



# Agricultural and Resource Policy Report

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## AGRICULTURAL COALITION FOR TOMORROW: AN ECONOMIC PROFILE OF KIOWA COUNTY

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### 1. Introduction

This report provides an economic profile of the 13 Colorado counties, located in the southeast and south-central region of the state, that comprise the Agricultural Coalition for Tomorrow (ACT). The objective of the report is to increase understanding of the contributors to ACT counties' economies in order to facilitate collaboration in strategic planning for future economic development in the region. In view of the likely uses of this information, the overall report has been released as 13 stand alone county reports. Each county report contains all state and regional information, in order to provide context for comparison, and the information specifically pertaining to one county.

The report illustrates potential areas of common interest or concern within ACT counties as well as pointing to unique features of counties that are less likely to be advanced through collaboration. This information provides an essential starting point in the search for regional and subregional economic development strategies, but can only fulfill this role if the information is actively used, updated and matched with complementary sources of local information to reflect changes in the regional economy over time.

**Study region:** The focal 13 Colorado counties for this report are: Alamosa, Baca, Bent, Conejos, Costilla, Crowley, Custer, Huerfano, Kiowa, Las Animas, Otero, Prowers, and Pueblo counties. These counties comprise the Agricultural Coalition for Tomorrow (ACT) Region. Throughout the report Colorado state information is compared to regional and county data.

### **Focal areas of research:**

Available county-level secondary information has been compiled to illustrate the essential features of the Colorado economy. A ten-year time series of information was used as available.

The data used include:

- General demographic information including population by age and race.
- General economic information including labor, employment, jobs-by-sector, housing, taxes, building permits, agricultural and land use information.
- Agricultural information including crop acreage, livestock production, agricultural income and expenditures, number of farms, value of farmland and buildings, Conservation Reserve Program (CRP) acres, and federal subsidies received.

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## 1.1 Demographics

The demographic information provided by this report is population by age and by race. The Demography Section of the Colorado Division of Local Government prepares annual population by age estimates. *Population by age*<sup>3</sup> is broken down into five age categories; 14 and under, 15-24, 25-44, 45-64, and over 65 years of age. *Population by race*<sup>4</sup> data were obtained from the 1990 and 2000 United States censuses.

## 1.2 Housing<sup>5</sup>

The housing market data provided by this report include: population, household population, group quarters population, total housing units, total households occupied, vacant housing units, average household size, housing vacancy rate, and net building permits. For the regional and state assessment of housing data, the totals for each county were summed and determined using the same methodology employed by the State Demographer's Office.

The U.S. Census Bureau provides *population* estimates. *Household population* is the number of people living in households on July 1 for each year and is computed by subtracting the group quarters population from the total population.

*Group quarters population* includes inmates of institutions such as; prisons, nursing homes, handicapped living institutions, military barracks, dormitories, and shelters. It is estimated from decennial census group quarters counts and also by annual data from institutions and colleges.

*Total housing units* are estimated by adding net building permits to decennial census count of housing units. The estimate includes both seasonal and vacant units.

*Total households occupied* are estimated from total housing units, household population, and people per household. *Vacant housing units* are computed by subtracting total households from total housing units and are prepared by the Office of the Colorado State

Demographer. The *average household size* is computed by dividing the household population by the number of households. This is the average number of people residing in each household.

The *housing vacancy rate*<sup>6</sup> is prepared by the State Demographer's Office and is computed by dividing the number of vacant housing units by total housing units. The number of seasonal homes in each county has been subtracted from the total reported number of vacant homes in order to obtain a better view of the actual home vacancy rate.

The Housing Division of the U.S. Census Bureau obtains *residential building permits* from annual survey reports. The permits include both private and public new housing units, and in most cases does not cover mobile homes or trailers. Prior to 1995, the data reflected the subtraction of demolitions, therefore only 1995-1999 data is assessed in this report.

## 1.3 Labor and Jobs by Sector

All labor market information and *jobs-by-sector*<sup>7</sup> information is provided to the public through the Colorado State Demographer's Office. Labor market information includes *estimated total jobs, labor force, employed people, wage & salary jobs, estimated proprietors, and unemployed people*.<sup>8</sup> The primary state agency in charge of collection of employment data is the Labor Market Information section (LMI) of the Colorado Department of Labor and Employment. Employment data from the Census of Population and Economic Censuses are excluded from the data reported here because they are not available on an annual basis. Rather, a combination of estimation techniques is used to produce this series.

The two key sources of data for these estimates are the Current Population Survey (CPS) and establishment records. The CPS is administered by the U.S. Bureau of Labor Statistics (BLS), which samples 600 households in Colorado.

<sup>3</sup> Colorado Population Projection System. Colorado Department of Local Affairs. Feb 2002 <http://www.dola.colorado.gov/demog/Population/widepro1.cfm>

<sup>4</sup> 1990-2000 Demographic Comparisons. Colorado Department of Local Affairs. Feb 2002 <http://www.dola.state.co.us/demog/CensusData/Compare.html>

<sup>5</sup> Colorado County Profile System. Colorado Department of Local Affairs. Feb 2002 <http://www.dola.state.co.us/demog/mule.cfm>

<sup>6</sup> 1990-2000 Demographic Trend Report. Colorado Department of Local Affairs. Aug 2002. <http://www.dlg.oem2.state.co.us/demog/Census/SummaryFile1/DemographicTrend.htm>

<sup>7</sup> Colorado Employment by Sector. Colorado Department of Local Affairs. Feb. 2002 <http://www.dlg.oem2.state.co.us/demog/empgcod1.cfm>

<sup>8</sup> Colorado Employment, Labor Force, and Jobs. Colorado Department of Local Affairs. Feb. 2002 <http://www.dlg.oem2.state.co.us/demog/employ1.cfm>

Establishment records provide an estimate of the number of employees at work in an industrial establishment. Employment Security Program information (ES 202) is a major component of the establishment records. Under this program each firm with one or more employees is required to report the number of employees working for that company to the state on a quarterly basis. This employment data is considered of the highest available quality since it comes from employee payroll records. The U.S. Bureau of Economic Analysis (BEA) uses this information to estimate the number of farm wage and salary jobs using estimates provided by the United States Department of Agriculture (USDA).

In order to estimate the total number of jobs, the number of proprietors in each county must be compiled. In non-metropolitan areas, the BEA uses Schedule C of the income tax return form to derive this number. This overestimates the number of proprietors in each county, since most perform proprietary functions on a limited basis. The Colorado Demography Section has elected to use an alternative means to arrive at the number of proprietors at the county level. In the non-metropolitan areas of the state, dividing BEA's estimate of proprietor's income by the average earnings of wage and salary employees provides an estimate of the number of proprietors. Conversely, the number of proprietors in metropolitan areas is derived by the use of national ratios. Regional jobs-bisector estimates were found by the sum of the 13 individual county sectoral employment estimates.

#### 1.4 Local Taxes<sup>9</sup>

Tax information is divided into four major categories at the county level for evaluation purposes; retail sales, sales tax paid, total taxable assessed value, and mill levy.

Total *retail sales* and *sales tax paid* are both reported in thousands of dollars on an annual basis by the Colorado Department of Revenue. *Total taxable property* includes all land, improvements and personal property, whether assessed by the county assessors or by the state. The data is obtained from the Colorado Division of Property Taxation and is reported in thousands of dollars. The *mill levy* is the number of dollars of prop-

erty tax levied on each thousand dollars of assessed value for the support of a particular local government. In this assessment the base county mill levy, average school levy, and total average mill levy is provided.

State and regional sales tax information is determined by the sum of all counties' sales tax paid and retail sales. State and regional mill levy information is computed as a weighted average of the county mill levies based upon the county total assessed value and total property taxes paid. Care must be exercised in the evaluation of this data since the difference from county-to-county can be drastic in some instances.

#### 1.5 Education

Education information is provided in two principal categories: *school enrollment*<sup>10</sup> and *total revenues and expenditures per school district*.<sup>11</sup> School enrollment for grades 1 to 8 is obtained from the Colorado Department of Education and the Dioceses of Colorado. Non-Catholic private school pupils are not included in the data. The October Average Daily Attendance Entitlement (ADEA) for each school year is reported. Total Revenue and Expenditures for school districts is reported by the Colorado Department of Education and is the source for this data.

#### 1.6 Agriculture

The agriculture sector is of traditional economic and cultural importance throughout the ACT region of Colorado. It remains a principal land use and steward of the natural resource base in the region. As a result, the economic features of the agriculture sector were afforded greater focus than other active economic sectors in the region. Data are provided on the number of farms, acres of land in farms, value of farmland and buildings, farm income and expenses, *CRP acres*,<sup>12</sup> crop production, and livestock production.

*Number of farms, acres of land in farms, and value of farmland and buildings*<sup>13</sup> are determined using Census of Agriculture information for 1987, 1992, and 1997. *Farm income and expenses*<sup>14</sup> are estimated by the Economic Research Service (ERS) with the cooperation of National Agriculture Statistic (NASS) of the USDA. The USDA estimate of *net income of all farms* is calculated as the estimates of gross output less the estimates of production expenses.

<sup>9</sup> Annual Report to the Governor and the Legislature. Colorado Department of Local Affairs. Sept. 2002.

<sup>10</sup> Colorado County Profile System. Colorado Department of Local Affairs. Feb. 2002. <http://www.dola.state.co.us/demog/mule.cfm>

<sup>11</sup> School District Revenues and Expenditures. Colorado Department of Education. Feb. 2002 <http://www.cde.state.co.us/cdefinance/RevExp.htm>

<sup>12</sup> Monthly Active CRP Contract Reports. Farm Service Agency. Feb. 2002 [http://www.fsa.usda.gov/dafp/cepd/crp\\_reports.htm](http://www.fsa.usda.gov/dafp/cepd/crp_reports.htm)

<sup>13</sup> Census of Agriculture: 1987, 1992, 1997. Oregon State University. Feb. 2002 <http://govinfo.kerr.orst.edu/ag-stateis.html>

<sup>14</sup> Regional Accounts Data. Bureau of Economic Analysis. Feb. 2002 <http://www.bea.doc.gov/bea/regional/reis/>

United States Dept. of Agriculture (USDA) *cash receipts* estimates are based on data for the quantities of the agricultural products sold and their prices at the state and county levels. *Gross output* is calculated as the sum of cash receipts from the sale of agricultural products, cash receipts from other farm activities, government payments, the gross rental value of farm housing, the imputed value of home consumption for farm products, and the value of the change in farm inventories.

The estimates of *production expenses* include the purchases of feed, livestock and poultry, seed, fertilizer, agricultural chemicals and lime, and petroleum products, labor expenses, machinery rental and custom work, and animal health.

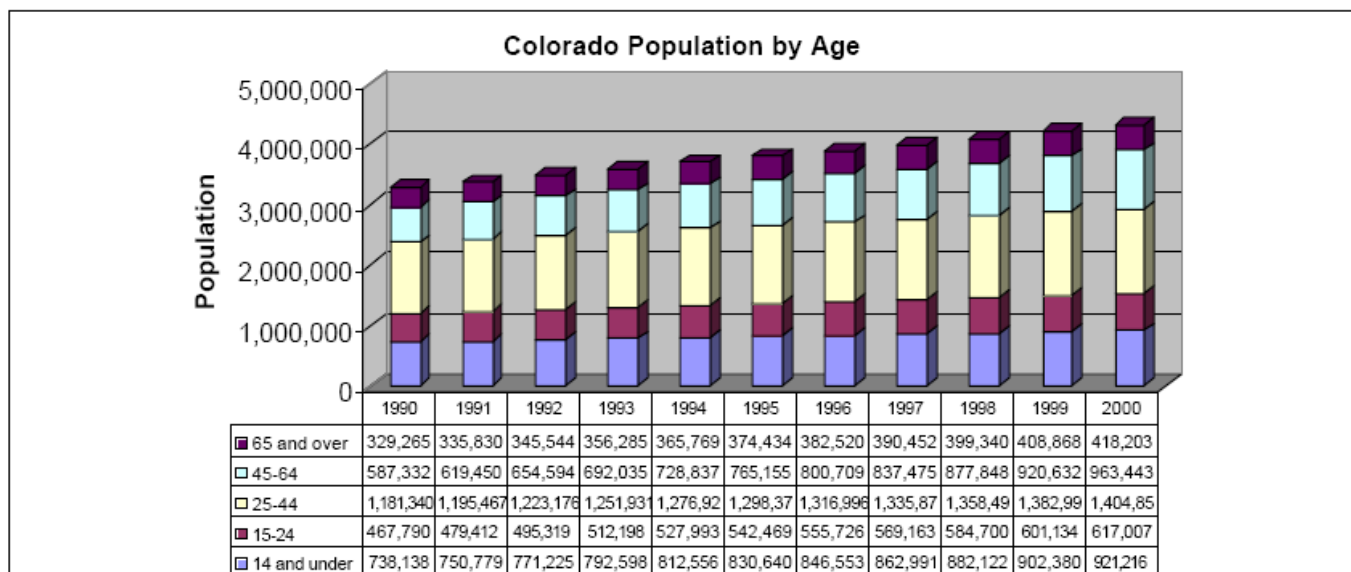
Colorado Agriculture Statistics Service (CASS) publishes annual *crop production*<sup>15</sup> information for major crops grown in the state. These crops include; winter and spring wheat, corn for grain and silage, barley, oats, sorghum, sunflowers, dry beans, alfalfa hay and all hay. Acres planted/harvested, and production data are provided. *Livestock production* is composed of livestock sold in thousands of dollars and the number of livestock producers. Livestock species include cattle, hogs, and sheep and the source of information is Census of Agriculture for 1987, 1992, and 1997.

## 2. Population by Age

The number of people in different age categories over time provides an initial indication of the demographic profile and trends within the region. These categories are 14 years of age and under, 15-24, 25-44, 45-64, and over 65. The age of the population gives an indication of the sort of current and future employment opportunities required and the type and amount of services demanded. Aggregated age characteristics of a county's or region's population can provide early indications of service needs, such as schools and hospitals, markets for local products, and features of the current and future labor force.

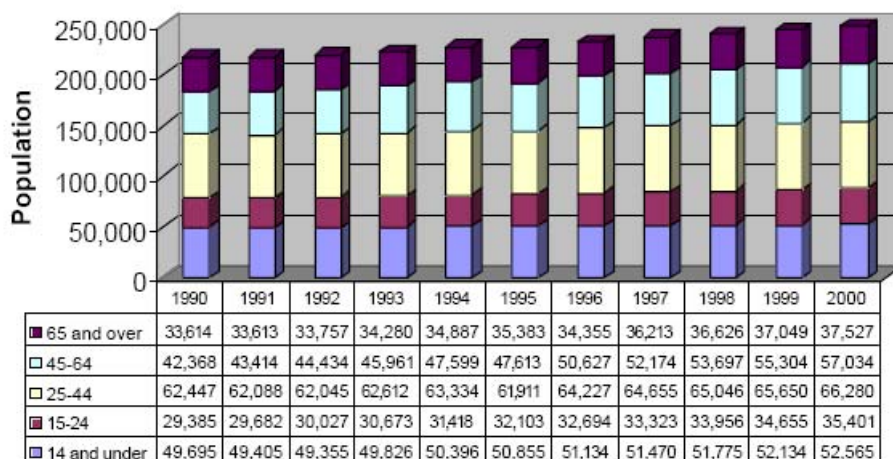
### 2.1 Overview and Summary

Colorado's population increased from 3.3 million in 1990 to 4.3 million in 2000, a rate of 31% for the decade. Colorado was one of only eight states to grow by more than 1 million people over the period and the third fastest growing state in the country behind Nevada and Arizona. Throughout the decade the greatest proportion of the population fell in the prime workforce productivity years between 25 and 44 years of age, 38% of the total in 2000. Paralleling national aging trends, the 45-64 age category experienced the greatest rate of increase over the decade (64%), followed by the 15-24 age category (32%) and the greater than 65 year old category (27%). The lowest rate of growth was in the most populous category, ages 25-44 years, which increased by 19% over the decade.



<sup>15</sup> Colorado. Colorado Department of Agriculture. Colorado Agriculture Statistics 1991-2001. Colorado Agriculture Statistics Service, Feb. 2002

ACT Region Population by Age



The ACT Region's population increased from 217,509 in 1990 to 248,807 in 2000, a rate of 14% for the decade. The population of the ACT Region was 7% of state population in 1990 and 6% in 2000. Like the state of Colorado, the greatest proportion of the people in the ACT Region were between the ages of 25-44. However, that age category comprised only 27% of the total population in 2000 in the region compared to 38% in the state as a whole. Following state and national trends, the 45-64 year old age category was the fastest growing age group (35%) in the region over the period, followed by people between the ages of 15 and 24 (21%). Two of the age categories representing current and future entrants to the labor force (25 to 44 years of age and under 14 yrs) increased at the relatively low rate of 6% over the period.

Pueblo County had the greatest population in the region and the greatest population in each age category. Otero County had the second highest population in each age group, except for the 15-24 year old category (Alamosa County was second). Las Animas County had the third highest number people 45 and older. Alamosa County had the third highest number of people between the ages of 25 and 44 years of age. Otero County had the third greatest population between the ages of 15 and 24 years and Prowers County had the third highest number of people less than 14 years of age.

Kiowa County had the least population in the region and the lowest population in each age category. Custer County was ranked twelfth in the number of people greater than 65 yrs and in all categories of people less than 44 years of age. Costilla County had the twelfth ranking in the population between 45 and 64 years of age. Costilla County had the eleventh ranking population in all categories of people less than 44 years of age, while Baca and Crowley Counties were ranked eleventh in the number of people from 45 to 65 and greater than 65 years of age, respectively.

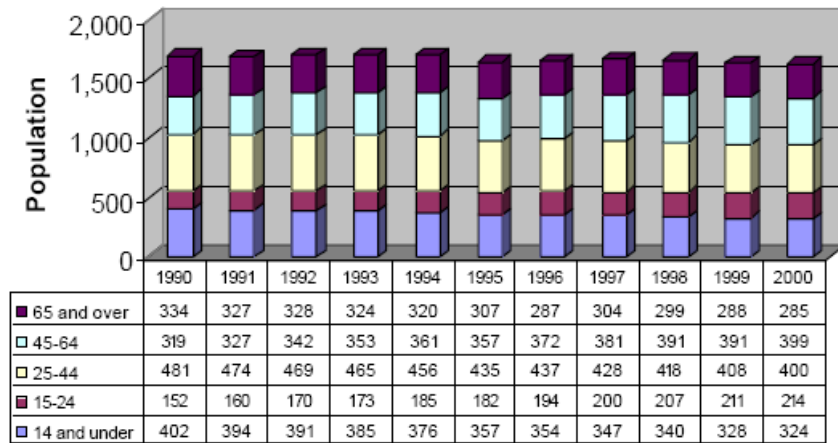
## 2.2 County trends in Population by Age

In 2000, the population of 1,622 in Kiowa County accounted for less than 1% of the region's total. Within the ACT Region, the lowest population counts for every category were in Kiowa County. In addition, Kiowa's population actually decreased in three age categories. The greatest decline was in the 14 and under age category (-19%), followed by the 25 to 44 age category (-17%). The population in the 65 and greater age category fell by 15% during the decade. The number of people between the ages of 15 and 24 (41%) and 45 to 64 (25%) were the only categories showing increases in population.

## 2.3 Population by Age: Conclusion

The population of the ACT Region is generally stable to increasing at a modest rate. Overall, the regional

**Kiowa County Population by Age**



population is growing more slowly than the state of Colorado. However, some counties within the region are increasing in population and some are decreasing. Current and future labor population declined in Alamosa, Baca, Costilla, Kiowa, Otero, and Prowers Counties, potentially indicating human capital flight due to a lack of desirable employment opportunities. Further evaluation of labor information shows that wage and salary jobs in Costilla and Kiowa Counties have decreased, while the unemployment rate in Baca increased during the same time period. This supports the contention that population decline and the lack of jobs are related.

### 3. Population by Race

The information people provide to the census about their race can be useful to community leaders. Race can be a useful, if imperfect, indicator of culture and may provide insights into consumer preferences for products, services and information. Due to religious or other cultural traditions potentially correlated with race, some social and business practices may be acceptable throughout the community and some may not. Aggregate race information may also point out opportunities to benefit from federal and state programs intended for traditionally underserved populations. In this section, relative and total population of African American, American Indian, Hispanic, and

White people are reported on a county-by-county basis from 1990 and 2000 US Censuses.

#### 3.1 Summary and Overview of Hispanic Population

Total Hispanic/Latino<sup>16</sup> population increased at both the regional and state levels. The Mexican<sup>17</sup> population at the state level increased, while there was a decrease at the regional level. Other Hispanic<sup>18</sup> population dramatically increased both regionally and statewide.

Pueblo County has the highest population for total Hispanic/Latino, Mexican, and Other Hispanic populations. Otero County had the second highest number of Hispanic/Latino and Mexican people. Las Animas County had the second highest number of Other Hispanics and the third highest Hispanic/Latino population. Alamosa County had the third highest population of Other Hispanics, while Powers County had the third highest population of people of Mexican descent.

Due to its low total population, Kiowa County has the fewest people in each of the categories, while Custer County had the second fewest individuals (12th of 13) of Mexican, Other Hispanic and total Hispanics/Latino descent in 2000. Baca County ranked 11th of the 13 ACT counties in total Hispanic/Latino, Mexican and Other Hispanics populations in 2000.

<sup>16</sup> Total Hispanic/Latino is the sum of Mexican and Other Hispanics.

<sup>17</sup> Respondents provided the write-in entry of Mexican.

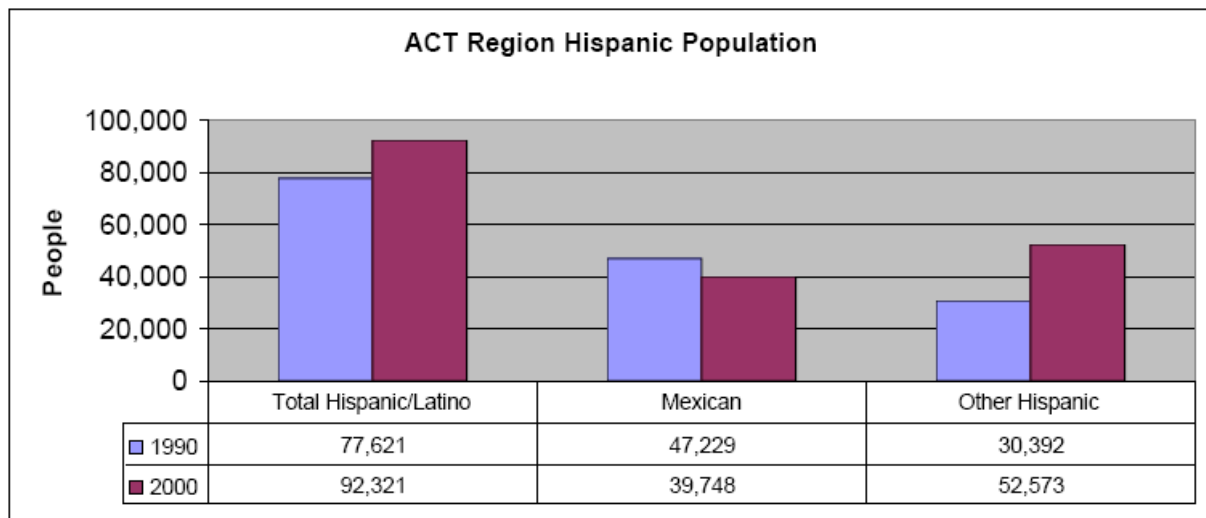
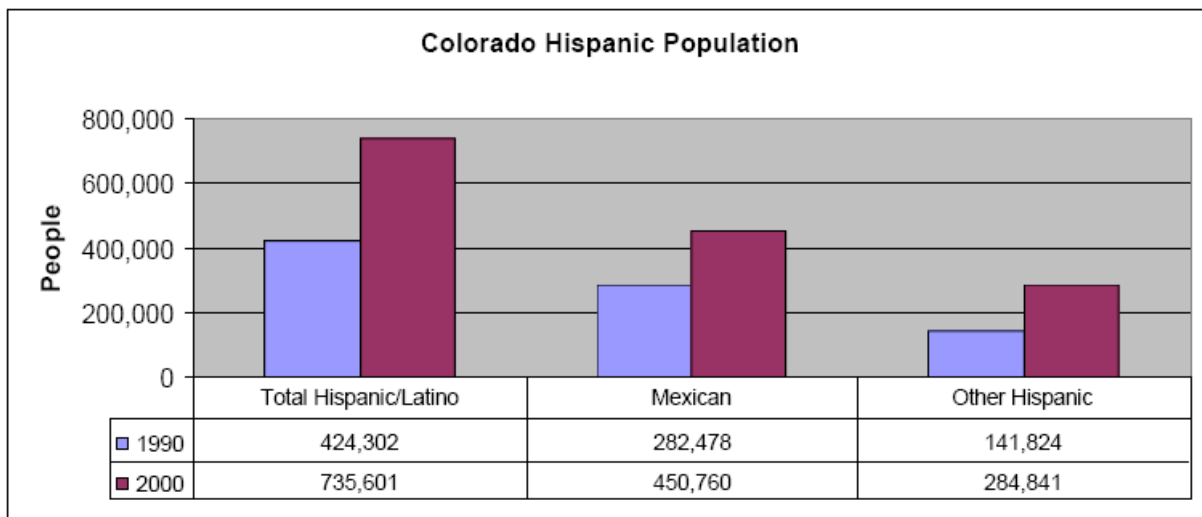
<sup>18</sup> Respondents were considered Other Hispanic provided they wrote-in entries such as a Hispanic/Latino group other than Mexican (for example, Puerto Rican, Cuban, and Guatemalan).

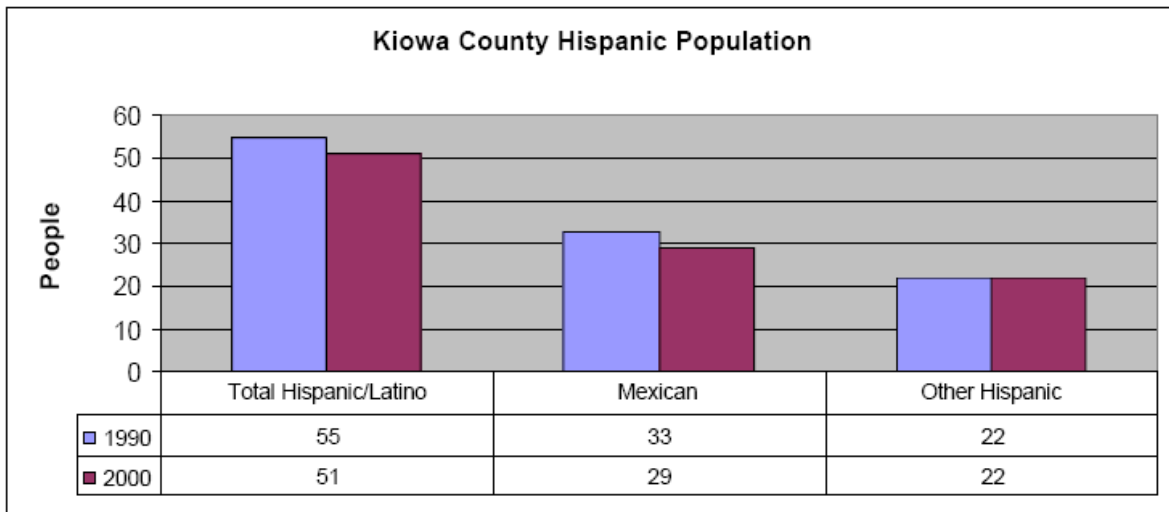
Mexican population increased in 6 of 13 counties (Baca, Bent, Crowley, Custer, and Prowers). Hispanic/Latino population increased across all counties except Kiowa County. Other Hispanic population increased in every county, except Kiowa County, which remained constant for the period. Costilla County had the highest percentage of Hispanic/Latino population with 68% of the county total. Conejos County's Hispanic/Latino population accounted for 59% of the total, 41% of the total county population in Las Animas and Alamosa County.

In 2000, the total Hispanic/Latino population accounted for 17% of Colorado's total population, while Mexican and Other Hispanics accounted for 10% and 7%, respectively. The total number of Hispanic/Latino people in Colorado increased by 73% since 1990. The Mexican population experienced an

increased by 60% and the Other Hispanics category grew by 101% over the period.

In 2000, the total Hispanic/Latino population accounted for 37% of the ACT regional population. The Mexican population accounted for 16%, while Other Hispanic accounted for 21% of the regional total. The Mexican population in the ACT Region decreased by 16% over the period, while the total Hispanic/Latino population increased by 19%. However, this apparent change in ethnic composition may be in part an artifact of the nature of self-reported data. The largest increase in population came from ethnicities that comprise the Other Hispanic category, increasing some 73% during the 1990s. The ACT Region accounted for 13% of the state's Hispanic/Latino population, 9% of the state's Mexican population, and 18% of the state's Other Hispanic population.





### 3.2 County trends in White and Hispanic Populations

Total population in Kiowa County was 1,622. The Hispanic/Latino population accounted for 3% of the total population (2% Mexican and 1% Other Hispanic). Within the ACT Region, Kiowa County displayed the smallest population for each of the three categories in 2000. During the 1990s, population declined for total Hispanic/Latinos by 7%, as Mexican populations declined by 12%, and Other Hispanics population held steady at 22 people.

### 3.3 Regional Summary: Trends in African American and American Indian Populations

In 1990 and 2000, the African American population in the state made up 4% of the total population. American Indians statewide comprised 1% of the total population in 1990 and 2000. White population in Colorado comprised 83% of the total statewide in 2000. The American Indian population increased by 59% over the decade, while the African American and White population expanded by 24% and 23%, respectively.

Whites accounted for 79% of the ACT region's total population. African Americans and American Indians

accounted for approximately 2% of the total in 1990 and 2000. In 2000, 10% of Colorado's American Indian population and 2% of the African American population resided in the ACT Region. The White population in the region comprised 6% of the state's total in 2000.

