2 percent for 1999 and then to increase to 2.8 percent by 2004.
- ! Nonagricultural employment growth will slow to 2.2 percent in 1999 and to 1.6 percent in 2000, after increasing 2.6 percent in 1997 and 1998.
- ! After falling to a three-decade low of 4.1 percent in October, the national unemployment rate is expected to increase to 4.2 percent in 1999.

The Colorado Economy

Our forecast calls for slowing in Colorado's economy in 2000 and beyond. The primary factors contributing to Colorado's economic slowdown are a scarcity of labor, a higher cost environment, and a slowdown in the construction industry.

- ! After healthy growth the past few years, the state's nonagricultural growth rate will slow to a 2.9 percent pace in 2000 and a 2.4 percent pace in 2001.
- ! We expect the unemployment rate to remain at 3.0 percent in 1999 and to gradually rise toward 4.2 percent by 2004.
- ! Colorado's construction market will cool in 2000. Residential housing permits are expected to decrease 0.3 percent in 2000, while the value of nonresidential construction will decrease 6.3 percent.

! The Denver-Boulder inflation rate is the proxy we use to measure inflation in Colorado. This rate has remained above the national rate throughout the 1990s, but is still at a relatively low level. Nationally, inflation has decreased from 5.4 percent in 1990 to 1.6 percent in 1998. Colorado has followed a similar pattern and decreased from 4.4 percent in 1990 to 2.4 percent in 1998.

Advanced Technology

Colorado's advanced technology industries play an important and growing role in the state's economy.

- ! In 1998, advanced technology jobs comprised 6.1 percent of total employment, a total of 125,000 workers in Colorado.
- ! Wages in the advanced technology sector were 46 percent higher than the average Colorado nonfarm wage in 1998, more than \$47,000 compared with just over \$32,000.
- ! The largest share of Colorado's advanced technology work force 18.9 percent is located in Boulder County.

TABOR Limit and General Fund Revenue Outlook

Summary

- ! In FY 1989-99, the TABOR surplus was \$679.6 million. In FY 1999-00, the TABOR surplus will increase to \$711.2 million. In total, from FY 1999-00 through FY 2004-05, we expect the state to exceed its TABOR limit by \$5.8 billion.
- ! In FY 1998-99, the **fiscal year-end General Fund reserve** was \$686.6 million, which is \$498.5 million above the statutory 4.0 percent reserve requirement. In FY 1999-00, the excess General Fund reserve declines because the state is reserve spending in other words, the state's General Fund obligations exceed its General Fund revenues.
- ! The General Assembly transferred over \$100 million to the Capital Construction Fund for each of the fiscal years 1999-00, 2000-01 and 2001-02 and extended the 10.0 percent diversion of sales and use taxes to the Highway Users Tax Fund indefinitely. In total, from FY 1999-00 to FY 2004-05, the state will be transferring close to \$1.8 billion to the Capital Construction and Highway Users Tax Funds. After accounting for these transfers, the FY 2004-05 General Fund reserve will be \$1,030.7 million.
- ! General Fund appropriations will increase \$286.7 million in FY 1999-00, to \$5,001.6 million and will increase an additional \$300.1 million in FY 2000-01, to \$5,301.7 million. The current General Fund revenue forecast allows General Fund appropriations to grow by the statutory maximum 6.0 percent limit.
- ! Growth in **General Fund revenues** increased 7.3 percent in FY 1998-99, but will slow to a 5.2 percent pace in FY 1999-00. The slower growth in General Fund revenues occurs because of the \$279 million tax reduction package passed in the 1999 legislative session, slower economic activity, weaker capital gains income, a reduction in estate tax receipts, and a change in the state's Medicaid disproportionate share program.

This section of the forecast first discusses the surplus due to spending limits imposed by the Taxpayer's Bill of Rights (TABOR) — Article X, Section 20 of the Colorado state constitution. It also describes tax cuts enacted in 1999 and presents an overview of the General Fund reserves and revenues.

The TABOR Surplus

Colorado's long economic expansion, spanning most of the 1990s, has contributed to strong growth in General Fund revenues. In FY 1998-99, growth in General Fund revenues increased 7.3 percent on top of robust 15.4 percent growth in FY 1997-98. Strong revenue growth caused significant TABOR surpluses in recent years and spurred the state to adopt large tax reductions. Even given these tax cuts,

The General Assembly transferred over \$100 million to the Capital Construction Fund for each of the fiscal years 1999-00, 2000-01 and 2001-02 and extended the 10.0 percent diversion of sales and use taxes to the Highway Users Tax Fund indefinitely.

Strong revenue growth caused significant TABOR surpluses in recent years and spurred the state to adopt large tax reductions.

On average, the TABOR refund will be \$964 million during the six-year forecast period.

Even with the lower income tax rate, the state will accumulate TABOR surpluses of \$5.8 billion during the forecast period.

however, Colorado's TABOR surplus is expected to range from \$700 million to \$1.2 billion in the next six years. The TABOR provision of the constitution limits the state's revenue growth to the sum of inflation and population growth from the previous calendar year.

Because of the significant anticipated TABOR surpluses, several permanent tax cuts were passed during the 1999 legislative session and signed into law by the Governor. In total, taxes were permanently reduced by \$279 million in FY 2000-01, the first full year of the majority of the tax cuts. The largest tax cut was a permanent reduction in the income tax rate, from 5.0 percent to 4.75 percent, effective January 1, 1999. Even given the tax cuts, the state exceeded its TABOR revenue limit by \$679.6 million in FY 1998-99. We forecast that the TABOR surplus will be \$711.2 million in FY 1999-00 and will reach \$1,203.8 million by FY 2004-05. On average, the TABOR refund will be \$967 million during the six-year forecast period. All of this surplus revenue must be refunded, unless voters allow the state to retain the revenue.

Table 1 displays the anticipated TABOR surpluses during the six-year forecast period. The forecast of TABOR surpluses reflects the 4.75 percent income tax rate and other permanent tax reductions enacted during the 1999 legislative session. Even with the lower income tax rate, the state will accumulate TABOR surpluses of \$5.8 billion during the forecast period. Our forecast for estimated TABOR surplus revenues is now \$138 million higher than projected last September. Detailed calculations of the TABOR surplus can be found in **Table 2**; a comprehensive discussion of the overall tax cut package (both permanent and temporary) is discussed later in this section.

Table 1
Estimated TABOR Surplus Revenues
(millions of dollars)

Fiscal Year	TABOR Surplus
1999-00	\$711.2
2000-01	822.0
2001-02	920.2
2002-03	1,012.9
2003-04	1,111.1
2004-05	1,203.8
Cumulative Total	\$5,781.2

Figure 1 graphically displays total TABOR surplus revenues. As long as our economy continues to post healthy gains, we will experience strong revenue growth, and hence, large TABOR surpluses. The figure also shows that cash fund revenues now comprise a smaller share of total TABOR revenues than in the past. This is because cash fund revenues are growing at a slower pace than General Fund revenues. Indeed, in FY 1996-97, cash fund revenues were 30.2 percent of total TABOR revenues, while in FY 2004-05, cash fund revenues are anticipated to be a 24.1 percent share.

TABLE 2

TABOR Surplus Revenue (\$ in millions)										
	FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 2001-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05			
TABOR Revenues: General Fund Cash Funds	\$5,749.6 /C 2,176.4	\$6,078.9 /C 2,196.8	\$6,471.2 /C 2,278.4	\$6,908.2 /C 2,343.9	\$7,350.2 /C 2,436.2	\$7,803.1 /C 2,528.7	\$8,272.7 /C 2,631.6			
Total TABOR Revenues	7,923.0 /G	8,275.7	8,749.6	9,252.1	9,786.4	10,331.8	10,904.3			
TABOR Limit:										
Growth Rate Allowable TABOR Growth Rate	15.3% /D 5.3%	14.3% /D 4.4%	15.7% /D 5.1%	16.4% /D 5.1%	17.1% /D 5.3%	17.4% /D 5.1%	17.9% /D 5.2%			
TABOR LIMIT	\$7,243.4 /E	\$7,564.5 /F	\$7,950.3	\$8,355.8	\$8,798.6	\$9,247.4	\$9,728.2			
REVENUES ABOVE / (BELOW) TABOR LIMIT	\$679.6	\$711.2	\$799.3	\$896.3	\$987.7	\$1,084.4	\$1,176.1			
EMERGENCY RESERVE: /A										
TABOR Emergency Reserve Reserved Amount (CMTF Principal)	217.3 /B 248.1 /A	226.9 /B 248.1 /A	238.5 /B 248.1 /A	250.7 /B 248.1 /A	264.0 /B 248.1 /A	277.4 /B 248.1 /A	291.8 /B 248.1 /A			
Additional Money Needed for Emergency Reserve	NA	NA	NA	2.6	15.9	29.3	43.7			

Totals may not sum due to rounding.

NA: Not Applicable.

Note: Article X, Section 20 of the State Constitution (TABOR) broadly defines spending such that expenditures are equal to revenues. The statutory 6 percent limit applies to the General Fund appropriations only. Thus, the two concepts are not directly comparable.

- /A The principal of the Controlled Maintenance Trust Fund (CMTF) may be used as full or partial satisfaction of the constitutional emergency reserve requirement for Cash and General Funds. Thus, the principal of the CMTF is reported as the reserved amount.
- /B In years where the projected revenues exceed the amount allowed by the Constitution, the reserve is calculated based on the limit, rather than on projected receipts. Given that the state will only retain the maximum allowed by the Constitution, it need only reserve three percent of such amount.
- /C These figures differ from the General Fund revenues reported in other tables because they net out revenues that are already in the Cash Funds to avoid double counting. For instance, the General Fund gaming revenues, unexpended prior-year Medicaid expenditures that are booked in "other revenue," and transfers of unclaimed property are netted out. These figures also include the full amount of sales and use tax before diversion to the Highway Users Tax Fund. The state diverts ten percent of the sales and use tax revenues to the Highway Users Tax Fund.
- /D These growth rates are from the previous year's TABOR limit, rather than from the previous year's actual revenues.
- /E In FY 1998-99, the State Fair was disgualified as a TABOR exempt enterprise and thus included in the TABOR limit and TABOR revenues.
- /F In FY 1999-00, the TABOR limit will be adjusted to account for the inclusion of Colorado Northwestern Community College in the state's revenue base.
- /G In FY 1998-99, \$3.0 million has been subtracted from the TABOR revenues to account for adjustments to prior year calculations.

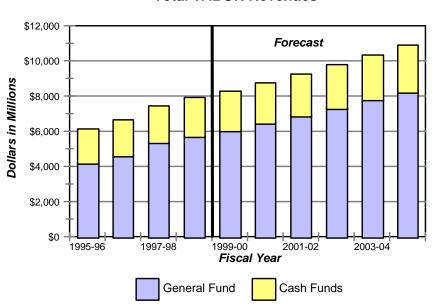


Figure 1
Total TABOR Revenues

Permanent Tax Reduction Bills Passed During the 1999 Legislative Session

In reaction to large and growing TABOR surpluses, many tax reductions were passed in the 1999 legislative session. In total, state taxes were permanently reduced by \$279 million for the first full year of implementation of the tax reduction bills (FY 2000-01). There were two primary categories of permanent tax reduction bills enacted in 1999: bills that reduced *income* taxes (totaling \$264 million in FY 2000-01) and bills that reduced *sales and use* taxes (totaling \$12 million in FY 2000-01). In addition, a bill permanently reducing a portion of the severance tax was passed. Each of these bills is briefly described in this section. The bills are listed in descending order of magnitude. *Table 3*, which follows the descriptions, displays the reduction to General Fund revenues due to each permanent tax bill.

State taxes were permanently reduced by \$279 million for the first full year of implementation of the tax reduction bills (FY 2000-01).

Bills that Reduce Income Taxes:

- 1. *Reduction of the State Income Tax Rate* House Bill 99-1207 reduced the state income tax rate from 5.0 percent to 4.75 percent. This is the largest of the permanent tax cuts, accounting for \$226.6 million in FY 2000-01.
- 2. Elimination of the Marriage Penalty House Bill 99-1003 eliminated the "marriage penalty" paid by joint filers at the state level. The marriage penalty arises for joint filers who claim the standard deduction. The penalty results in a couple paying more income taxes when married and filing a joint return than when single and filing two separate returns. The bill adjusted federal taxable income in an amount that eliminates the marriage penalty. It accounts for \$20.6 million of the permanent tax cuts.

House Bill 99-1207 reduced the state income tax rate from 5.0 percent to 4.75 percent. This is the largest of the permanent tax cuts, accounting for \$226.6 million in FY 2000-01.

- 3. *Elderly Pension Exclusion* House Bill 99-1151 increased the amount of pension or annuity income an individual aged 65 or older may subtract from federal taxable income for state income tax purposes. The exempt amount increased from \$20,000 to \$24,000.
- 4. *Income Tax Credit for Long-Term Care Insurance* House Bill 99-1246 created a state income tax credit for long-term care insurance. The credit is equal to 25 percent of the cost of the policy, but is not to exceed \$150. The credit is only available to individuals who earn less than \$50,000 per year, or joint filers with income of less than \$100,000 per year.
- 5. Foreign Source Income Adjustment House Bill 99-1125 changed the calculation used to compute the amount of foreign source income that is excluded in Colorado for state corporate income tax purposes. The adjustment now reflects the federal corporate tax rate in effect during the tax year for all federal taxable income. Prior to passage of this bill, the adjustment used a federal tax rate that existed before 1987.
- 6. Conservation Easement Tax Credit House Bill 99-1155 created an income tax credit for individuals and corporations that donate all or part of a perpetual conservation easement in gross to a governmental entity or a 501 (3) (c) charitable organization. The credit, not to exceed \$100,000 per donation, may be carried forward and applied against income taxes due for up to 20 succeeding income tax years.

Sales and Use Tax Exemptions:

- 1. *Exemption for Farm Equipment* House Bill 99-1002 created a sales and use tax exemption for farm equipment with a value of \$1,000 or greater.
- 2. *Exemption for Food Sold in Vending Machines* House Bill 99-1015 exempted food sold through vending machines from the state sales and use tax.
- 3. Exemption for Pesticides Used in Agricultural Products House Bill 99-1381 created an exemption from the state sales and use tax for pesticides that are used in the production of agricultural and livestock products.
- 4. *Exemption for Biotechnology* House Bill 99-1335 provided a mechanism to rebate state sales and use taxes paid for tangible personal property that is used mainly in Colorado for the research and development of biotechnology.
- 5. Exemption for Alternative Fuel Vehicles House Bill 99-1271 allowed the purchase of a low emitting vehicle to be eligible for the alternative fuels income tax credit or rebate program. It also created a state sales and use tax exemption for the purchase of low emitting certified vehicles, power source replacements, and parts used for converting power sources for motor vehicles with a gross vehicle weight of 10,000 pounds or more.

House Bill 99-1125 changed the calculation used to compute the amount of foreign source income that is excluded in Colorado for state corporate income tax purposes. House Bill 99-1249 lowered the amount of severance tax paid by Colorado companies.

- 6. *Exemption for Agricultural Compounds* House Bill 99-1016 exempted from the state sales and use tax agricultural compounds that promote the health of livestock and semen.
- 7. Exemption for Coins and Precious Metal Bullion House Bill 99-1009 created an exemption from the sales and use tax for coins and precious metal bullion.

Severance Tax Reduction:

Severance Tax – House Bill 99-1249 lowered the amount of severance tax paid by Colorado companies. This reduction is reflected in the cash fund revenues displayed in *Table 7*. It increased the amount of metallic minerals exempt from severance tax from \$11 million to \$19 million; exempted from severance tax the first 625,000 tons of molybdenum ore produced each year; increased the amount of coal production that is exempt from the severance tax from 8,000 tons to 300,000 tons produced in each quarter of the taxable year; and specified that the investment earnings of the state Severance Tax Trust Fund and the Local Government Severance Tax Fund will now be credited to their respective funds instead of the General Fund.

Table 3
Fiscal Impacts of Permanent Tax Reductions
(dollars in millions)

Bill Number	FY 1998-99	FY 1999-00	FY 2000-01
Income Tax Reductions:			
Income Tax Rate Reduction (HB 99-1207)	\$90.3	\$211.6	\$226.6
Marriage Penalty (HB 99-1003)	\$0.0	\$10.1	\$20.6
Pension Exclusion (HB 99-1151)	\$0.0	\$4.2	\$8.8
Long-Term Care Insurance Credit (HB 99-1246)	\$0.0	\$2.1	\$4.6
Foreign Source Income Adjustment (HB 99-1125)	\$0.0	\$1.5	\$3.1
Conservation Easement Tax Credit (HB 99-1155)	\$0.0	\$0.2	\$0.7
Subtotal Income Tax Reductions	\$90.3	\$229.7	\$264.2
Sales and Use Tax Reductions:			
Farm Equipment (HB 99-1002)	\$0.0	\$3.5	\$3.6
Food Sold through Vending Machines (HB 99-1015)	\$0.0	\$1.7	\$3.3
Agricultural Pesticides (HB 99-1381)	\$0.0	\$2.7	\$2.7
Biotechnology (HB 99-1335)	\$0.0	\$0.9	\$1.0
Alternative Fuels (HB 99-1271)	\$0.0	\$0.8	\$0.8
Agricultural Compounds (HB 99-1016)	\$0.0	\$0.5	\$0.5
Coins and Precious Metal Bullion (HB 99-1009)	\$0.0	\$0.1	\$0.2
Subtotal Sales and Use Tax Reductions	\$0.0	\$10.2	\$12.1
Severance Tax (HB 99-1249)	\$0.0	\$2.9	\$2.8
Total Permanent Tax Reductions	\$90.3	\$242.8	\$279.1

How will the Surplus TABOR Revenue be Refunded?

Even given the substantial permanent tax cuts, the state must still refund a significant amount of surplus TABOR revenue (see *Table 1*). Five bills were enacted in 1999 to provide mechanisms to refund the excess TABOR revenue. In FY 1999-00, \$679.6 million of the FY 1998-99 surplus will be refunded by these temporary refunds.

The five bills are prioritized in the following manner. When the TABOR surplus exceeds \$50 million, an earned income tax credit is implemented (House Bill 99-1383). When the surplus is anticipated to be \$170 million, a personal property tax credit takes effect (House Bill 99-1311). Given a \$220 million TABOR surplus, a certain level of dividends, interest, and capital gains are exempt from income taxation (House Bill 99-1137), while a surplus of \$260 million or more triggers a capital gains exemption for capital gains income earned from the sale of Colorado assets (House Bill 99-1237). In the event the surplus is not totally refunded through the aforementioned mechanisms or the amount of the surplus does not reach one of the triggers, House Bill 99-1001 is implemented to refund the excess revenues via a temporary sales tax refund that varies by income level. *Table 4* outlines the relative impacts of the bills.

- 1. Earned Income Tax Credit House Bill 99-1383 is used as a refund mechanism for the TABOR surplus in years that the surplus exceeds \$50 million. House Bill 99-1383 creates an earned income tax credit for Colorado taxpayers that claim the federal earned income tax credit. The amount of the credit is equal to 8.5 percent of the federal earned income tax credit claimed on the individual's federal tax return. In FY 1999-00, it is estimated \$29.5 million will be refunded through the Earned Income Tax Credit.
- 2. *Personal Property Tax Credit* House Bill 99-1311 allows a refund for a share of personal property taxes paid to all jurisdictions. The amount of the refund is equal to the aggregate amount of personal property tax paid to all jurisdictions, or \$500, whichever is less, plus 13.37 percent of the personal property tax paid that is over \$500. This credit is a refund mechanism of the TABOR surplus and is only in effect in years when the surplus TABOR revenues exceed \$170 million. In FY 1999-00, \$79.2 million of the FY 1998-99 surplus was refunded through this mechanism.
- 3. *Dividend, Interest, and Capital Gains Exemption* House Bill 99-1137 excludes from the state's income tax capital gains, interest, and dividend income up to \$1,200 for individuals and up to \$2,400 for joint filers. This exemption occurs in years when the TABOR surplus exceeds \$220 million. In years that the TABOR surplus does not exceed \$220 million, this bill would not take effect. House Bill 99-1137 is not operational until FY 2000-01.
- 4. Colorado Capital Gains Modification House Bill 99-1237 extends a modification of the capital gains exclusion to Colorado assets and property acquired before May 9, 1994. (Currently, taxpayers are allowed to claim a modification for capital gains associated with the sale of Colorado-based property and assets acquired on or after May 9, 1994 that are held for five years.) This bill will only be implemented in years in which the TABOR surplus exceeds \$260 million. House Bill 99-1237 is not operational until FY 2000-01.

Five bills were enacted in 1999 to provide mechanisms to refund the excess TABOR revenue. In FY 1999-00, \$679.6 million of the FY 1998-99 surplus will be refunded by these temporary refunds.

In FY 1999-00, it is estimated \$29.5 million will be refunded through the Earned Income Tax Credit.

In FY 1999-00, \$79.2 million of the FY 1998-99 surplus was refunded through the Personal Property Tax Credit. The average sales tax refund per taxpayer using this refund mechanism is \$224.

5. Sales Tax Refund – House Bill 99-1001 establishes a temporary sales tax refund as a mechanism to refund excess TABOR revenues. House Bill 99-1001 uses a six-tiered approach (based on federal adjusted gross income) to refund the TABOR surplus. If the average refund is \$15 or less, then each taxpayer receives the flat refund amount. This bill will be used when the amount of the TABOR surplus does not reach one of the thresholds outlined above or for any amount not refunded through one of the previous refund mechanisms. For the FY 1998-99 TABOR surplus that will be refunded in FY 1999-00, the average sales tax refund per taxpayer using this refund mechanism is \$224. Our forecast shows that the average refund through this mechanism will be \$194 in FY 2000-01 and \$234 in FY 2001-02.

Table 4
TABOR Refund Mechanisms
(dollars in millions)

	Trigger Amount	Refunded In FY 1999-00	Refunded In FY 2000-01	Refunded In FY 2001-02
Projected TABOR Surplus Revenue	NA	\$679.6	\$711.2	\$822.0
Refunded Through:				
Earned Income Tax Credit (H.B. 99-1383)	\$50.0	\$29.5	\$31.2	\$33.1
Personal Property Tax (H.B. 99-1311)	\$170.0	\$79.2	\$103.5	\$109.7
Dividend, Interest, and Capital Gains Exemption (H.B. 99-1137)	\$220.0	\$0.0	\$39.3	\$41.7
Colorado Capital Gains Modification (H.B. 99-1237)	\$260.0	\$0.0	\$43.4	\$41.7
Sales Tax Refund (H.B. 99-1001)	Remaining	\$570.9	\$493.8	\$595.8

General Fund Overview

Strong growth in employment, wages, and realized capital gains increased tax collections in Colorado and the General Fund is in a healthy financial position.

In FY 1998-99, the fiscal year-end reserve was \$686.6 million, or 14.6 percent of General Fund appropriations.

Economic conditions have been extremely favorable in Colorado during the past few years. Strong growth in employment, wages, and realized capital gains increased tax collections in Colorado and the General Fund is in a healthy financial position. General Fund revenue growth moderated to 7.3 percent in FY 1998-99, after exceptionally strong growth in FY 1997-98. Growth will slow to 5.2 percent in FY 1999-00 before rebounding to 6.5 percent in FY 2000-01. The slower growth in FY 1999-00 occurs because of large tax cuts enacted in 1999. Tax collections will be \$243 million lower in FY 1999-00 because of these tax cuts. In FY 2000-01, higher revenue growth resumes, albeit from a lower base than otherwise would have occurred without the tax reductions.

Table 5 provides an overview of General Fund revenues and reserves through FY 2004-05. The General Fund overview provided in **Table 5** assumes current-law capital construction transfers plus any additional funds necessary to complete capital construction projects begun in FY 1999-00. In FY 1998-99, the **fiscal year-end reserve** was \$686.6 million, or 14.6 percent of General Fund appropriations. This reserve was \$498.5 million above the statutory reserve

requirement of 4.0 percent of appropriations. It should be noted that the state had an overexpenditure in the Medicaid program in FY 1998-99 that reduced the reserve somewhat for that year.

In FY 1999-00, the fiscal year-end reserve decreases to \$618.2 million, which is 12.4 percent of General Fund appropriations. Moreover, the monies above the statutory reserve requirement decrease to \$418.1 million. The monies above the reserve requirement decrease in FY 1999-00 because the state is reserve spending — in other words, the state's General Fund obligations are anticipated to exceed its General Fund revenues. In total, from FY 1999-00 through FY 2004-05 the state will be transferring just over \$1.8 billion to the Capital Construction and Highway Users Tax funds.

The General Fund reserve in FY 2004-05 is forecast to be \$1,030.7 million, which is \$763.0 million above the required reserve. Essentially, this means that there will be an additional \$763.0 million available for capital construction projects, tax cuts, and/or increased rebates and expenditures throughout the six-year horizon.

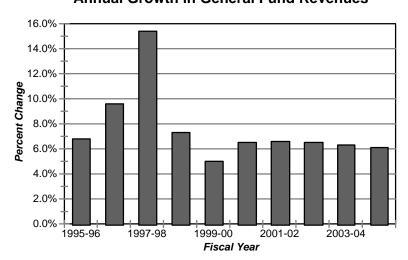
It is important to note that the monies in excess of the statutory reserve are onetime monies. In other words, if a portion of the \$418.1 million in excess FY 1999-00 reserves is spent, there will no longer be the full \$763.0 million of excess reserves available for expenditures in FY 2004-05. Once the reserve is spent, it affects the out years as well.

General Fund Revenue Growth

General Fund revenue increased 7.3 percent in FY 1998-99. While the rate of growth was still relatively high in FY 1998-99, it slowed considerably from FY 1997-98's torrid pace of 15.4 percent. General Fund revenue growth will slow to 5.2 percent in FY 1999-00. The slower growth in FY 1999-00 results from the income tax reductions and the sales and use tax exemptions passed during the 1999 legislative session. After FY 1999-00, growth in General Fund revenues will increase at a rate above 6.0 percent per year. *Figure 2* shows General Fund revenue growth from FY 1995-96 through FY 2004-05.

Figure 2

Annual Growth in General Fund Revenues



In total, from FY 1999-00 through FY 2004-05 the state will be transferring just over \$1.8 billion to the Capital Construction and Highway Users Tax funds.

The slower growth in FY 1999-00 results from the income tax reductions and the sales and use tax exemptions passed during the 1999 legislative session.

Table 5

General Fund Overview (\$ in millions)											
	FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 2001-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05				
BEGINNING RESERVE	\$901.0	\$686.6	\$618.2	\$652.0	\$727.6	\$865.0	\$998.0				
GROSS GENERAL FUND	5,794.0	6,096.3	6,491.2	6,931.2	7,376.5	7,833.2	8,307.2				
SENATE BILL 97-1 TRANSFERS TO THE HUTF	(170.4) /A	(186.8) /A	(198.1) /A	(210.1) /A	(222.4) /A	(236.7) /A	(251.0) /A				
TOTAL FUNDS AVAILABLE	\$6,524.6	\$6,596.1	\$6,911.4	\$7,373.1	\$7,881.8	\$8,461.5	\$9,054.2				
EXPENDITURES: General Fund Appropriations Medicaid Overexpenditure Rebates and Expenditures Capital and Prison Construction Transfer for Highway Construction TABOR Refund Accounting Adjustments TOTAL OBLIGATIONS	\$4,703.0 /C	\$5,001.6 /E	\$5,301.7	\$5,619.8	\$5,957.0	\$6,314.4	\$6,693.2				
	11.9	NA	NA	NA	NA	NA	NA				
	114.4	123.0	123.6	125.0	126.3	127.8	128.9				
	368.3	173.7 /D	122.8 /D	101.4 /D	37.2 /D	33.6 /D	18.8 /D				
	100.0	0.0	0.0	0.0	0.0	0.0	0.0				
	563.2	679.6	711.2	799.3	896.3	987.7	1,084.4				
	(22.8)	NA	NA	NA	NA	NA	NA				
	\$5,838.0	\$5,977.9	\$6,259.3	\$6,645.5	\$7,016.8	\$7,463.6	\$7,925.4				
YEAR-END GENERAL FUND RESERVE:	\$686.6	\$618.2	\$652.0	\$727.6	\$865.0	\$998.0	\$1,128.8				
STATUTORY RESERVE: 4.0% OF APPROPRIATIONS	188.1	200.1	212.1	224.8	238.3	252.6	267.7				
MONIES IN EXCESS OF STATUTORY RESERVE	498.5	418.1	440.0	502.9	626.7	745.4	861.1				
RESERVE AS A % OF APPROPRIATIONS	14.6%	12.4%	12.3%	12.9%	14.5%	15.8%	16.9%				
TABOR CONSTITUTIONAL EMERGENCY RESERVE REQUIREMENT: General & Cash Fund Emergency Reserve Requirement Reserved Amount (CMTF Principal) Money Above/(Below) Emergency Reserve	\$217.3	\$226.9	\$238.5	\$250.7	\$264.0	\$277.4	\$291.8				
	248.1 /B	248.1 /B	248.1 /B	248.1 /B	248.1 /B	248.1 /B	248.1 /B				
	30.8	21.2	9.6	(2.6)	(15.9)	(29.3)	(43.7)				
Appropriations Growth	\$280.5 /C 6.30% /C	\$286.7 /E	\$300.1	\$318.1	\$337.2	\$357.4	\$378.9				
Appropriations Growth Rate		6.10% / E	6.00%	6.00%	6.00%	6.00%	6.00%				

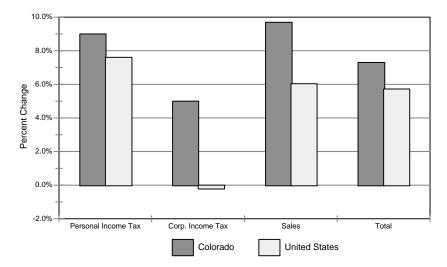
NA: Not Applicable.

Totals may not sum due to rounding.

- /A Senate Bill 97-1, House Bill 98-1202, and House Bill 99-1206 divert ten percent of sales and use taxes to the Highway Users Tax Fund (HUTF).
- /B The principal of the Controlled Maintenance Trust Fund (CMTF) may be used as full or partial satisfaction of the constitutional emergency reserve requirement. Thus, the principal of the CMTF is reported as the reserved amount.
- /C Includes \$2.5 million in appropriations that are exempt from the statutory appropriations limit. In addition, \$11.9 million in Medicaid overexpenditures is exempt from the statutory limit, but is used as the base for calculation of the FY 1999-00 limit.
- /D The capital figures are the greater of (a) the statutory transfer (Section 24-75-302, C.R.S.) or (b) the funds necessary to complete the capital projects initiated in FY 1998-99 and 1999-00 (the so-called continuation projects), except for Lowry and Fitzimmons. Based upon the revised scope of these projects, we have not included the out-year capital construction figures necessary to complete them. These figures will be revised when the numbers are available.
- /E Includes \$3.8 million in appropriations that are exempt from the statutory appropriations limit.

Our forecast for General Fund revenues is considerably higher than our September 1999 forecast. In FY 1999-00, the forecast is \$153 million higher, an increase of 2.6 percent. The forecast was revised in only three categories: individual income, corporate income, and sales tax receipts. Revenue growth in these three categories outpaced national gains (See *Figure 3*). Nationally, overall revenue growth increased 5.7 percent in FY 1998-99, compared with 7.3 percent in Colorado. Growth in personal income tax revenue was 7.6 percent nationally versus 9.0 percent in Colorado. Meanwhile, corporate income tax receipts declined nationally in FY 1998-99, while they grew 5.0 percent in Colorado. Finally, strong consumer spending affected sales tax receipts both nationally and in Colorado. Colorado sales tax receipts grew 9.7 percent in FY 1998-99, compared with 6.0 percent nationally. *Figure 3* compares revenue growth in Colorado and the nation for FY 1998-99. The following section discusses the General Fund projections by revenue source and *Table 6* displays the forecast.

Figure 3
Growth in Tax Revenues: Colorado vs. United States
FY 1998-99



Income Tax Revenues Continue to Exceed Expectations

Much of the growth in the General Fund revenues has occurred in individual income taxes, which comprise 58 percent of the General Fund revenues. In FY 1998-99, individual income taxes increased 9.0 percent, but we expect the growth rate to slow in FY 1999-00 because of the income tax rate reduction. Still, even given the income tax cuts, Colorado's individual income tax growth will be 6.4 percent in FY 1999-00. Growth in individual income tax revenues will accelerate in FY 2000-01, albeit from a lower base, once the full effects of the income tax rate reductions materialize.

The strong increases in individual income tax revenues such as those witnessed in FY 1997-98 and FY 1998-99 are not unique to Colorado but are also occurring across the country. The contributing factors to strong gains in individual income

Growth in personal income tax revenue was 7.6 percent nationally versus 9.0 percent in Colorado.

Even given the income tax cuts, Colorado's individual income tax growth will be 6.4 percent in FY 1999-00.

The contributing factors to strong gains in individual income tax receipts are strong job growth in highwage positions and large increases in capital gains income.

The permanent tax reduction package lowers individual income tax revenues by \$206 million in FY 1999-00.

tax receipts are strong job growth in high-wage positions and large increases in capital gains income. Colorado's individual income tax growth has averaged a strong 10.3 percent per year throughout the 1990s.