Colorado and the ACT Region experienced increases in White,<sup>19</sup> African American<sup>20</sup> and American Indian<sup>21</sup> populations. African American and American Indian populations grew far more quickly in the ACT Region than statewide. The state's White population grew faster than the ACT Region. The region experienced a 129% increase in American Indians, 39% increase in African Americans, and a 5% increase in Whites. These race categories grew by 59%, 24%, and 23% statewide, respectively.

Regionally, the greatest number of African Americans and American Indians were in populous Pueblo County. Crowley County experienced the second highest population of African Americans and Bent County was third. Alamosa County accounted for the third highest number of American Indians, while Las Animas County accounted for the second most. Pueblo experienced the highest population of Whites, while

<sup>19</sup> A person having origins in any of the original peoples of Europe, the Middle East, of North Africa. It includes people who indicate their race as "White" or report entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish.

<sup>20</sup> A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black, African American, or Negro," or who provide written entries such as African American, Afro American, Kenyan, Nigerian, or Haitian.

<sup>21</sup> Includes people who indicate their race as "American Indian," entered the name of an Indian tribe, or report such entries as Canadian Indian, French-American Indian, or Spanish-American Indian.



Otero and Las Animas accounted for the second and third highest, respectively.

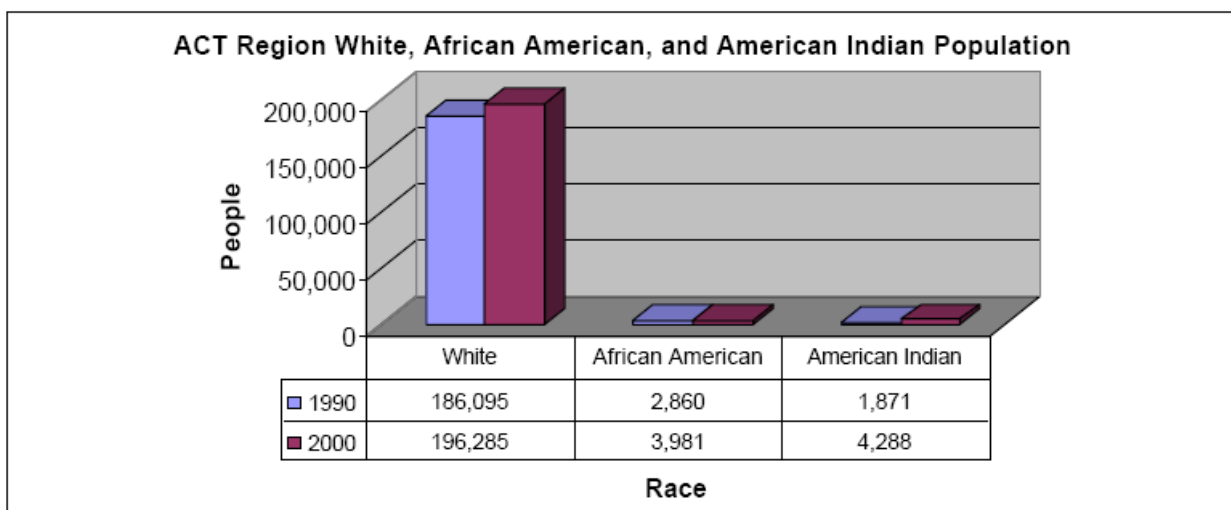
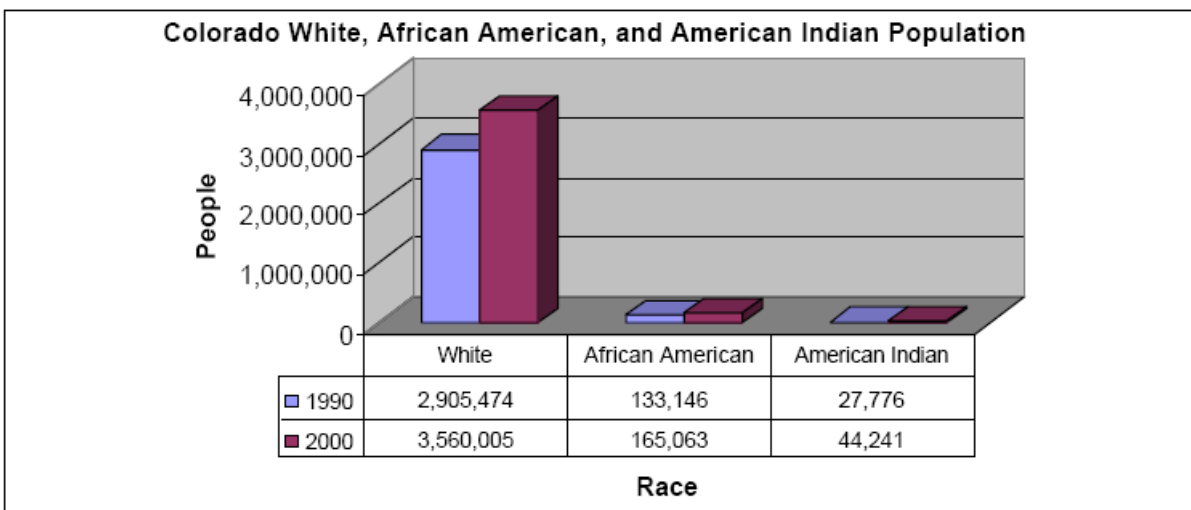
Baca County had the lowest population of African Americans and the eleventh ranking in number of American Indians. Custer County ranked eleventh for population of African Americans and twelfth in American Indian population. Kiowa County ranked twelfth for the number of African Americans and had the fewest American Indians in 2000. The lowest White population was located in Kiowa, followed by Costilla and Custer County.

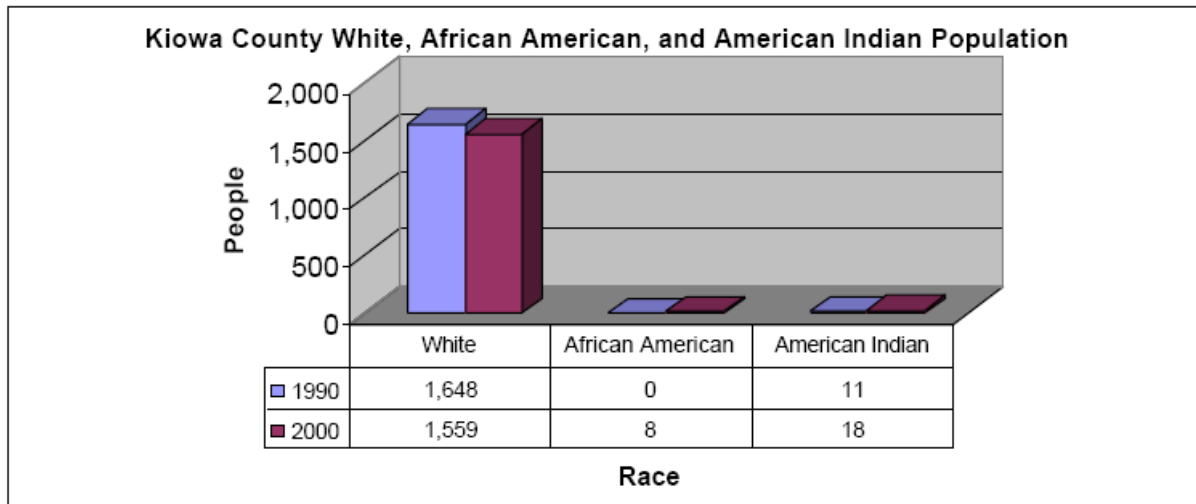
African American and American Indian populations in most of the counties of the ACT Region rose or remained constant throughout the decade. The American Indian population in Baca County decreased over

the period. The White population in a majority of ACT Counties (Alamosa, Baca, Conejos, Costilla, Kiowa, Otero, Prowers) decreased over the period.

### 3.4 County trends in American Indian and African American Populations

Kiowa County's White population accounted for 96% of the total population, while African American and Native American populations both accounted for approximately 1%. The African American population increased from 0 to 8, and American Indian population grew from 11 to 18 over the period. The White population was the only race category to experience a decrease, falling by 5% over the timeframe. Region-wide, Kiowa County displayed the lowest White and American Indian population, while also ranking twelfth in the number of African Americans in 2000.





### 3.5 Conclusion for Population by Race

The ACT Region experienced increases in total Hispanic, Other Hispanic, White, Black, and American Indian populations. Regionally, only the Mexican population decreased for the period. Government agencies; local, federal, and national, can more readily focus their efforts for race and ethnicity programs. The increase in specific ethnic populations can signify that there is an increased demand for specific government programs such as an increased demand for bilingual education, especially since approximately 3% of the current students statewide require such classes.

## 4. Housing

Aggregate housing and household information reveal trends in the supply and demand for residential real estate within a region. Although the housing market is rather complicated and market specific, increases in population and household size generally imply an increase in the demand for houses, housing prices and house size. Increases in vacancy rates generally imply pressure to decrease rental rates and home prices.

### 4.1 Summary and Overview

In 2000, the total housing stock in the ACT Region accounted for 6% of the state's total housing stock. Population has been trending upward for both Colorado and the ACT Region. The rate of increase in housing units statewide (22%) did not keep pace with the rate of population growth (30%). On the other hand, in the ACT Region increases in the number of housing units (14%) paralleled population increases (13%). The average household size in Colorado decreased from 2.74 people per household in 1990 to 2.12 in 2000. The household size in the ACT Region also decreased, but only slightly, from 2.56 in 1990 to

2.51 in 2000. Vacancy rates for both the state and the region have decreased over the period. The ACT Region had a higher vacancy rate than the state in both 1990 and 2000. The total number of vacant houses in each county includes the total amount of seasonal housing in each county, whereas the vacancy rates for the counties have been adjusted to remove seasonal housing.

In 2000, Pueblo County had the highest group quarters population within the ACT Region, Crowley County was second and Alamosa County, third. The highest number of housing units was also found in Pueblo, followed by Otero and Las Animas County. The largest average household size is in Conejos County followed by Prowers and Crowley. Baca County had the highest vacancy rate followed by Kiowa and Bent County.

In 2000, Costilla County had the lowest group quarters population followed by Custer and Kiowa County in second and third. Kiowa County has the lowest number of housing units, followed by Crowley and Costilla County. Huerfano County has the lowest average household size, followed by Baca and Custer County. Pueblo County has the lowest vacancy rate, followed by Custer and Alamosa County.

Population growth and related household population growth provides an indicator of housing demand. Residential vacancy rates provide an indicator of the supply or stock of housing relative to demand. Increases in group quarters population have relatively little direct impact on residential housing demand, but may indirectly influence housing markets by increases in service sector jobs to serve those institutions or through

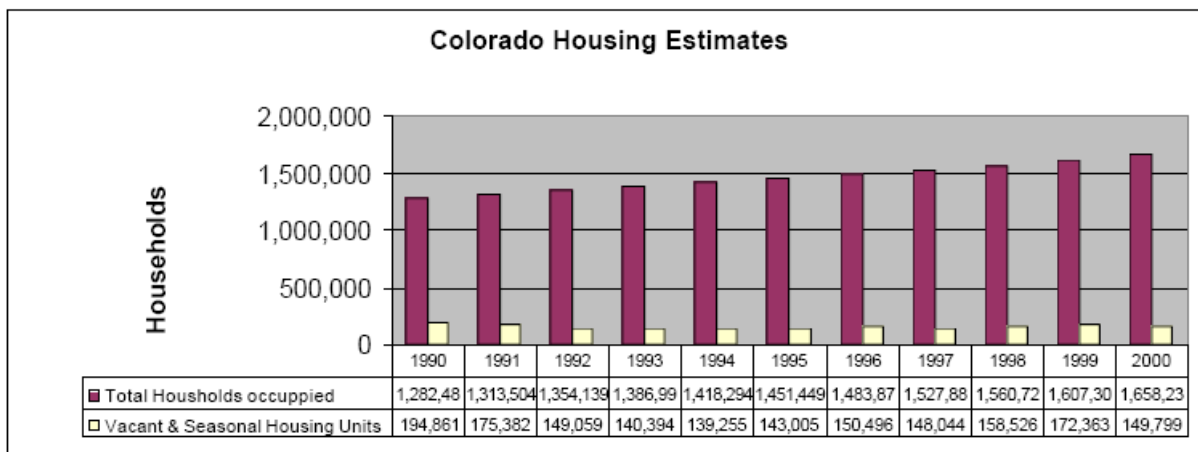
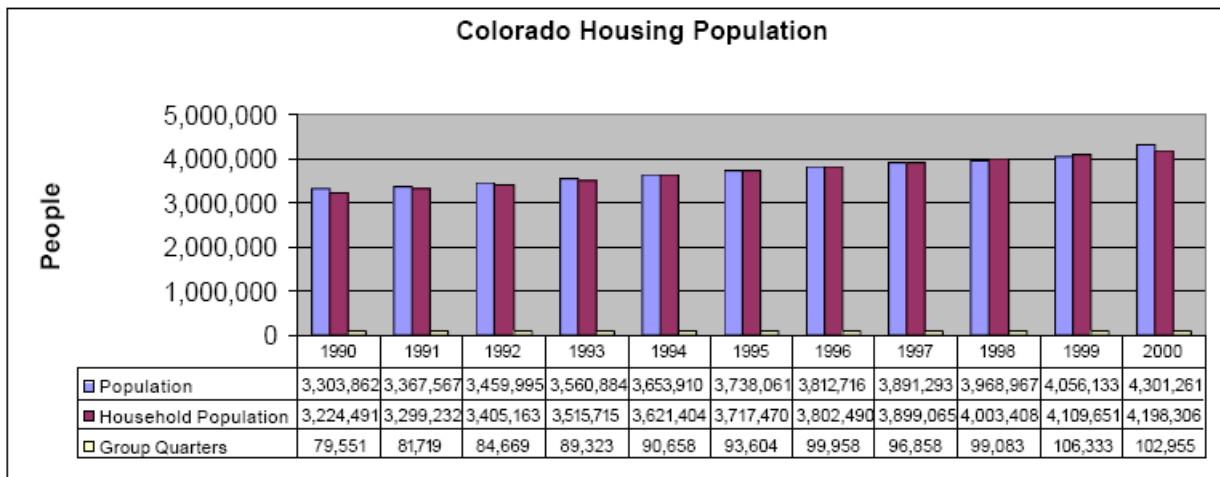
seasonal rental property markets in the case of universities. In Colorado, group quarters population, or population found in prisons, nursing homes, and handicap institutions, rose by 29% over the decade to parallel overall population growth.

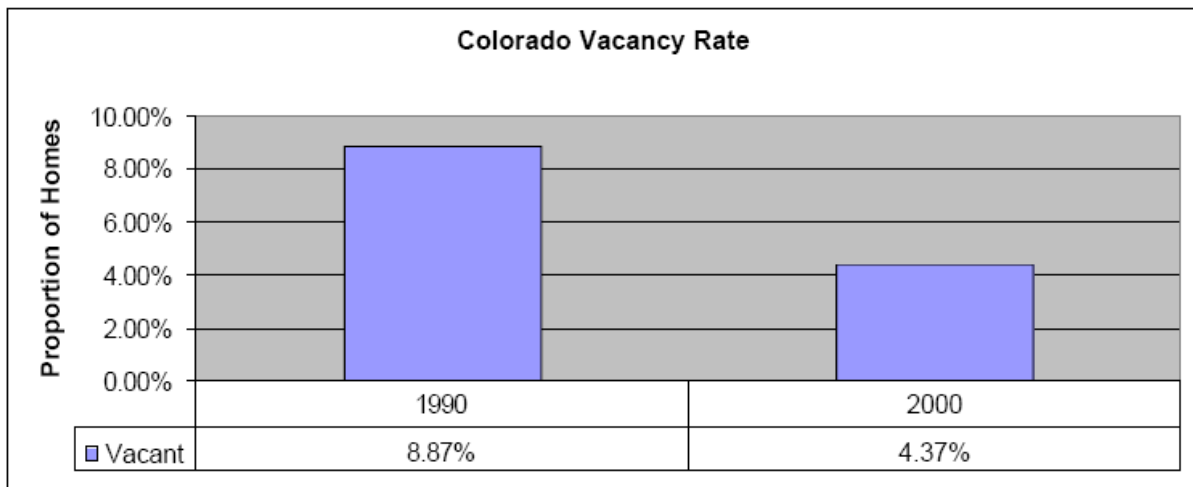
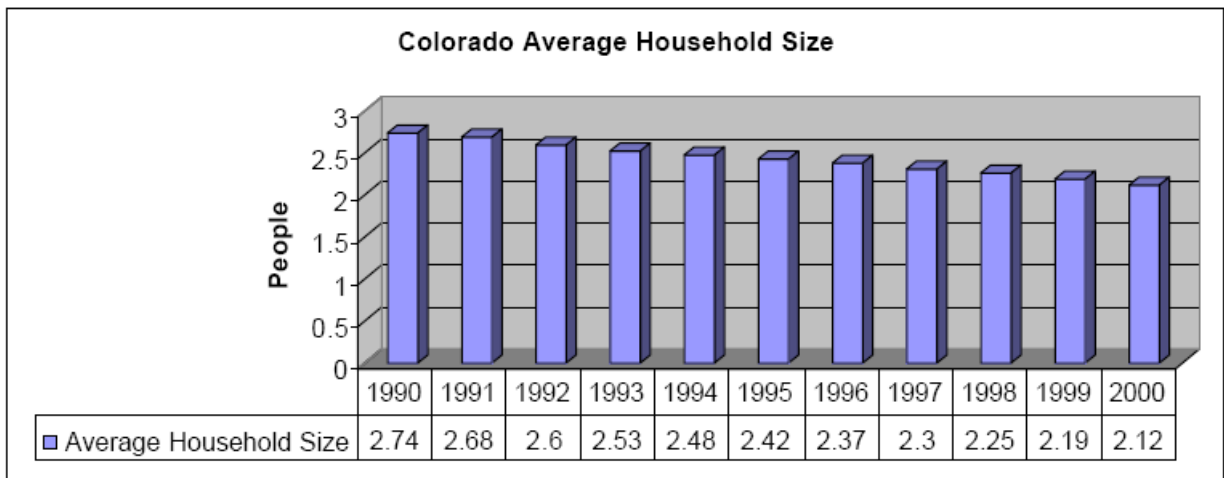
Total housing units in Colorado have also climbed with the increase in population, which undoubtedly required additional housing. Vacant and seasonal housing in Colorado peaked in 1990 and hit a low of 139,255 vacant and seasonal homes statewide in 1994. This number has climbed each year from 1994 to 1999, but in 2000 it decreased by 23% from the 1999 observation.

Nationwide, household size has decreased and higher incomes tend to imply lower household sizes. For example, the U.S. people per household in 1990 were 2.63, decreasing to 2.59 in 2000. As a general rule, household sizes tend to be smaller in urban settings. As an increasingly urban and wealthy state, it could be expected that Colorado household size should have

decreased between 1990 and 2000. Recent data for Colorado does bear out this expectation, indicating a decrease in household size over the period (2.74 in 1990 and 2.12 in 2000). A longer time series provides a more accurate picture of the longer-term trends. In 1960 Colorado's average household size was 3.23 people, 3.08 in 1970, and 2.65 in 1980. In general, international immigrant households tend to be larger on average than second generation and longer American households. An important portion of Colorado's population growth is driven by first generation immigrants. For example, between 1990 and 1994, 68,006 international immigrants entered Colorado, while between 1995 and 2000 population from international immigration was 133,066. This represents a population increase of 96% among international immigrants. It could be expected that downward household size trends would be muted within the state and where first generation households are more concentrated.

Similar to the idea of "frictional unemployment," there is a need to have vacant housing at all times to allow





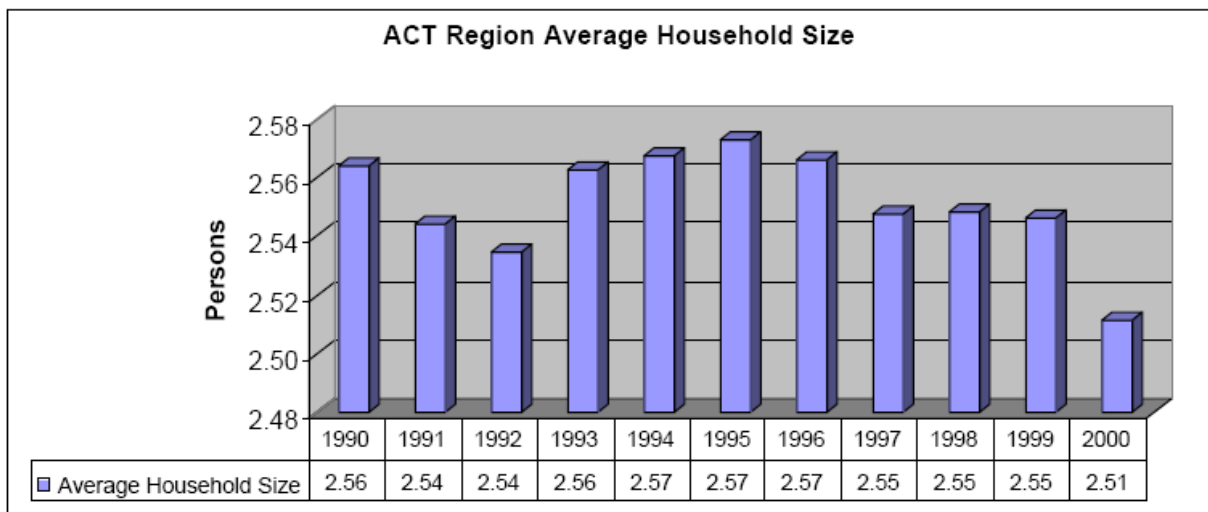
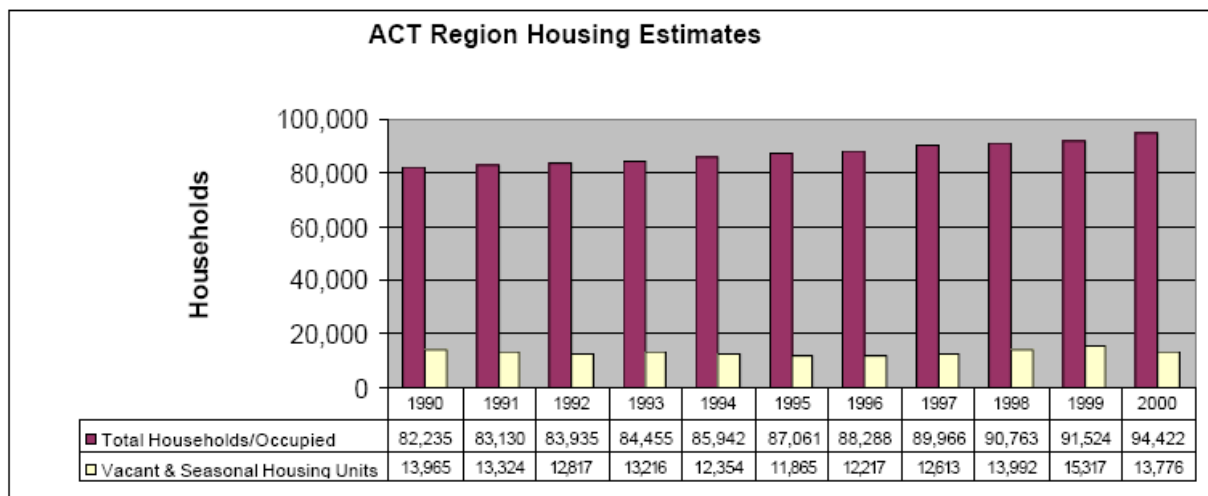
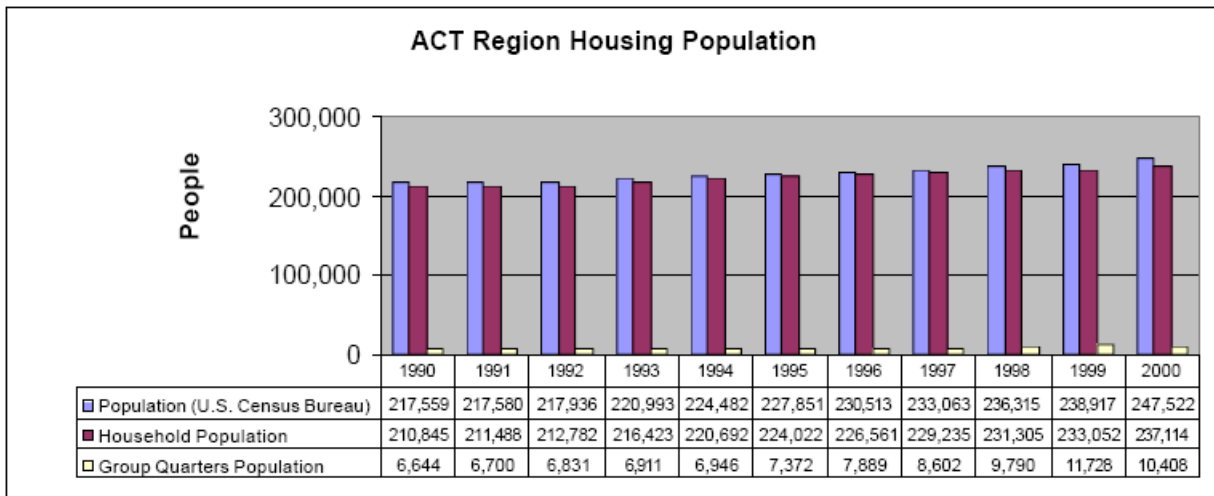
for families to upgrade, move into the area, or for families to form. It is difficult to establish a benchmark to measure the level at which the vacancy rate is “bad” or “good”. For the purposes of this assessment, the state average is considered the benchmark. Home vacancy rates are in a downward trend since 1990. In areas with high levels of agricultural activity there are noticeably higher vacancy rates than in counties with less economic dependence on agriculture. Seasonal housing has a large impact on vacancy rates in counties with a higher level of natural amenities, recreation and tourism. Depending on when Census Enumerators evaluated the home, there may be significant levels of vacant housing in the county. As a result, seasonal housing has been taken into consideration and has been excluded from the vacancy rate reported here.

Comparisons of the ACT Region to the state total reveals that group population grew by 57% over the

10-year period, which constitutes 10% of the state’s total in 2000. Total population increased from 217,559 to 247,522, or a 14% growth rate over the same 10-years. This population made up 6% of the state total in 2000.

Total housing units increased by 10% across the ACT Region during the 1990s. The state’s growth rate of housing was 20% over the same period. Vacant and seasonal housing units have varied somewhat throughout the decade. In 1990, the total vacant homes were 13,965 and by 2000 reached 13,776. Between 1990 and 2000 the number of vacant and seasonal homes reached a low of 11,865 in 1995 and a high of 15,317 in 1999. The total number of households occupied in the ACT Region increased by 15% over the period.

Overall average household size has decreased from 2.56 in 1990 to 2.51 in 2000. In 1994, 1995, 1996 there



was a consistent level of 2.57 people per household. This plateau is followed by another plateau of 2.55 for 1997-1999.

The ACT Region has a higher vacancy rate than the state. Despite this, the number of vacant homes in the ACT Region decreased over the period. Out of all the

counties in the ACT Region, only two (Pueblo and Alamosa) showed increases in the vacancy rate between 1990 and 2000.

#### 4.2 County trends in housing

Although annual population increases were observed, Kiowa County experienced an overall decrease in population between 1990 and 2000. The highest population was in 1993 when it increased to 1,704 people. Household population decreased by 3% over the 10-year period. Regionally, Kiowa County had the eleventh ranked group quarters population.

Evaluation of the region's housing units shows that Kiowa County had the least amount of housing, with the total decreasing over the 10-year period by a rate of 7%. Although total housing units declined, total households occupied increased from 657 to 665 over the decade. Vacant and seasonal housing units declined by

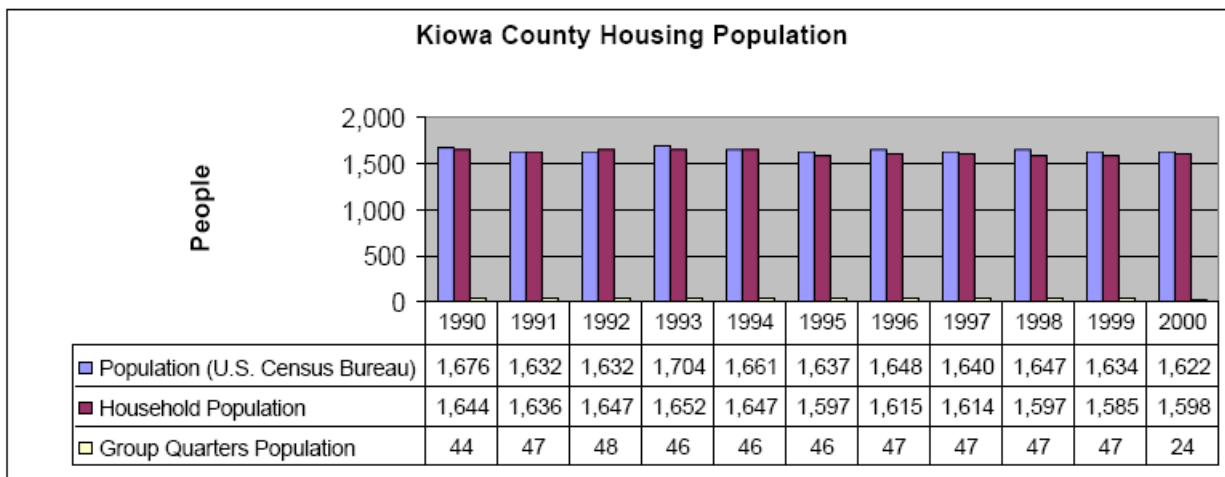
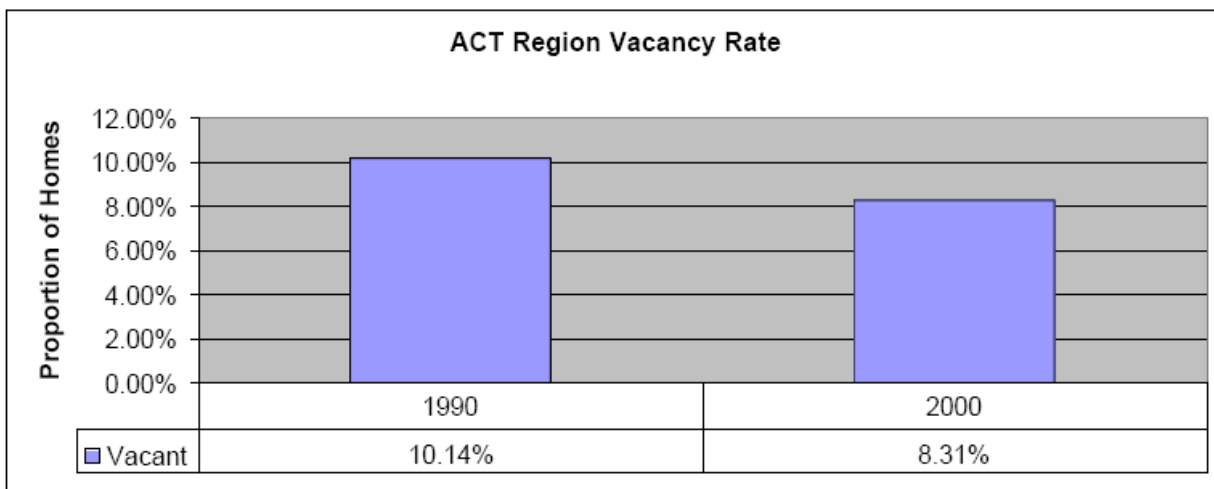
31% for the period.