In FY 1999-00, individual income tax revenue growth will slow to a 6.4 percent rate. Law changes passed in 1999 will contribute to the slower growth, as will weaker capital gains income and somewhat slower job growth. The permanent tax reduction package lowers *individual* income tax revenues by \$206 million in FY 1999-00. Within the tax reduction package, House Bill 99-1207 — a permanent reduction in the income tax rate — will have the largest impact. In FY 1999-00 (the first full year of implementation), this bill reduces individual income tax revenues by \$190 million.

While maintaining a relatively strong influence on income tax receipts, income tax revenue generated from capital gains slowed somewhat in FY 1998-99. With that said, stronger-than-expected capital gains realizations have led us to increase our individual income tax receipt forecast. Strong growth has occurred in estimated payments, mainly attributable to capital gains income. Thus, we revised our FY 1999-00 individual income tax forecast \$93 million higher.

Figure 4 shows our forecast for growth in individual and corporate income tax receipts.

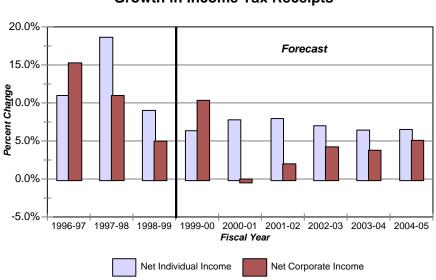


Figure 4
Growth in Income Tax Receipts

We expect corporate income tax revenue to increase 10.3 percent in FY 1999-00.

Growth in Corporate Income Taxes Increases in the Near Term

After increasing 5.0 percent in FY 1998-99, we expect corporate income tax revenue to increase 10.3 percent in FY 1999-00. Growth in FY 1999-00 is higher because of some large estimated payments already received from corporations this year. These payments caused us to increase our FY 1999-00 forecast by

\$26 million. These are expected to be one-time in nature, however. Thereafter, growth will slow. In FY 2000-01, we are forecasting a slight decline in corporate income tax revenues because of two bills that become effective on January 1, 2000. House Bill 99-1125 will reduce foreign source income attributed to corporations and thus will reduce corporate taxes in FY 2000-01. Moreover, slower growth in corporate profits, primarily due to slower economic activity and rising costs will further contribute to the slowdown.

Excise Tax Revenue Growth Accelerates

In FY 1998-99, excise taxes increased 9.7 percent, accelerating from FY 1997-98's 7.8 percent growth rate. Excise taxes include sales and use taxes as well as taxes on cigarettes, tobacco, and liquor. Excise taxes comprise approximately 31 percent of General Fund revenues. We expect excise tax revenue growth to remain robust, growing at a 9.1 percent rate in FY 1999-00, and then to slow throughout the remainder of the forecast horizon.

The major component of excise taxes is the **sales tax**. Sales taxes increased 9.7 percent in FY 1998-99. We forecast sales tax revenues to grow 10.0 percent in FY 1999-00. Thus far in FY 1999-00, sales tax receipts have been exceptionally strong, reflecting robust consumer spending, both nationally and locally. Thus, more sales tax revenue is being received than originally predicted. We increased our sales tax forecast by \$35 million in FY 1999-00.

Use tax receipts, the second largest component of excise tax receipts, grew 16.6 percent in FY 1998-99. Our forecast calls for moderating growth in use tax receipts. Growth in the construction, defense, and transportation, communication and public utilities industries determine the growth in use tax revenues. Since the construction industry is forecast to moderate in FY 1999-00, the rate of growth of use tax receipts will slow. However, strong growth in the communications industry will mitigate this slowdown somewhat.

Other Revenues

This last category of tax receipts encompasses a large group of revenues. These include estate taxes, insurance taxes, pari-mutuel taxes, interest income, court receipts, gaming taxes, medicaid revenues, and other income. Very few revisions were made to these categories for this forecast. After increasing 28.3 percent in FY 1997-98, these miscellaneous revenues decreased 12.2 percent in FY 1998-99, and are expected to decline another 25.7 percent in FY 1999-00.

The primary reason for the decrease in this category is a drop in Medicaid revenues. An important change is taking place in **Medicaid** revenues in FY 1999-00. Medicaid revenues are currently received through the *disproportionate share program*. Beginning in FY 1999-00, the state will allow both Denver Health and University hospitals to certify the maximum amounts possible of the disproportionate share funds directly with the federal government, thereby eliminating their payments to the state. Effectively, this lowers Medicaid revenues

Thus far in FY 1999-00, sales tax receipts have been exceptionally strong, reflecting robust consumer spending, both nationally and locally. Thus, more sales tax revenue is being received than originally predicted.

Interest income is forecast to decrease slightly due to reduced General Fund reserves. and the TABOR surplus by \$65 million per year beginning in FY 1999-00. Since the state has sufficient funds without this benefit to allow General Fund appropriations to grow by the 6.0 percent maximum allowed under current law, the loss of the \$65 million in revenue essentially lowers the amount of money available for transfer for capital, controlled maintenance, highway purposes, and/or increased expenditures and rebates by a like amount each year. This action also frees up \$44 million for FY 1999-00 General Fund appropriations. These released funds are within the 6.0 percent appropriations limit.

Forecasts for other revenue sources, interest income, insurance tax, and rebates and expenditures did not change materially from the September 1999 forecast. **Interest income** is forecast to decrease slightly due to reduced General Fund reserves. **Insurance tax** revenues will experience somewhat slower growth because of a law change in the 1996 session that phases in a lower insurance premium tax rate for companies that do not maintain a home or regional home office in Colorado.

TABLE 6

Colorado General Fund, Accrual Basis Revenue Estimates by Tax Category

(\$ in millions)

						(Ψ 111 1111110	,							
Category	FY 1998-99	% Change Over Prior Year	12/99 Estimate FY 1999-00	% Change Over Prior Year	12/99 Estimate FY 2000-01	% Change Over Prior Year	12/99 Estimate FY 2001-02	% Change Over Prior Year	12/99 Estimate FY 2002-03	% Change Over Prior Year	12/99 Estimate FY 2003-04	% Change Over Prior Year	12/99 Estimate FY 2004-05	% Change Over Prior Year
Sales	\$1,563.7 /B	9.7	\$1,720.8	10.0	\$1,829.4 /B	6.3	\$1,945.7 <i> </i> 1	B 6.4	\$2,063.8 /E	6.1	\$2,202.1 /B	6.7	\$2,341.8 /B	6.3
Use	140.2 /B	16.6	147.1	4.9	151.6 /B	3.1	155.6 / I	B 2.6	159.9 /E	2.8	164.5 /B	2.8	168.0 /B	2.1
Cigarette	60.0	0.2	58.5	-2.5	56.9	-2.7	57.2	0.5	57.1	-0.2	57.0	-0.2	57.4	0.7
Tobacco Products	8.6	6.5	8.9	3.2	9.3	4.7	9.8	5.2	10.2	4.1	10.6	3.7	10.9	2.9
Liquor	25.8	2.7	26.1	1.3	26.6	2.0	27.2	2.0	27.7	2.1	28.3	2.0	28.7	1.4
TOTAL EXCISE	1,798.3	9.7	1,961.4	9.1	2,073.8	5.7	2,195.5	5.9	2,318.7	5.6	2,462.4	6.2	2,606.7	5.9
Net Individual Income	3,326.8 /D	9.0	3,538.4	6.4	3,813.0 /D	7.8	4,115.7 <i>/</i> I	D 7.9	4,404.2 / D	7.0	4,687.4 /D	6.4	4,993.2 /D	6.5
Net Corporate Income	276.2 /E	5.0	304.8	10.3	303.8 /E	-0.3	309.8 /	E 2.0	322.9 /E	4.2	335.1 /E	3.8	352.2 /E	5.1
TOTAL INCOME	3,603.0	8.7	3,843.1	6.7	4,116.8	7.1	4,425.5	7.5	4,727.1	6.8	5,022.5	6.2	5,345.4	6.4
Estate	67.1	-38.8	56.1	-16.4	59.0	5.1	62.7	6.3	68.5	9.3	69.2	1.1	72.1	4.1
Insurance	117.9	3.6	120.7	2.4	124.2	2.9	128.0	3.1	132.0	3.2	136.1	3.1	136.5	0.3
Pari-Mutuel	6.2	-12.3	6.4	3.1	6.5	1.3	6.6	1.2	6.6	1.2	6.7	1.1	6.8	1.1
Interest Income	47.5	-9.0	45.3	-4.7	43.9	-3.0	41.7	-5.0	47.6	14.0	55.6	17.0	53.7	-3.6
Court Receipts	25.4	2.0	24.6	-3.2	25.3	2.8	26.0	2.7	26.8	3.0	27.3	2.0	28.2	3.2
Gaming	27.3 /A	26.7	17.4	-36.4	20.0 /A	15.2	23.0 <i>l</i>	A 14.8	26.3 /A	14.5	30.1 /A	14.6	34.4 /A	14.3
Medicaid (Intergovt. Transfer)	73.0	0.5	7.6	-89.5	7.6	0.0	7.6	0.0	7.6	0.0	7.6	0.0	7.6	0.0
Other Income	28.3	-37.6	13.7	-51.6	14.1	3.2	14.7	3.8	15.2	3.6	15.6	2.3	15.8	1.7
TOTAL OTHER	392.7	-12.2	291.8	-25.7	300.6	3.0	310.2	3.2	330.7	6.6	348.3	5.3	355.1	1.9
GROSS GENERAL FUND	\$5,794.0	7.3	\$6,096.3	5.2	\$6,491.2	6.5	\$6,931.2	6.8	\$7,376.5	6.4	\$7,833.2	6.2	\$8,307.2	6.1
REBATES & EXPENDITURES:														
Cigarette Rebate	16.7	-0.4	16.3	-2.5	15.8	-2.7	15.9	0.5	15.9	-0.2	15.9	-0.2	16.0	0.7
Old-Age Pension Fund	57.4	2.7	55.4	-3.5		2.0	57.6	2.0		2.0	60.0	2.0		2.0
Aged Property Tax & Heating Credit	11.8 /C	25.5	22.9	94.1	22.8	-0.4	22.5	-1.3		-1.8	21.9	-0.9	-	-1.0
Fire/Police Pensions	28.5	0.7	28.4	-0.4	28.5	0.4	28.9	1.4	29.5	2.1	30.1	2.0	30.1	0.0
TOTAL REBATES & EXPENDITURES		3.7	123.0	7.5	123.6	0.4	125.0	1.1	126.3	1.1	127.8	1.2		0.0
TOTAL REBATES & EXPENDITORES) 114.4	3.1	123.0	1.5	123.0	0.5	123.0	1.1	120.5	1.1	127.0	1.2	120.9	0.9

Totals may not sum due to rounding.

NA: Not Applicable.

[/]A Limited gaming receipts are reported net of revenues that are credited to the Local Government Limited Gaming Impact Fund (LGLGIF). In addition, the receipts are net of transfers to the State Highway Fund and to the Municipal Limited Gaming Impact Fund (MLGIF). In FY 2000-01, the MLGIF will be merged into the LGLGIF.

[/]B S.B. 97-1, H.B. 98-1202, and H.B. 99-1206 divert ten percent of sales and use taxes to the Highway Users Tax Fund. The full amount of sales and use taxes are reported here, and the ten percent is deducted from available revenues in the General Fund Overview in Table 3.

[/]C Effective January 1, 1999, H.B. 98-1112 increased both the amounts of the property tax and heat credits and the income levels at which the credits are phased out. Thus, there are significant increases in these credits in FY 1999-00.

[/]D The net individual income tax estimate reflects the permanent tax reductions passed during the 1999 legislative session, including H.B. 99-1207 (income tax rate reduction), H.B. 99-1003 (marriage penalty), H.B. 99-1155 (pension exclusion) and H.B. 99-1246 (long-term care insurance credit).

[/]E The net corporate income tax estimate reflects the permanent tax reductions passed during the 1999 legislative session, including H.B. 99-1207 (income tax rate reduction) and H.B. 99-1125 (foreign source income adjustment).

Cash Fund Revenues Forecast

Summary

- ! In total, cash fund revenues are forecast to increase 0.9 percent between FY 1998-99 and FY 1999-00, and to increase at a compound annual average rate of 3.2 percent from FY 1998-99 through FY 2004-05.
- ! Transportation-related revenues, the largest group of cash funds, are expected to increase 2.5 percent in FY 1999-00 after increasing 4.4 percent in FY 1998-99. The Highway Users Tax Fund, the largest component of the transportation-related cash funds, is expected to grow at a 2.1 percent rate, while the remainder of this group will grow at a 4.9 percent rate.
- ! Higher education cash funds, the next largest group of cash funds, are expected to grow 3.9 percent in FY 1999-00. They are forecast to increase at a compound annual average rate of 4.6 percent from FY 1998-99 through FY 2004-05.
- ! Unemployment insurance taxes, the largest contributor to the **Unemployment Insurance Trust Fund**, are forecast to fall 2.3 percent in FY 1999-00. Overall, the Unemployment Insurance Trust Fund is expected to decrease by 0.8 percent in FY 1999-00, but grow at a compound annual average rate of 2.7 percent from FY 1998-99 through FY 2004-05.

Cash funds are revenues earmarked for specific purposes. In FY 1998-99, they comprised 27 percent of total funds subject to the spending limitations imposed by TABOR. Total cash fund revenues are expected to increase by a scant 0.9 percent between FY 1998-99 and FY 1999-00. The slow growth is primarily because of weak growth in transportation-related revenues and a decline in Unemployment Insurance Trust Fund revenues. Overall, we lowered our FY 1999-00 total cash fund revenue forecast \$13.6 million, a decrease of 0.6 percent. From FY 1998-99 through FY 2004-05, total cash fund revenues are expected to grow at an annual average rate of 3.2 percent.

The forecasts for cash fund revenues are summarized in *Table 7*, while more detailed forecasts for the transportation-related, higher education, and the Unemployment Insurance Trust Fund revenues are shown in *Tables 8*, *9 and 10*, respectively.

Transportation-Related Cash Funds

The largest cash fund group is comprised of transportation-related revenues, most of which are in the Highway Users Tax Fund (HUTF). *Table 8* displays forecasts for these funds. In terms of revenue sources, 73 percent of the HUTF comes from taxes levied on the sale of motor and special fuels. Vehicle registration fees account for an additional 21 percent of this fund, and the remainder is from driver's

Total cash fund revenues are expected to increase by a scant 0.9 percent between FY 1998-99 and FY 1999-00. The slow growth is primarily because of weak growth in transportation-related revenues and a decline in Unemployment Insurance Trust Fund revenues.

TABLE 7

Cash Fund Revenue Forecasts by Major Category (Accrual Basis, Dollar Amounts in Millions)											
	FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 2001-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05	FY 1998-99 to FY 2004-05 CAAGR *			
Transportation-Related Change	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA			
Higher Education	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Unemployment Insurance	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Limited Gaming Fund	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Wildlife Cash Fund	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Capital Construction - Interest	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Insurance-Related	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Regulatory Agencies	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Severance Tax	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Petroleum Storage Tank Fund	NA	NA	NA	NA /A	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
Controlled Maintenance Trust Fund - Interest Change	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA			
Other Cash Funds	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				
TOTAL CASH FUND REVENUE	NA	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA				

^{*} CAAGR: Compound Annual Average Growth Rate

/A Decreased revenues reflect reduction in the surchage rate effective July 1, 2001 (Section 8-20-206.5, C.R.S).

TABLE 8

Transportation-Related Cash Funds Revenue Forecast (Accrual Basis, Dollar Amounts in Millions)											
		FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 2001-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05	FY 1998-99 to FY 2004-05 CAAGR *		
Highway Users Tax Fund (HUTF)											
Registrations		\$140.3	\$146.7	\$152.5	\$157.9	\$163.4	\$169.1	\$175.0			
Change		7.4%	4.5%	4.0%	3.5%	3.5%	3.5%	3.5%	3.7%		
Motor and Special Fuels	/A	\$495.6	\$503.8	\$517.4	\$533.5	\$549.5	\$565.4	\$580.7			
Change		5.2%	1.7%	2.7%	3.1%	3.0%	2.9%	2.7%	2.7%		
Other Receipts	/B	\$40.6	\$40.6	\$41.5	\$42.3	\$43.1	\$44.0	\$44.9			
Change		-3.7%	0.0%	2.2%	1.9%	1.9%	2.1%	2.0%	1.7%		
TOTAL HUTF		\$676.6	\$691.1	\$711.4	\$733.6	\$755.9	\$778.5	\$800.6			
Change		5.1%	2.1%	2.9%	3.1%	3.0%	3.0%	2.8%	2.8%		
Other Transportation-Related Cash Funds	/C	\$42.9	\$46.4	\$48.0	\$49.6	\$51.3	\$52.9	\$54.6			
Change		-4.8%	8.2%	3.5%	3.3%	3.3%	3.2%	3.1%	4.1%		
TOTAL TRANSPORTATION-RELATED Change		\$719.5 4.4%	\$737.5 2.5%	\$759.5 3.0%	\$783.2 3.1%	\$807.2 3.1%	\$831.4 3.0%	\$855.2 2.9%	2.9%		

[/]A Net of Refunds

[/]B Includes interest earnings, court fines, driver's license fees, and other miscellaneous income.

[/]C Includes income to the State Highway Fund and fees collected for distributive data processing, emissions, motorcycle safety, and emergency medical services.

^{*} CAAGR: Compound Annual Average Growth Rate

From FY 1998-99 through FY 2004-05, total transportation-related tax revenues will increase at a healthy compound annual average rate of 2.9 percent.

From FY 1998-99 through
FY 2004-05, we anticipate
total enrollment in the state's
higher education system to
grow at a compound annual

average rate of 1.6 percent.

licenses, court fines, interest earnings, and other miscellaneous items. The "other transportation-related cash funds" includes various funds that collect fees for distributive data processing, emissions, motorcycle safety, and special transport permits, along with interest earnings and local monies given to the State Highway Fund to match other state or federal dollars for transportation construction.

The recent slowing of Colorado's economy is responsible for the slower revenue growth from gas taxes in FY 1999-00. From FY 1998-99 through FY 2004-05, however, total transportation-related tax revenues will increase at a healthy compound annual average rate of 2.9 percent. Total HUTF revenues will increase by 2.5 percent in FY 1999-00 and 3.0 percent in FY 2000-01.

Higher Education Cash Funds

Table 9 displays the forecast for higher education cash funds. In FY 1999-00, these revenues are forecast to increase 3.9 percent. Roughly 78 percent of the revenues come from tuition payments. The remainder of the higher education cash funds revenues comes from instructional fees, hospital patient revenue, and other miscellaneous items.

Growth in tuition revenues is driven by tuition rate increases and student enrollment. For the past few years, the maximum allowed **tuition increase** has been set by legislation and tied to the Denver-Boulder inflation rate. Under the current process, we expect resident and nonresident tuition rates to increase each year by the full Denver-Boulder inflation rate, 2.4 percent in FY 1999-00 and 3.0 percent in FY 2000-01. In the FY 2000-01 executive budget, the OSPB proposed a 3.0 percent tuition increase for resident students and a higher, 5.0 percent increase for nonresidents. Given that the tuition increases for FY 2000-01 are still in the proposal stage, we left the tuition increases at the inflation rate until further action is taken.

The preliminary FY 1999-00 total **full-time-equivalent enrollment** (FTE) in the state's public higher education institutions are shown in *Table 9*. These are slightly higher than those we forecast in September 1999. The upward change in the growth rate between FY 1998-99 and FY 1999-00 is also due in part to a downward revision of the FY 1998-99 FTE enrollment figures. In FY 1999-00, the total number of FTE students in state institutions of higher education is 145,126. This includes 730 FTE students from Colorado Northwestern Community College (CNCC), which was incorporated into the state system on July 1, 1999. The addition of CNCC accounts for approximately 0.6 percent of the increase in enrollment in FY 1999-00.

Our forecast for FY 2000-01 enrollment growth is the same as we published in September 1999. Enrollment for the remainder of the forecast period has been revised slightly upward because we changed the model used for the forecast to include national public school enrollment trends. From FY 1998-99 through FY 2004-05, we anticipate total enrollment in the state's higher education system

TABLE 9

Higher Education Cash Fund Revenue Forecast by Source (Accrual Basis, Dollar Amounts in Millions)											
	FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 2001-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05	FY 1998-99 to FY 2004-05 CAAGR *			
Tuition Change	NA NA	NA 3.7%	NA 4.4%	NA 4.5%	NA 4.9%	NA 4.9%	NA 5.0%	NA			
Non-Tuition Change	NA NA	NA 4.5%	NA 4.7%	NA 4.6%	NA 5.0%	NA 4.9%	NA 4.9%	NA			
TOTAL HIGHER EDUCATION Change	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA			
Full-Time-Equivalent Students											
Total	135,431	138,286	140,666	142,740	144,941	147,055	149,162				
Change	1.8%	2.1%	1.7%	1.5%	1.5%	1.5%	1.4%	1.6%			
Resident	114,269	116,862	119,044	120,949	122,922	124,769	126,590				
Change	2.0%	2.3%	1.9%	1.6%	1.6%	1.5%	1.5%	1.7%			
Nonresident	21,162	21,424	21,622	21,792	22,019	22,286	22,572				
Change	1.1%	1.2%	0.9%	0.8%	1.0%	1.2%	1.3%	1.1%			

Totals may not sum due to rounding.

Note: For FY 1999-00, maximum allowed tuition increases for both resident and nonresident tuition is 2.4 percent, equal to the Denver-Boulder inflation rate in 1998. For FY 2000-01 and beyond, we assume that tuition will increase by the Denver-Boulder inflation rate.

^{*} CAAGR: Compound Annual Average Growth Rate.

Enrollment growth in FY 1999-00 reflects the addition of 650 resident and 80 nonresident students from Colorado Northwestern Community College into the state's public higher education system.

The higher education cash funds will increase 3.9 percent in FY 1999-00 and 4.5 percent in both FY 2000-01 and FY 2001-02.

By FY 2004-05, we expect the UI Trust Fund balance to reach \$861.7 million. Furthermore, we forecast that the fund will remain statutorily solvent throughout the forecast period. to grow at a compound annual average rate of 1.6 percent, with resident enrollment growing at a 1.7 percent rate and nonresident enrollment growing at a 1.1 percent rate.

The higher education cash funds will increase 3.9 percent in FY 1999-00 and 4.5 percent in both FY 2000-01 and FY 2001-02. From FY 2002-03 through FY 2004-05, growth in higher education cash funds is expected to hover around 5.0 percent.

Unemployment Insurance Trust Fund

The forecast for the Unemployment Insurance (UI) Trust Fund is found in *Table 10*. Tax collections in the UI Trust Fund decreased 5.5 percent in FY 1998-99, partially because of an auditor's adjustment that moved \$5.5 million of UI taxes from the UI Trust Fund to the Employment Support Fund. We expect UI tax collections to decrease again in FY 1999-00 (by 2.3 percent). For FY 1999-00, UI tax revenue is coming in below the September 1999 forecast. One possible reason for the lower revenues is that the strong economy is lowering unemployment benefit payments and therefore lowering tax rates.

By FY 2004-05, we expect the UI Trust Fund balance to reach \$861.7 million. Furthermore, we forecast that the fund will remain statutorily solvent throughout the forecast period. The UI Trust Fund balance increases are due to increased revenues from rising wages accompanied by low benefit payments. Indeed, benefit payments declined from FY 1996-97 through FY 1998-99, but are expected to increase through the end of the forecast period as economic activity tapers off and unemployment rises slightly.

The UI Trust Fund collects revenue from two sources: employer-paid taxes on the first \$10,000 in annual wages for each employee, and interest earnings on the balance in the Trust Fund.

The UI *tax rate* also has two components:

- 1. The first is the base tax rate, which depends on how much an employer has paid in UI taxes relative to how much former employees have claimed in unemployment benefits. For example, an employer who experiences a high amount of benefit claims compared with tax payments would pay a higher base tax rate than an employer for which the opposite was true.
- 2. The second component is the socialized surcharge tax which is levied to cover the unemployment benefit claims against employers who have gone out of business. The surcharge tax increased to 0.2 percent of taxable wages in January 1998 and to 0.3 percent in January 1999. During the 1999 legislative session, however, Senate Bill 99-248 permanently set the surcharge tax rate at 0.22 percent beginning on January 1, 2000. Furthermore, beginning July 1, 1999, half of the surcharge will be diverted to the Employment Support Fund. Both of these events have been incorporated into the forecast.

TABLE 10

Unemployment Insurance Trust Fund Forecast (Accrual Basis, Dollar Amounts in Millions)										
	FY 1998-99	12/99 Estimate FY 1999-00	12/99 Estimate FY 2000-01	12/99 Estimate FY 01-02	12/99 Estimate FY 2002-03	12/99 Estimate FY 2003-04	12/99 Estimate FY 2004-05	FY 1998-99 to FY 2004-05 CAAGR *		
Beginning Balance Change	\$606.8 14.2%	\$679.5 12.0%	NA NA	NA NA	NA NA	NA NA	NA NA	NA		
Income	NA	\$219.6	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA	NA		
Taxes	NA	\$173.8	\$179.1	\$185.0	\$190.8	\$196.9	\$203.0			
Change	NA	NA	3.1%	3.3%	3.1%	3.2%	3.1%	NA		
Interest	NA	\$45.8	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA	NA		
Total Benefits	NA	NA	NA	NA	NA	NA	NA			
Change	NA	NA	NA	NA	NA	NA	NA	NA		
Ending Balance	\$679.5	NA	NA	NA	NA	NA	NA			
Total Wages	\$55,663.1	\$60,992.4	\$65,473.2	\$70,369.8	\$75,916.2	\$81,870.9	\$88,070.2			
Change	9.3%	9.6%	7.3%	7.5%	7.9%	7.8%	7.6%	7.9%		
Solvency Ratio	1.2%	NA	NA	NA	NA	NA	NA			

Totals may not sum due to rounding.

^{*} CAAGR: Compound Annual Average Growth Rate.

After increasing 12.6 percent in FY 1997-98 and 18.6 percent in FY 1998-99, we expect gaming taxes to decrease 17.1 percent in FY 1999-00.

Other Cash Funds

The *Limited Gaming Fund* collects taxes levied on the adjusted gross proceeds earned on gaming activity in Gilpin and Teller counties. After increasing 12.6 percent in FY 1997-98 and 18.6 percent in FY 1998-99, we expect gaming taxes to decrease 17.1 percent in FY 1999-00. The overall decrease from FY 1998-99 is due to the lower gaming tax rates that went into effect July 1, 1999. This change is expected to reduce revenues from gaming taxes by approximately \$15 million in FY 1999-00. Thereafter, increased tourism activity will produce healthy gaming tax receipts, with growth averaging over 10 percent through the remainder of the forecast period.

Wildlife Cash Fund revenues come primarily from the sale of hunting and fishing licenses. Hunting and fishing license sales were strong in the 1998 hunting season, and FY 1998-99 cash revenues increased 4.4 percent. Wildlife revenues are expected to fall in FY 1999-00 and beyond, however. This is due in part because over-the-counter deer license sales were eliminated in FY 1999-00. Furthermore, we anticipate slower growth in overall hunting activity, along with reduced interest income as a result of increased spending from the Wildlife Cash Fund reserve.

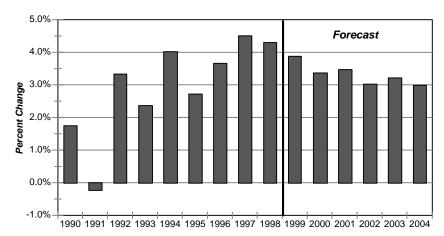
The remainder of the cash fund revenue sources are relatively small when compared to transportation-related, higher education and UI funds. Although there have been minor revisions since our September 1999 forecast, none of these funds have changed substantially except for "other cash funds". The miscellaneous revenues that comprise the "other cash funds" category increased by \$5.5 million as a result of an auditor's transfer of this amount from the Unemployment Insurance Tax Fund into the Employment Support Fund, one of the funds in this category.

The National Economy

Through the third quarter of 1999, the national economy continued to grow robustly, especially for this late stage of an economic expansion. If this expansion continues through January, it will be the longest expansion in the post-World War II era. Moreover, the current economic expansion differs from those of the past. While most expansions started quickly and then faded, the current expansion started slowly and has since increased its pace. The sustained strong economic growth encouraged the Federal Reserve to increase interest rates in November for the third time this year. Higher interest rates are beginning to dampen interest-rate-sensitive sectors and may begin to slow the U.S. economy.

Inflation-adjusted **gross domestic product** (GDP) increased 5.5 percent in the third quarter of 1999, after growing 1.9 percent in the second quarter of 1999. Robust consumer spending, strong inventory investment, and a small improvement in the trade deficit contributed to the strong GDP growth. Inflation-adjusted GDP growth is expected to increase 3.9 percent in 1999 and then slow to 3.4 percent in 2000. Even with this slowing, GDP growth in 2000 will be exceptionally strong for this stage in a business cycle. As a result of robust economic activity, the labor market is tight and the inability to find skilled workers will contribute to slower GDP growth in 2000. An additional factor moderating GDP growth is a slowdown in consumer spending. Strong consumer demand has fueled the economic expansion as consumers have gone on a spending spree. Indeed, consumer demand has in the past year outpaced domestic supply. *Figure 5* shows our forecast for GDP growth through 2004.

Figure 5 Inflation-Adjusted GDP Growth



Oil prices, after bottoming-out in December 1998, have steadily increased in 1999. As a result of the increases in oil prices, consumer price **inflation** has slightly accelerated, averaging 2.6 percent through October 1999 compared with the same 10-month period through October 1998. We expect the inflation rate to average 2.2 percent for 1999 and then to increase to 2.8 percent by 2004.

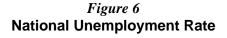
Higher interest rates are beginning to dampen interest-rate-sensitive sectors and may begin to slow the U.S. economy.

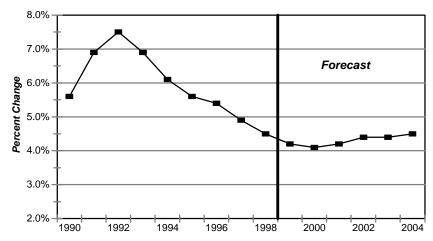
The labor market is tight and the inability to find skilled workers will contribute to slower GDP growth, as will a slowdown in consumer spending.

Oil prices, after bottomingout in December 1998, have steadily increased in 1999. The investment in advanced technology products is beginning to show in productivity gains.

Contributing to the low inflation rate is strong growth in **productivity**. The large increase in productivity witnessed in the past few years reflects relatively lower cost of capital and the extremely tight labor markets. As interest rates dropped in 1998 and labor became more scarce, firms began substituting capital for labor. The investment in advanced technology products is beginning to show in productivity gains. In 2000, productivity growth is forecast to drop to 1.9 percent and then to remain around 2.1 percent through 2004.

Nonagricultural employment growth will slow to 2.2 percent in 1999 and to 1.6 percent in 2000, after increasing 2.6 percent in both 1997 and 1998. After falling to a three-decade low of 4.1 percent in October, the national unemployment rate is expected to increase to 4.2 percent in 1999. In 2000, the national unemployment rate is expected to fall again to 4.1 percent and then start climbing towards 4.5 percent in 2004. The slower employment growth, coupled with the decreasing unemployment rate, exemplifies the tight national labor market. It is becoming more and more difficult to find workers to fill vacant positions. *Figure 6* displays the forecast for the unemployment rate.





Surprisingly, the record-low unemployment rate has not put strong upward pressure on wages. Through September 1999, wage growth was 3.6 percent, similar to the wage gains of 1998 and 1997 and not considerably higher than the inflation rate. Moreover, employment costs increased only 0.8 percent in the third quarter of 1999. For the 12 months ending in September, employment costs grew 3.1 percent. Employment costs (which include wages and benefits) are expected to grow at a 3.1 percent pace in 1999, and then drift towards 3.7 percent for the remainder of the forecast.

The main drivers of the prolonged national expansion have been business investment and consumer spending. Equipment spending – especially now that software is included with computer hardware – has shown robust growth. Equipment spending has experienced healthy gains because borrowing costs have

The main drivers of the prolonged national expansion have been business investment and consumer spending.

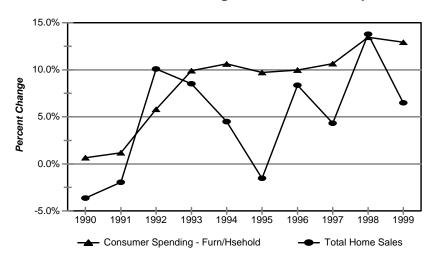
been relatively low over the past few years. With the increase in interest rates, capital will become slightly more expensive and may slow growth in expenditures on equipment. However, even with that said, there will still be growth in equipment spending because of the scarcity of labor. Labor, especially skilled labor, is becoming an increasingly scarce resource in the United States. Thus, more businesses are investing in equipment that increases productivity.

Consumer spending, after showing some signs of weakening, appears to be rebounding just in time for holiday spending. Consumer confidence, after a fourmonth decline, increased in November. Consumers believe the economy will continue to grow, the labor market will remain tight, and incomes will grow. The perception that incomes will rise with the tight labor market will spur consumer spending in the last month of 1999. However, in 2000 consumer confidence will drop slightly and consumer spending growth will slow.

Consumer spending has also been bolstered by growth in housing values and home ownership. Rising home values in conjunction with the soaring stock market have increased consumer wealth, and thus spurred spending. This phenomenon is known as the "wealth effect." With the cost of borrowing now more expensive, and housing valuation not rising as rapidly as in the past few years, the wealth effect may not be as prominent in the next few years. This could dampen both the housing market and consumer spending on household goods.