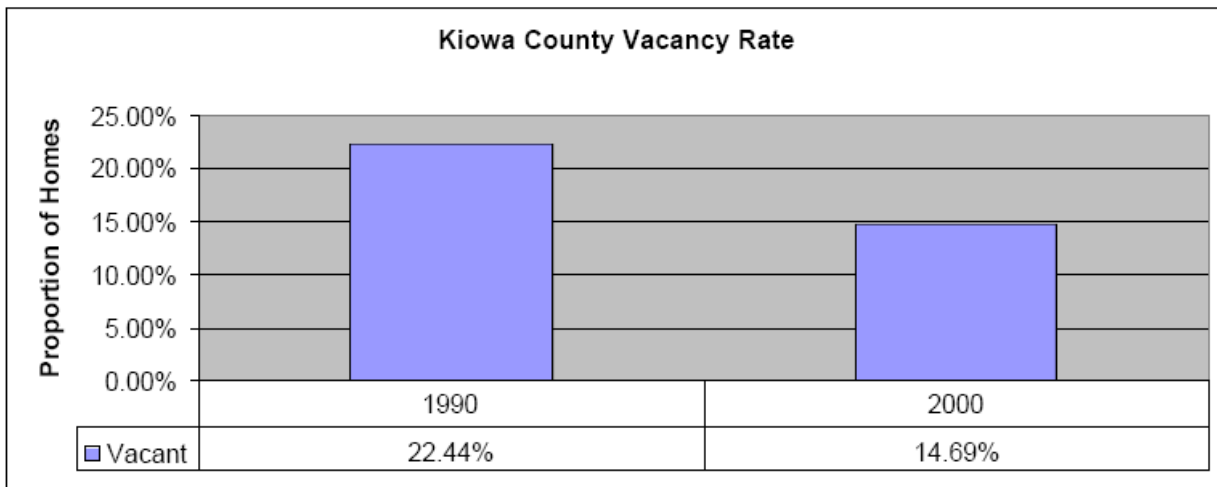
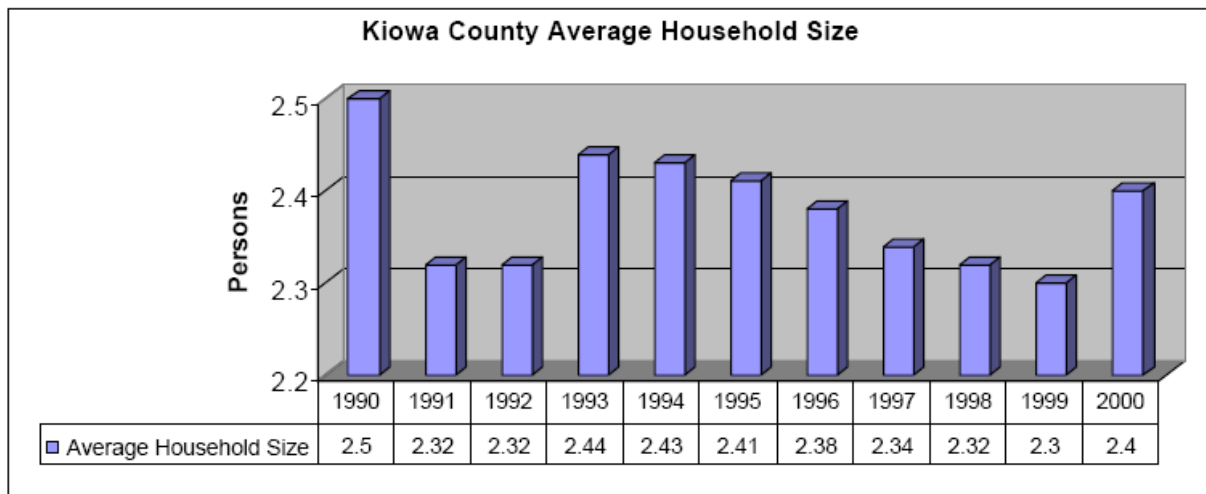
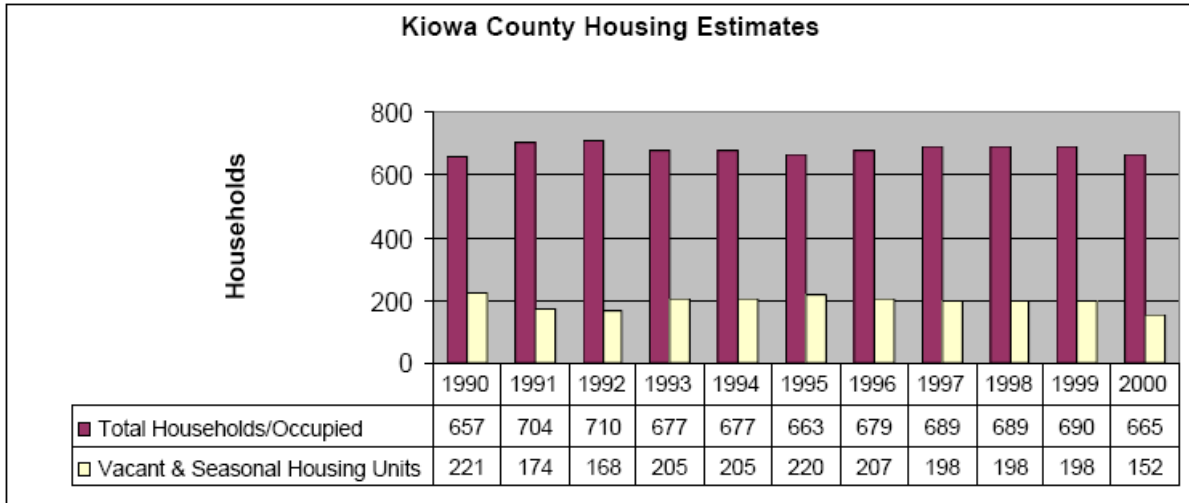
Average household size in Kiowa County declined between 1990 and 2000. Several years were quite low relative to the rest of the region and in every year the county average is lower than the regional average.

In 1990, the housing vacancy rate in Kiowa County was the highest in the region and second highest in 2000. However, vacancy rates have declined between 1990 and 2000.

#### 4.3 Housing Conclusions

Increases in population and per capita income create increased demand for housing. Conversely a decrease in population implies downward pressure on housing prices. The housing vacancy rate is the difference between the rate of growth in population and the rate of growth in the housing stock. Regionally, a decrease





in the vacancy rate is observed indicating that population and income growth are outpacing increases or renovations in the regional housing stock, potentially putting upward pressure on general housing prices in the region.

#### 4.4 Summary and overview of building permits

The Housing Division of the U.S. Census Bureau obtains building permits mainly from the annual survey reports. These data reflect new private and public housing units. Prior to 1995 the data reflected the subtraction of demolitions. Due to this significant series change, only the 1995 through 1999 data are provided.

Building permits show how much actual new growth is occurring in the county and gives an indication of changes in the supply of housing in the county. Building permits in Colorado and in the ACT Region increased consistently for every year from 1990 to 2000, with the exception of a state level decrease between 1998 and 1999. The region had 4% of the state's total building permits in 2000.

Pueblo County had the highest number of building permits in the region in 1999, followed by Conejos

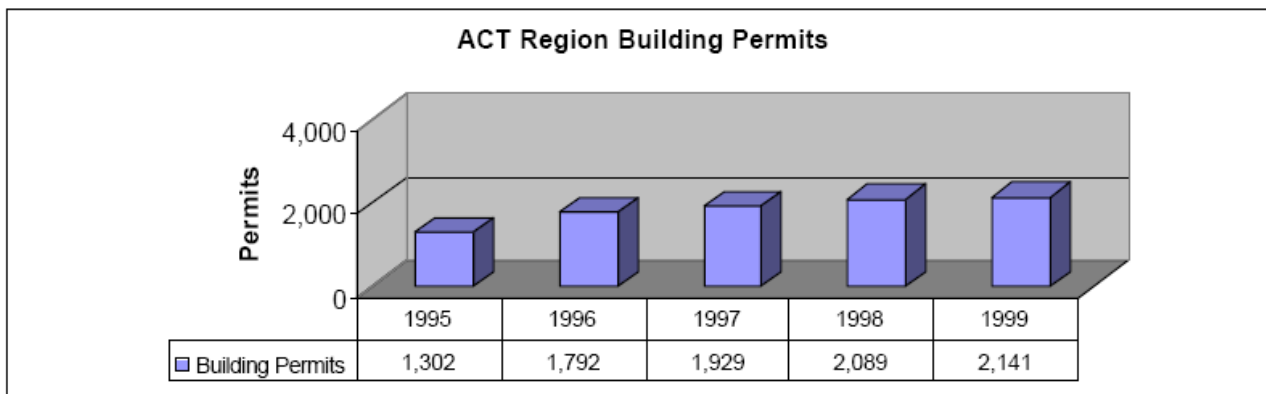
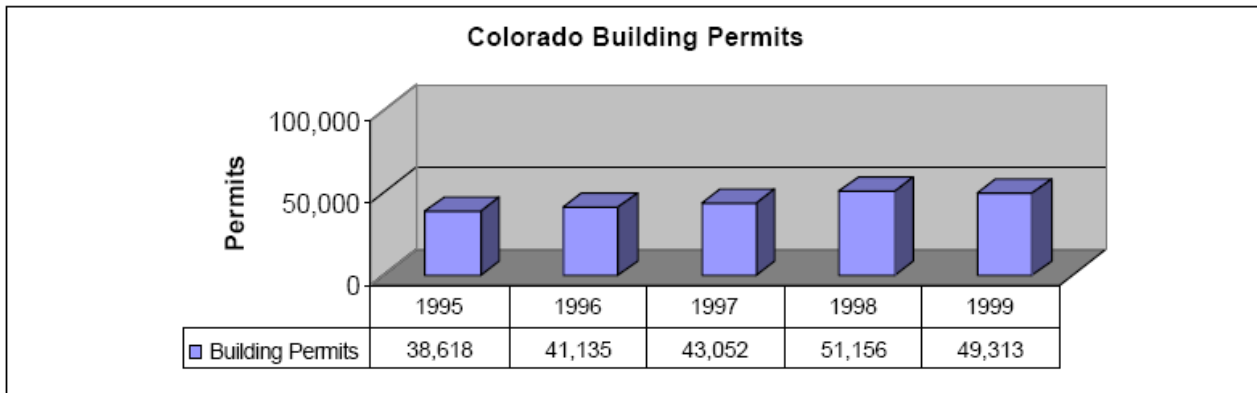
County. Huerfano County had the third highest number of building permits in 1999. Costilla, Crowley, and Kiowa County had the fewest building permits, and all had fewer than four building permits in 1999. Baca and Bent County had 10 and 14 permits, respectively.

Between 1990 and 1999, Colorado had a 28% increase in building permits. In a consistent increasing trend over the decade, 1998 provided a high point in activity, while in 1995 the lowest number of permits was registered.

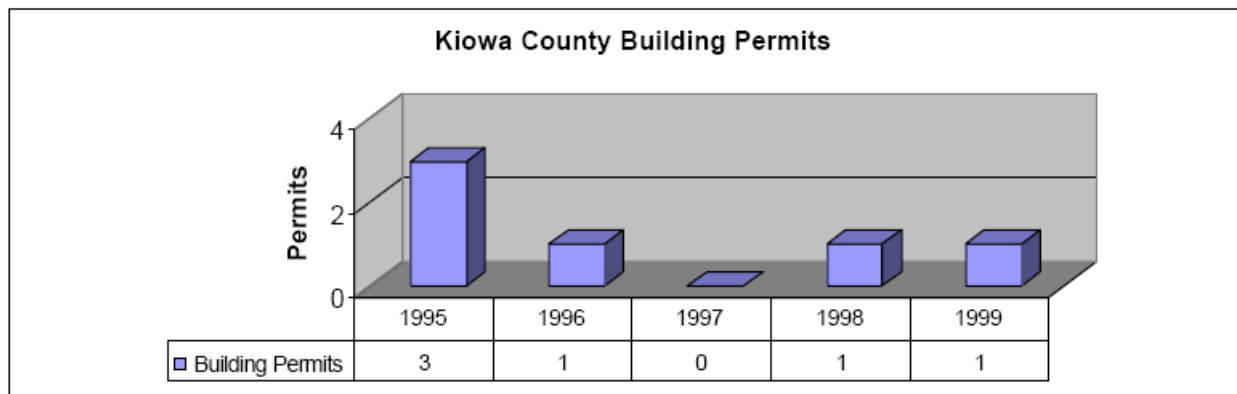
Similarly, building permits in the ACT Region showed an increase throughout the decade. A growth rate of 64% occurred between 1995 and 1999. In 1999, the greatest number of building permits was observed, comprising 4% of the state total.

#### 4.5 County trends in building permits

In 1999, Kiowa County ranked twelfth in the number of net building permits regionally. Permit numbers have been relatively few throughout the period, with the greatest number of permits issued occurring in 1995.







#### 4.6 Building Permit Conclusion

The building of private or public housing units signifies a significant investment on the part of the owner. Construction is a “follower” industry. When an economy is growing for whatever reason, construction demand increases. Therefore, a vibrant construction sector can be considered one indicator of regional economic health. Over the study period, the construction sector demonstrated the greatest growth in the regional economy, growing by 106%, while the number of building permits regionwide increased by 64%, illustrating a close relationship between the two categories.

### 5. Jobs by Sector

Jobs by sector gives an indication of how important a certain sector of the economy is to the entire county’s economy and measures if that sector increases in importance over a period of time. Nine sectors of the economy are assessed in this study, but there are many more components of each sector that compose these nine sectors. For example, manufacturing can be divided into categories such as textiles, lumber, chemicals and many other types of manufacturing.

#### 5.1 Summary and overview of jobs by sector

Colorado had an increase of 48% in all jobs, while the region had a growth rate of 26%. Out of all jobs in the state, the ACT Region accounted for 4% of the state’s total in 2000. The highest number of jobs in Colorado and the region are in the service, wholesale & retail, and the government sectors. For Colorado, the most growth existed in the service sector, while at the regional level the construction sector grew the most over the decade.

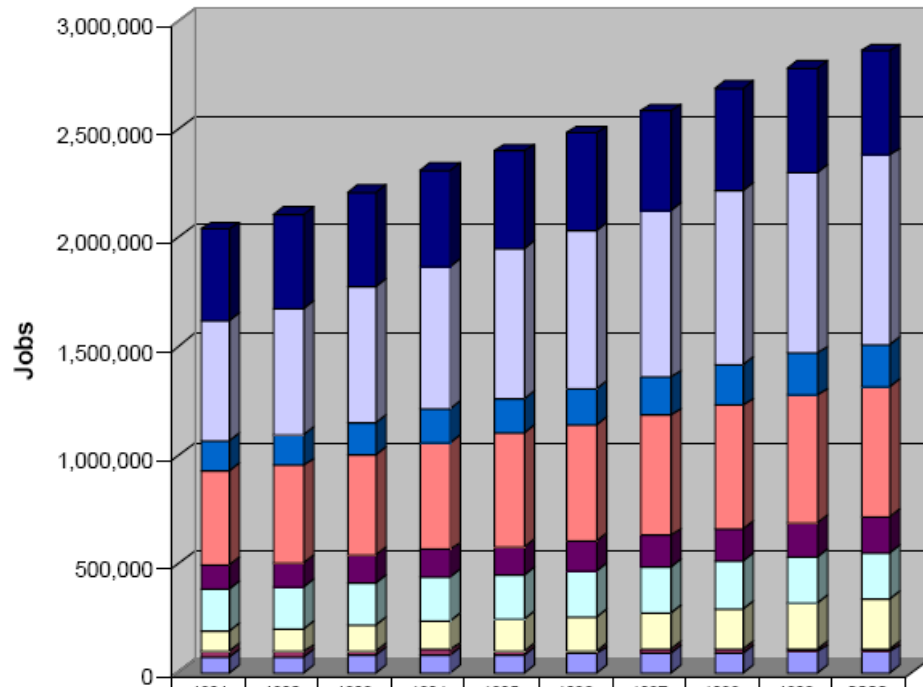
The most jobs in the ACT Region are located in Pueblo County, followed by Otero County and Alamosa County. In each of the counties with the highest

number of jobs, the service sector had the highest employment in 2000. Costilla, Crowley, and Kiowa County have the lowest number of jobs, regionally. Agriculture was the leading employment sector in Costilla County and Kiowa County economy, and the government sector was the number one employer in Crowley County. In every county in the region, the government sector ranked in the top three, except for Custer and Huerfano County. In nine of the thirteen counties the service sector ranked among the top three employers. For those counties that do not have the service sector in the top three sectors of the county economy, the wholesale and retail sector played a substantial role.

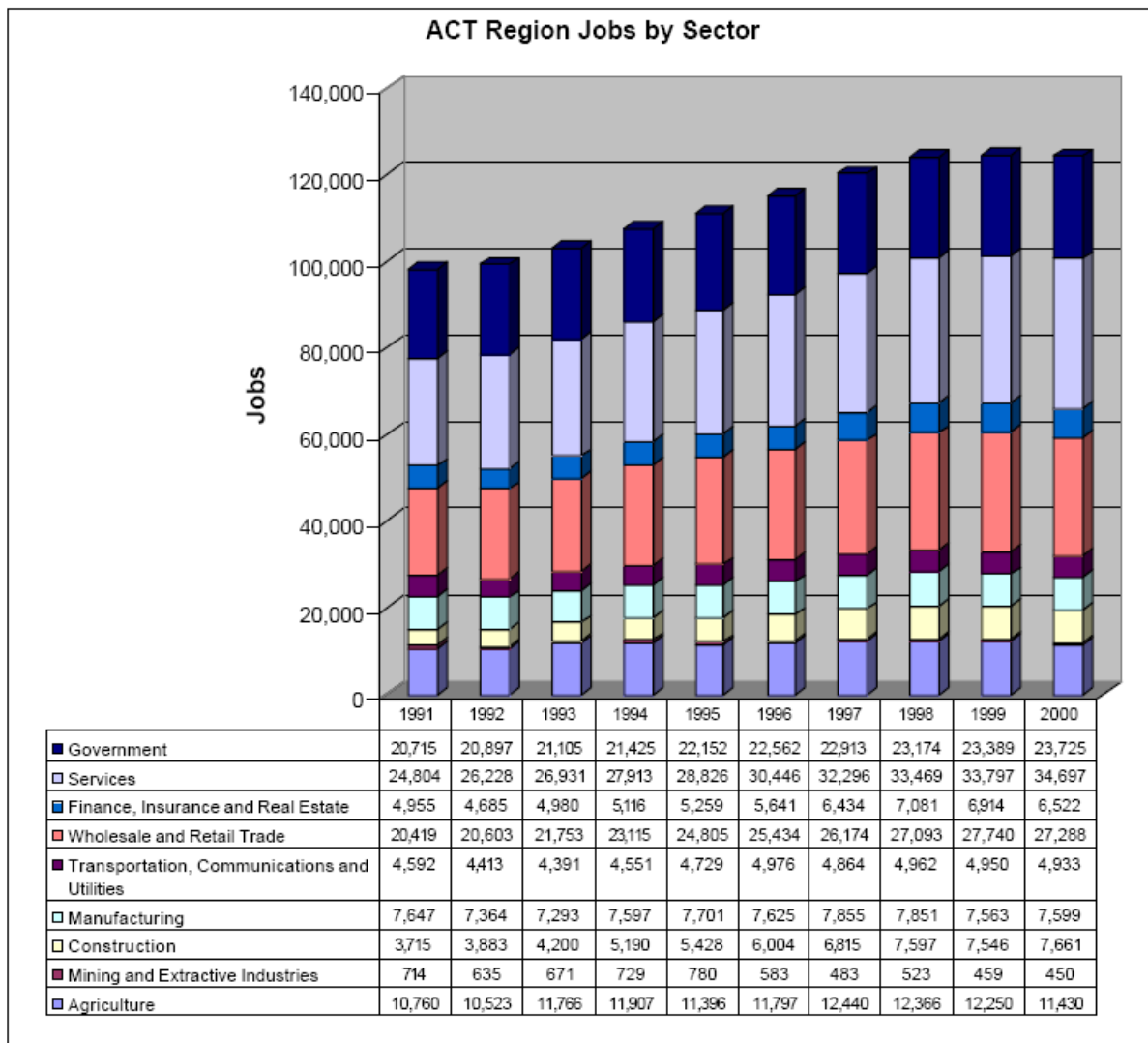
Overall, the total number of jobs in Colorado increased from 1,937,369 in 1990 to 2,859,682 in 2000, an increase of 48%. Out of all the sectors in the Colorado economy the service sector accounted for the most jobs (30%). Wholesale and retail trade followed with 21% and government with 16% of all jobs in the state. The service sector grew at the fastest rate (57%) and the finance, insurance, and real estate sector (FIRE) followed with a 47% increase in jobs. The transportation, communication and utilities sector had the third fastest growth rate statewide (46%).

Between 1990 and 2000, the number of jobs in the ACT Region went from 98,322 jobs to 124,305, or a 26% growth over the decade. Out of all jobs in Colorado in 2000, 4% were in the ACT Region. The service sector accounted for 28% of the jobs in the ACT Region and was the number one regional employment sector. The service was followed by the wholesale and retail sector (22%) and the government sector (19%). The construction sector demonstrated the greatest rate of growth in the region, increasing from 3,715 in to 7,661 (106%). Services grew by the second highest rate (40%) and wholesale and retail trade grew third

**Colorado Jobs by Sector**



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
■ Government	420,348	433,294	438,743	440,697	443,868	448,187	456,483	466,726	474,365	478,792
□ Services	554,071	586,204	621,221	657,749	694,128	729,517	769,464	803,640	836,601	868,057
■ FIRE	135,803	140,422	149,598	155,930	157,143	164,416	176,172	187,251	193,165	194,315
■ Wholesale and Retail Trade	430,893	442,903	463,315	492,698	522,063	535,244	551,672	566,103	582,370	598,253
■ Transportation, Communications and Utilities	113,515	115,871	122,802	128,542	134,248	138,589	140,828	148,081	160,915	166,424
□ Manufacturing	194,337	193,197	193,903	196,840	202,432	206,477	213,913	217,425	214,447	215,894
□ Construction	93,599	104,362	120,036	135,963	143,218	155,977	167,342	186,315	206,091	226,072
■ Mining and Extractive Industries	24,306	21,753	21,080	20,552	19,304	17,705	18,084	18,165	16,797	16,646
■ Agriculture	72,657	73,002	81,022	83,540	81,311	84,825	89,805	91,658	94,055	95,229



fastest. In the ACT Region, agriculture accounted for 9% of the total jobs in 2000. Mining and extractive industries were the only industries to demonstrate a decrease in employment over the decade, diminishing from 714 in 1990 to 450 in 2000.

### 5.2 County trends in jobs by sector

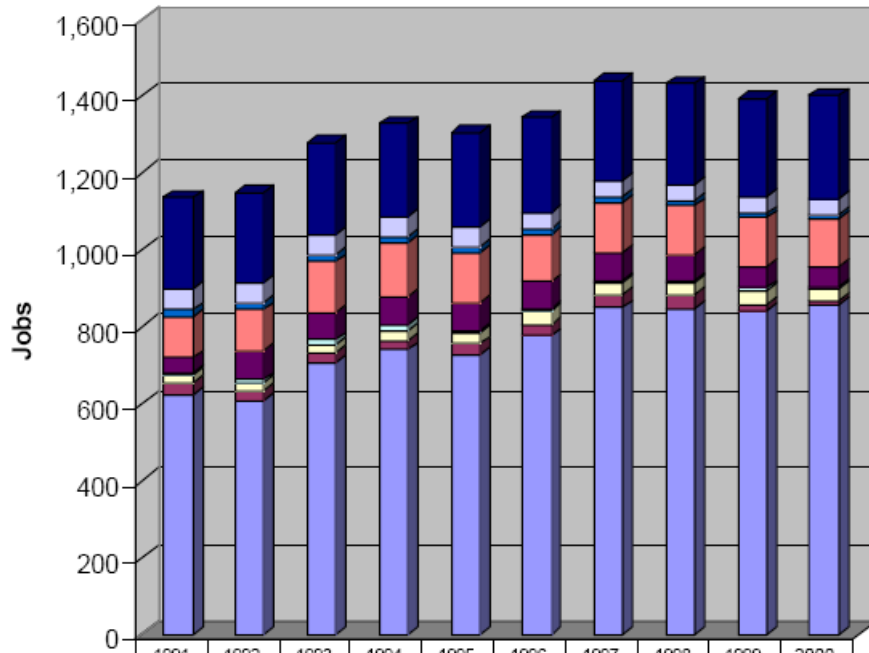
Regionally, 1% of the total jobs existed in Kiowa County. Agriculture in Kiowa County had the highest concentrations of jobs in 2000 with 61% of the total, government followed with 19%, and wholesale & retail trade with 9%. Two sectors in the county exhibited signs of significant decreases, FIRE, which declined by 41% and mining & extractive industries,

which decreased by 71% between 1990 and 2000. The construction industry showed the highest rate of growth, increasing by 41% over the decade. The second highest rate of job growth took place in transportation, communications and utilities (38%), and agriculture was third (37%).

### 5.3 Job by Sector Conclusions

The evaluation of jobs by sector was done to show how important a specific type of activity is to the overall condition of the county's economy. County planners need to have some idea of the number and proportion of jobs current employers offer to the county residents. If the current distribution or size of major

Kiowa County Jobs by Sector



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Government	237	232	237	242	247	249	261	262	257	269
Services	55	54	55	52	52	39	42	43	43	41
FIRE	17	17	17	15	14	15	14	11	11	10
Wholesale and Retail Trade	108	108	133	141	129	124	132	127	128	126
Transportation, Communications and utilities	37	74	70	71	74	70	71	68	54	51
Manufacturing	7	9	11	15	4	4	5	5	6	6
Construction	22	18	22	26	30	39	32	30	38	31
Mining and Extractive Industries	28	29	25	25	28	28	34	40	17	8
Agriculture	625	606	708	740	728	776	850	845	840	859

employment sectors is unsatisfactory, then focused efforts to encourage or discourage the development of local economic sectors can take place using the tools at the disposal of the county. Just like any financial portfolio the local economy should be diverse in order to help cope with unforeseen changes in the sector of greatest importance in the counties. Undiversified economies are more prone to high amounts of variation. This may be a tolerable risk in a financial portfolio, but due to frictions in the job and housing markets and the benefits of stability to a community, it may not be optimal for community planning. Some counties that may want to consider diversification include; Baca with 47% of current jobs in agriculture, Huerfano, with 44% of jobs in the service sector, and Kiowa with 61% of jobs in agriculture.

## 6. Labor

The labor information provided in this assessment is the result of both the Current Population Survey (CPS), conducted by the US Census Bureau for the Bureau of Labor and Statistics, and ES202 data, reported monthly by firms with more than one employee.

The Bureau of Economic Analysis then takes the CPS and ES202 data and makes the addition of wage and salary agriculture jobs, military, and private household employment to give an estimate of all wage and salary employment. To this total the number of proprietors is added, which is found by looking at the Federal Income Tax Schedule Cs filed in those counties. The total number of proprietors in the counties, as estimated by the BEA, is then taken by the Demographers

Office and adjusted to provide a more reasonable assessment. In rural areas the BEA estimate is divided by the estimated average income of wages and salaries employees. In urban counties, the number of proprietors is determined by using national ratios.

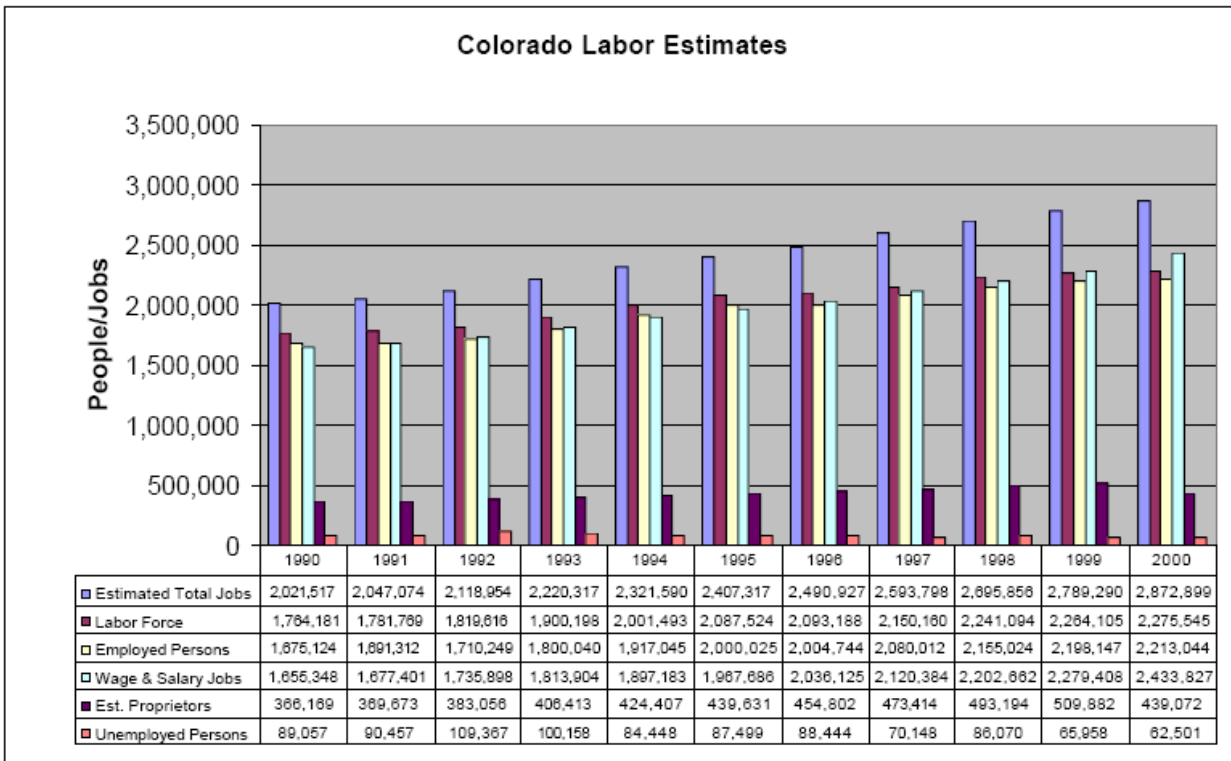
### 6.1 Summary and Overview of labor estimates

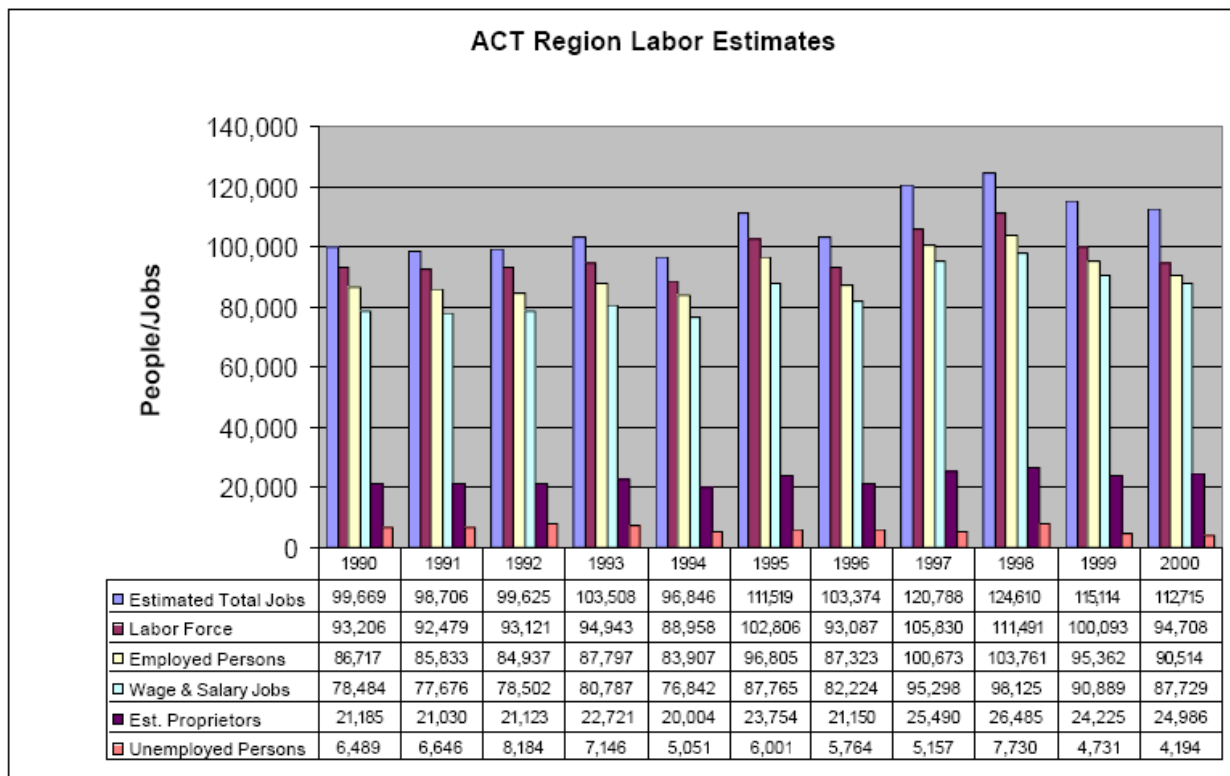
Total estimated jobs in Colorado increased by 42%, while jobs increased by 13% in the ACT Region. The state labor force grew by 29% and the regional labor force grew by 2%. Wage & salary jobs comprised 85% of total jobs at the state level and accounted for 78% of the region's total jobs in 2000. The number of unemployed people in the ACT Region decreased by 35% and 30% statewide over the decade.

Regionally, Pueblo County had the greatest number of people in all labor categories. The second highest number of total estimated jobs, labor force, employed people, wage and salary jobs, and estimated proprietors were found in Otero County. Alamosa County has the third highest number in each of these outlined categories. Costilla, Kiowa, Custer, and Crowley County consistently had the lowest total labor estimates in the region.

During the 1990s, the Colorado labor market was relatively robust. Colorado had a 42% increase in the number of total estimated jobs, accompanied by a 29% increase in the labor force. Employed people increased by 32% between 1990 and 2000 and the number of unemployed people decreased by 30% over the period. Wage and salary jobs increased by 47%, while the number of estimated proprietors increased by 20%. Wage and salary jobs accounted for 85% of total estimated jobs in 2000.

The regional labor market was also quite robust through the 1990s, though less so than the state at large. Total estimated jobs increased by 13% during the decade, with the highest number of jobs existing in 1998. The labor force climbed by 2% over the period. The number of employed people grew by 4% between 1990 and 2000, peaking in 1998 at around 110,000 people. The number of wage and salary employees also hit its decade high in 1998. The number of wage and salary employees grew by 12% and estimated proprietors grew by 18%. The state had a lower growth rate. Unemployment decreased in the region by 35% over the period. The greatest number of unemployed people was in 1998. Wage and salary jobs accounted for 78%





of the region's total jobs in 2000, while the state had 85%. Generally speaking, the labor market in the ACT Region peaked in 1998, whereas reached its apex state-wide in 2000.

### 6.2 County trends in labor estimates

Kiowa County had an increase of total estimated jobs of 20% over the decade, peaking in 1997. Labor force, employed people, and wage and salary jobs all decreased in the 1990s. Wage and salary jobs declined by the greatest rate (14%) and by 2000, wage and salary jobs accounted for only 36% of the total jobs in the county. Labor force and employed people both declined by 4% for the period. The greatest growth occurred in estimated proprietors, which increased by 52% in the 1990s. Despite decreases in many of the labor categories, the number of unemployed people decreased for the decade.

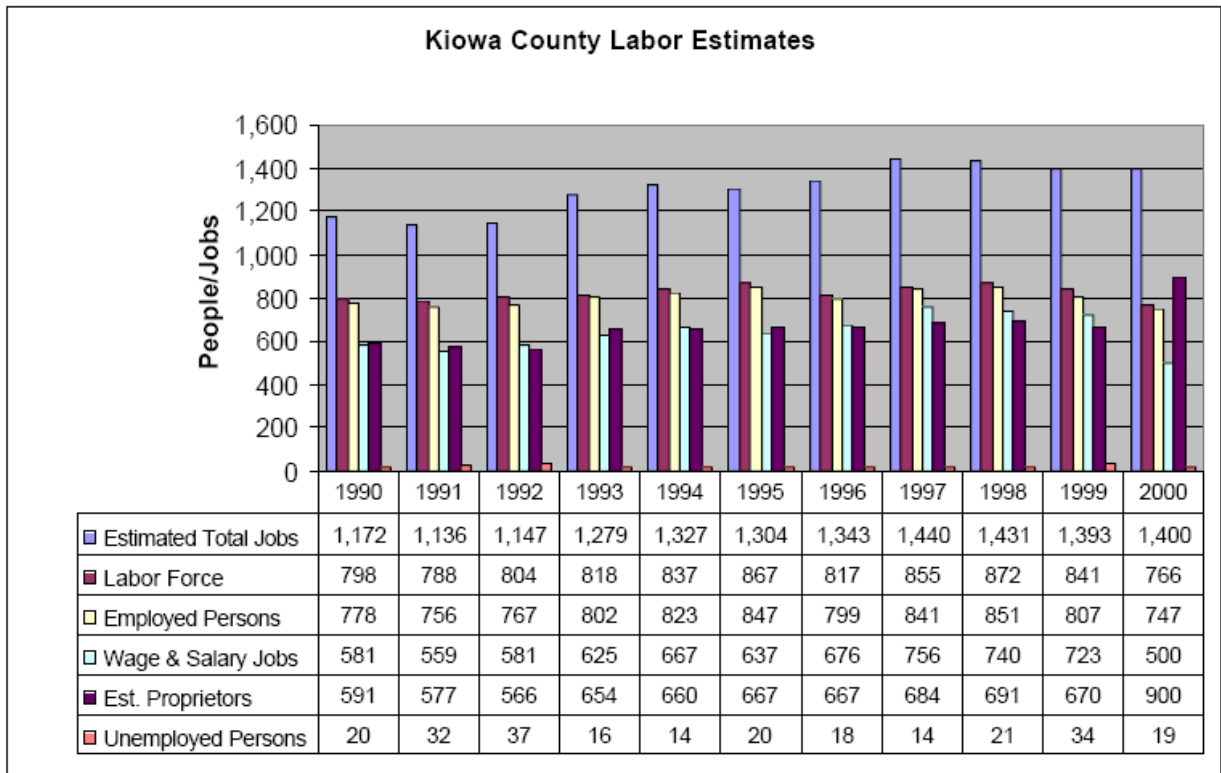
### 6.3 Labor Conclusion

The Senior Economist for the Colorado governor's office claimed that in 1999, Colorado had the best economy in the nation and the second best throughout the 1990s. This contention was fueled, in part, due to sustained employment growth and wage and salary job

growth. The 1990s were extraordinary economic times, but not for everybody, since there has been an increase in unemployed people in Baca, Bent, Crowley, and Custer counties and wage and salary jobs decreased in Costilla and Kiowa. Growth in the state of Colorado was uneven and some of the ACT counties were among those who did not benefit as greatly from the boom. Estimated total jobs increased in every county with the exception of remaining constant in Costilla, implying a consistent or increasing demand for labor in each county examined. Generally, there were consistent changes in the number of estimated jobs, showing that the labor force had sufficient time to under take new available positions. However, this was not the case in Costilla. The rising tide of Colorado's economy floated most boats, but some within the ACT region were left a bit.

### 7. Local Tax Information

Sales and property taxes are used by local governments to provide services to their constituencies. A mill levy is a type of property tax, also referred to as an ad valorem tax. One mill is equivalent to 1/1000 of the total assessed value of a property. Generally speaking, the number of mills levied against the value of real estate adjusts to reflect changes in the value of local



real estate relative to community service needs. Property taxes are one of the major tools used by local governments to pay for public schools and other essential community services. If property values increase and mill levies do not decrease then either the community has decided to sponsor more services per capita or community growth is not paying its way and is being subsidized by current residents. Sales taxes constitute a high proportion of the total state tax revenue. State sales tax revenues increase consistently on an annual basis and by 2001 accounted for 33% of the total tax revenue collected by the state.

### 7.1 Summary and overview of tax information

In Colorado, total property value increased by 68% from 1990-2000, while property value in the region increased by 44%. In both cases the property tax rate reduced over the period. Retail sales tax revenue increased by 140% statewide, while regional tax revenues increased by 103%.

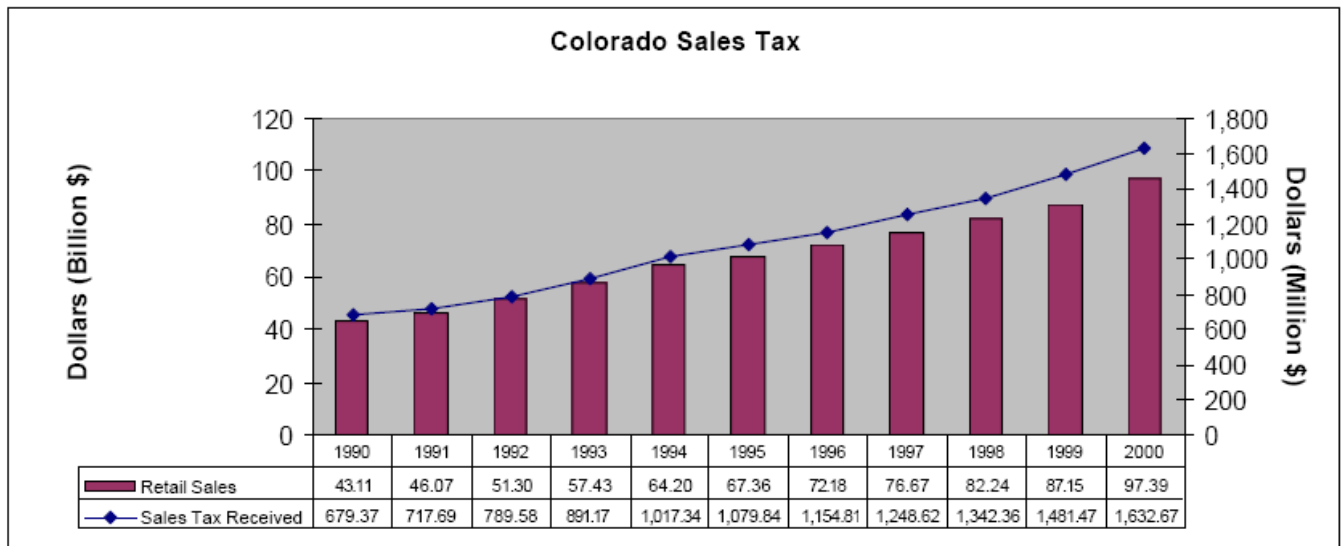
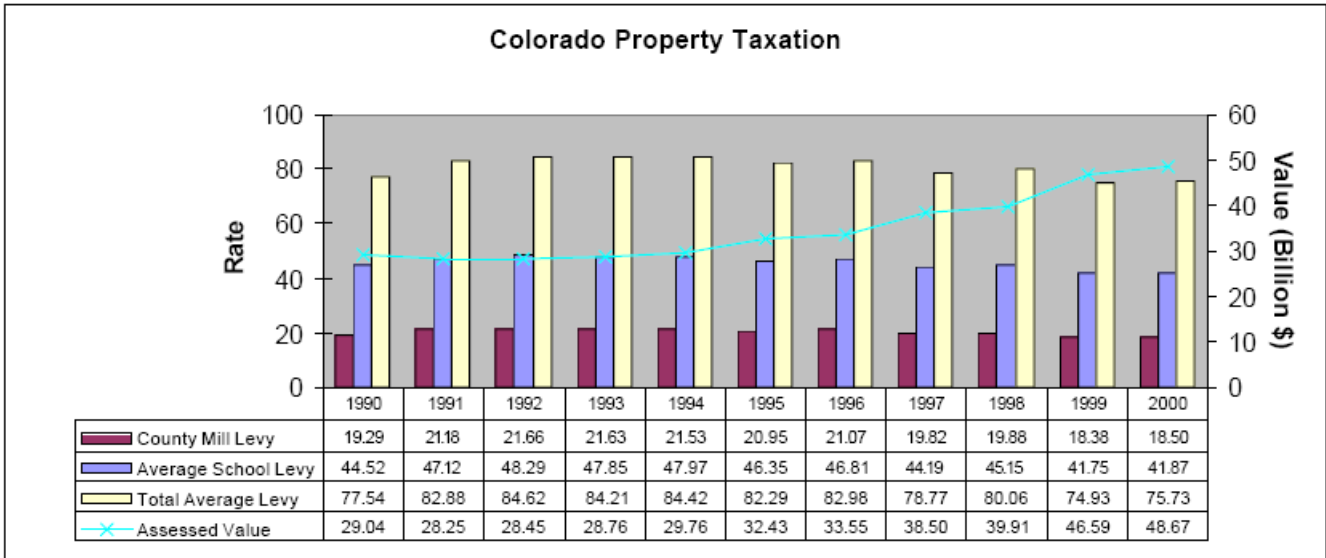
Regionally, Pueblo County generated the highest amount of state sales taxes, followed by Alamosa and Otero County. Kiowa County generated the least sales taxes, Costilla was twelfth and Crowley County was

ranked eleventh of the thirteen counties in the ACT region.

Pueblo County had the highest total taxable value in 2000, followed by Las Animas and Huerfano County. The lowest taxable value occurred in Crowley County followed by Kiowa and Conejos County. Kiowa County had the highest county mill levy, followed by Crowley and Bent. Custer County imposed the lowest county mill levy, followed by Las Animas and Costilla County.

Alamosa County had the highest average school levy, followed by Kiowa and Costilla County. Bent County imposed the lowest average school levy, followed by Crowley and Las Animas County. Kiowa County, Pueblo County and Alamosa County all had the highest total average levy. Las Animas County had the lowest total average mill levy for 2000, followed by Custer and Conejos County.

The total taxable assessed value of property in Colorado grew by 68% in the past decade. The state mill levy decreased by 4%, while the average school levy and total average mill levy dropped by 6% and 2%, respectively.



Retail sales in Colorado increased by 126% over the 1990s, while the sales tax generated increased by 140%. Retail sales in Colorado have grown consistently and steadily over the decade.

Total taxable assessed value in the ACT Region grew at a slower pace than the state as a whole, although it increased by 44% through the 1990s. The regional mill levy remained relatively steady throughout the 1992-1997 period, with a decade high regional average of 27.37 was observed in 1991. When the value of total taxable property started to increase in 1997, cuts in the regional property tax rates were implemented. The average school levy in the region decreased by a rate greater than that of the state, declining by 14%. The

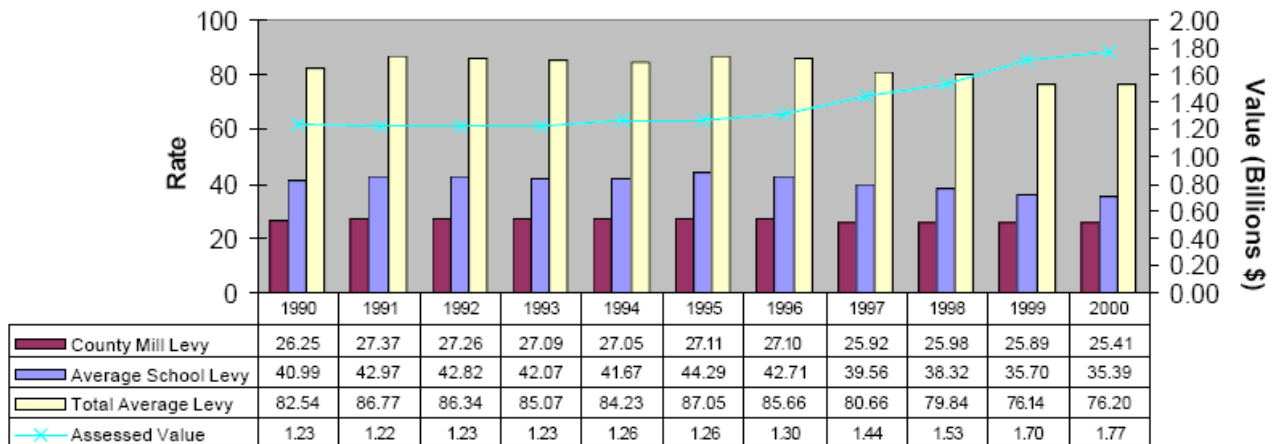
total average levy also declined by a rate higher than that of the state, falling by 8% over the 1990s.

Between 1990 and 2000, retail sales in the ACT Region increased 80%. The region had persistent increases in retail sales increases and state sales tax generated increased by 103% over the period.

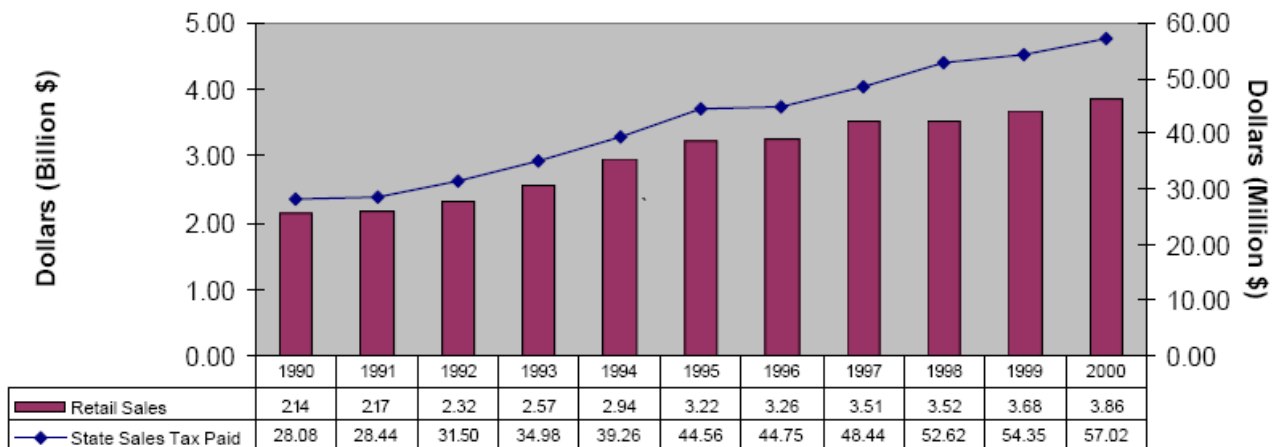
**7.2 County trends in property and retail taxes**  
Regionwide, Kiowa County had the highest county mill levy and total average levy. Kiowa County also had the second highest average school levy in 2000 and the ranked twelfth in total taxable value in 2000, regionally. During the decade, Kiowa County realized a 16% decline in total taxable value. In 1990, the



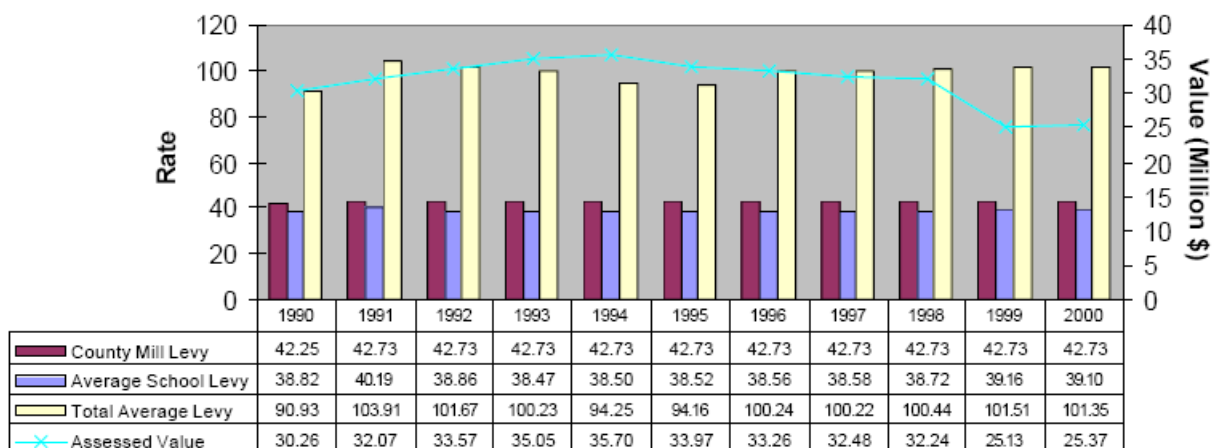
### ACT Region Property Taxation



### ACT Region Sales Tax



### Kiowa County Property Taxation



mill levy was 42.25, increasing the following year to 42.73 to hold steady through the end of the decade. The average school levy for Kiowa County increased by 1%, while the total average levy increased by 11%.

Within the ACT Region, Kiowa County had the lowest amount of state sales tax generated in 2000. Sales tax generated decreased 21% between 1990 and 2000, even though retail sales increased by 16%.

### 7.3 Taxation Conclusion

The mill levy is a property tax that is used to provide essential government services to the community (e.g, roads, emergency services, and public education). For a given portfolio of services it can be expected that total assessed value and average mill levy should be inversely related. Increases in population create greater demands on public services, but also generate sales tax and property tax revenues. If increases in population and assessed value are not accompanied by reductions in average tax burden, then population growth is not paying its way or the community has decided to increase the amount or quality of services provided per capita. For example, Alamosa and Custer County both experienced increases in population and assessed value. Despite this there were increases in the mill levy over the period.

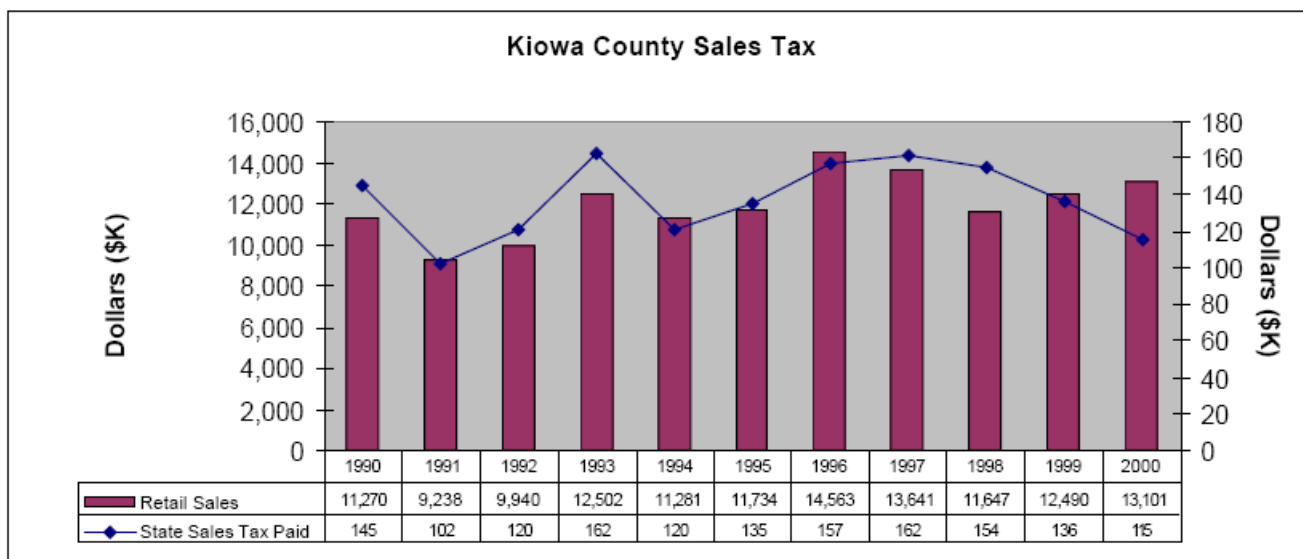
Sales taxes are typically regressive, which means that poorer people suffer a disproportionate amount of the sales tax burden. For example, regardless of who you are you are going to pay 2% on the purchase of good.

That 2% represents a higher proportion of a poor person's income than that of a wealthier individual. Increases in sales tax rates as a substitute for increasing mill levies (which tend to place greater burden on the relatively wealthy) for counties who are concerned about their poorer residents. However, sales taxes are popular in counties for which tourism is an important economic sector. Tourists pay sales taxes, but not mill levies. Either due to population growth, income growth or actual increases in sales tax rates, the total sales tax paid have increased in every county of the ACT region throughout the observation period.

**8. Education** percentage of residents with college degrees (more than 1 in 3) and ranks third highest in the percentage of high school graduates. Colorado's high school class of 2001 had a graduation rate of 80.5%, which was slightly less than the 80.9% rate in 2000. This report uses the October Average Daily Attendance and is reported by the Colorado Department of Education.

**8.1 School enrollment summary and overview** Colorado had consistent increases in the number of students enrolled into grades 1-8, while the region had some decreases in the period. Overall, the ACT Region had a 3% increased enrollment for the period, while the state had a 21% increase.

Using the most recent data available, Pueblo County had the highest number of students in the 1-8 grade in 1999. Otero County had the second most students,



followed by Alamosa County. Kiowa County had the fewest students, Custer County enrolled the second fewest students, and Crowley County had the third fewest students enrolled in 1999. Baca, Crowley, Kiowa, Otero, and Prowers Counties showed decreases in students in grades 1-8 over the decade, while the rest of the region experienced increases.