Strong increases in housing starts (up 10.0 percent in 1998) have led to increases in consumer spending on household goods. *Figure* 7 shows the relationship between growth in total home sales and growth in consumer spending on furniture and household expenditures. However, in response to the three interest rate increases this year, growth in new housing is expected to slow in 1999 and to decrease 5.5 percent in 2000. Moreover, the market for sales of existing single-family homes has softened and will continue to weaken.

Figure 7 Home Sales are Fueling Furniture Consumption



Rising home values in conjunction with the soaring stock market have increased consumer wealth, and thus spurred spending.

The main long-term risk is that inflation will rise more than expected and this expansion – like all postwar expansions prior to this – will end because of rising prices.

Internationally, the economic outlook is improving. After declining in 1998 and the first half of 1999, exports are rebounding. Recovering Asian economies are spurring export demand. Moreover, despite a weak euro, demand for U.S. goods in Europe is increasing.

There are two primary **short-term risks** to continued economic expansion. The first is that the stock market is overvalued and could decline. If this occurs, consumer confidence would decline and consumer spending would retreat more than anticipated. The second risk is that the rebounding Asian economies may not fare as well as anticipated. If these economies slide into recession, the U.S. economic outlook will be sharply affected as well. The main **long-term risk** is that inflation will rise more than expected and this expansion – like all postwar expansions prior to this – will end because of rising prices.

TABLE 11

HISTORY AND FORECAST FOR KEY NATIONAL ECONOMIC VARIABLES

Calendar Year

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
INFLATION-ADJUSTED & CURRENT DOLLAR INCOME ACCOUNTS											
Inflation-Adjusted Gross Domestic Product (Billions) Percent Change	\$6,728.9	\$6,911.7	\$7,164.9	\$7,487.6	\$7,809.6	\$8,112.5	\$8,385.6	\$8,676.4	\$8,938.7	\$9,226.0	\$9,501.5
	4.0%	2.7%	3.7%	4.5%	4.3%	3.9%	3.4%	3.5%	3.0%	3.2%	3.0%
Gross Domestic Product (Billions) Percent Change	\$7,054.3	\$7,400.6	\$7,813.2	\$8,300.7	\$8,760.0	\$9,227.5	\$9,671.4	\$10,159.5	\$10,649.0	\$11,213.3	\$11,789.6
	7.6%	4.9%	5.6%	6.2%	5.5%	5.3%	4.8%	5.0%	4.8%	5.3%	5.1%
Personal Income (Billions) Percent Change	\$5,760.5	\$6,077.4	\$6,429.8	\$6,789.9	\$7,129.4	\$7,542.9	\$7,935.2	\$8,324.0	\$8,706.9	\$9,142.2	\$9,355.5
	5.1%	5.5%	5.8%	5.6%	5.0%	5.8%	5.2%	4.9%	4.6%	5.0%	5.0%
Per-Capita Income (\$/person) Percent Change	\$22,063.3	\$23,123.6	\$24,240.4	\$25,369.1	\$26,405.1	\$27,639.9	\$28,834.1	\$29,996.3	\$31,118.2	\$32,419.2	\$32,907.1
	3.8%	4.8%	4.8%	4.7%	4.1%	4.7%	4.3%	4.0%	3.7%	4.2%	1.5%
POPULATION AND EMPLOYMENT											
Population (Millions) Percent Change	261.1	262.8	265.3	267.6	270.0	272.9	275.2	277.5	279.8	282.0	284.3
	1.1%	0.7%	0.9%	0.9%	0.9%	1.1%	0.8%	0.8%	0.8%	0.8%	0.8%
Civilian Unemployment Rate	6.1%	5.6%	5.4%	4.9%	4.5%	4.2%	4.1%	4.1%	4.3%	4.4%	4.5%
Total Nonagricultural Employment (Millions) Percent Change	114.1	117.2	119.7	122.8	126.0	128.8	130.8	132.6	134.0	135.6	137.1
	3.1%	2.7%	2.1%	2.6%	2.6%	2.2%	1.6%	1.4%	1.0%	1.2%	1.1%
PRICE VARIABLES											
30-Year T-Bond Rate	7.4%	6.9%	6.7%	6.6%	5.6%	6.0%	5.8%	5.9%	5.9%	5.9%	5.9%
Consumer Price Index (1982-84=100) Percent Change	148.4	152.5	156.9	160.5	163.1	166.7	170.5	174.1	178.6	183.6	188.8
	2.6%	2.8%	2.9%	2.3%	1.6%	2.2%	2.3%	2.1%	2.6%	2.8%	2.8%
Producer Price Index (1982=100) Percent Change	120.4	124.8	127.7	128.2	127.0	129.4	132.4	133.3	135.2	137.4	139.4
	1.3%	3.6%	2.3%	0.4%	-0.9%	1.9%	2.3%	0.7%	1.4%	1.6%	1.5%
Industrial Production Index (1987=100) Percent Change	109.1	114.4	119.5	126.7	131.4	134.7	138.6	144.7	152.0	160.0	165.4
	5.4%	4.9%	3.5%	6.0%	3.7%	2.5%	2.9%	4.4%	5.0%	5.3%	3.4%
OTHER KEY INDICATORS											
Corporate Profits After Tax (Billions) Percent Change	\$348.6	\$425.0	\$454.3	\$488.4	\$474.2	\$520.7	\$542.1	\$549.1	\$559.0	\$583.0	\$603.4
	16.1%	21.9%	6.9%	7.5%	-2.9%	9.8%	4.1%	1.3%	1.8%	4.3%	3.5%
Housing Starts (Millions) Percent Change	1.446	1.361	1.470	1.476	1.623	1.665	1.573	1.585	1.556	1.567	1.587
	12.0%	-5.9%	8.0%	0.4%	10.0%	2.6%	-5.5%	0.8%	-1.8%	0.7%	1.3%

Sources: Standard & Poor's DRI, Bureau of Economic Analysis, Bureau of the Census.

The Colorado Economy

Colorado's strong economic expansion that spanned the decade of the 1990s will be sustained into the next century. The 1990s were marked by strong growth in Colorado in terms of employment and wage gains and new construction. They also saw a restructuring of Colorado's economic sectors. Advanced technology emerged as an important industry in Colorado, while construction remained the foundation of Colorado's economic boom. As we move into the twenty-first century, construction will still play an important role in the economy, but no longer the lead role. Advanced technology will grow, while the service and tourism industries will expand.

Our forecast calls for slowing in Colorado's economy in 2000 and beyond. Through October 1999 most economic indicators show signs of slowing. While the unemployment rate decreased throughout 1999, employment growth also slowed. Inflation has slightly increased in Colorado and remains above the national rate, as it has throughout the 1990s. Multi-family home construction, after a strong year in 1998, decreased throughout 1999.

In this section, we will first examine the factors creating Colorado's economic slowdown and then discuss the forecast of Colorado's key economic indicators. Finally, we will detail our forecast for Colorado's economic sectors, including construction activity.

Factors Contributing to Colorado's Economic Slowdown

The primary factors contributing to Colorado's economic slowdown are a scarcity of labor, a higher cost environment, and a slowdown in the construction industry.

Scarcity of Labor

The main factor limiting Colorado's expansion is a shortage of labor. Colorado's seasonally adjusted unemployment rate was 3.0 percent through October 1999, while employment growth tapered off to a 2.3 percent pace. The low unemployment rate, coupled with slowing employment growth, indicates a lack of supply of workers rather than a lack of demand for products made by firms in Colorado.

While the unemployment rate has been near or below 4 percent since 1994, Colorado's labor market is increasingly tight and may have surpassed "full employment" – defined as the point when there is little or no involuntary unemployment. In other words, those people who are unemployed are typically out of work voluntarily as they look for a better job. Thus, the increases in the labor pool must come from in-migration and natural population growth. However, we forecast that both the rate of in-migration and the population growth rate will slow slightly over the next five years. The demographics of the baby boom and baby

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Indeed, between 1990 and 1998 wages have risen 88 percent, residential housing costs are up over 100 percent, and office and industrial rents in the metropolitan-Denver area have increased over 65 percent.

We expect employment growth to slow to a 2.9 percent pace in 2000 and to a 2.4 percent pace in 2001.

We expect the unemployment rate to remain at 3.0 percent in 1999 and to gradually rise toward 4.2 percent by 2004.

bust generations will drive weak labor force growth over the next decade. This assures that scarcity of qualified labor will be the most difficult challenge facing employers for years to come.

Higher Cost Environment

In the past few years, much of the strong growth in Colorado's economy resulted from the many firms that decided to locate or expand their facilities in Colorado because of the state's low cost structure. However, Colorado's ability to attract new business is moderating because of the scarcity of labor and increased costs. Whereas Colorado once had an abundance of both skilled and unskilled labor at relatively low wages, low real estate costs, and an overall low cost of living, the strong economy has neutralized these benefits. Indeed, between 1990 and 1998 wages have risen 88 percent, residential housing costs are up over 100 percent, and office and industrial rents in the metropolitan-Denver area have increased over 65 percent. As a result, Colorado's competitive low-cost advantage has eroded. Without a readily available labor pool and an amenable cost environment, Colorado's benefits to relocating firms have diminished, thus contributing to slower growth.

Colorado's Economic and Demographic Indicators

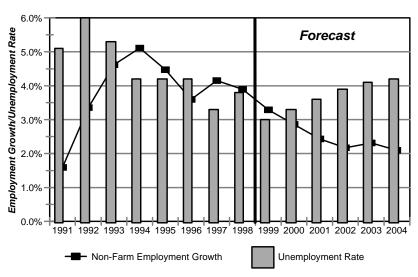
This section provides our forecast for Colorado's economic and demographic indicators. Included in this discussion is employment, wages and income, population, and inflation.

Employment

After healthy increases the past few years, the state's nonfarm job growth slowed this year. Through October 1999, nonfarm employment growth increased 2.3 percent. This is slower than 1998's pace of 3.6 percent and below the annual average 3.7 percent gain that occurred during the 1990s. The slower growth in employment is attributed to a lack of available workers, rather than layoffs. We expect employment growth to slow to a 2.9 percent pace in 2000 and to a 2.4 percent pace in 2001.

The slower employment growth has not yet led to an increased unemployment rate. Indeed, through October 1999, Colorado's unemployment rate averaged 3.0 percent, well below the 3.8 percent unemployment rate posted in 1998. We expect the unemployment rate to remain at 3.0 percent in 1999 and to gradually rise toward 4.2 percent by 2004. *Figure 8* shows both the employment growth and unemployment rates in Colorado.

Figure 8
Colorado Nonfarm Employment Growth and Unemployment Rate



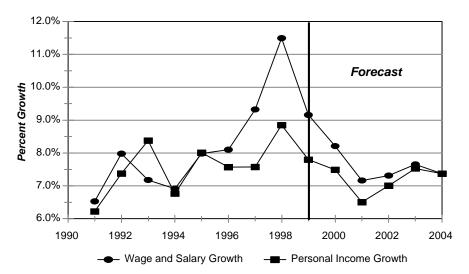
Wages and Income

Colorado made considerable gains in wages during the late 1990s. Overall, wages increased 11.5 percent in 1998, or 9.1 percent after adjusting for inflation. The inflation-adjusted increases of 1998 were the strongest pace of the 1990s. We forecast continued, albeit slower wage and salary income growth in 1999, up 7.5 percent, and in 2000 we expect wage growth to be 7.0 percent. The slower growth in wage and salary income is attributable to slower gains in employment.

Total personal income grew 8.2 percent in 1998, the second fastest rate in the country. Total income differs from wages and salaries because it includes other sources of income such as interest and dividends. Wages and salaries comprise 60.8 percent of personal income. Growth in total income will slow slightly in 1999 to a 7.8 percent pace and then grow 7.5 percent in 2000 (*Figure 9*). Slower overall income growth is expected primarily because of slower wage and salary income gains. It is important to note that capital gains are not included in the income figures and income from capital gains has been an important factor contributing to consumer spending and income tax growth during the last three years.

Total personal income grew 8.2 percent in 1998, the second fastest rate in the country.

Figure 9 Wage and Salary and Personal Income Growth in Colorado



Note: Personal income differs from wages and salaries because it includes dividends and interest income. Wages and salaries comprise 61 percent of personal income.

Strong economic activity bolstered Colorado's median annual household income to \$45,253 in 1998, the seventh highest level in the nation. This reflected a robust 4.7 percent increase in annual household income. Meanwhile, Colorado also had the nation's third-lowest percentage of residents living below the federal poverty level (8.7 percent), a substantial improvement over the previous year when Colorado ranked ninth lowest.

Population and Migration

Throughout the 1990s, population growth in Colorado (2.3 percent per year) was faster than the national average (0.9 percent). The state's in-migration peaked at 77,000 in 1993. As the decade advanced, population growth slowed in Colorado, primarily due to slower rates of in-migration. We expect there to be 46,400 net-migrants in 1999 and 46,900 in 2000. Throughout the forecast horizon in-migration will slow, thus causing population growth to taper off. Population growth is expected to slow from 2.0 percent in 1998 to 1.6 percent in 2004.

Inflation

The Denver-Boulder inflation rate is the proxy we use to measure inflation in Colorado. This rate has remained above the national rate throughout the 1990s, but is still at a relatively low level. Nationally, inflation decreased from 5.4 percent in 1990 to 1.6 percent in 1998. Colorado has followed a similar pattern, wherein inflation was 4.4 percent in 1990 and fell to 2.4 percent in 1998. Inflation has been higher in Colorado because of the relative strength of

Strong economic activity bolstered Colorado's median annual household income to \$45,253 in 1998, the seventh highest level in the nation.

Population growth is expected to slow from 2.0 percent in 1998 to 1.6 percent in 2004.

our economy compared with the nation. Because of rising national inflation, Colorado's inflation rate will increase as well. The Denver-Boulder inflation rate is forecast to increase to 2.9 percent in 1999 and to 3.2 percent in 2000. The main components driving the higher inflation are increasing housing and medical care costs.

Colorado Economic Sectors

This section details our forecast for various economic sectors in Colorado. The construction, advanced technology, financial, insurance and real estate, manufacturing, retail trade, services, and tourism sectors are discussed.

Construction

This section analyzes both residential and nonresidential construction. Construction has been the catalyst to Colorado's expansion during the 1990s. In 1998, construction employment increased 10.8 percent, while construction wages increased 16.7 percent. Employment in the construction industry, which has more than doubled since 1990, will grow at slower rates during the forecast period because of anticipated leveling off of construction activity. The forecast for Colorado's construction industry is one of moderating growth in residential construction and strong growth in nonresidential construction in 1999, followed by an overall decrease in construction activity in 2000. Contributing to the decreases in the construction industry during 2000 — both residential and nonresidential — will be higher interest and mortgage rates. In addition, some overbuilding has occurred in nonresidential construction. In 1999, we expect construction employment to grow 7.4 percent, then to slow to a 1.1 percent pace in 2000. Thereafter, construction employment will remain steady through 2001.

Residential Construction

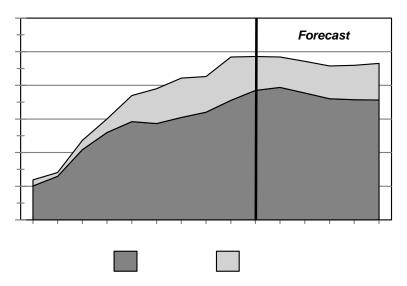
The residential real estate market has been — and continues to be — an integral part of Colorado's economic expansion. Both the construction of new single-family homes and the resale market showed strong gains through October 1999. We forecast that residential construction will increase 0.3 percent in 1999 marking a 16-year peak in home building. In 2000, we anticipate the residential home market will be flat. The construction of single-family homes will grow significantly in 1999, up 8.3 percent, but this growth will be offset by a large decline in the multi-family market. (Multi-family permits are expected to decrease 21.6 percent in 1999.) Growth in single-family home construction will slow to 2.4 percent in 2000 and apartment construction will continue to decrease. *Figure 10* displays our forecast for single- and multi-family building permits.

Because of rising national inflation, Colorado's inflation rate will increase as well. The main components driving the higher inflation are increasing housing and medical care costs.

Construction has been the catalyst to Colorado's expansion during the 1990s, more than doubling its work force.

Both the construction of new single-family homes and the resale market showed strong gains through October 1999.

Figure 10
Residential Building Permits



The average resale price of an existing home increased 11.8 percent through November and now stands at \$207,441.

The opening of the E-470 corridor is projected to bring as many as 45,000 homes and apartments to the area, valued at an estimated \$9 billion.

The apartment vacancy rate in the Denver-area reached a five-year low.

Through October 1999, the number of total residential construction permits decreased 4.1 percent compared with the same 10-month period in 1998, according to the U.S. Bureau of Census. The number of single-family home permits issued grew 8.2 percent through October, while the number of apartment permits issued plunged 32.6 percent. The number of existing home sales closed in metro-Denver through November increased 2.1 percent compared with the same period in 1998. The average resale price of an existing home increased 11.8 percent through November and now stands at \$207,441 according to Perry and Butler Realty. Since 1990, single-family home prices in the metro-Denver area increased over 100 percent. Home prices in the metro-Denver area have been escalating because of a lack of supply of existing homes on the market. In November 1999, there were 21 percent fewer homes on the market than in November 1998.