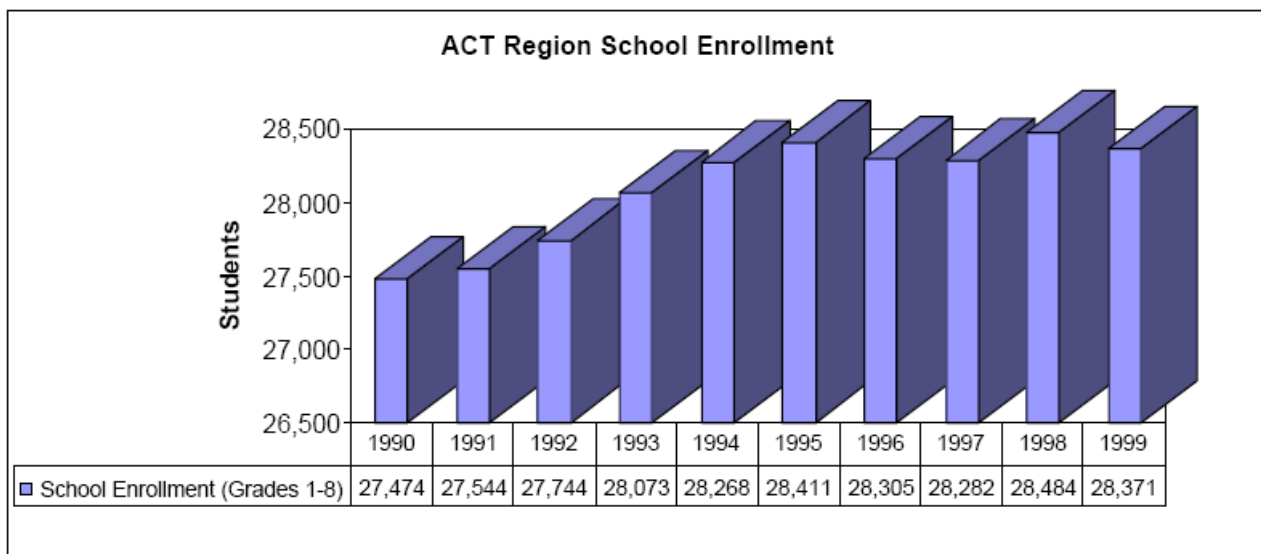
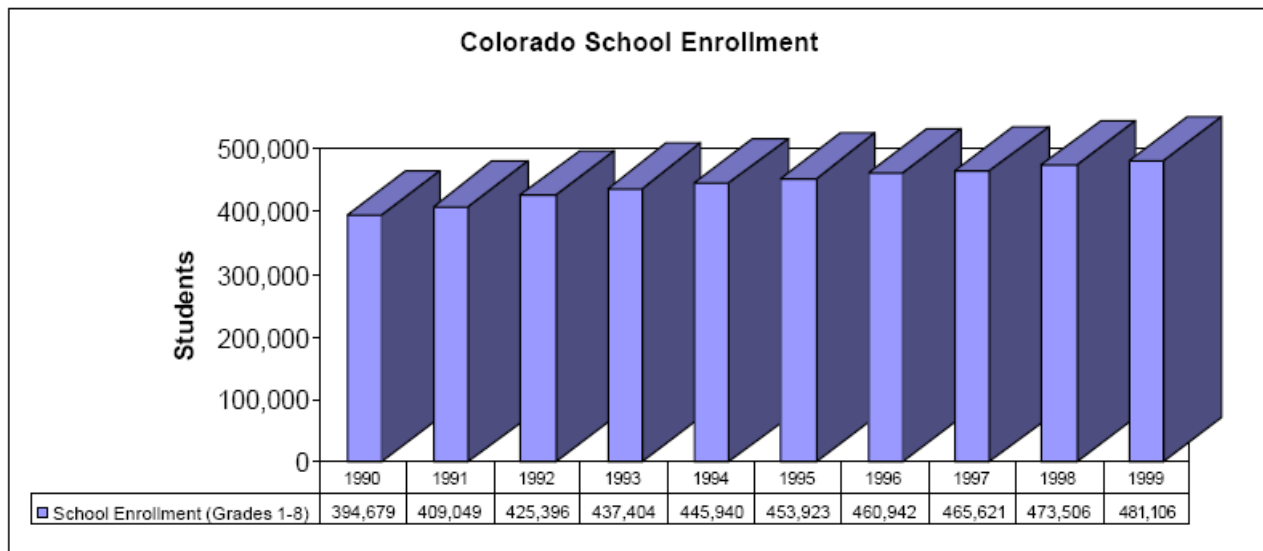
Overall, school enrollment in the ACT Region increased by 3% for the period, with the greatest number of students enrolled in 1998. Between 1990 and 1995, enrollment increased steadily before declining in 1996. Between 1995 and 1999, the region had small variations in the number of students, but for the most part remained relatively stable.

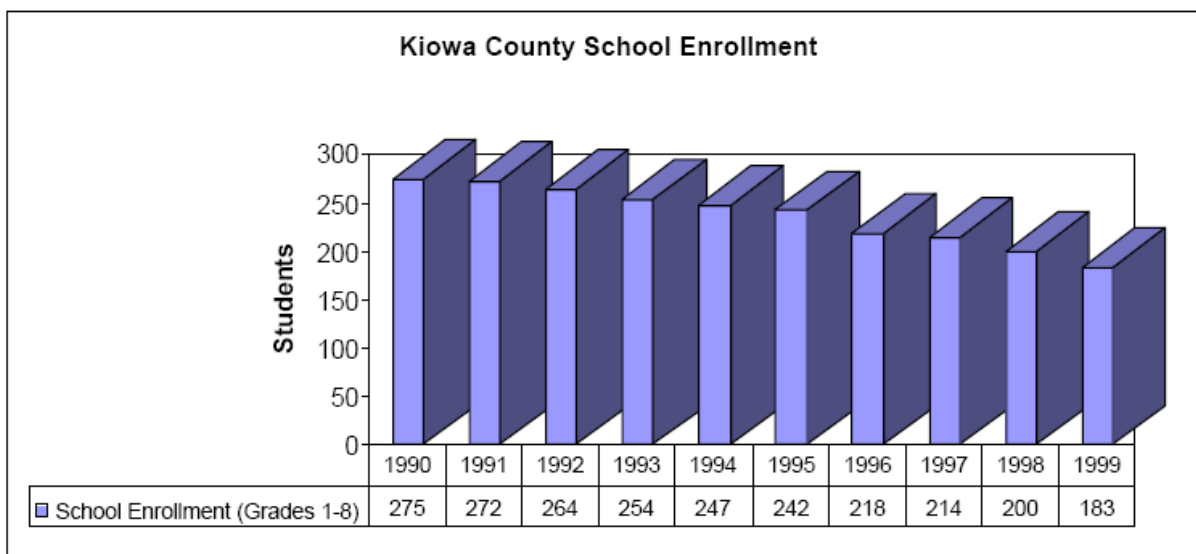
## 8.2 County trends in school enrollment

Regionwide, Kiowa County enrolled the fewest students in grades 1-8. County enrollments decreased consistently through the decade reaching the end of the decade with 33% (92) fewer students than it had in 1990.

## 8.3 School Enrollment Conclusion

An educated populace is essential to a well functioning democracy. Some aspects of education are also important for job training. Education is an expensive and lengthy process that will be underprovided from a societal perspective without government action. Counties bear the majority of the costs of education in the form of mill levies. However, studies have shown that





educated people are less costly to society in terms of the use of certain public services such as welfare, and are less likely to commit crimes. There are also studies that show positive correlation between health status and the level of educational attainment. Higher education also tends to correlate with higher taxable income. County enrollment trends can facilitate planning for educational services. Moreover, school enrollment shows what the county workforce will be in the near future and provides some insight to the county's labor force. School enrollment within the ACT region demonstrates a great variety of county level trends. Each county will want to examine its enrollment trends in assessing future investment in education and educational infrastructure and in considering possibilities for cross-district and cross county partnerships in primary and secondary education.

#### **8.4 School district revenue and expenditure summary and overview**

School districts make use a number of sources of federal, state and local funds. Total school district revenue for Colorado declined by 7% over since the 1997-98 school year. The ACT Region had a decrease in school district revenue between FY 1997 and FY 1998, but over the entire period had a 14% growth rate. Colorado school district expenditures increased by less than 1%, while the regional school district expenditures decreased by less than 1% over the period.

The highest level of revenues and expenditures were found in Pueblo County and Otero was second. The third highest expenditures occurred in Las Animas

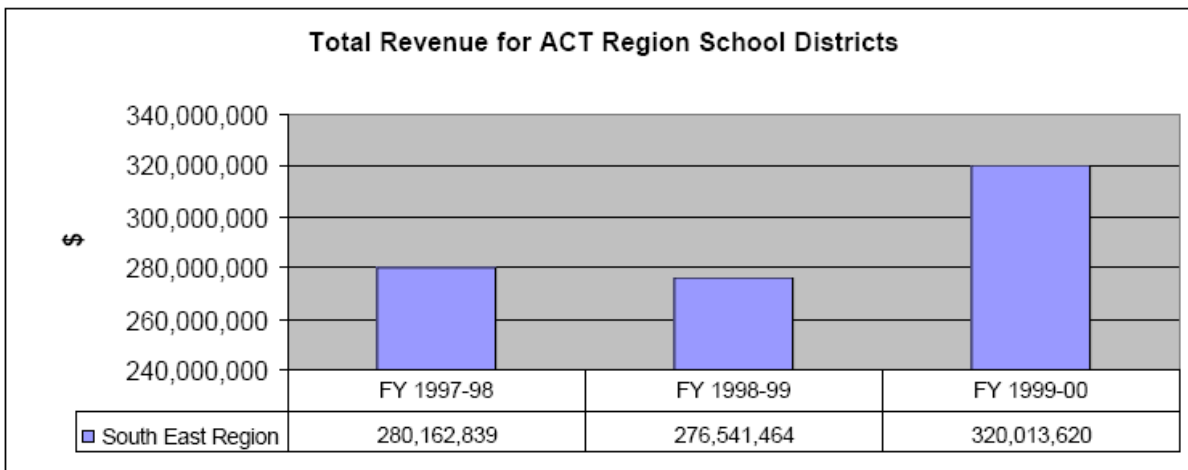
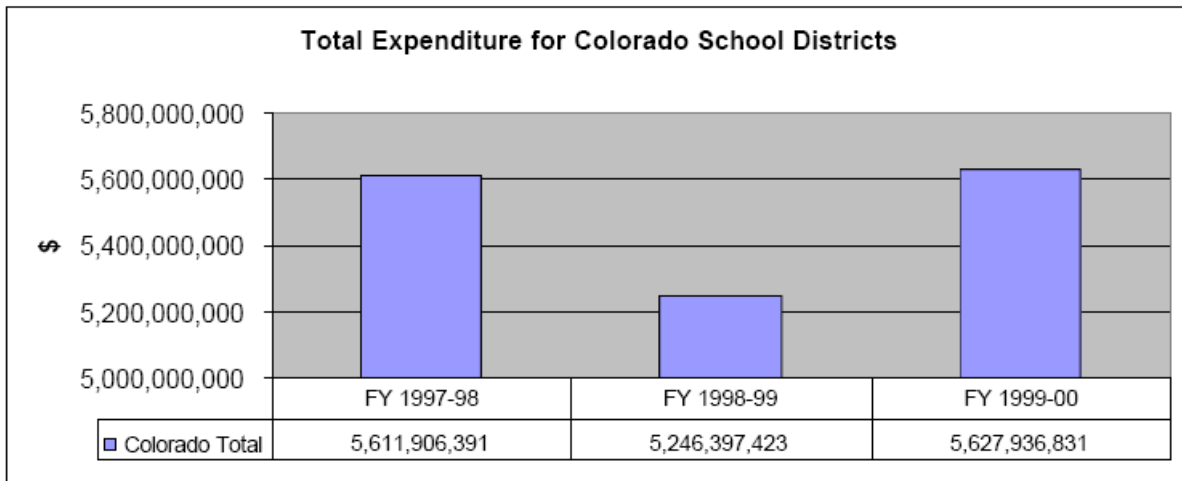
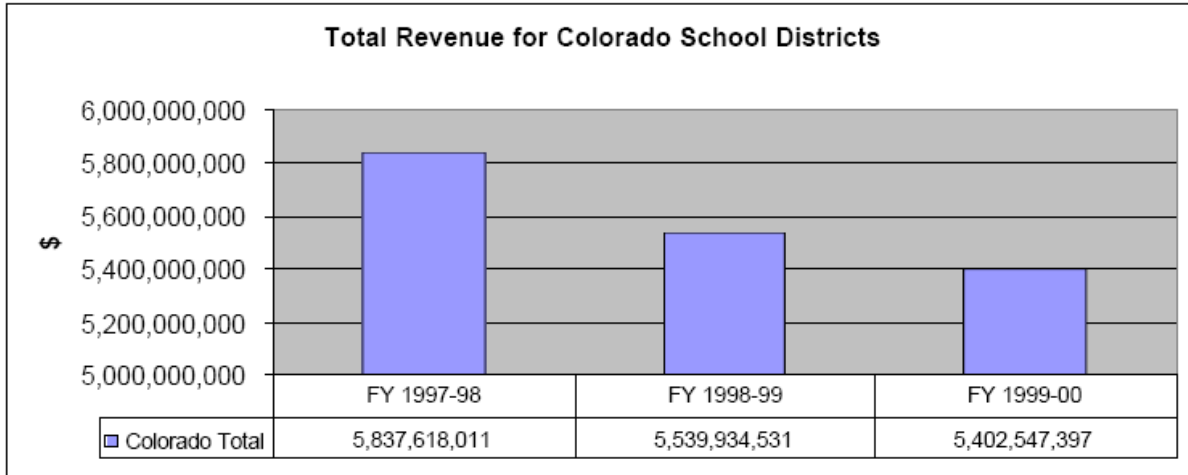
County and Prowers County had the third highest revenue in 1999-2000. Custer County had the lowest county total school district revenue and expenditures, while Kiowa County ranked twelfth and Crowley County ranked eleventh for 1999-2000.

For the 1997 fiscal year, Colorado school districts had total revenues of \$5.8 billion, decreasing by 5% in 1998, and then 3% in 1999, yielding a 7% decrease in total school district revenues over the most recent school years of record.

Total expenditures of Colorado school districts decreased by 7% between fiscal year 1997 and 1998, but increased by a similar amount between 1998 and 1999.

Revenues exceeded expenditures for the first two years in the series, but the system as a whole was in deficit for the 1999-2000 school year based upon these figures. In 1997, the difference between total revenue and total expenditures for all school districts in Colorado equaled \$225 million more in revenue than that of expenditures. The following year revenues exceeded expenditures by \$294 million. However, the tables turned in 1999 when expenditures exceeded the total revenues by \$225 million.

In the ACT region, total school revenues declined by 1% between 1997 and 1998, then climbed by 16% between 1998 and 1999. The total revenue for 1999 accounted for 6% of the state total.



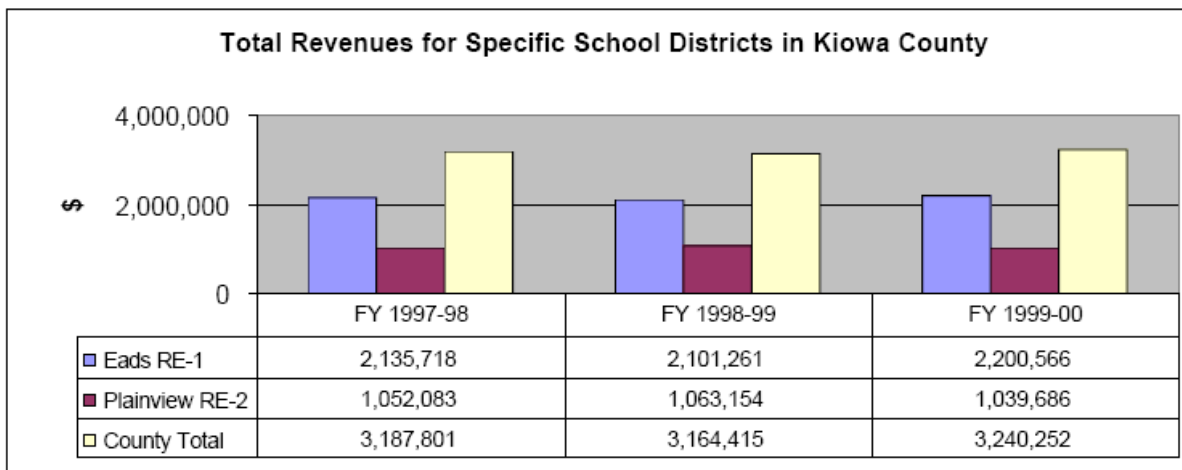
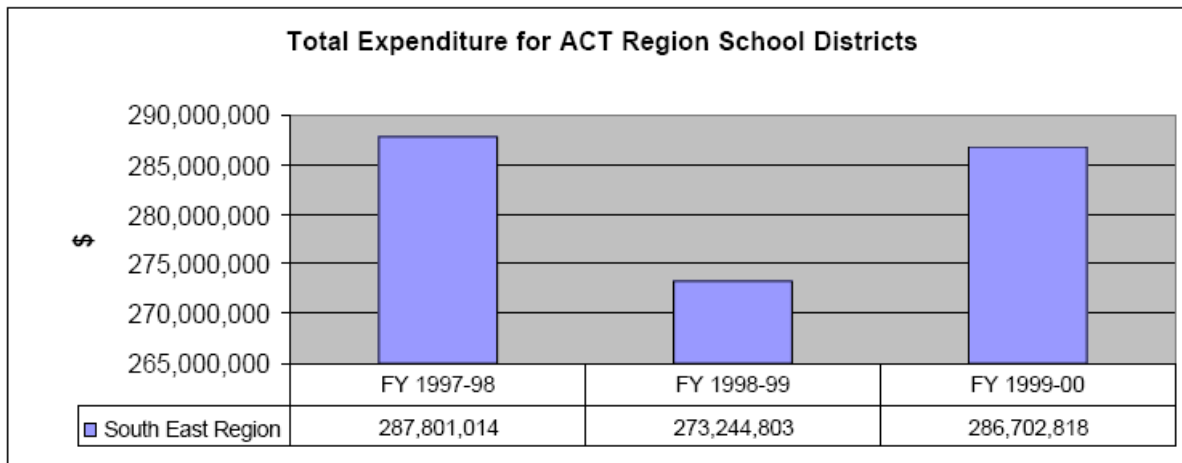
Total school district expenditures in the region decreased by 5% between 1997 and 1998, then increased by the same percentage between 1998 and 1999. The total expenditures in 1999 accounted for 5% of the state total. Regionally, total expenditures in 1997 exceeded the total revenues by \$7.6 million. In 1998, the total revenue exceeded the total expenditures by \$3.3 million. In 1999, total revenue jumped by a substantial amount causing \$33.3 million more in revenue than in expenditures in the year's school budget.

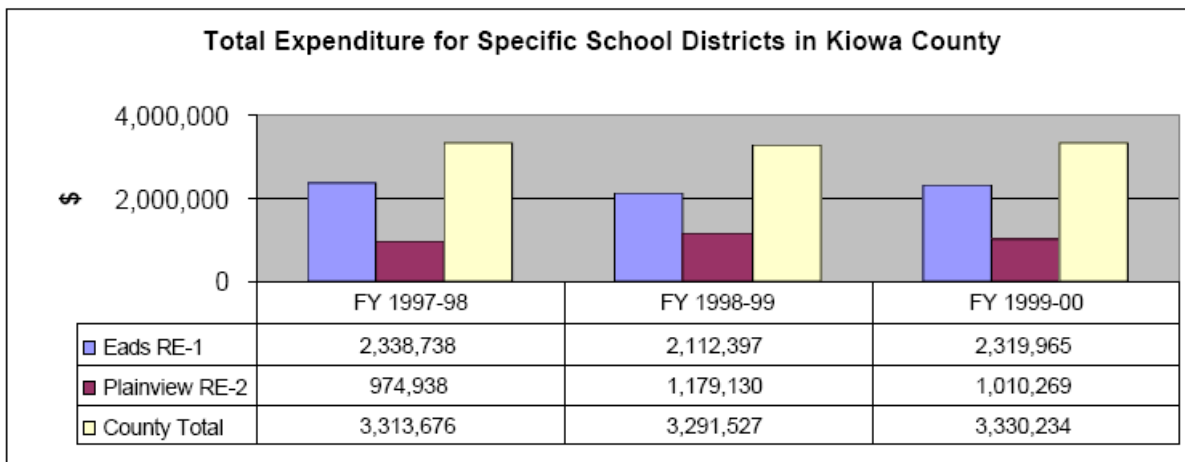
### 8.5 County trends in school district revenue and expenditure

Regionally, the Kiowa County's total school district revenues for 1999 were ranked twelfth. From 1997 to 1998, total school district revenues decreased by 1% and increased by 2% in 1999.

Kiowa County had the twelfth ranked school district expenditures and revenues in the region. Eads RE-1 had 70% of the county total school district expenditure in 1999, whereas Plainview RE-2 had 30%. Expenditures changed little over the period, decreasing by 1% in 1998 and increasing again by 1% in 1999.

Total school district expenditures in Kiowa County exceeded the total school district revenues for each year of this observation. In 1997, school district expenditures exceeded the school district revenues by \$126,000. In 1998, total school district expenditures exceeded revenues by \$127,000 and by \$90,000 in 1999.





### 8.6 School District Revenue and Expenditure Conclusion

Many people associate the level of school district expenditure and availability of funds to the quality of education obtained. Poorer school districts cannot afford some of the same resources as that of wealthier school districts; therefore school districts with low fund availability may suffer from a quality disparity. It is more likely that combining student enrollment information with school budget information to derive the expenditures per student would provide a useful measure of the connection between resources and educational quality. Further, student demographics and determining the amount of the school budget that actually goes to education, as opposed to bussing for example, would better reveal any potential relationships. Research in this area has generated mixed results. Research by James Coleman claims that family background was the leading determinate of performance, not expenditures. Conversely, Ferguson (1991) finds that school resources do contribute to the quality of education. Smaller class sizes, teacher literacy rates, and teacher experience, which are influenced by school district expenditures, are all correlated with student performance. The results are too conflicting to give a definite answer regarding the level of expenditures, but it is obvious that with the more availability of funds, the more money will be spent by the district and the utilization of these funds will differ from student to student even within the same school district.

### 9. Agriculture

During the 21st century the number of people living on farms and the number of farms has declined substantially. Technological innovation and federal policy in

the agriculture sector has facilitated the redundancy of farm labor and the concentration of agricultural production among fewer and fewer larger and larger operations. Farm numbers are not the only indicator of health in the agriculture sector. Cash receipts, expenditures, and net income all provide insight by showing whether crops or livestock receipts have a greater influence in the region and whether the production expenses of a specific type is having negative ramifications for farmers' income.

Increasing pressure has been placed on farmers by society to have more responsibility toward conservation and federal incentive policies have facilitated environmental stewardship in the agriculture sector. Through the Conservation Reserve Program millions of farmland acres have been taken out of agriculture and placed in conservation practices to help reduce erosion and pollution. Farmers not only provide food and fiber to society, but also provide other consumptive and nonconsumptive values of natural resource management through their environmental stewardship of the land. This section includes the amount of those farm goods produced as well as the amount of acreage in the ACT Region under production. In addition to providing crop production volumes and acreage, the number of livestock operations and the value of livestock products are reviewed in this section.

#### 9.1 Summary of farm numbers, land in farms, and value of farmland and buildings

In 1997, 2,190,510 farms covered 956,010,000 acres throughout the nation. In that same year 32.6 million of Colorado's 66.6 million acres were considered farmland acres. These farmland acres were spread among

28,628 farms and ranches. The number of farms in the United States decreased by 8% between 1987 and 1997, while farms in Colorado increased by 4%. The ACT Region experienced a 2% increase in the number of farms from 1987-1997. The land in farms statewide decreased by 4% over the period, while land in farms in the ACT Region decreased by 5%.

The average estimated value of farmland and buildings per farm in Colorado increased by 54%, while average estimated value of farmland increased by 46% in the ACT Region. From 1987-1997, the value of farmland and the buildings on farmland property decreased in only one of the thirteen counties, indicating a general increase in the value of farmland per farm throughout the region.

Pueblo County had the most farms in the ACT region in 1997. Baca County was second, while Prowers County ranked third. Las Animas County had the most land in farms in the region, followed by Baca and Kiowa Counties. Crowley County had the highest estimated value of farmland and buildings per farm, followed by Las Animas and then Huerfano County.

Regionally, Custer County had the fewest farms, followed by Costilla and Crowley County. Custer County also had the lowest amount of land in farms, followed by Alamosa and Conejos Counties. Conejos County emerged with the lowest estimated value of farmland and buildings per farm, followed by Otero and Pueblo County.

The number of farms in Alamosa, Baca, Bent, Conejos, Costilla, and Prowers decreased over the outlined period. The amount of farmland acreage decreased in all counties with the exception of acreage in Costilla, Huerfano, and Las Animas Counties. The estimated value of land and buildings per farm increased dramatically for all counties in the ACT Region, with only Bent County as the exception.

The Census of Agriculture for 1987, 1992, and 1997 showed a decrease in the number of farms between 1987 and 1992 by less than 1%. However, the number of farms increased by 4% between 1992 and 1997.

Between 1987 and 1997, Colorado farmland acreage decreased by 4%. Colorado farmland acreage consistently decreases from the prior observation.

The average estimated value of farmland and buildings per farm increased by 54% in Colorado between 1987 and 1997. Statewide, a consistent increasing trend in the value of farmland and buildings was observed.

Regionally, the number of farms increased by 2% between 1987 and 1997. The number of farms in the region showed a slight decrease between 1987 to 1992. The 1997 total number of farms in the region accounted for 18% of the state total in that year.

Between 1987 and 1997, farmland acres in the ACT Region decreased by 5%. Land in farms increased slightly from 1987 to 1992. The 1997 regional total represented 29% of the state total.

Between 1987 and 1997, the value of farmland and buildings in the ACT Region increased by 46%. In comparison to the state average value of farms and buildings, the ACT Region's average value is \$24,000 per farm less than the state average.

## **9.2 County trends in farm numbers, land in farms, and value of farmland and buildings**

The number of farms in Kiowa County increased by 3% between 1987 and 1997, rebounding in the second half of the decade after a decrease of 19 farms between 1987 and 1992. Kiowa's total farm count accounted for 7% of the regional total in 1997.

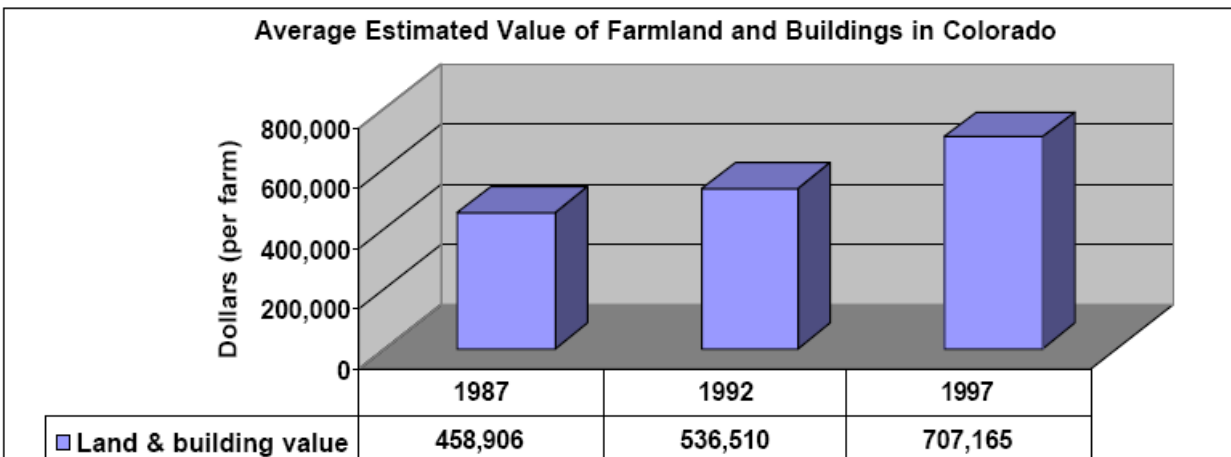
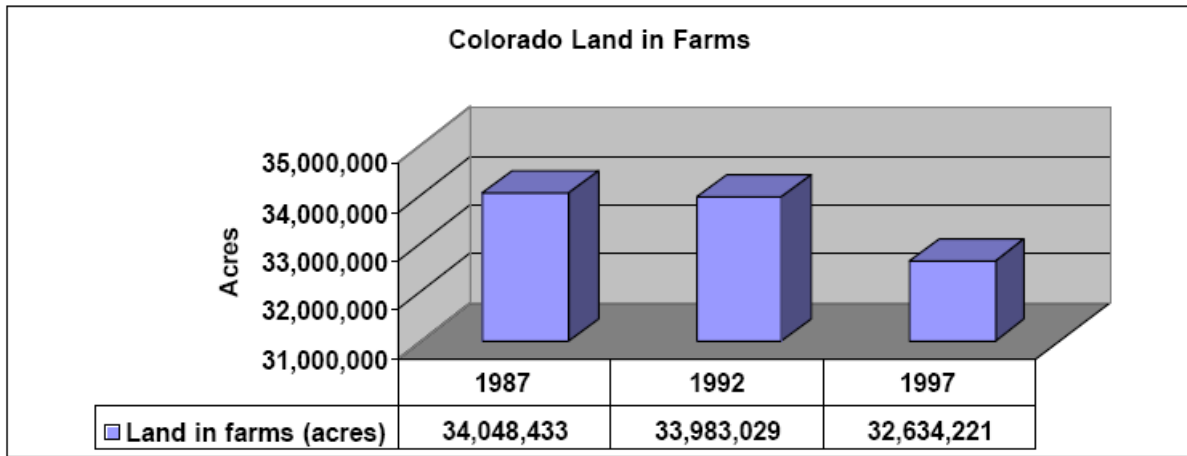
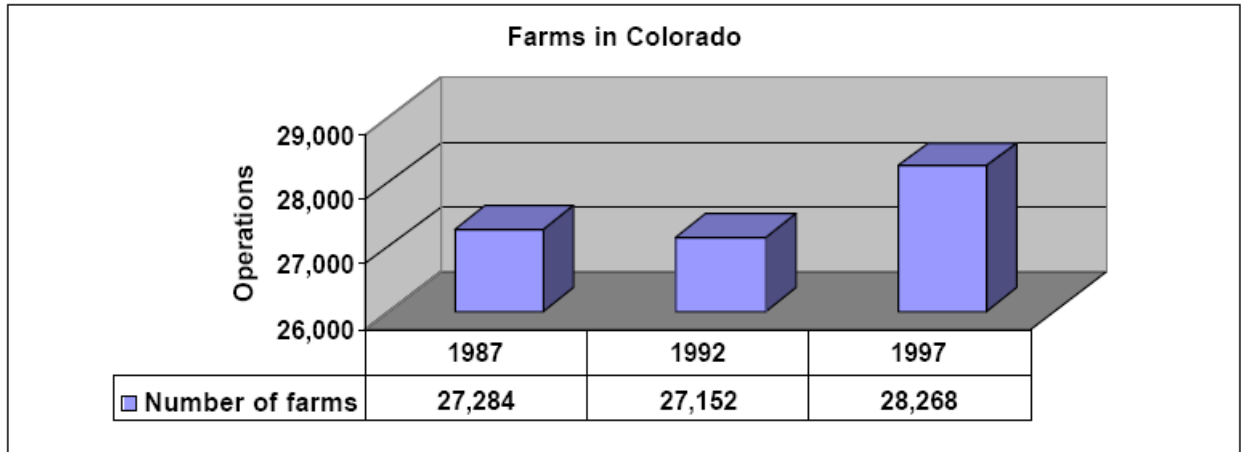
The amount of acreage involved in agricultural production in Kiowa County decreased by 8% between 1987 and 1997. The 1997 total accounted for 10% of the regional total, which made Kiowa County the county with the third highest amount of farm acres region-wide.