For the longer term, single-family home construction should remain fairly stable. The redevelopment of both the Stapleton Airport and Lowry Air Force Base will continue to add many new homes to the Denver area. Moreover, numerous housing developments are planned near Commerce City and the Rocky Mountain Arsenal, adding up to 9,000 new homes. Finally, in the long-term, the opening of the E-470 corridor is projected to bring as many as 45,000 homes and apartments to the area, valued at an estimated \$9 billion.

After a strong year in 1998, the apartment construction market decreased in 1999. Through October 1999, the number of multi-family home permits issued was down 32.6 percent compared with the same period through October 1998. Accompanying the decreased apartment construction were rising rental rates and decreasing vacancy rates. The apartment vacancy rate in the Denver-area reached a five-year low. Through the third quarter of 1999, the Denver-area apartment vacancy rate fell to 3.7 percent and the average rent rose to \$725, a 5.8 percent increase from the third quarter of 1998. Only 990 new units were added to the

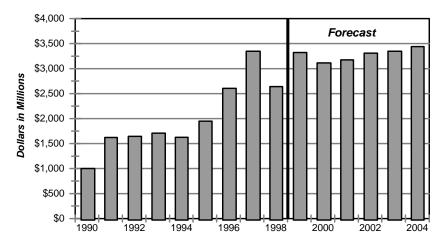
market during the third quarter, compared with a demand for 2,899 units. As a result of strong demand with little supply, we believe that apartment construction will rebound in 2000.

Nonresidential Construction

In 1999 we expect the value of nonresidential construction to grow 25.9 percent, after declining by a similar rate in 1998. Thus, we expect that 1999 will match the 11-year high of nonresidential construction that occurred in 1997. In 2000, we forecast that there will be a 6.3 percent decrease in the value of nonresidential construction. Thereafter, the market will stabilize. The volatility in nonresidential construction is indicative of a market that is slowly becoming saturated as well as one where developers are cautious about overbuilding.

Through the first ten months of 1999, the nonresidential construction market posted healthy gains. Indeed, the value of nonresidential construction increased 26.0 percent through October 1999, according to F.W. Dodge. Strong growth occurred in construction of office, retail, industrial, amusement, education and science, dormitories, hospital and health treatment, and public facilities. The only areas registering a decline in construction activity were the religious, hotel, and garage and service station sectors. *Figure 11* shows the forecast for the value of nonresidential construction through 2004.

Figure 11
Value of Nonresidential Construction



In the *office* construction market, over 800,000 square feet of office space were added during the third quarter of 1999, according to Frederick Ross Company. However, 57 percent of the new office space remains vacant. The Frederick Ross Company is predicting that the metro-Denver office vacancy rates will increase to 9 percent by year-end 1999 as an estimated additional 800,000 square feet of office space comes on line in the fourth quarter. Meanwhile, through October 1999 the value of office construction was 6.1 percent above year-to-date October 1998 level according to F.W. Dodge.

The volatility in nonresidential construction is indicative of a market that is slowly becoming saturated as well as one where developers are cautious about overbuilding.

The value of nonresidential construction increased 26.0 percent through October 1999, according to F.W. Dodge.

After three years of decline, the value of retail construction increased 20.0 percent through October 1999.

The big landmark developments — The Colorado
Convention Center, Six Flags
at Elitch Gardens Amusement
Park, Denver International
Airport, Denver Central
Library, Coors Field,
Colorado's Ocean Journey,
and the new Broncos'
Stadium (currently under
construction) — have
become the signature of
Denver's economic boom.

The outlook for the state's advanced technology and communications sectors remains positive throughout the forecast period.

The *retail* construction market in Colorado has turned around. After three years of decline, the value of retail construction increased 20.0 percent through October 1999, according to F.W. Dodge. Moreover, the retail vacancy rate in the Denverarea was only 5.3 percent in the third quarter of 1999. The low vacancy rate has caused many builders to plan new projects. Several in-process projects will be completed in the fourth quarter of 1999.

Other areas of nonresidential construction that are faring well are industrial (up 160.8 percent), education and science (up 88.3 percent), public (up 63.4 percent), and amusement (up 60.6 percent). Of concern is the significant increase in construction of industrial space while at the same time industrial vacancies are rising.

The strong growth in the construction sector has been bolstered by the many public works projects completed in the 1990s. The \$160 million Pepsi Center, which opened in October, is the seventh large public works project completed in a decade in which the big landmark developments — The Colorado Convention Center, Six Flags at Elitch Gardens Amusement Park, Denver International Airport, Denver Central Library, Coors Field, Colorado's Ocean Journey, and the new Broncos' Stadium (currently under construction) — have become the signature of **Denver**'s economic boom. In all, more than \$5 billion in public works construction occurred in the 1990s. The outlook for future public works projects is promising. With the recently passed TRANS proposal, construction will speed up on new highways in Colorado. Moreover, the state has a variety of capital construction projects planned or under construction. For example, the state is constructing a new building for the Department of Human Services and an addition to the San Carlos Correctional Facility. The University of Denver just unveiled plans for a new, \$50 million performing arts and education complex which will begin construction next summer. The University of Denver also recently completed a new business school and athletic facilities.

Advanced Technology and Communications

The advanced technology sector is an integral part of Colorado's economy. In the next section of this document, we report on the role advanced technology plays in our economy, and its growth since the early 1970s. Despite the negative effects of the Asian economic crisis and Colorado's scarcity of labor, the outlook for the state's advanced technology and communications sectors remains positive throughout the forecast period. Even with the tight labor market, advanced technology firms are still moving to and expanding in Colorado. We forecast advanced technology employment will increase 2.2 percent in 1999 and 2.8 percent in 2000. Much of the growth in this sector will occur at firms that are new to the state. For example, Sun Microsystems will employ 3,500 workers by 2001, while Level 3 Communications will grow from 400 employees in 1998 to 1,200 employees in 2000.

Financial, Insurance and Real Estate

The financial, insurance and real estate (FIRE) sector has experienced stellar growth in the past few years. Employment in this sector increased 5.0 percent in 1996, 7.0 percent in 1997, and 6.9 percent in 1998. The strong growth in this sector is a result of many back-office operations, such as Merrill Lynch, locating in Colorado as well as growth in the region's mutual fund industry. Moreover, the strong housing market has required more people to work in the real estate industry. As in other sectors, we expect employment growth to slow in the FIRE sector. The slower growth will be caused by a slowdown in the real estate market and continued consolidation of the banking industry.

The financial, insurance and real estate (FIRE) sector has experienced stellar growth in the past few years.

Manufacturing

Manufacturing employment experienced slow growth throughout the 1990s, increasing at an annual average rate of 0.9 percent between 1990 and 1998. Most of the weakness was concentrated in the early 1990s. The Asian economic slump of 1998 had some negative impact on Colorado's manufacturing sector, but the state still managed to increase overall manufactured exports. Employment increased 1.6 percent in 1998, with durable manufacturing reporting a strong 2.5 percent increase and nondurable manufacturing reporting no growth. (Durable manufacturers produce goods that last longer than three years, while nondurable manufacturers produce goods that have a life of three years or less.) Both instruments manufacturing and food processing employment declined in 1998. Printing and publishing, lumber, stone, clay and glass, and computer and office equipment are expected to expand in 1999 and 2000, but the tight labor market has forced manufacturing firms to find ways to increase productivity without added labor. These productivity gains will become more integral to the manufacturing firms during the next decade.

The tight labor market has forced manufacturing firms to find ways to increase productivity without added labor.

Retail Trade

After increasing 2.8 percent in 1997 and 2.4 percent in 1998, employment in retail trade will increase 3.6 percent in 1999 and 3.3 percent in 2000. Average wage and salary income in the retail sector, although lower than the statewide average, will expand in 2000 to just over \$20,000.

One major challenge to retailers will be the difficulty of finding workers. In almost every store there is a help wanted sign. The flurry of retail construction activity, previously discussed in the nonresidential construction sector, will only compound the problem. Flatirons Crossing, which is expected to open in August 2000, will create 3,000 new jobs in the area. Moreover, the locations of many of the new retail developments are in areas with high costs-of-living, making it difficult for retail workers to live where they work and further exacerbating the shortages of labor.

In 1998, consumer spending increased 6.8 percent and has grown at an annual rate of 7.2 percent from 1990 to 1998. We expect consumer spending to increase 6.7 percent in 1999 and 7.0 percent in 2000. From 1999 to 2004, consumer spending

We expect consumer spending to increase 6.7 percent in 1999 and 7.0 percent in 2000. will increase at an annual average growth rate of 6.6 percent. Sales at auto dealerships are expected to increase 10.1 percent in 1999 after a 5.3 percent gain in 1998 and a 4.0 percent gain in 1997. Growth in auto sales nationally has been extremely fast and in Colorado the same phenomenon is occurring. Growth in auto sales will slow in 2000 to a 3.8 percent pace.

The challenge facing the retail trade sector is the increasing use of electronic commerce (e-commerce). More and more, consumers are shopping on-line. A study by the University of Texas found that e-commerce increased 127 percent nationally from first quarter 1998 to first quarter 1999. Retailers are now faced with changing the way they do business. E-commerce will increase competition for local retailers and local retailers will need to emphasize service and selection.

Services

The service sector in Colorado experienced strong growth in the 1990s. Between 1990 and 1998, employment in this sector grew at a annual rate of 5.6 percent. The service sector encompasses a wide variety of firms including restaurant workers, software programmers, attorneys, hair dressers, and nurses, along with many other varied professions. The business service sector is the largest component of the service sector. Employment in business services grew at an average annual growth rate of 9.8 percent between 1990 and 1998. We expect growth in business services to remain strong, but growth will slow in the near term because of the lack of available workers. Business services employment will grow 7.8 percent in 1999 and 5.3 percent in 2000. We expect overall service sector employment to grow 4.2 percent in 1999 and 3.9 percent in 2000.

Tourism

Tourism spans the service and retail trade industries. The tourism industry in Colorado experienced mixed outcomes thus far in 1999. While the gambling towns are thriving and passenger traffic and revenue projections at the Denver International Airport are robust, the lack of snow in the mountains restrained skier visits early in the season.

Construction activity in the gambling town of Black Hawk is brisk. Currently, there is approximately \$1 billion of casino-related real estate development occurring in the area. Two casinos were recently completed, three more are under construction, and an additional three casinos are in the planning stages. Gambling receipts are up 14.8 percent for October 1999 compared with October 1998 in the three gaming towns in Colorado.

Warm weather had a negative effect on the ski resorts early in the season. Many ski areas are reporting slow bookings through the holidays. Crested Butte delayed the opening of its resort due to poor snowfall and lack of bookings. Many of the ski resorts are now open, but with little skiable terrain. Still, it is early in the season and skier visits tend to be volatile at this point. However, there is some

Employment in business services grew at an average annual growth rate of 9.8 percent between 1990 and 1998.

While the gambling towns are thriving and passenger traffic and revenue projections at the Denver International Airport are robust, the lack of snow in the mountains restrained skier visits early in the season.

cause for concern since skier visits declined during the 1998-99 ski season due to poor snowfall.

Denver International Airport (DIA) expects the airport to serve 45 million new passengers and contribute \$1.7 billion to the local economy by 2005. Thus far in 1999, DIA has had record numbers of passengers, with passenger visits up 4.2 percent through August 1999, compared with the same period in 1998. Moreover, prospects for future growth at the airport are positive. For the first time since its opening, the airport will have all of its gates leased. A new, regional airline is planning service from DIA. Jet Anywair plans routes to small cities in North Dakota, Montana, and Saskatchewan. The airline plans to be in business by next year.

The number of hotel rooms in Denver is expected to grow by 12.6 percent this year after a 32 percent increase during the past three years. Occupancy rates in metro-Denver hotels declined 4.0 percentage points in July 1999 from July 1998. However, the decline in occupancy rates is not surprising considering the significant growth in the supply of available rooms. Furthermore, the average rental rate did not decline, suggesting an increase in demand.

Risk to the Forecast

Colorado's economy has historically paralleled national economic growth. As Colorado becomes a more diverse economy, its ties to the national economy strengthen. Hence, if the national economy enters into a recession, Colorado would slide into a slow growth environment. Thus, the primary risk to the Colorado forecast is a national recession, most likely caused by weak international economies, a decline in the financial industry, or higher inflation.

Denver International Airport (DIA) expects the airport to serve 45 million new passengers and contribute \$1.7 billion to the local economy by 2005.

The number of hotel rooms in Denver is expected to grow by 12.6 percent his year.

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TABLE 12

HISTORY AND FORECAST FOR KEY COLORADO ECONOMIC VARIABLES Calendar Year

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
INCOME											
Total Income (Millions)	\$84,115	\$90,884	\$97,764	\$105,159	\$113,742	\$123,374	\$132,618	\$141,247	\$151,142	\$162,526	\$174,507
Percent Change	6.8%	8.0%	7.6%	7.6%	8.2%	7.8%	7.5%	6.5%	7.0%	7.5%	7.4%
Wage and Salary Income (Millions)	\$48,969	\$52,883	\$57,178	\$62,484	\$69,160	\$76,061	\$82,308	\$88,207	\$94,656	\$101,900	\$109,410
Percent Change	6.9%	8.0%	8.1%	9.3%	11.5%	7.5%	7.0%	6.6%	6.5%	6.7%	6.8%
Per-Capita Income (\$/person)	\$23,002	\$24,290	\$25,618	\$27,015	\$28,663	\$30,482	\$32,155	\$33,632	\$35,377	\$37,415	\$39,534
Percent Change	4.0%	5.6%	5.5%	5.5%	6.1%	6.3%	5.5%	4.6%	5.2%	5.8%	5.7%
POPULATION AND EMPLOYMENT											
Population (Thousands)	3,656.9	3,741.6	3,816.2	3,892.6	3,971.0	4,047.5	4,124.3	4,199.8	4,272.3	4,343.9	4,414.1
Percent Change	2.6%	2.3%	2.0%	2.0%	2.0%	1.9%	1.9%	1.8%	1.7%	1.7%	1.6%
Net Migration (Thousands)	70.2	62.2	50.9	52.1	48.7	46.4	46.9	43.2	41.9	41.3	39.9
Unemployment Rate (%)	4.2	4.2	4.2	3.3	3.8	3.0	3.3	3.6	3.9	4.1	4.2
Total Non-Agricultural Employment (thousands)	1,755.8	1,834.6	1,889.8	1,979.5	2,051.0	2,118.5	2,179.1	2,232.0	2,280.4	2,333.1	2,382.0
Percent Change	5.1%	4.5%	3.6%	4.2%	3.6%	3.3%	2.9%	2.4%	2.2%	2.3%	2.1%
CONSTRUCTION VARIABLES											
Total Housing Permits (Thou. of Units)	37.2	38.6	41.1	43.1	49.5	49.7	49.5	48.2	46.8	47.0	47.6
Percent Change	24.4%	3.8%	6.5%	4.9%	14.8%	0.3%	-0.3%	-2.6%	-3.0%	0.5%	1.2%
Nonresidential Const. (Value-\$ Millions) *	\$1,580.9	\$1,840.6	\$2,366.7	\$2,985.8	\$2,313.6	\$2,911.7	\$2,729.2	\$2,785.0	\$2,900.8	\$2,935.2	\$3,017.3
Percent Change	0.2%	16.4%	28.6%	26.2%	-22.5%	25.9%	-6.3%	2.0%	4.2%	1.2%	2.8%
PRICES AND SALES VARIABLES											
Retail Trade Sales (\$ Billions)	38.1	40.0	42.7	45.0	47.9	51.4	55.0	58.7	62.2	66.3	70.9
Percent Change	11.5%	5.0%	6.7%	5.6%	6.4%	6.7%	7.0%	6.7%	5.9%	6.6%	6.9%
Denver-Boulder Inflation Rate	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8		
Denver-Boulder Inflation Rate	4.4%	4.3%	3.5%	3.3%	2.4%	2.9%	3.2%	3.5%	3.4%	3.5%	3.5%

Sources: Bureau of Economic Analysis, Colorado Depts. of Labor & Employment, Local Affairs, and Revenue.

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Advanced Technology in Colorado - Then and Now

Summary

- ! In 1998, advanced technology jobs comprised 6.1 percent of all nonfarm employment in Colorado, a total of 125,000 out of 2,051,000 workers in Colorado.
- ! Wages in the advanced technology sector were 46 percent higher than the average Colorado nonfarm wage in 1998, more than \$47,000 compared with just over \$32,000.
- The largest share of Colorado's advanced technology work force 18.9 percent
 is located in Boulder County.