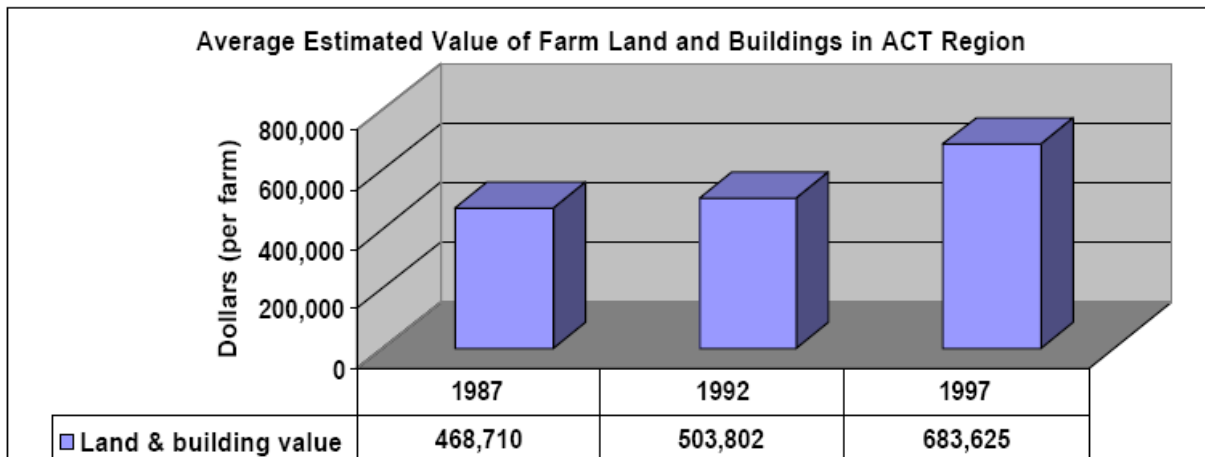
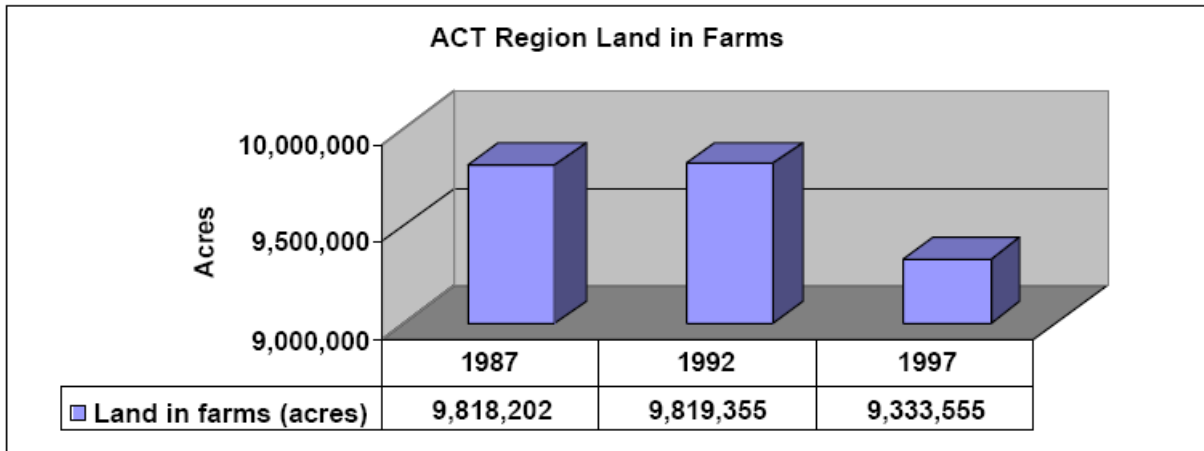
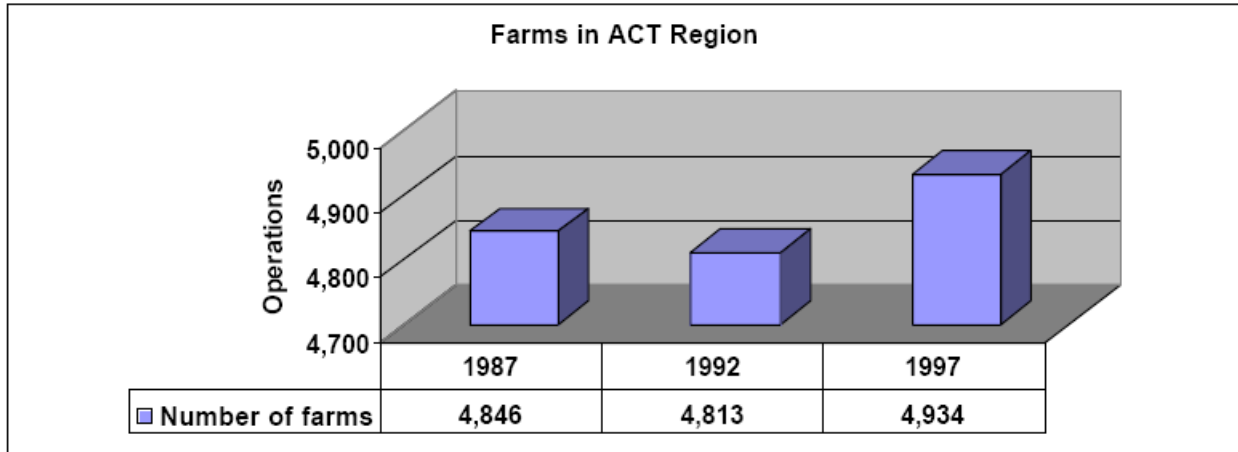
The estimated value of farmland and buildings per farm in Kiowa County increased by 7% between 1987 and 1997, rebounding from a decrease of \$59,000 between 1987 and 1992. The total value of land and buildings per farm in Kiowa County equaled \$26,000 less than the regional average value per farm in 1997.

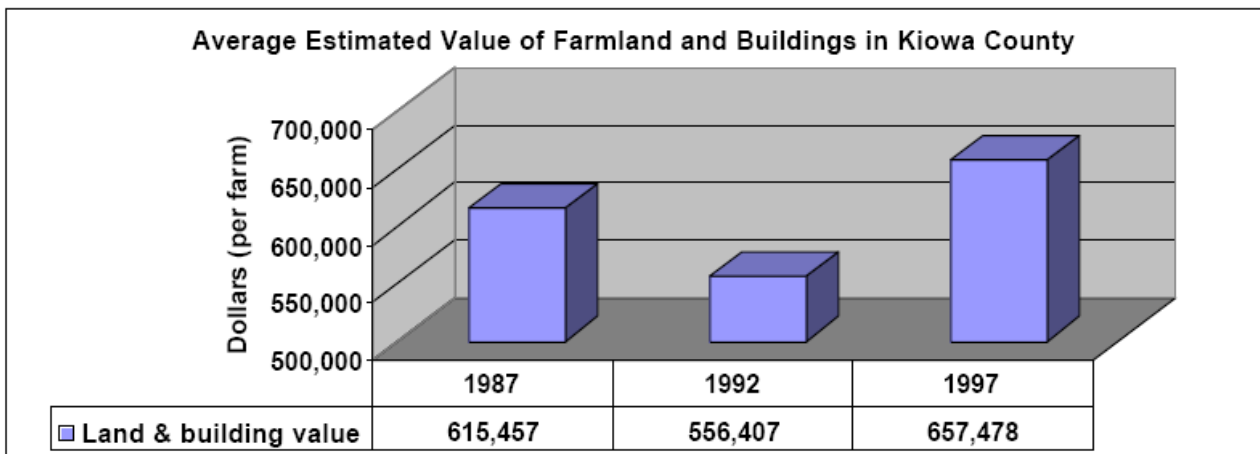
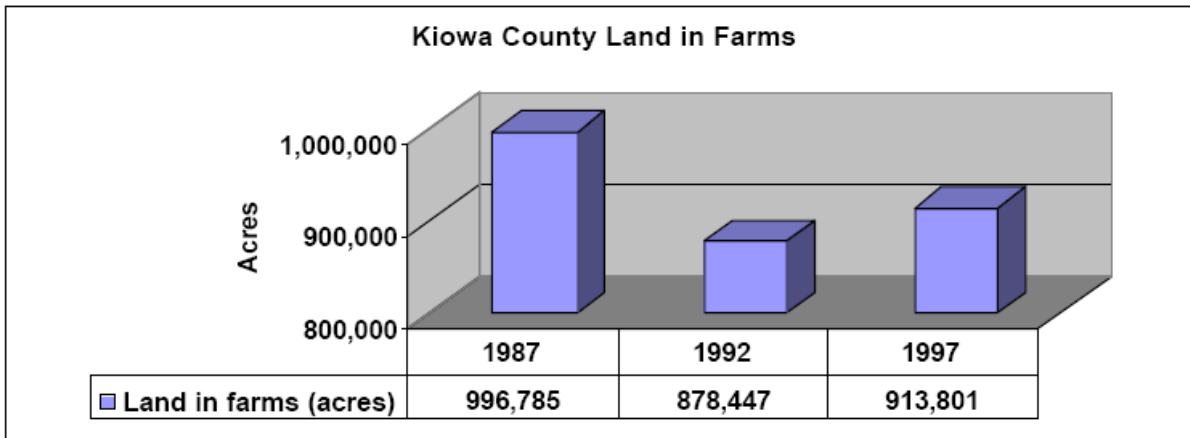
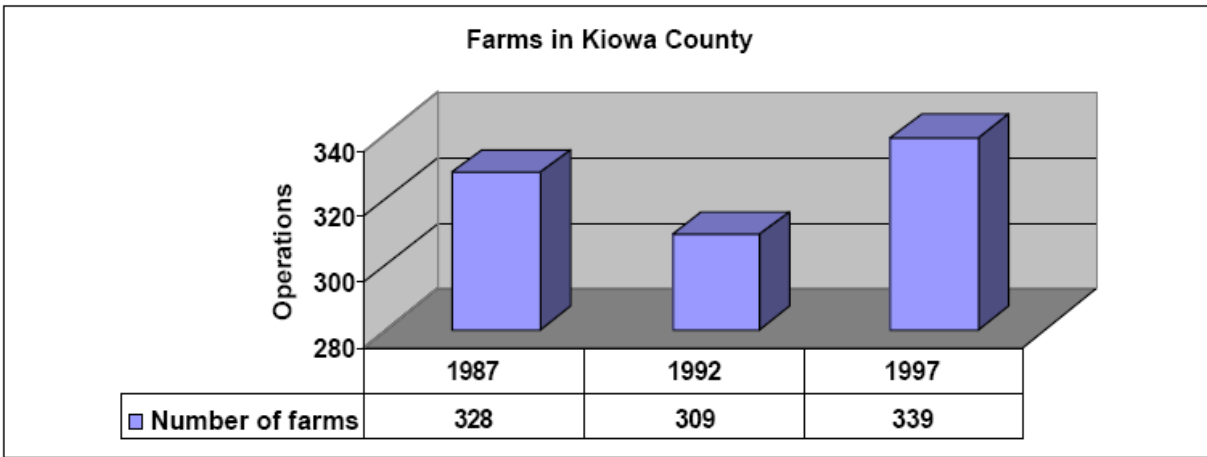
## **9.3 Farm Number, Acreage, and Property Value Conclusion**

Land in farms has decreased for both the region and the state, while the number of farms has increased in both cases; agricultural parcels are smaller on average than they were at in 1997. The average farm in the









region in 1987 had 2,026 acres, and the declined to 1,892 acres by 1997. Closer inspection of agricultural lands would probably reveal more very large operations where most of the agricultural production activities occur and many more parcels of about 35 acres where little to no actual agricultural production is taking place. Despite experiencing an increase in the number of farms the number of agricultural jobs have decreased in Costilla, Crowley, Custer, Las Animas, and Prowers County during the 1990s. Agriculture land prices are a function of expected future returns, including government farm programs, but also the potential to convert that land to higher intensity uses than agriculture. Thus, population and income growth may be driving agricultural land values beyond what is justifiable from the returns to agricultural production. The property value of farmland and buildings has been increasing while returns to actual farm production have largely been in decline. As a result, farmers and ranchers have a greater incentive to take the land out of agricultural production now than they did in the past.

#### **9.4 Summary and overview of farm income and expense**

Farm income and expense estimates in Colorado are the result of cooperation between the Economic Research Service (ERS) and National Agriculture Statistics Service (NASS). The ERS and NASS provide data to the Bureau of Economic Analysis (BEA) where they are aggregated into state and national level information. The major income components of this assessment are government payments, miscellaneous income, cash receipts from livestock, crops, and other sources. The expense portion of this study is comprised of purchases of feed, livestock, seed, fertilizer, petroleum, labor, and all other production expenses. In other sections of this study livestock receipts are explored in greater detail. The major difference between the farm income and expense section presented here and the livestock section presented later is that the farm income section below uses estimates whereas sections 9.10- 9.19 use actual data collected from the Census of Agriculture.

Statewide, the majority of cash receipts came from livestock sales. Statewide cash receipts fell by 1% for the period, while the region experienced a 17% decrease. Coloradoan farms realized an 18% increase, while the regions' farmers experienced a 15% increase in cash receipts from crops. Other income at the state level increased by 85% and the ACT Region's other income category grew by 146% during the same

period. Imputed and miscellaneous income for the state grew by 113%, while growing by 315% in the region.

At the state and regional level, all production expense categories increased with the exception of a decrease in the purchased livestock expenses. Cash receipts and other income increased by 12% at the state level and decreased by 8% in the region. Total net income including corporate farms throughout the state experienced a 34% decrease in income over the period, while the regional category decreased by 22%. State and regional inventories decreased markedly over the period, which is reflected in decreases in income for the state, region and within many counties.

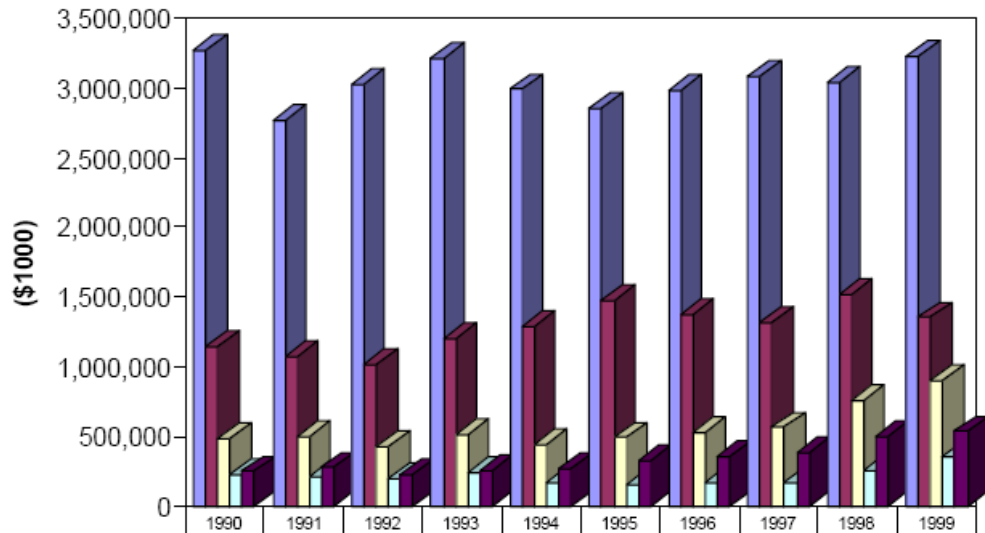
Using the most recent data, Prowers County had the highest cash receipts from livestock, Otero had the second highest and Crowley County was third. Alamosa County, Baca County, and Prowers County had the highest cash receipts from crops. Baca, Prowers, and Kiowa County were the top three counties in cash receipts from other income. Baca, Kiowa, and Prowers County had the highest amounts of government payments in 1999. Prowers, Crowley, and Baca County had the highest imputed and miscellaneous income within the region.

Feed purchase and livestock expenses were the highest in Prowers, Otero, Crowley, and Baca County in 1999. Seed purchase, fertilizer and lime, and petroleum product expenses were highest in Alamosa, Prowers, and Baca County. Hired farm labor and all other expenses were the greatest in Alamosa, Prowers, and Kiowa County within the ACT Region.

Total cash receipts from marketings, total production expenses and total cash receipts and other income were the highest in, Prowers, Otero, and Baca County. Prowers, Baca, and Crowley County had the highest overall net incomes. Alamosa, Kiowa, and Costilla County had the highest total value of inventory change within the region, and were the only counties reporting a positive change in inventory over the period.

Colorado livestock and livestock products cash receipts decreased by 1% between 1990 and 1999. Livestock receipts make up the majority of all cash receipts earned. The cash receipts from crops increased by 18%, from \$1.15 billion in 1990 to \$1.36 billion in 1999. Other income, which is income earned from farm related activities other than crop and livestock production, increased 85% and government payments rose

### Colorado Cash Receipts



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
■ Cash receipts: livestock and products	3,266,796	2,767,708	3,024,186	3,206,597	2,988,246	2,857,647	2,983,400	3,080,970	3,037,123	3,226,519
■ Cash receipts: crops	1,149,078	1,082,042	1,025,796	1,209,575	1,289,401	1,477,324	1,379,232	1,323,311	1,515,896	1,355,665
□ Other income	491,694	500,500	439,696	514,861	450,916	499,350	536,728	568,935	757,098	909,712
□ Government payments	236,723	217,102	203,234	250,253	176,967	166,963	176,240	175,637	257,696	368,005
■ Imputed and miscellaneous income received	254,971	283,398	236,462	264,608	273,949	332,387	360,488	393,298	499,402	541,707

by 6% over the period. Imputed and miscellaneous income increased by 113% statewide over the period. Imputed income consists of income from the rental value of the home if the farm dwelling was rented at market value rather than being occupied by the farmer. Imputed farm income also includes custom work income, rental income, and income from forest products.

Production expenses increased in all but one expense category between 1990 and 1999. Feed purchases increased by 46% and seed purchases increased by 65% over the decade. Fertilizer and lime expenditures increased by the highest rate in the period, climbing by 85%. Petroleum products purchased increased by 7% and hired farm labor climbed by 73%, whereas the all other expense category climbed by 33% over the decade. Livestock purchase expenses decreased by 15% statewide, the only expense category that declined. The greatest expenditures statewide were in the all other expenses category, accounting for 41% of the total production expenses in 1999. Livestock purchase expenses were the second highest proportion of total expenditures, accounting for 27% of the total.

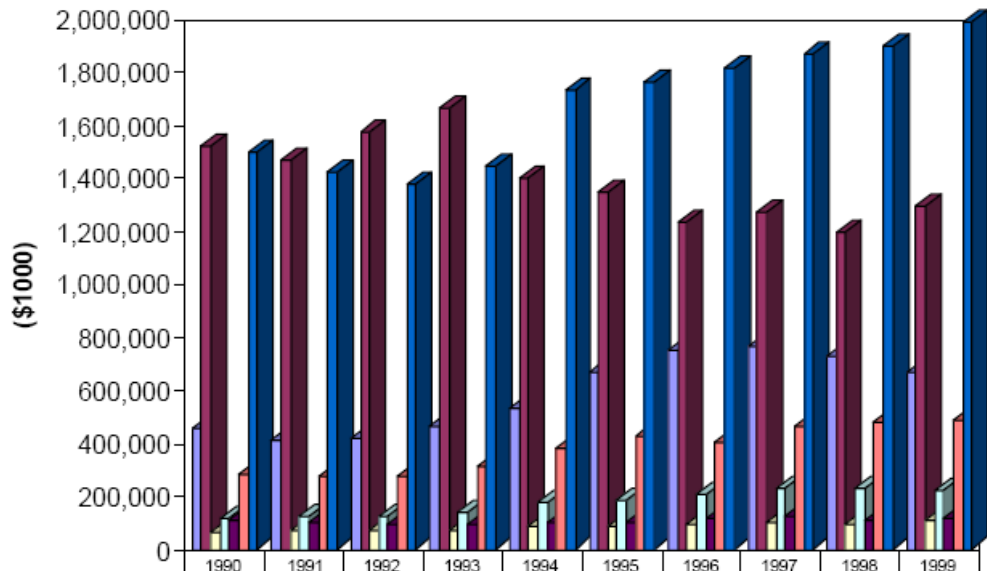
Corporate farms and farm proprietors experienced a decrease in the amount of income that they received

between 1990 and 1999. Corporate farms statewide had a 34% decrease in income for the period, whereas farm proprietors had a decrease of 19%. Total cash receipts and other income increased for the period by 12%, which were largely overshadowed by the 21% increase in production expenses and 109% decrease in the value of inventory change. Total farm labor and proprietors' income decreased by less than 1% for the period.

In the ACT Region, a 17% decrease in the cash receipts earned from livestock occurred between 1990 and 1999. On the other hand, cash receipts earned from crops increased by 15% for the same period. Cash receipts from other sources increased by 146% and the amount of government payments increased by 36% through 1999. Imputed and miscellaneous income received went from \$37.8 million in 1990 to \$156.8 in 1999, an increase of 315%. Livestock receipts in the ACT Region comprised the majority of the total cash receipt earned each year.

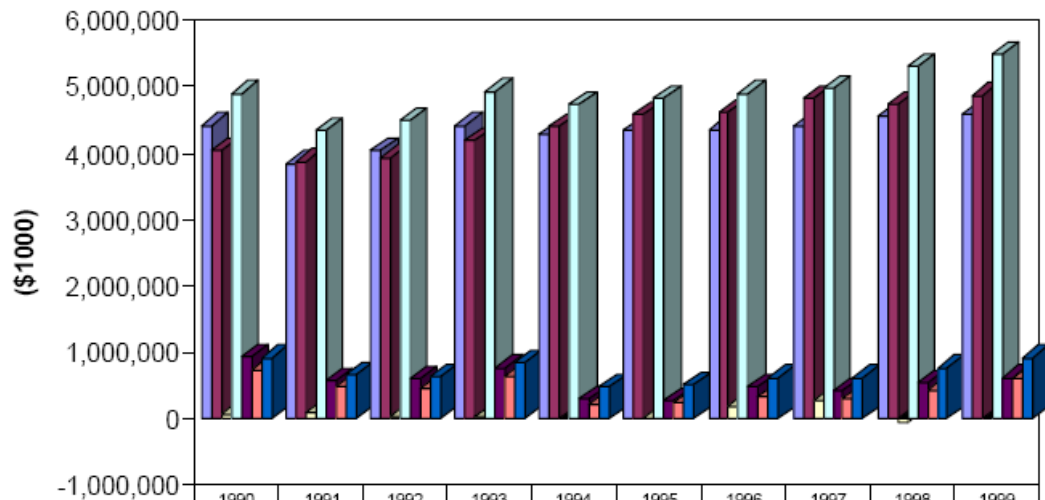
Feed expenses increased by 25% in the ACT Region over the outlined period, going from \$74.3 million in 1990 to \$93.1 million in 1999, and comprised 14% of the region's total production expenses in 1999.

### Colorado Production Expenses



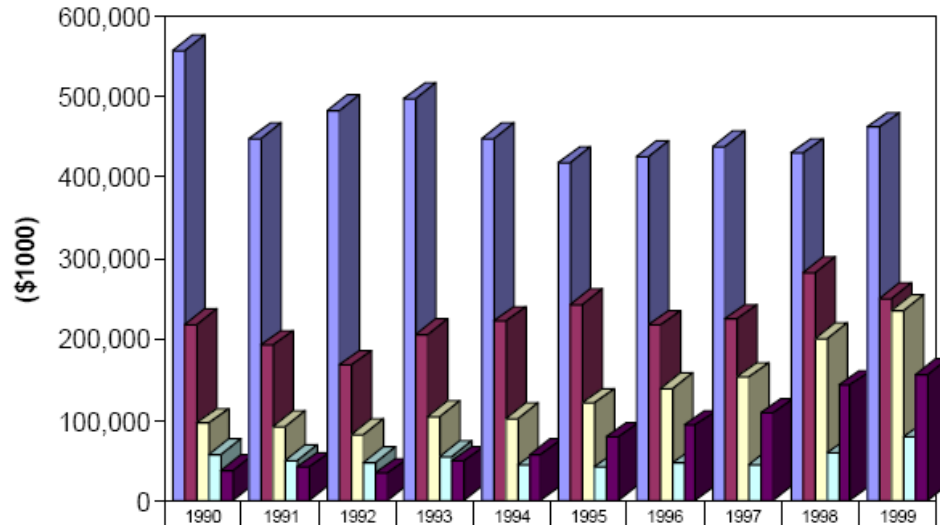
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Feed purchased	455,454	408,701	420,109	462,390	529,534	666,076	750,855	762,373	728,983	666,099
Livestock purchased	1,522,088	1,470,848	1,576,251	1,666,998	1,398,438	1,350,477	1,231,168	1,271,336	1,194,526	1,292,104
Seed purchased	64,602	73,793	68,051	73,278	86,651	83,523	92,715	102,597	97,051	106,756
Fertilizer & lime (incl. ag. chem. 78-fwd.)	120,493	123,472	123,690	139,727	174,946	185,744	204,636	229,210	229,931	223,090
Petroleum products purchased	107,136	104,258	93,467	91,427	101,268	101,166	118,243	123,210	111,048	114,858
Hired farm labor expenses	280,130	272,215	272,949	311,170	382,211	430,218	403,277	467,551	476,511	485,171
All other production expenses	1,494,709	1,420,361	1,375,264	1,445,584	1,730,199	1,760,753	1,814,017	1,866,387	1,894,887	1,987,323

### Colorado Income and Expense Totals



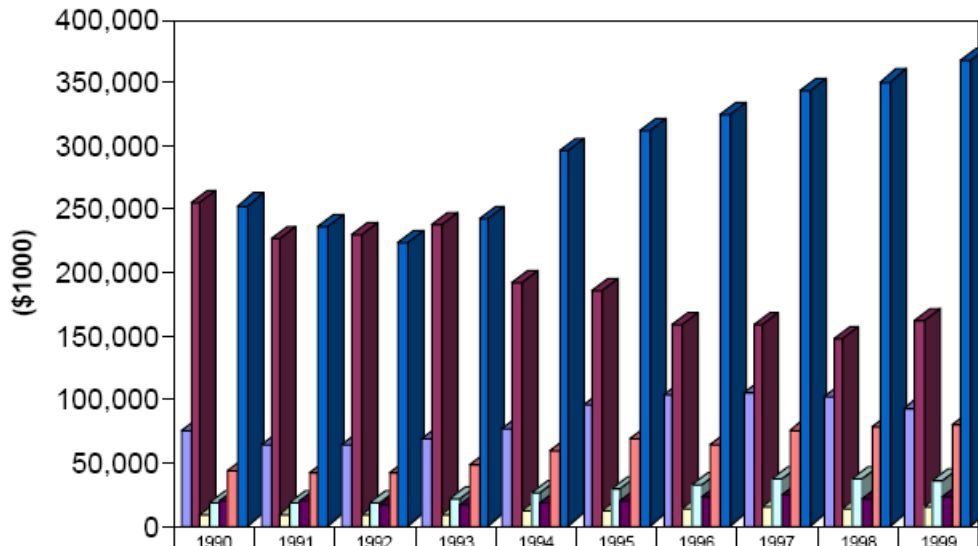
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total cash receipts from marketings (\$000)	4,415,874	3,849,750	4,049,982	4,416,172	4,277,647	4,334,971	4,362,632	4,404,281	4,553,019	4,582,184
Total production expenses	4,044,612	3,873,649	3,929,781	4,190,574	4,403,247	4,577,957	4,614,911	4,822,664	4,732,939	4,875,401
Total value of inventory change	63,934	88,836	31,940	25,514	-26,762	4,998	187,341	256,528	-48,336	-5,719
Total cash receipts and other income	4,907,568	4,350,250	4,489,678	4,931,033	4,728,563	4,834,321	4,899,360	4,973,216	5,310,117	5,491,896
Total net income including corporate farms	926,890	565,437	591,837	765,973	298,554	261,362	471,790	407,080	528,842	610,776
Total net farm proprietors' income	725,852	470,794	449,764	637,317	218,820	229,601	327,582	296,426	433,583	588,297
Total farm labor and proprietors' income	912,477	649,170	625,083	841,724	481,637	512,211	610,243	617,032	760,303	911,182

### ACT Region Cash Receipts



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
■ Cash receipts: livestock and products	557,395	448,099	482,321	496,155	449,087	418,576	426,150	437,855	430,038	461,831
■ Cash receipts: crops	217,569	192,633	167,348	206,546	222,291	243,024	216,742	224,174	283,324	250,060
□ Cash receipts: Other income	95,646	91,796	82,401	103,694	101,659	120,335	139,177	152,841	201,645	235,166
□ Government payments	57,827	50,443	48,295	55,175	44,134	41,724	46,087	44,669	58,727	78,364
■ Imputed and miscellaneous income received	37,819	41,316	34,106	48,519	57,525	78,581	93,057	108,172	142,875	156,779

### ACT Region Production Expenses



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
■ Feed purchased	74,371	64,613	64,521	68,646	76,297	95,008	104,167	105,152	101,972	93,177
■ Livestock purchased	255,195	227,169	230,576	238,542	192,351	185,171	158,232	158,421	147,422	161,502
□ Seed purchased	8,426	9,365	8,346	9,346	11,354	11,392	12,841	14,670	13,963	15,360
□ Fertilizer & lime (incl. ag. chem. 78-fwd.)	18,046	18,542	18,442	21,164	26,620	28,989	31,960	36,606	36,908	35,811
■ Petroleum products purchased	19,978	19,298	16,965	16,783	18,764	19,110	22,410	23,833	21,569	22,309
■ Hired farm labor expenses	43,120	41,918	41,737	48,178	59,426	68,919	64,417	75,918	78,204	79,528
■ All other production expenses	253,075	236,958	224,063	242,780	296,683	311,777	325,603	344,377	351,097	368,225

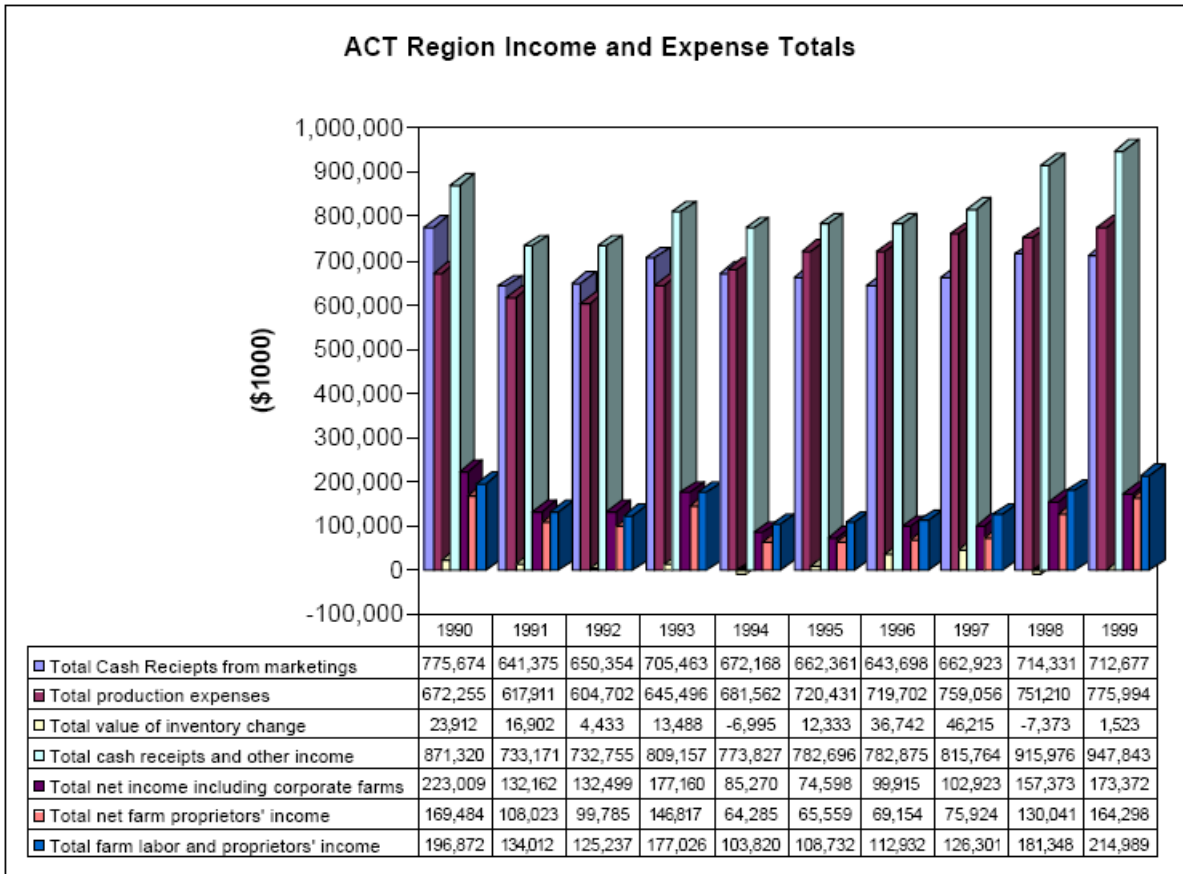
Livestock purchase expenditures decreased by the greatest amount, 37% over the period, or 12% of the region's total production expenses in 1999. Seed purchase expenditures climbed by the second highest rate among the other expenditure categories, growing by 82% for the period. Fertilizer and lime had the greatest increase in expenditures for the period (98%). Total fertilizer expenditures accounted for 19% of the state total in 1999. Hired farm labor expenses increased by 12%, and petroleum product expenditures increased by 84%. The other expenditures category contributed the most (47%) to total expenditures regionally in 1999.

In the ACT Region, total cash receipts from marketings decreased by 8%, whereas total production expenses increased by 15% between 1990 and 1999. The total value of inventory change went from \$23.9 million in 1990 to \$1.5 million in 1999. Cash receipts and other income decreased by 9% over the period. The total net income including corporate farms declined by 22% and total net farm proprietors' income declined by 3% regionwide. The total farm labor and proprietors' income categories both increased by 9% in the period. The ACT Region contributed heavily to the states totals in each category.

The region's greatest contribution was to the total net income including corporate farms total and the total net farm proprietors' income, each accounting for 28% of the state's total in 1999. Total farm labor and proprietors' net income in the region accounted for 24% of the state's total in 1999. The ACT Region contributes 22% of the total cash receipts statewide and 17% of total cash receipts and other income. Only 16% of the state's total expenses were production expenses from the ACT Region in 1999.

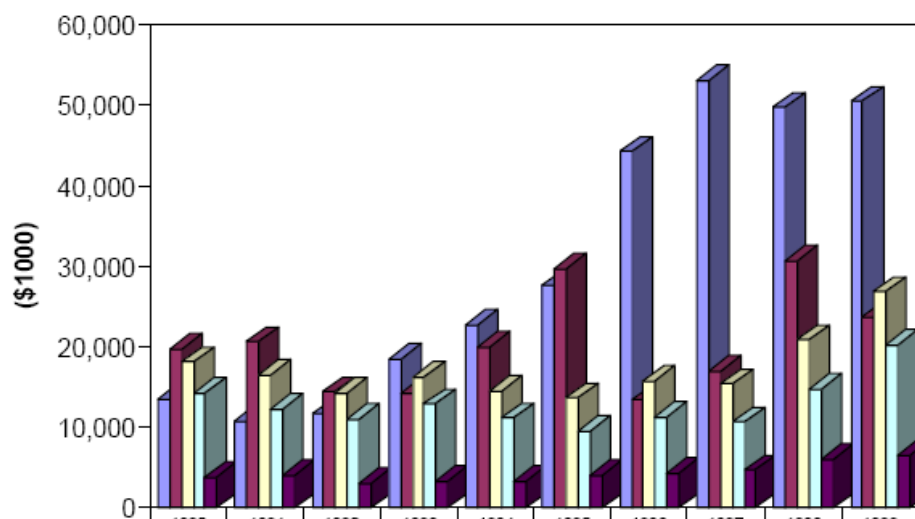
### 9.5 County trends in farm income and expenses

Every income category in Kiowa County increased during the 1990-1999 period. Cash receipts from livestock and products climbed by the greatest amount in the period, growing by 271%. The imputed and miscellaneous income category followed with the second highest rate of increase, growing by 69% for the period. Cash receipts for other income climbed by 48% and government payment grew by 42%. Crop cash receipts in the county had a 20% increase between 1990 and 1999. Kiowa County contributed heavily to the 1999 totals for the region. Government payments accounted for the greatest contribution to the region's totals out of the county, with 26% of the regional total





Kiowa County Cash Receipts



■ Cash receipts: livestock and products	13,624	10,862	11,698	18,586	22,860	27,630	44,318	53,150	49,778	50,477
■ Cash receipts: crops	19,773	20,660	14,435	14,283	20,097	29,783	13,503	17,099	30,683	23,746
□ Cash receipts: Other income	18,216	16,493	14,310	16,383	14,654	13,710	15,812	15,439	20,953	26,925
□ Government payments	14,306	12,356	11,121	12,919	11,192	9,568	11,386	10,679	14,862	20,303
■ Imputed and miscellaneous income received	3,910	4,137	3,189	3,464	3,462	4,142	4,426	4,760	6,091	6,622

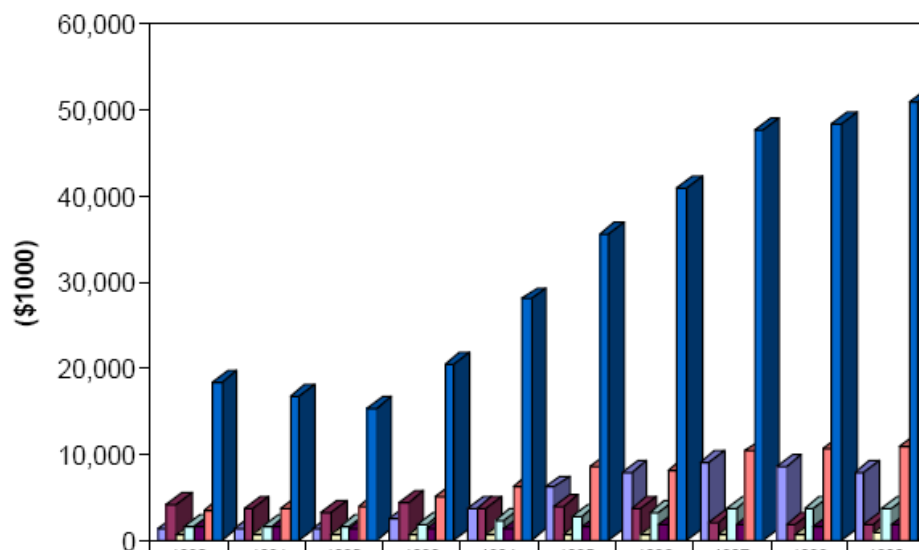
in 1999. Both livestock receipts and other cash receipts accounted for 11% of the regional total in that same year. Cash receipts for crops in Kiowa County accounted for 9% and imputed and miscellaneous income accounted for 4% of the regional total in 1999.

Production expenses in Kiowa County increased in all but one of the expense categories between 1990 and 1999. The only expense category that decreased, livestock purchased expenditure, declined by 55% for the outlined period. Feed purchase expenditures had the greatest increase, growing by 434% over the 1990s. Hired farm labor had the second highest rate of increase, growing by 209% over the period. The all other production expense category increased by 175% and fertilizer and lime expenses grew by 119%. Seed purchase expenses and petroleum expenses grew by 41% and 8%, respectively. Kiowa County contributed 14% of the regional total in 1999 for both hired farm labor expenses and all other expense category. Fertilizer and lime expenses in the county contributed 10% and feed purchase expenses from Kiowa County

contributed 9% to the regional total. Kiowa County accounted for 8% of the regional total petroleum expenses in 1999.

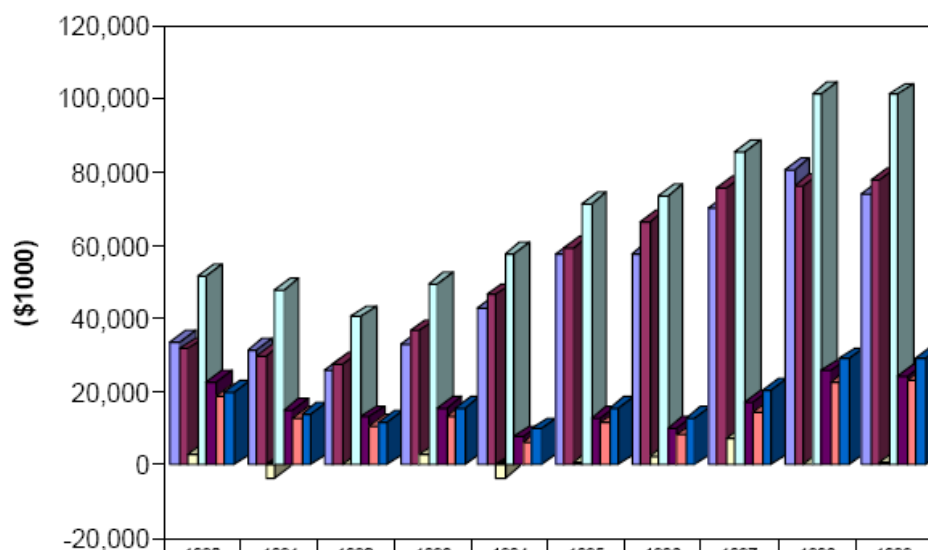
Kiowa County had some signs of improvement in farm income through the 1990s. Total cash receipts from marketings increased by 122% for the period, while production expenses grew 146%. The total value of inventory change decreased by 67% and total cash receipts and other income increased by 96% for the decade. Total net income including corporate farms, total net farm proprietors' income, and total farm labor and proprietors' income increased by 6%, 24% and 45%, respectively. All net farm income categories in Kiowa County contributed 14% to the regional total in 1999, while 11% of the regional total for total cash receipts from other income came from Kiowa County. Both total cash receipts from marketings and total production expenses categories in Kiowa County contributed 10% of the regional total in 1999.

### Kiowa County Production Expenses



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Feed purchased	1,489	1,342	1,375	2,624	3,784	6,175	7,871	9,107	8,706	7,955
Livestock purchased	4,275	3,707	3,295	4,378	3,788	3,921	3,697	2,127	1,886	1,919
Seed purchased	596	706	667	656	693	690	732	808	764	840
Fertilizer & lime (incl. ag. chem. 78-fwd.)	1,666	1,714	1,710	1,960	2,395	2,827	3,173	3,753	3,763	3,651
Petroleum products purchased	1,644	1,632	1,475	1,385	1,433	1,537	1,778	1,910	1,721	1,780
Hired farm labor expenses	3,530	3,693	3,892	5,031	6,318	8,549	8,151	10,347	10,728	10,897
All other production expenses	18,456	16,810	15,333	20,539	28,016	35,578	40,849	47,736	48,459	50,823

### Kiowa County Income and Expense Totals



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Cash Receipts from marketings	33,397	31,522	26,133	32,869	42,957	57,413	57,821	70,249	80,461	74,223
Total production expenses	31,656	29,604	27,747	36,573	46,427	59,277	66,251	75,788	76,027	77,865
Total value of inventory change	2,900	-3,528	396	2,727	-3,539	860	2,569	7,227	336	972
Total cash receipts and other income	51,613	48,015	40,443	49,252	57,611	71,123	73,633	85,688	101,414	101,148
Total net income including corporate farms	22,857	14,883	13,092	15,406	7,645	12,706	9,951	17,127	25,723	24,255
Total net farm proprietors' income	18,738	12,750	10,481	13,372	6,389	11,489	8,213	14,346	22,767	23,163
Total farm labor and proprietors' income	20,115	14,132	11,899	15,551	9,817	15,764	13,052	20,396	28,920	29,251

## 9.6 Agricultural Income and Expense Conclusion

Diversification of agricultural production is a noticeable trend throughout the state, since there have been massive increases in the Other Income and Imputed and Miscellaneous income categories for all counties in the region. Cash receipts from livestock decreased in many of the counties. At first glance, this seems strange since there has been an increase in the number of properties that are considered cattle operations in the region. However, further evaluation of data reveals that the value of cattle sold has decreased over the period throughout the region. Production expenses have continuously increased in every county, except for Las Animas County, showing that farmers have had to continuously pay more and more over the 1990s for the production that they provide, while the price for the output has declined. Total net farm income categories were drastically affected by the total value of inventory change and the increase in production expenses. The positive change in the value of inventory signifies new production within a year. In contrast a negative change, like many of the counties experienced in the later half of the decade, is the result of a draw down in beginning year stocks and represents the sale of commodities produced in prior years.

## 9.7 Summary and overview for Conservation Reserve Program acreage

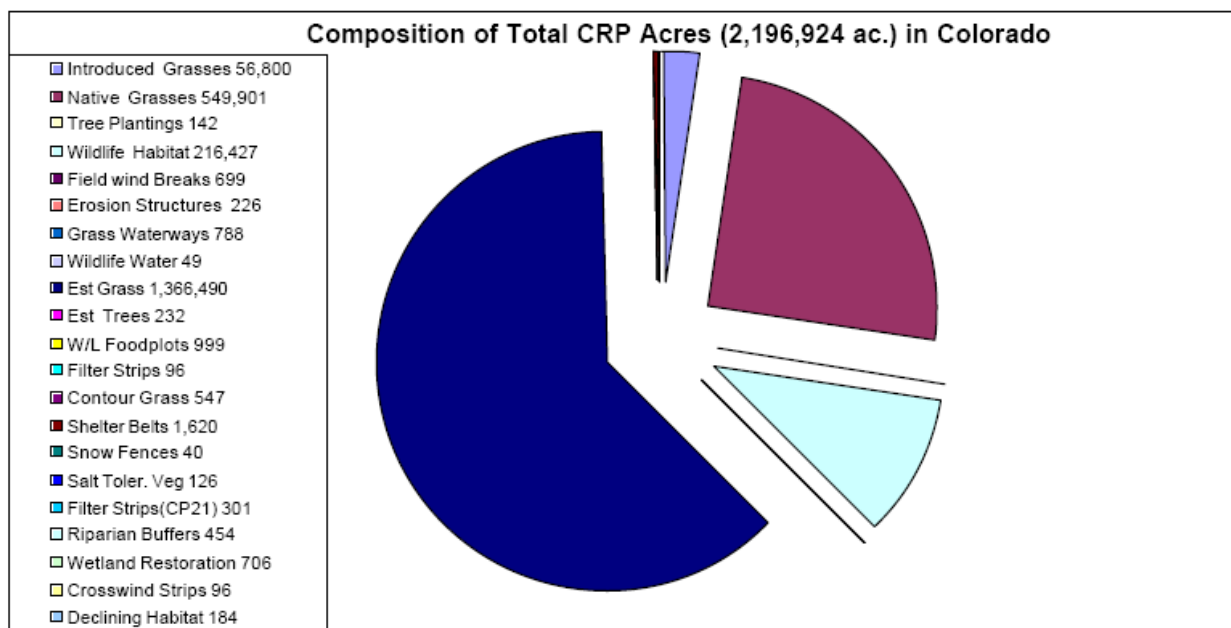
The 1985 Farm Bill authorized the USDA, through the Natural Resources Conservation Service (NRCS, SCS at the time), to accept bids from producers to idle

highly erodible cropland under the umbrella of the Conservation Reserve Program (CRP). The CRP has continued to be an important part of subsequent Farm Bills and is prominent in the Conservation Title of the Farm Security and Rural Investment Act of 2002. Colorado contract acreage for 1988-2002 active CRP acreage is reported here.

Colorado currently has more than 2.1 million acres enrolled in the CRP. Thousands of Colorado farmers and ranchers are receiving an annual average payment of more than \$31 per acre for their CRP ground. Most state and the regional CRP acres are enrolled as established grass acres. The second highest concentration of CRP acres is enrolled as native grass acres at both the state and the ACT regional level.

Many of the counties that make up the ACT Region have no active CRP acreage. The highest percentage of active CRP acres is in Baca County with 35% of the region's total. The second highest concentration of CRP acreage is in Kiowa County, which had 28% of the region's total, followed by Prowers with 23%. Combined, these three counties accounted for 86% of the total active CRP acreage in the region.

The vast majority of Conservation Reserve Program (CRP) acres in the state are enrolled as established grass acres. This category accounted for 62% of the state's total CRP lands, while the native grass category was the second highest, accounting for 25%. Wildlife habitat acres had the third highest acreage enrolled,

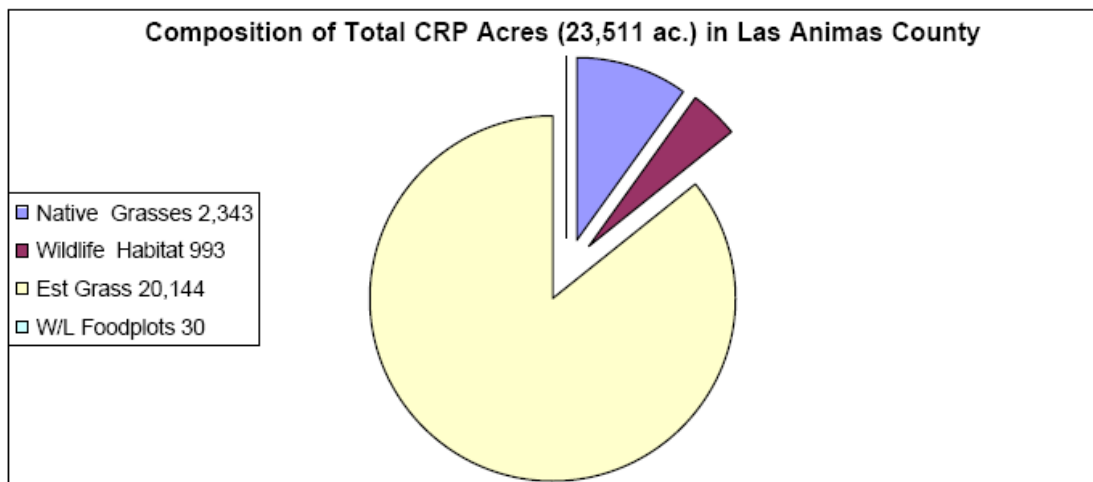
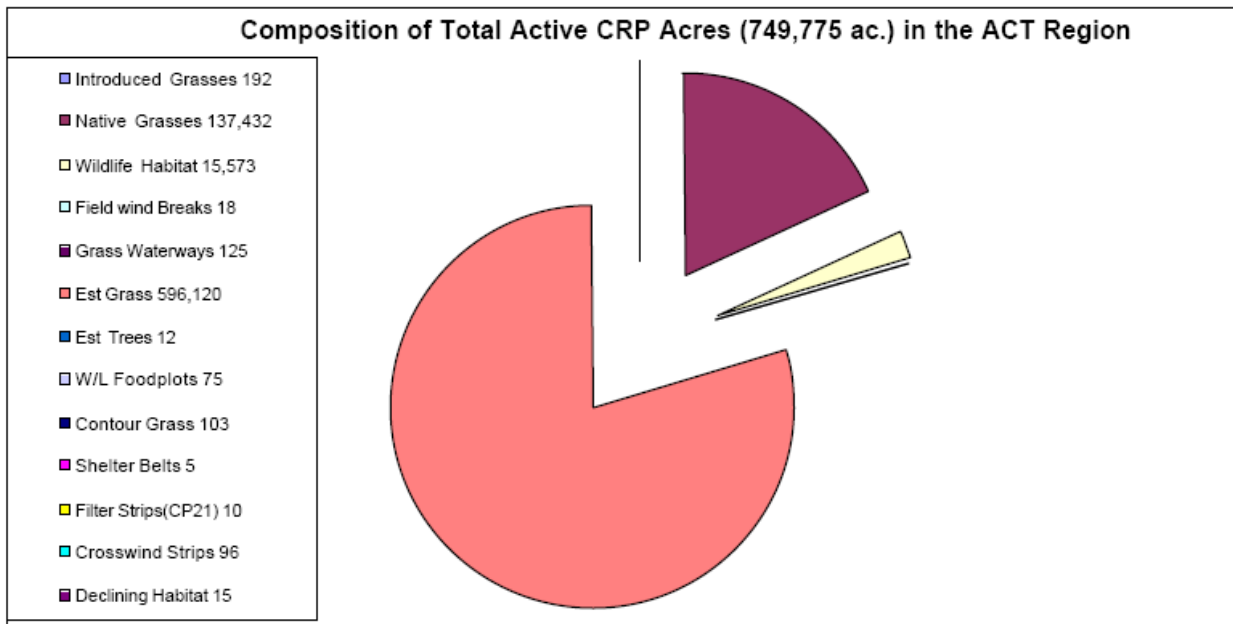


with approximately 10% and the remaining categories comprised 3% the of targeted CRP priority practices.

The region made up 34% of Colorado’s total active CRP acres. Established grass acres account for 80% of the regional CRP ground. The established grass acres in the ACT Region accounted for 44% of the state’s total active established grass CRP acres. Native grasses had the second greatest acreage enrollment and comprised 18% of the region’s total CRP acres. The region accounted for 25% of Colorado’s total active native grass CRP program acres. Wildlife habitat accounted for the next greatest number of enrolled acres, accounting for 2% of the regional total active acres. The number of wildlife acres in the region comprised 7% of the state’s total active acres in the program.

### 9.8 County trends in Conservation Reserve Program acreage

Kiowa County accounted for 28% of the region’s total CRP acreage in 2002. The greatest number of program acres occurred under the established grass practice, accounting for 77% of the county total and 27% of the region’s established grass totals. Native grass acreage experienced the second greatest enrollment, which made up 23% of the region’s active acreage and 36% of the region’s native grass total. Kiowa County comprised the entire regional total for acres enrolled into established trees and declining habitat practices. The other two practices in the county, shelterbelts and wild-life food plots, comprised a high percentage of the region’s total, making up 60% of the regional total in each category.



### **9.9 Conservation Reserve Program Conclusion**

The Conservation Reserve Program is federal effort to mitigate the effects of nonpoint pollution, erosion, and reduce the quantity of production emanating from unsuitable lands. One of the major economic aspects of the CRP program is that it reduces the quantity of production of some crops therefore creates upward pressure on the prices of the crops that are produced. However, idled land does not generate the same local multiplier effects that productive land would. Colorado producers currently have more than 2 million acres, or about 8% of private lands enrolled in this program. Despite county level acreage limits, local hot spots may occur within the state and one might observe reduced economic activity due to participation in the CRP. As a result, local officials may want to consider what economic activity can be generated from idled land in addition to the \$31 per acre average annual payment received by participating Colorado farmers and ranchers.

### **9.10 Summary and overview of crop acreage and production**

Producers in the United States feed a large number of domestic residents as well as citizens of foreign countries. In 1940, 1 producer fed 22 people and by 2000 this ratio had risen to 1:139. Every year there is a 2% increase in productivity per acre on U.S. farmland. However, the number of farms, farmers and farm acres reduces every year. In Colorado, there has been an increase in the productivity of specific crops and the total crop acreage has also increased. The state of Colorado is ranked in the top five for the production of winter wheat, sunflowers, sorghum, millet, potatoes, sheep, cattle on feed, and many vegetables.

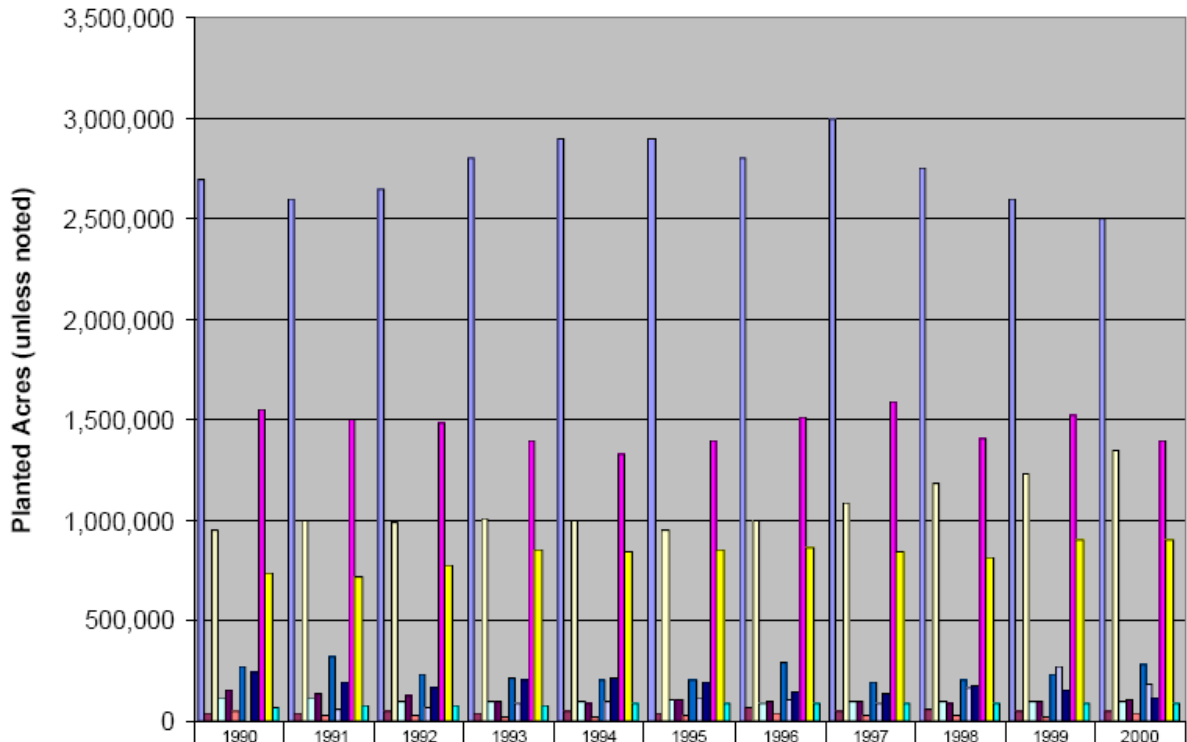
Statewide, the greatest increase in planted acres was in land dedicated to sunflower production. Most of the farmland in Colorado is planted in wheat. However, the greatest volume of production is in corn. Both the state and the region experienced a decrease in acreage devoted to dry beans, barley, oats, all hay and winter wheat. The state experienced a decrease in corn for silage acreage, while the region increased over the period. The ACT Region and the state experienced an increase in acreage dedicated to sorghum, while a reduction occurred in the amount produced over the period. Generally, production of crops in Colorado and the ACT Region expanded. However, dry beans and winter wheat production declining for both. Statewide, a decrease in silage and oat production occurred, while the region experienced an increase.

Kiowa, Baca, and Prowers Counties have the highest production of winter wheat. Costilla, Alamosa and Conejos Counties experienced the region's top production of spring wheat, oats, and barley in 2000. Baca, Prowers and Otero are the three largest producers of corn for grain and corn for silage. The highest production of sorghum and sunflowers occurs in Baca, Kiowa, and Prowers County. Between Pueblo and Otero County, 100% of the region's total bean production was accounted for in 2000. Prowers, Bent and Alamosa County are the top three producers for alfalfa hay and all hay. The counties that account for all potato production in the region are Alamosa, Conejos and Costilla County.