In 1991, Nancy J. McCallin, then Chief Economist at the Colorado Legislative Council, reported on the role of advanced technology in the Colorado economy. This study presents an update on the role that Colorado's advanced technology industries play in the state's economy today.

What is Advanced Technology?

Quantifying the advanced technology sectors was difficult in 1991 and remains difficult in 1998. There is still neither an accepted definition as to what constitutes advanced technology, nor official government data for advanced technology industries. Advanced technology encompasses a range of businesses. These include the electronics, biomedical, research and development, computer, space, and communications industries. In addition, advanced technology industries include firms that provide traditional products or services produced by cutting-edge methods and firms that provide cutting-edge products produced by traditional methods.

For purposes of continuity, we define advanced technology here using the same definition that was employed by McCallin in 1991. These industries, listed in the table at the end of this section, were selected after considering three factors: the technical sophistication of workers and production processes, research and development (R&D) expenditures, and the product itself. The 1991 study quantified the presence of advanced technology in Colorado using a variant of the Bureau of Labor Statistics (BLS) definition reported in "High Technology Today and Tomorrow: A Small Slice of the Employment Pie" (Monthly Labor Review, November 1983). An industry is included if the ratio of technology-oriented workers — defined as engineers, life and physical scientists, mathematicians, engineering and science technicians, and computer specialists — to total employment is higher than the ratio for all manufacturing, and R&D expenditures relative to sales are greater than or equal to the average for all industries. We exclude from the original BLS list petroleum refining and part of the chemical industry.

Advanced technology encompasses a range of businesses – electronics, biomedical, research and development, computer, space, and communications industries.

Advanced technology has had — and continues to have — a significant impact on Colorado's economy.

Today, more than 125,000 employees in Colorado work in advanced technology industries.

Colorado's employment in the advanced technology sectors has grown significantly over the past quarter century. As defined here, advanced technology is concentrated primarily in manufacturing, but includes a small part of the service industry (software and research laboratories). The available historical data are aggregated in ways that makes it hard to exclude portions of the identified industries that are not specifically engaged in advanced technology. Furthermore, changes to the industry classifications over the past two decades hamper comparison of employment in the advanced technology sector at a greater level of detail. Despite these difficulties, there is little doubt that advanced technology has had — and continues to have — a significant impact on Colorado's economy.

Advanced Technology Employment

In 1972, employment in advanced technology industries made up 4.8 percent of total employment in the state. In 1998, advanced technology jobs comprised 6.1 percent of the work force. In 1972, advanced technology industries employed 39,000 workers in Colorado. By 1989, the number of jobs had grown to 102,000 workers. Today, more than 125,000 employees in Colorado work in advanced technology industries.

At the end of the 1990s, advanced technology-related employment in the U.S. is dominated by the computer and data processing services industries of the "information technology" sector, which provides the infrastructure and knowledge necessary to make information rapidly available. Information technologies include software producers and consultants who can increase the productivity of current operations, and can help create new products, services and capabilities for firms. The U.S. defense and aerospace industries, once an important contributor to advanced technology jobs, are being downsized and experiencing slow or no growth, while U.S. computer hardware manufacturers have been moved "off shore."

As is true for the nation, Colorado's employment in the advanced technology sectors has grown significantly over the past quarter century. It increased by a remarkable 221 percent from 1972 to 1998, compared with 136 percent for total state nonfarm employment for the same period. Furthermore, in Colorado advanced technology employment growth is also now dominated by increases in the computer-related services sector. *Figure 12* and *Figure 13* show how Colorado's advanced technology employment has changed over the past 27 years.

The pie charts in *Figure 12* and *Figure 13* display the shares held by each component of the advanced technology sector in 1972 and 1998, respectively. The most significant difference is that employment in Software & Computer Services grew from 3.2 percent of advanced technology employment in 1972 to 37.4 percent of advanced technology employment in 1998. Meanwhile, both Instruments and Chemicals experienced a decrease in share of total advanced technology employment from 1972 to 1998.

R&D (0.8%)

Chemicals (11.1%)

Machinery & Metal Products (20.5%)

Instruments (23.4%)

Electrical Equipment & Supplies (21.8%)

Figure 12
Advanced Technology Employment by Sector – 1972

Figure 13
Advanced Technology Employment by Sector – 1998

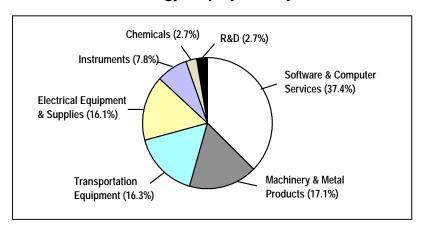


Table 13 reports the compound annual growth rates of Colorado's advanced technology sectors from 1972 to 1998, along with three ten-year subperiods from this same time span. As *Table 13* shows, overall growth in the advanced technology industry has slowed throughout the time period examined. After increasing at a pace stronger than average job growth from 1972 to 1988, advanced technology job growth lagged overall job gains from 1988 to 1998. This was primarily because of the downsizing at Rocky Flats and because of reductions in Machinery & Metal Products.

As is true for the national economy, Colorado's advanced technology growth has not been consistently strong throughout the seven industry classifications that comprise the advanced technology sector. Throughout the 26-year time period examined, Software & Computer Services displayed the most consistent strength, increasing at a compound annual average growth rate of 14.4 percent per year. In 1972, none of Colorado's seven advanced technology sectors was significantly larger than the others. By 1998, this was no longer the case. Although all seven of

Throughout the 26-year time period examined, Software & Computer Services displayed the most consistent strength, increasing at a compound annual average growth rate of 14.4 percent per year.

the advanced technology categories showed employment growth between 1972 and 1988, only Software & Computer Services showed substantial growth between 1988 and 1998.

Table 13
Compound Annual Advanced Technology
Employment Growth Rates

Standard Industrial Classification	(SIC Code)	1972-98	1972-82	1978-88	1988-98
Software & Computer Services	(737)	14.4%	17.8%	15.6%	12.5%
Machinery & Metal Products	(34-35)	3.7%	8.0%	7.4%	-0.6%
Transportation Equipment	(38)	3.8%	12.4%	-1.0%	2.1%
Electrical Equipment & Supplies	(36)	3.2%	7.5%	6.7%	0.2%
Instruments	(37)	0.2%	3.2%	7.5%	-4.5%
Chemicals	(28)	-0.9%	2.9%	4.5%	-6.4%
R&D	(8731)	9.2%	18.8%	15.4%	1.8%
Total Advanced Technology		4.4%	8.1%	5.9%	2.4%
Total Nonagricultural Employment		3.2%	4.1%	2.1%	3.8%

Although the state's advanced technology industry is overwhelmingly comprised of small businesses, it is less so than the state as a whole.

In the fourth quarter of 1998, a total of 4,858 firms were engaged in advanced technology in Colorado, up 239 percent from 1989. Of these, 95.5 percent had fewer than 100 employees, 3.6 percent had between 100 and 499 employees, and 0.9 percent had more than 500 employees. Although the state's advanced technology industry is overwhelmingly comprised of small businesses, it is less so than the state as a whole — 97.5 percent of the firms in all sectors have fewer than 100 employees, 2.2 percent have between 100 and 499 employees and 0.3 percent have more than 500 employees.

In 1998, wages in the seven advanced technology sectors averaged more than \$47,000, an amount 46 percent higher than the average Colorado nonfarm wage.

Advanced Technology Wages

In 1989, wages in the advanced technology sector were 45 percent above the average wage for nonfarm employment in Colorado and 8 percent above those for manufacturing industries. In 1998, wages in the seven advanced technology sectors averaged more than \$47,000, an amount 46 percent higher than the average Colorado nonfarm wage, and the average advanced technology worker earned 15 percent more than the average manufacturing worker in the state. *Figure 14* shows that average annual salaries were highest within the R&D and Machinery & Metal Products sectors, followed by Transportation Equipment, Software & Computer Services, Chemicals, Instruments, and Electrical Equipment & Supplies.

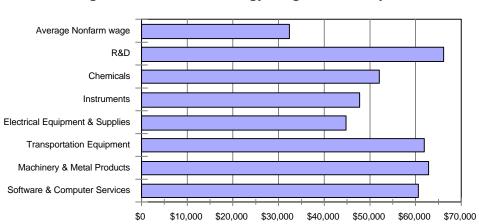


Figure 14
Average Advanced Technology Wage and Salary – 1998

Geographic Locations of Advanced Technology Industries within Colorado

Although traditional "cost-of-doing-business measures" — tax rates or incentives, costs of compensation, land and office space, energy, and capital, and the firm's perception of the general business climate — are important to advanced technology industries, "other factors appear to contribute the most to high-tech firms' location decisions. These other factors include: access to a trained/educated work force, close proximity to excellent educational facilities and research institutions, an existing network of suppliers, availability of venture capital, climate . . . As we enter the age of human capital where firms merely lease knowledge assets, firms' location decisions will be increasingly based upon quality-of-life factors that are important to attracting and retaining this most vital economic asset. In high-tech services, strict business-cost measures will be less important to growing and sustaining technology clusters in metro economies. Locations that are attractive to knowledge assets will play a vital role in regional economic success." (America's High-Tech Economy. Milken Institute, July 1999.)

As is true for the nation as a whole, Colorado's advanced technology enterprises are concentrated in a few locations. *Table 14* shows Colorado's top-ten counties for advanced technology employment in 1989, and how they fared in 1998. There has been some leveling of the distribution of advanced technology employment within these counties over the past decade, although little change in the corresponding rankings.

! In 1989, Jefferson County held the greatest share of advanced technology workers, 23.6 percent. Jefferson County's rank dropped to third by 1998 and accounted for only 11.3 percent of the advanced technology workers. The share of advanced technology workers decreased in Jefferson County because of the closing of Rocky Flats.

Firms' location decisions will be increasingly based upon quality-of-life factors.

Colorado's advanced technology enterprises are concentrated in a few locations.

Boulder County housed approximately 19 percent of Colorado's advanced technology firms, the largest share held by any of Colorado's counties.

! In both 1989 and 1998, Boulder County housed approximately 19 percent of Colorado's advanced technology firms, the largest share held by any of Colorado's counties.

Table 14

Top Ten Counties for Colorado Advanced Technology
Employment – 1989 and 1998

		Emplo	yment	Firms						
	1989 Percent	Rank	1998 Percent	Rank	1989 Percent	Rank	1998 Percent	Rank		
Adams	5.4%	7	5.1%	7	4.3%	8	3.5%	8		
Arapahoe	10.7%	4	11.6%	4	17.2%	3	16.2%	2		
Boulder	23.2%	2	25.8%	1	19.3%	1	18.9%	1		
Denver	5.7%	6	9.6%	6	18.0%	2	14.5%	4		
El Paso	14.8%	3	18.0%	2	11.3%	5	12.7%	5		
Jefferson	23.6%	1	13.3%	3	13.3%	4	14.5%	3		
Larimer	8.9%	5	10.7%	5	5.2%	7	5.9%	7		
Mesa	1.5%	9	1.0%	9	1.1%	9	0.8%	10		
Pueblo	0.9%	11	0.8%	10	0.9%	11	0.6%	11		
Weld	3.9%	8	3.8%	8	1.0%	10	1.1%	9		
All Others	1.4%	10	0.3%	11	8.4%	6	11.2%	6		
Total	100.0%		100.0%		100.0%		100.0%			

Colorado's Advanced Technology Rankings within the Nation

Colorado's concentrations of advanced technology employment — especially those in the Boulder-Longmont, Colorado Springs, Denver, Fort Collins-Loveland, and Greeley metropolitan statistical areas (MSA) — are noteworthy at the national level.

- ! As measured by advanced technology real output growth rates between 1990 and 1998, Colorado Springs ranked 28th, Denver ranked 38th, Greeley ranked 42nd, and Boulder-Longmont ranked 47th out of the top 50 metropolitan statistical areas nationally.
- ! Denver ranks 20th nationally in terms of share national advanced technology real output in 1998.
- ! Denver was second only to the Seattle-Bellevue-Everett MSA when measured based on changes between 1978 and 1998 in advanced technology services output as a proportion of national advanced technology services output, while Colorado Springs ranked 16th when measured based on the analogous measure for advanced technology manufacturing output.

Colorado as a whole also ranks high with regards to advanced technology employment and output, according to results reported by the American Electronics Association in 1999.

As measured by advanced technology real output growth rates between 1990 and 1998, Colorado Springs ranked 28th, Denver ranked 38th, Greeley ranked 42nd, and Boulder-Longmont ranked 47th.

- ! Colorado is 4th in the nation in the number of advanced technology jobs added between 1990 and 1997: Colorado added 40,000 advanced technology jobs during this period, topped only by Texas, California and Georgia which added 102,000, 66,000, and 46,000 jobs, respectively.
- ! Colorado is 2nd only to New Hampshire when ranked by advanced technology workers per 1,000 private workers in the state.
- ! Colorado ranks 10th among the 50 states when measured by average advanced technology wages in 1997, 12th when measured by number of advanced technology jobs, and 13th when measured by growth in advanced-technology employment.

Performance and Risks

In McCallin's discussion of advanced technology in Colorado, she noted that advanced technology employment for defense activities — more than half of Colorado's advanced technology employment in 1989 — was sensitive to changes in fiscal policy at the national level. She also noted that advanced technology production facilities have the potential to be moved offshore where labor costs are lower. The state's experience in the mid-1980s also showed that advanced technology industries were not immune to business cycle fluctuations and are sensitive to international competition. These risks and experiences held true throughout the early 1990s.

By 1998, Colorado's advanced technology sector had lost a significant portion of the employment involved with defense activities and manufacturing. These losses, however, were more than compensated by increases in Software & Computer Services employment, which grew at a stellar average compound annual rate of 14.4 percent from 1972 to 1998.

Overall, the strong advanced technology sector will continue to post strong growth in Colorado, but not without risks. Advanced technology industries can be volatile as are other manufacturing industries. This was most obvious in the mid-1980s when these industries had a significant contraction. In addition, because advanced technology exports comprise a large share of Colorado's international trade — 71 percent in 1998 — the state is becoming more closely tied to national and international developments. Furthermore, the advanced technology sector can cause widening income disparity between technology "haves" and "have nots." The pace of change in this sector may reduce job security and job tenure while "technical obsolescence" may increase the risk of unemployment among formerly high-paid workers. Offsetting this concern is the fact that advanced technology products hold the key to coping with present and upcoming labor shortages by enhancing work force productivity.

Colorado is 2nd only to New Hampshire when ranked by advanced technology workers per 1,000 private workers in the state.

The state's experience in the mid-1980s also showed that advanced technology industries were not immune to business cycle fluctuations and are sensitive to international competition.

Advanced technology products hold the key to coping with present and upcoming labor shortages by enhancing work force productivity.

Advanced technology establishments continue to be pursued as high growth, high paying businesses that provide Colorado with a competitive advantage.

Skilled labor is critical to the expansion and reinforcement of Colorado's advanced technology industries.

Conclusion

Advanced technology establishments continue to be pursued as high growth, high paying businesses that provide Colorado with a competitive advantage. In 1998, Colorado's advanced technology employment was 6.1 percent of total nonfarm employment. More than one-third of these jobs are in the Software & Computer Services category of the advanced technology sector.

Colorado's advanced technology jobs are primarily located in the greater Denver metropolitan area. The highest numbers are in Boulder, Arapahoe and Denver counties, in that order. Advanced technology firms are still most likely to be small, employing fewer than 100 employees. Wages in these firms average 46 percent more than other state wages.

Skilled labor is critical to the expansion and reinforcement of Colorado's advanced technology industries. Low cost and other traditional business measures are less important to advanced technology firms than having a readily available pool of highly-qualified labor, and providing the quality-of-life resources that this class of labor demands.

Table 15
Advanced Technology Sectors

Major Group	Industries	SIC
Chemicals	Industrial Inorganic Chemicals Drugs	281 283
Metal Products & Machinery	Ordnance and Accessories Engines and Turbines Special Industry Machinery Computer and Office Equipment	348 351 355 357
Electrical Equipment & Supplies	Electric Transmission and Distribution Equipment Electrical Industrial Apparatus Household Audio and Video Equipment and Audio Recordings Communications Equipment Electronic Components and Accessories Miscellaneous Electrical Machinery, Equipment, and Supplies	361 362 365 366 367 369
Transportation Equipment	Aircraft and Parts Guided Missiles and Space Vehicles	372 376
Instruments	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical Systems, Instruments and Equipment Laboratory Apparatus and Analytical, Optical, Measuring and Controlling Instruments Surgical, Medical and Dental Instruments Photographic Equipment and Supplies	381 382 384 386
Software & Computer Services	Computer Programming, Data Processing, and Other Computer Related Services	737
Research Labs	Commercial Physical Research	8731

Appendix A

Gross General Fund Revenues Fiscal Year

	78-79	79-80	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98
Sales	\$466.5	\$482.7	\$485.8	\$541.6	\$566.4	\$731.9	\$673.8	\$662.9	\$648.3	\$669.0	\$694.8	\$768.1	\$779.8	\$844.5	\$928.9	\$1.036.6	\$1.131.8	\$1,218,7	\$1.310.0	\$1.426.0
Use	48.6	53.3	54.4	74.1	66.1	66.8	73.0	76.1	68.6	55.6	54.7	62.5	66.9	69.1	69.1	82.5	91.1	102.8	115.8	120.3
Cigarette	33.4	34.8	37.0	37.2	36.7	47.4	52.3	50.9	66.1	61.9	59.0	56.3	57.5	57.3	56.6	57.0	59.7	58.2	60.0	59.9
Tobacco Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1	3.0	3.2	3.9	4.3	4.6	5.5	5.9	7.0	8.2	8.1
Liquor	24.2	26.0	24.7	25.8	25.1	25.3	25.0	24.4	23.6	22.6	21.5	21.4	19.1	21.2	23.2	22.6	23.3	24.3	24.0	25.1
Other	3.7	4.2	3.1		2.0	23.3	1.9	1.9	1.9	22.0	2.0	21.4	3.7	3.2	3.6	3.6	4.1	4.4	3.2	0.0
Otnei	3.1	4.2	3.1	2.0	2.0	2.1	1.9	1.9	1.9	2.0	2.0	2.0	3.7	3.2	3.0	3.0	4.1	4.4	3.2	0.0
TOTAL EXCISE	\$576.4	\$600.9	\$605.0	\$680.7	\$696.3	\$873.5	\$826.0	\$816.2	\$811.2	\$814.2	\$835.0	\$913.5	\$930.9	\$999.6	\$1,086.0	\$1,207.8	\$1,315.9	\$1,415.4	\$1,521.1	\$1,639.4
Individual Income	478.2	465.6	479.4	621.0	703.3	796.4	921.7	973.2	1,081.9	1,195.0	1,311.0	1,380.7	1,462.4	1,608.5	1,759.8	1,919.9	2,106.4	2,318.5	2,572.6	3,051.6
Corporate Income	109.9	117.4	84.8	88.8	66.5	94.1	78.8	124.4	136.7	112.9	167.0	104.2	115.0	112.2	138.4	146.8	191.1	205.7	237.1	263.1
TOTAL INCOME	\$588.1	\$583.0	\$564.2	\$709.8	\$769.8	\$890.5	\$1,000.5	\$1,097.6	\$1,218.6	\$1,307.9	\$1,478.0	\$1,484.9	\$1,577.4	\$1,720.6	\$1,898.2	\$2,066.7	\$2,297.5	\$2,524.2	\$2,809.7	\$3,314.7
Estate	24.4	25.7	6.6	12.3	8.9	10.7	14.0	13.7	18.4	13.4	15.5	21.7	15.3	34.3	19.7	33.9	27.6	31.8	34.6	109.6
Insurance	35.7	39.9	41.6	47.9	51.6	56.6	64.7	75.0	84.1	80.7	81.1	82.5	84.7	89.1	92.1	101.9	105.1	110.4	111.8	113.8
Pari-Mutuel	8.0	8.2	8.8	9.5	8.4	8.6	7.7	8.5	9.0	8.4	8.4	8.3	8.4	8.3	8.5	8.5	8.2	8.1	7.5	7.1
Interest Income	27.3	53.9	37.6	34.5	7.6	4.4	33.4	21.1	10.8	5.9	15.6	15.9	4.0	5.6	8.3	18.5	28.6	37.2	41.2	52.2
Court Receipts	6.0	6.6	7.2	8.6	7.4	9.1	12.3	12.9	14.1	19.3	20.5	19.9	11.6	17.5	17.8	19.5	20.1	20.7	23.1	24.9
Severance	18.3	23.6	31.4	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.7	7.5	10.5	8.4	12.0	3.1	0.0	0.0	0.0	0.0
Medicaid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.4	258.9	205.6	126.7	69.0	80.4	72.6
Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	13.4	16.6	17.1	17.5	19.6	21.5
Other	17.1	13.1	14.3	13.7	10.6	22.1	13.6	17.7	11.7	27.0	20.8	26.4	21.1	25.9	35.2	43.2	49.5	34.4	30.4	45.4
TOTAL OTHER	\$136.6	\$171.0	\$147.5	\$126.5	\$94.5	\$111.5	\$145.7	\$148.9	\$148.1	\$161.8	\$172.6	\$182.0	\$155.6	\$275.6	\$465.9	\$450.6	\$382.9	\$329.2	\$348.6	\$447.1

\$1,301.1 \$1,354.9 \$1,316.7 \$1,517.0 \$1,560.6 \$1,875.5 \$1,972.2 \$2,062.7 \$2,177.9 \$2,283.9 \$2,485.6 \$2,580.4 \$2,663.9 \$2,995.8 \$3,450.1 \$3,725.1 \$3,996.3 \$4,268.7 \$4,679.4 \$5,401.2

Note: Numbers may not add due to rounding.

GROSS GENERAL FUND

Source: Controller's Annual Reports; Accounts and Control.

Selected Cash Fund-Related Historical Data Unemployment Insurance Trust Fund Balance (Dollar Amounts in Millions) Calendar Year 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 **Ending Balance** \$90.4 \$156.8 \$230.8 \$291.5 \$301.6 \$326.6 \$377.7 \$423.6 \$469.0 \$497.9 \$560.9 Source: Division of Labor and Employment. **Higher Education Full-Time-Equivalent Enrollment** Fiscal Year 1986-87 1987-88 1988-89 1989-90 1990-91 1991-92 1992-93 1993-94 1994-95 1995-96 1996-97 1997-98 Residents 91,947 99,240 103,219 105,503 107,803 108,947 108,580 109,385 112,077 94,511 108,863 108,667 Percent Change 2.2% 2.8% 5.0% 4.0% 2.2% 2.2% 1.1% -0.1% -0.3% 0.1% 0.7% 2.5% Nonresidents 15,593 16,338 16,965 17,801 19,149 19,463 20,573 20,673 20,472 20,741 20,464 20,940 Percent Change 0.4% 4.8% 3.8% 4.9% 7.6% 1.6% 5.7% 0.5% -1.0% 1.3% -1.3% 2.3% Total 107,540 129,520 110,849 116,205 121,020 124,652 127,266 129,536 129.052 129,408 129,849 133,017 Percent Change 2.0% 3.1% 4.8% 4.1% 3.0% 2.1% 1.8% 0.0% -0.4% 0.3% 0.3% 2.4% Totals may not sum due to rounding. Source: Colorado Commission on Higher Education. Wildlife Hunting and Fishing Licenses Calendar Year 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 909,157 Resident 913,666 912,669 917,678 935,904 886,706 900,697 902,787 902,989 927,371 925,419 Percent Change 1.5% 0.5% -0.1% 0.5% 2.0% -5.3% 1.6% 0.2% 0.0% 2.7% -0.2% 446,616 532,555 562,835 Nonresident 471,015 495,282 515,573 601,734 626,523 608,206 611,848 624,032 Percent Change 6.6% 5.5% 5.2% 4.1% 3.3% 5.7% 6.9% 4.1% -2.9% 0.6% 2.0% Total 1,355,773 1,384,681 1,407,951 1,433,251 1,468,459 1,449,541 1,502,431 1,529,310 1,511,195 1,539,219 1,549,451 3.1% Percent Change 1.7% 1.8% 2.5% -1.3% 3.6% 2.1% 1.8% 1.9% 0.7% Source: Division of Wildlife.

HISTORY FOR KEY NATIONAL ECONOMIC VARIABLES

Calendar Year

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
INFLATION-ADJUSTED & CURRENT DOLLAR INCOME ACCOUNTS													
Inflation-Adjusted Gross Domestic Product (Billions)	\$5,717.1	\$5,912.4	\$6,113.3	\$6,368.4	\$6,591.8	\$6,707.9	\$6,676.4	\$6,880.0	\$7,062.6	\$7,347.7	\$7,543.8	\$7,813.2	\$8,144.8
Change	3.8%	3.4%	3.4%	4.2%	3.5%	1.8%	-0.5%	3.0%	2.7%	4.0%	2.7%	3.6%	4.2%
Gross Domestic Product (Billions)	\$4,213.0	\$4,452.9	\$4,742.5	\$5,108.3	\$5,489.1	\$5,803.3	\$5,986.2	\$6,319.0	\$6,642.3	\$7,054.3	\$7,400.6	\$7,813.2	\$8,300.7
Change	7.1%	5.7%	6.5%	7.7%	7.5%	5.7%	3.2%	5.6%	5.1%	6.2%	4.9%	5.6%	6.2%
Personal Income (Billions)	\$3,515.0	\$3,712.5	\$3,962.5	\$4,272.1	\$4,599.8	\$4,903.2	\$5,085.4	\$5,390.4	\$5,610.0	\$5,888.1	\$6,200.9	\$6,547.4	\$6,951.1
Change	7.3%	5.6%	6.7%	7.8%	7.7%	6.6%	3.7%	6.0%	4.1%	5.0%	5.3%	5.6%	6.2%
Per-Capita Income (\$/person)	\$14,773.6	\$15,460.0	\$16,354.4	\$17,472.8	\$18,636.2	\$19,655.0	\$20,167.8	\$21,136.3	\$21,762.4	\$22,617.9	\$23,595.3	\$24,685.8	\$25,957.9
Change	6.4%	4.6%	5.8%	6.8%	6.7%	5.5%	2.6%	4.8%	3.0%	3.9%	4.3%	4.6%	5.2%
POPULATION AND EMPLOYMENT													
Population (Millions)	237.9	240.1	242.3	244.5	246.8	249.5	252.2	255.0	257.8	260.3	262.8	265.2	267.8
Change	0.9%	0.9%	0.9%	0.9%	0.9%	1.1%	1.1%	1.1%	1.1%	1.0%	1.0%	0.9%	1.0%
Civilian Unemployment Rate	7.2%	7.0%	6.2%	5.5%	5.3%	5.6%	6.9%	7.5%	6.9%	6.1%	5.6%	5.4%	4.9%
Total Nonagricultural Employment (Millions)	97.4	99.3	102.0	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7
Change	3.2%	2.0%	2.6%	3.2%	2.5%	1.4%	-1.1%	0.3%	1.9%	3.1%	2.7%	2.1%	2.6%
FINANCIAL MARKETS													
30-Year T-Bond Rate	10.8%	7.8%	8.6%	9.0%	8.4%	8.6%	8.1%	7.7%	6.6%	7.4%	6.9%	6.7%	6.6%
10-Year T-Bond Rate	10.6%	7.7%	8.4%	8.8%	8.5%	8.6%	7.9%	7.0%	5.9%	7.1%	6.6%	6.4%	6.4%
Federal Fund Rate	8.1%	6.8%	6.7%	7.6%	9.2%	8.1%	5.7%	3.5%	3.0%	4.2%	5.8%	5.3%	5.5%
PRICE VARIABLES													
Consumer Price Index (1982-84=100)	107.6	109.7	113.7	118.4	124.0	130.8	136.3	140.4	144.6	148.3	152.5	157.0	160.6
Change	3.5%	1.9%	3.7%	4.1%	4.8%	5.4%	4.2%	3.0%	3.0%	2.6%	2.8%	2.9%	2.3%
Producer Price Index (1982=100)	104.6	103.3	105.4	108.0	113.5	119.1	121.7	123.2	124.7	125.5	127.9	131.3	131.8
Change	0.9%	-1.3%	2.1%	2.5%	5.1%	4.9%	2.2%	1.2%	1.2%	0.6%	1.9%	2.6%	0.4%
OTHER KEY INDICATORS													
Industrial Production Index (1987=100)	88.0	89.0	93.2	97.4	99.1	98.9	97.0	100.0	103.4	109.1	114.4	119.4	127.0
Change	1.6%	1.2%	4.6%	4.5%	1.8%	-0.2%	-2.0%	3.1%	3.4%	5.5%	4.9%	4.4%	6.3%
Corporate Profits After Tax (Billions)	\$158.7	\$136.9	\$187.5	\$244.8	\$235.3	\$260.9	\$282.6	\$308.5	\$345.0	\$386.7	\$457.5	\$502.7	\$557.6
Change	-7.7%	-13.7%	37.0%	30.5%	-3.9%	10.9%	8.3%	9.2%	11.8%	12.1%	18.3%	9.9%	10.9%
Housing Starts (Millions)	1.741	1.812	1.631	1.488	1.382	1.203	1.009	1.201	1.292	1.446	1.361	1.469	1.475
Change	-1.4%	4.0%	-10.0%	-8.7%	-7.1%	-12.9%	-16.2%	19.1%	7.5%	12.0%	-5.9%	7.9%	0.4%

Sources: Standard & Poor's DRI, Bureau of Economic Analysis, Bureau of the Census.

HISTORY FOR KEY COLORADO ECONOMIC VARIABLES

Calendar Year

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
CURRENT INCOME													
Personal Income (Millions) Percent Change	\$48,850	\$50,412	\$52,647	\$55,410	\$59,325	\$63,733	\$67,698	\$72,690	\$78,783	\$84,115	\$90,853	\$97,735	\$105,143
	5.6%	3.2%	4.4%	5.2%	7.1%	7.4%	6.2%	7.4%	8.4%	6.8%	8.0%	7.6%	7.6%
Wage and Salary Disbursements (Millions) Percent Change	\$29,582	\$30,444	\$31,363	\$32,879	\$34,681	\$37,148	\$39,574	\$42,733	\$45,801	\$48,969	\$52,880	\$57,163	\$62,495
	5.7%	2.9%	3.0%	4.8%	5.5%	7.1%	6.5%	8.0%	7.2%	6.9%	8.0%	8.1%	9.3%
Per-Capita Income (\$/Person) Percent Change	\$15,197	\$15,541	\$16,133	\$16,938	\$18,062	\$19,346	\$20,095	\$20,998	\$22,109	\$23,020	\$24,305	\$25,634	\$27,020
	4.3%	2.3%	3.8%	5.0%	6.6%	7.1%	3.9%	4.5%	5.3%	4.1%	5.6%	5.5%	5.4%
POPULATION AND EMPLOYMENT													
Population (thousands) \A Percent Change	3214.4	3243.8	3263.4	3271.4	3284.5	3294.394	3368.8	3461.7	3563.4	3653.91	3738.061	3812.716	3891.293
	1.2%	0.9%	0.6%	0.2%	0.4%	0.3%	2.3%	2.8%	2.9%	2.5%	2.3%	2.0%	2.1%
Net Migration	5.3	-5.7	-14.3	-24.0	-18.7	-12.6	37.6	66.4	77.4	70.2	62.2	50.9	52.1
Unemployment Rate (%)	5.8%	7.4%	7.7%	6.4%	5.8%	5.0%	5.1%	6.0%	5.3%	4.2%	4.2%	4.2%	3.3%
Total Nonagricultural Employment (Thousands) Percent Change	1,418.6	1,408.3	1,412.5	1,436.0	1,482.1	1,520.7	1,544.9	1,596.8	1,670.5	1,755.8	1,834.4	1,900.3	1,979.3
	1.1%	-0.7%	0.3%	1.7%	3.2%	2.6%	1.6%	3.4%	4.6%	5.1%	4.5%	3.6%	4.2%
CONSTRUCTION VARIABLES		,			,			,					
Total Housing Permits (Thousands of Units) \A Percent Change	32.8	31.0	18.0	12.9	11.1	11.9	14.1	23.5	29.9	37.2	39.5	42.2	42.5
	-26.0%	-5.7%	-41.9%	-28.5%	-13.5%	6.9%	18.3%	66.9%	27.4%	24.5%	6.2%	6.8%	0.7%
Nonresidential Const. (Value - \$ Millions) \ B Percent Change	1,726.1	1,213.9	948.0	972.8	645.6	939.2	1,609.7	1,538.9	1,578.2	1,580.9	1,840.6	2,350.9	2,985.8
	-2.7%	-29.7%	-21.9%	2.6%	-33.6%	45.5%	71.4%	-4.4%	2.6%	0.2%	16.4%	27.7%	27.0%
PRICES AND SALES VARIABLES			,	,					,				
Retail Trade Sales (\$ Billions) Percent Change	\$24.4	\$23.4	\$23.4	\$24.8	\$26.1	\$27.5	\$28.9	\$31.2	\$34.1	\$38.1	\$40.0	\$42.6	\$45.1
	4.9%	-3.9%	0.1%	5.9%	5.4%	5.3%	5.0%	8.0%	9.2%	11.5%	5.0%	6.7%	5.9%
Denver-Boulder CPI	1.071	1.079	1.108	1.138	1.158	1.210	1.256	1.303	1.358	1.418	1.480	1.531	1.581
Percent Change	2.6%	0.7%	2.7%	2.7%	1.8%	4.4%	3.8%	3.7%	4.2%	4.4%	4.3%	3.5%	3.3%

Sources: Except as noted, all historical values are from Standard & Poor's DRI.

W United States Bureau of the Census

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