The total number of crop acres in Colorado increased over the decade, with the greatest rate of increase existing for sunflower acres, which climbed by 193% between 1991-2000. Corn for grain had the next greatest rate of increase, growing by 42%, followed by a 22% increase in alfalfa hay acreage. Potatoes, spring wheat, and sorghum acres increased during the period growing by 16%, 14%, and 4%, respectively. Dry bean acres had the greatest decrease, dropping by 51%, followed by a 29% drop in planted barley acres. Oat acreage declined by 22% over the decade. Colorado also had decreases in corn for silage (14%), all hay (10%), and winter wheat (7%).

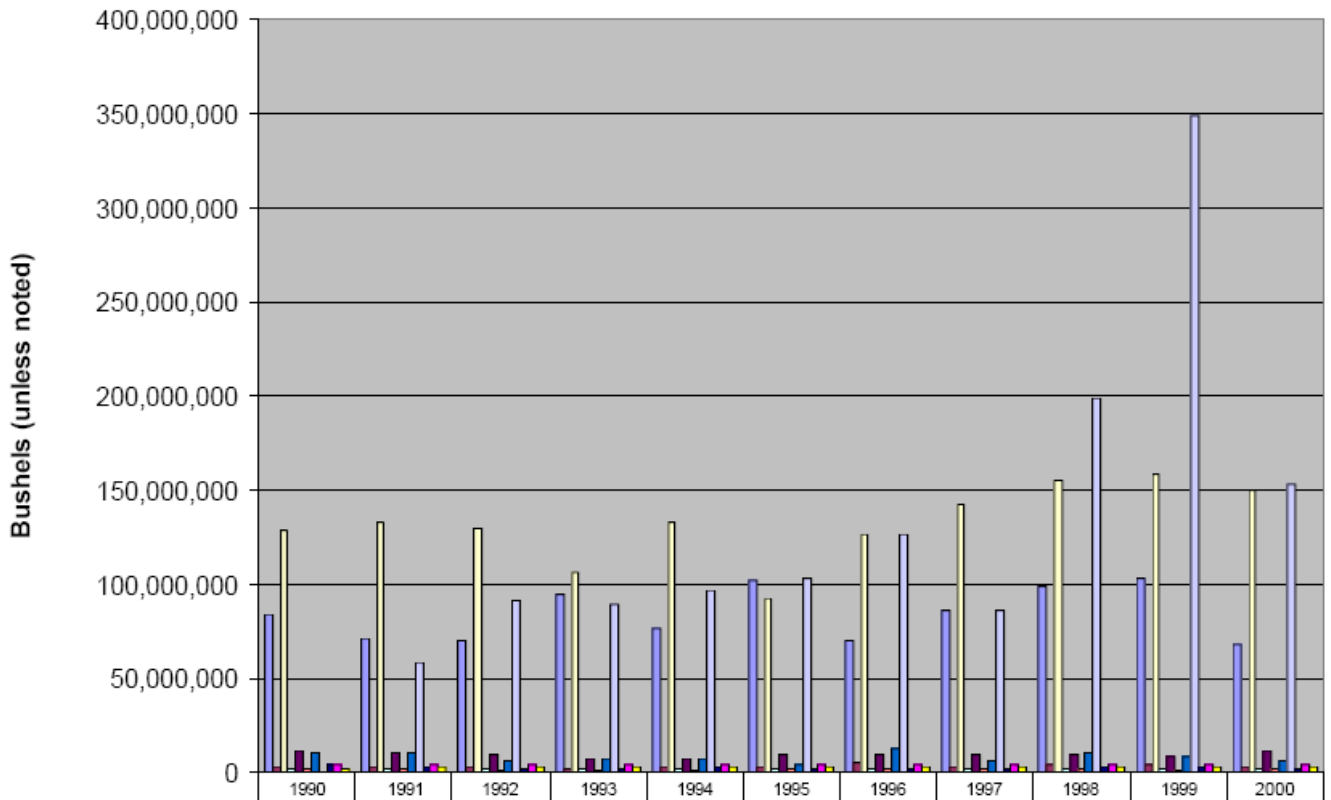
During the 1990s crop production in Colorado increased for some crops and decreased for others, but for the most part production increased over the period. The greatest increase occurred in the production of sunflowers, which grew by 162% over the period. Alfalfa hay production exhibited the second greatest rate of increase growing by 29%, followed by a 17% increase in the production of corn for grain. Spring wheat production increased by the similar rate of 15% over the period and all hay production increased by the smallest amount of 7% for the period. Barley production stayed relatively constant throughout the period. The greatest decrease at the state level was in dry bean production, which declined by 54%, followed by a 37% decrease in the production of sorghum. Winter wheat production also declined, by 19% over the observation period, whereas corn for silage had a 16% decrease in production. The least amount of decline took place in oat production.

Colorado Total Crop Acreage



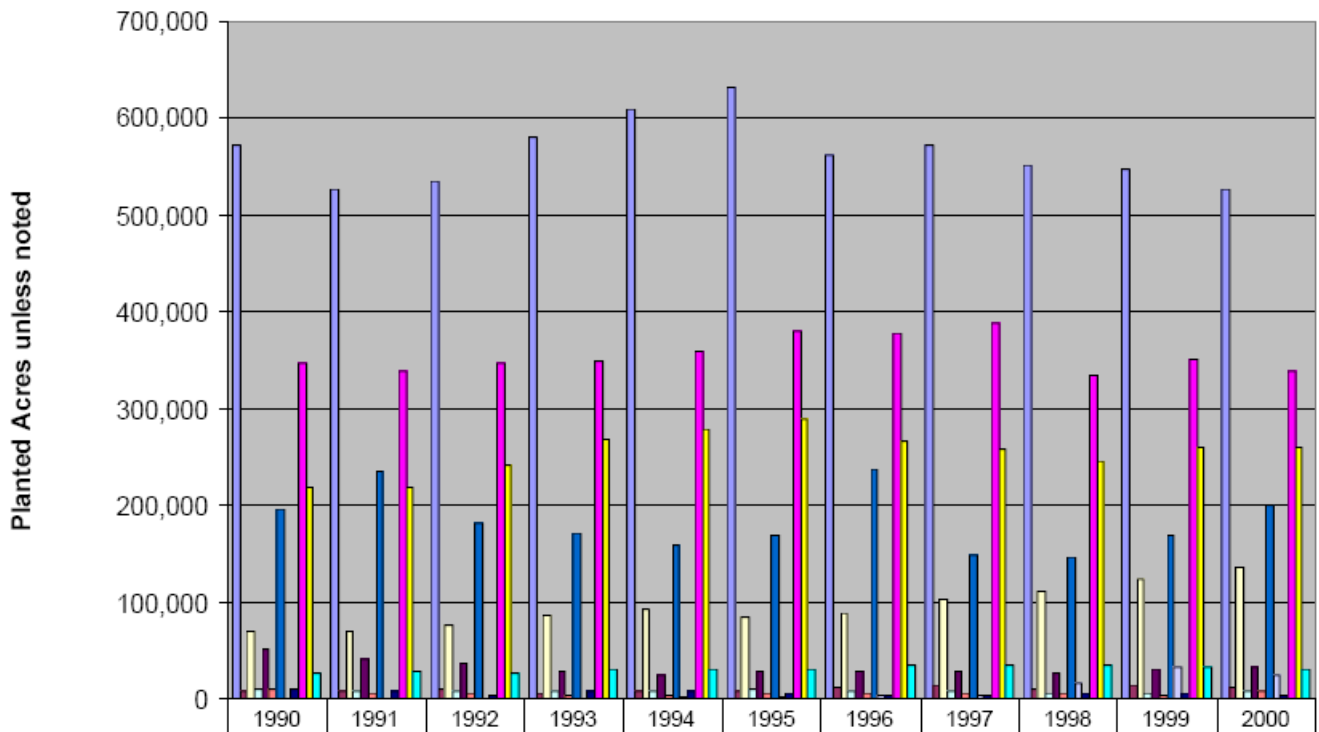
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Winter Wheat	2,700,000	2,600,000	2,650,000	2,800,000	2,900,000	2,900,000	2,800,000	3,000,000	2,750,000	2,600,000	2,500,000
Spring Wheat	42,000	38,000	50,000	35,000	45,000	40,000	70,000	53,000	62,000	53,000	48,000
Corn for grain	950,000	995,000	990,000	1,005,000	995,000	950,000	1,000,000	1,090,000	1,180,000	1,230,000	1,350,000
Corn for Silage (Harvested ac.)	117,000	120,000	100,000	100,000	97,000	105,000	90,000	100,000	100,000	100,000	100,000
Barley	155,000	140,000	130,000	100,000	90,000	110,000	100,000	95,000	90,000	95,000	110,000
Oats (Harvested ac.)	45,000	30,000	26,000	23,000	24,000	33,000	35,000	25,000	25,000	20,000	35,000
Sorghum	270,000	320,000	230,000	210,000	200,000	200,000	290,000	190,000	200,000	230,000	280,000
Sunflowers		63,000	70,000	85,000	100,000	115,000	110,000	85,000	160,000	270,000	185,000
Dry beans	245,000	190,000	164,000	205,000	215,000	190,000	145,000	135,000	170,000	155,000	120,000
All Hay (Harvested ac.)	1,550,000	1,500,000	1,480,000	1,400,000	1,330,000	1,400,000	1,510,000	1,590,000	1,410,000	1,520,000	1,400,000
Alfalfa Hay (Harvested ac.)	740,000	720,000	780,000	850,000	840,000	850,000	860,000	840,000	810,000	900,000	900,000
Potatoes	72,500	78,000	73,400	80,800	83,200	86,300	88,000	84,800	83,500	84,800	83,900

### Colorado Crop Production



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
■ Winter Wheat	84,150,000	71,300,000	70,500,000	94,350,000	76,500,000	102,600,000	70,400,000	86,400,000	99,450,000	103,200,000	68,150,000
■ Spring Wheat	2,800,000	2,700,000	3,619,000	2,640,000	3,234,000	2,660,000	5,100,000	3,700,000	4,020,000	4,000,000	3,220,000
□ Corn for Grain	128,650,000	133,110,000	130,240,000	106,800,000	133,500,000	92,130,000	126,380,000	143,080,000	155,150,000	159,040,000	149,860,000
□ Corn for Silage (tons)	2,633,000	2,640,000	2,250,000	2,100,000	2,037,000	2,100,000	1,935,000	2,250,000	2,400,000	2,400,000	2,200,000
■ Barley	12,000,000	10,400,000	9,720,000	7,650,000	7,470,000	10,000,000	9,568,000	9,612,000	9,430,000	9,030,000	12,075,000
■ Oats	2,250,000	1,800,000	1,560,000	1,423,000	1,440,000	2,046,000	1,820,000	1,700,000	1,750,000	1,300,000	2,205,000
■ Sorghum	10,340,000	10,800,000	6,660,000	7,140,000	7,650,000	4,620,000	13,260,000	6,000,000	10,545,000	8,610,000	6,510,000
□ Sunflowers (lbs)		58,250,000	91,600,000	89,000,000	96,300,000	103,106,000	126,800,000	86,100,000	199,250,000	348,450,000	153,650,000
■ Dry Beans (cwt)	4,275,000	3,330,000	2,608,000	2,609,000	3,280,000	2,558,000	2,250,000	2,280,000	2,868,000	2,755,000	1,960,000
■ All Hay (tons)	3,805,000	4,062,000	4,189,000	4,193,000	4,060,000	4,050,000	4,180,000	4,739,000	4,602,000	4,598,000	4,080,000
■ Alfalfa Hay (tons)	2,590,000	2,736,000	2,964,000	3,230,000	3,276,000	3,060,000	3,010,000	3,276,000	3,402,000	3,420,000	3,330,000

ACT Region Crop Acreage



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Winter Wheat	572,500	526,800	535,000	581,000	610,000	632,000	562,000	571,500	552,200	546,500	526,600
Spring Wheat	7,900	9,000	11,100	7,100	7,900	8,300	12,100	14,700	10,300	14,100	12,200
Corn for Grain	69,700	69,600	77,400	87,000	92,100	84,000	87,900	102,900	111,500	124,100	135,600
Corn for Silage	9,600	8,600	7,600	8,600	9,200	10,000	8,500	8,000	6,000	5,800	8,500
Barley	51,500	40,500	38,100	28,400	25,400	29,200	29,100	29,900	27,200	30,600	33,600
Oats	9,500	5,300	5,700	5,000	5,000	6,700	5,400	5,700	5,900	4,700	8,300
Sorghum	196,500	235,000	182,000	171,500	159,500	168,400	237,000	148,700	147,000	169,200	200,000
Sunflowers			300	500	2,400	1,300	3,500	4,600	15,700	34,000	25,000
Dry beans	10,500	7,500	5,100	8,000	7,500	5,800	4,300	4,500	5,500	6,300	4,900
All Hay	346,600	338,200	347,900	349,900	359,800	379,000	378,000	388,300	334,200	351,000	339,000
Alfalfa Hay	219,300	218,200	241,700	267,700	279,000	289,500	266,000	259,000	244,700	260,500	260,500
Potatoes	27,650	28,700	26,900	31,200	31,800	31,600	35,400	34,600	34,800	32,500	31,400

Total crop acres in Colorado have expanded by 3% for the 1990-2000 period. Sunflower production had the greatest rate of growth (193%) over the period. Corn for grain production had the second highest rate of increase, growing by 42% over the period. Alfalfa hay acres climbed by 22% for the period. Other increases occurred in the number of acres devoted to potatoes, spring wheat, and sorghum increasing by 16%, 14% and 4%, respectively, over the period. However a decrease in acres devoted to several crops was

observed. Dry beans acreage had the greatest decrease (51%), followed by a sizable decrease in barley (29%). The number of harvested acres of oats decreased by 22% for the period and a 10% decrease was observed for all hay harvested acres. The least amount of decrease occurred in the number of acres dedicated to winter wheat, which declined by 7% for the period.

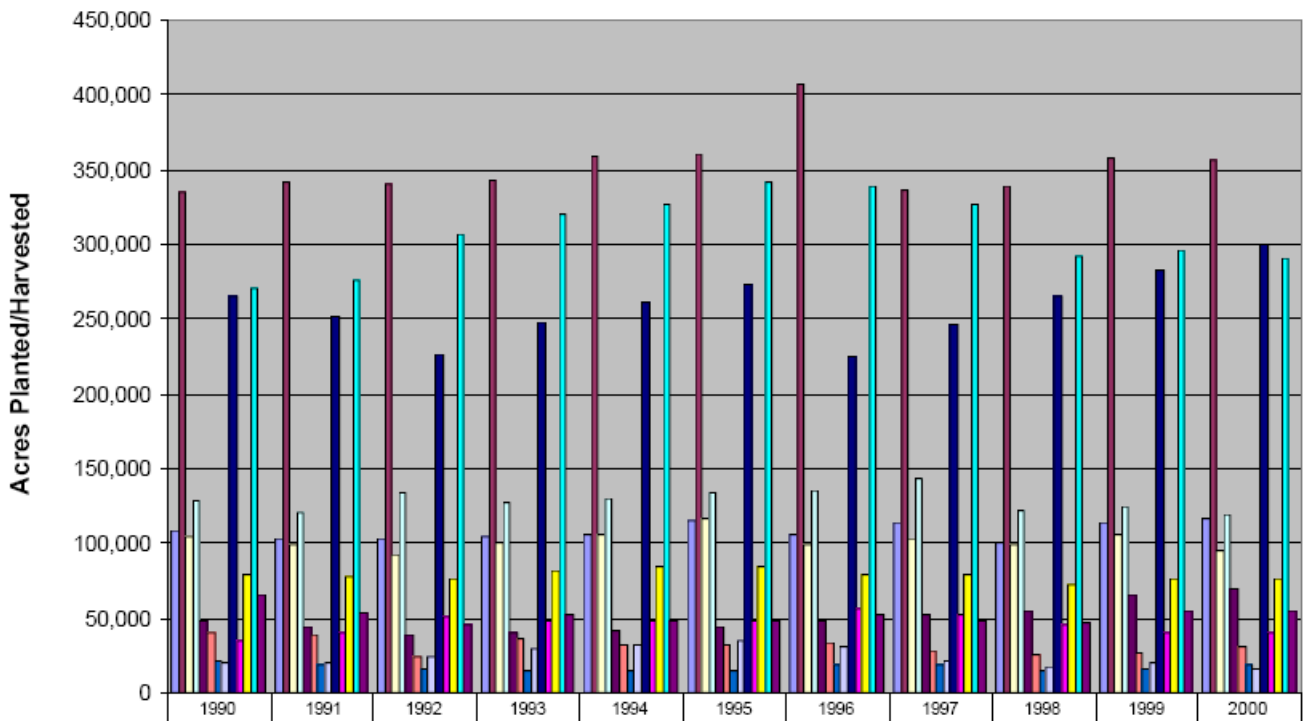
As one can see, the highest concentration of crop acreage occurred in Baca County consistently over the



period, with the 2000 total acreage in the county accounting for 22% of the region's total. The second highest for the period changed year to year with Las Animas and Prowers either being in the second or third ranking. By 2000, Kiowa County had 19% of the region's total, while Prowers County accounted for 18%. Conejos County made up the next highest percentage of cropland within the ACT Region, with 8% of the region's total crop acres in 2000, followed by Alamosa with 7% in that same year. Bent County comprised 6% of the region's total and Otero County comprised 5% of the same amount. Costilla, Las Animas, Pueblo, Crowley, Custer, and Huerfano Counties made up between 1%-4% for each respective county. The greatest amount of growth in the number of acres occurred in

Costilla County, which increased by 45% over the decade. Las Animas County experienced an increase of 15% for the period, while Kiowa County followed with an increase of 13%, and Prowers County had a growth of 8%. Alamosa and Baca counties both experienced an increase of 6% over the period. Crowley County had the greatest decrease in crop acreage (23%) followed by Huerfano County (22%). The third greatest decrease occurred in Pueblo, where crop acreage declined by 16%. Custer County also experienced a decrease of 10% for the period, while Bent and Conejos Counties both decreased in the amount of crop acreage by 8% for the period. Otero County decreased by the smallest amount of 3% over the decade.

**Total Crop Production Acreage for the ACT Region**

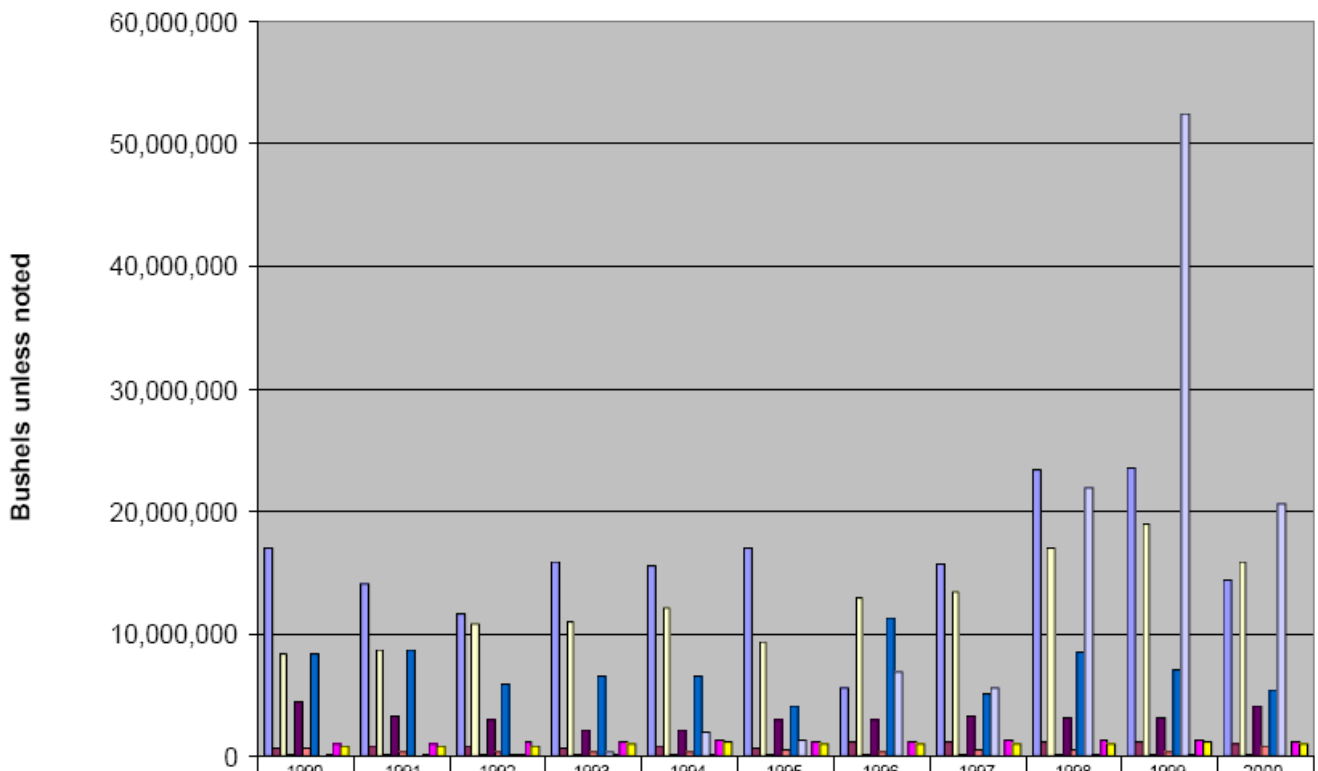


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Alamosa	109,100	102,900	102,900	103,900	105,600	115,000	106,300	114,500	101,000	113,600	116,200
Baca	334,400	341,800	339,800	343,400	359,100	360,300	407,400	336,700	338,200	358,000	355,800
Bent	104,000	99,100	93,000	100,800	106,300	116,600	99,600	102,900	98,700	105,300	94,800
Conejos	129,000	120,700	134,300	127,900	129,700	134,200	135,000	143,700	121,800	124,000	119,300
Costilla	48,050	44,500	39,300	40,100	41,500	44,600	48,100	52,400	54,400	65,000	69,900
Crowley	40,000	39,100	24,500	35,600	31,700	31,700	33,000	28,300	26,000	26,600	30,900
Custer	21,000	19,000	16,300	15,000	15,000	14,500	19,000	19,000	15,000	16,000	19,000
Huerfano	20,500	20,100	23,800	29,000	31,500	34,500	31,000	21,300	18,000	20,000	15,900
Kiowa	265,300	252,200	225,800	248,200	260,800	273,200	225,100	246,900	265,300	282,500	300,100
Las Animas	35,100	40,500	50,300	47,600	48,400	48,300	55,700	51,600	45,600	40,700	40,200
Otero	79,000	77,900	76,900	82,100	84,200	84,300	79,600	78,800	72,800	75,900	76,400
Prowers	270,300	276,200	306,400	320,300	327,400	341,700	338,200	327,200	291,300	295,800	291,100
Pueblo	65,500	53,400	45,500	52,000	48,400	48,100	52,000	47,900	46,300	55,400	55,000

Generally speaking, crop production in the ACT Region increased over the decade. Wheat production had a 16% decrease, while oats produced decreased 8%, and sorghum production decreased 36%. Sunflower production increased at the greatest rate, 9047%, over the 1992-2000 period. Corn for grain had the second highest rate of increase, 88%, spring wheat and dry beans also increased 70% and 67% over the period. Alfalfa hay and all hay production increased by 29% and 16% for the period, followed by an increase of 2% in barley production. Regional sorghum production made up the greatest proportion, 82%, of the state

production. Oat production had the second highest contribution to the state total at 35% in 2000. Barley production in the region also accounted for a sizable portion of the state's production with 34% of the total. Spring wheat and alfalfa hay production in the region accounted for 31% of the state's total, while all hay production comprised 29% of the state's total for 2000. Winter wheat production in the region accounted for 21% of the state's total and the remaining crops; sunflowers, corn for grain, corn for silage, and dry beans accounted for 13%, 11%, 8% and 3% of the state's total crop production for 2000.

**ACT Region Crop Production**



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Winter Wheat	16,989,000	14,113,000	11,570,000	15,925,000	15,475,000	16,970,000	5,600,000	15,695,000	23,455,000	23,482,000	14,360,000
Spring Wheat	594,000	792,000	883,000	642,000	765,000	615,000	1,141,000	1,215,000	1,083,000	1,135,000	1,005,000
Corn for Grain	8,416,000	8,603,000	10,867,000	11,005,000	12,104,000	9,355,000	12,845,000	13,480,000	17,000,000	18,950,000	15,800,000
Corn for Silage (tons)	172,300	154,000	156,000	148,000	177,000	181,000	190,000	155,000	120,000	121,000	175,000
Barley	4,395,000	3,193,500	2,924,000	2,130,000	2,127,000	2,982,500	2,928,000	3,229,000	3,130,000	3,150,000	4,059,000
Oats	629,000	406,000	394,000	370,000	392,000	553,000	403,000	546,000	529,000	367,000	780,500
Sorghum	8,383,000	8,700,000	5,896,000	6,528,000	6,583,000	4,139,000	11,332,000	5,012,000	8,580,000	6,993,000	5,345,000
Sunflowers (lbs)	0	0	225,000	360,000	1,960,000	1,230,000	6,840,000	5,500,000	21,850,000	52,450,000	20,580,000
Dry Beans (cwt)	171,000	106,000	82,000	99,500	122,000	75,000	49,000	63,000	96,000	90,500	56,000
All Hay (tons)	1,007,100	1,027,000	1,087,800	1,162,400	1,276,700	1,193,300	1,175,200	1,323,000	1,256,800	1,254,500	1,170,600
Alfalfa Hay (tons)	802,700	813,000	896,000	1,002,900	1,120,500	1,019,500	930,000	1,040,700	1,055,500	1,064,200	1,037,200

The San Luis Valley is responsible for all potato production in the ACT Region. The region accounted for 39% of potato production statewide in 2000. Alamosa County had the highest amount of production, regionally, with 81% of the region's total in 2000. Alamosa also had an increase in production of 26% over the period. Costilla County had the second highest amount of potato production in 2000, accounting for 16% of the region's production. Costilla County had an increase in potato production of 60% over the 1990s. Conejos County had the least amount of potato production of the potato producing counties in the region with 3% of the regional total in 2000. Conejos County was the only county decreased its potato production over the outlined period, declining by 47%.

### 9.11 County trends in crop acreage and production

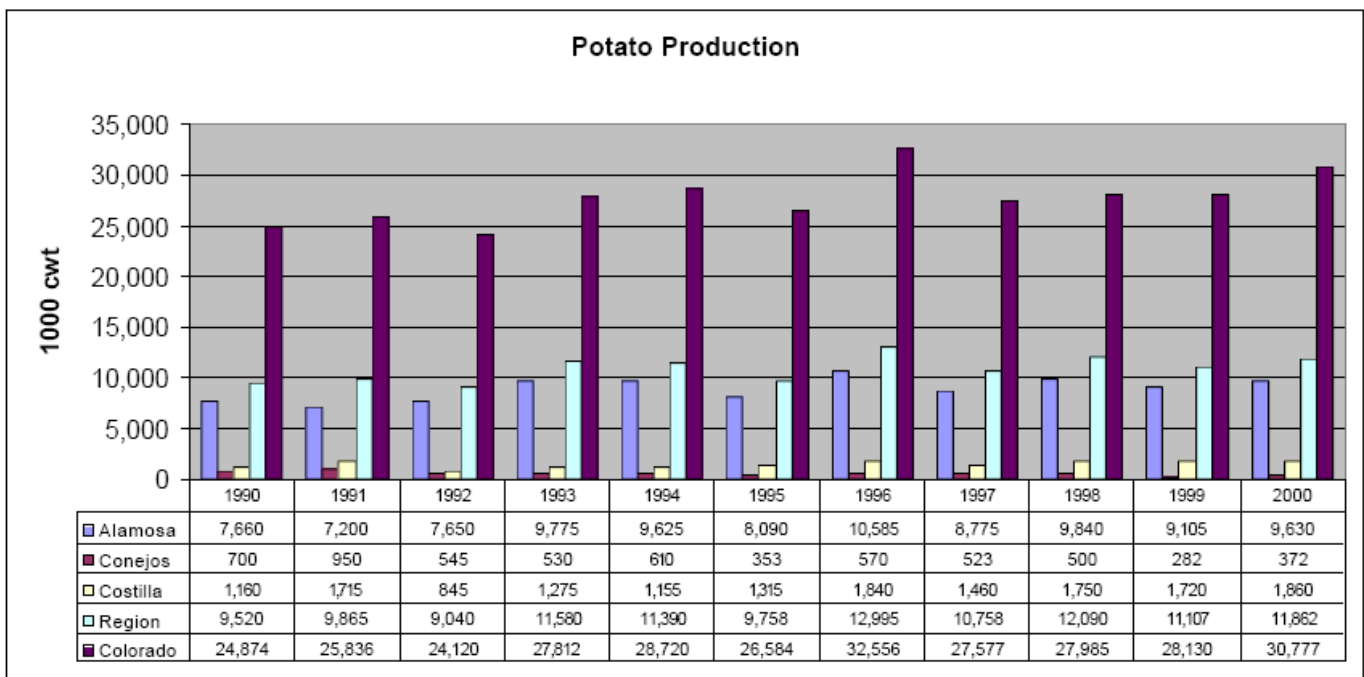
Total acreage in Kiowa County increased by 13% for the 1990-2000 period and most crop acreage in the county contributed heavily for the region's total in 2000. Sunflower acreage in Kiowa County accounted for 80% and winter wheat acreage accounted for 38% of the regional total in 2000. Sorghum, barley, corn for grain accounted for 28%, 14% and 13% of the regional total in 2000. Kiowa County contributed small amounts to the regional total for all hay and alfalfa hay acreage, with only 2% and 1% of the regional totals. Corn for grain had the greatest rate of increase for

acreage dedicated to a specific crop, increasing by 5700% for the 1990-2000 period. Alfalfa hay acreage increased by 213% over the decade and sorghum acreage increased by 43%. Barley, all hay, and winter wheat had decreases in the amount of acreage of 89%, 44%, and 7%, respectively, over the decade. Spring wheat and barley experienced sporadic increases and decreases in acreage throughout the decade.

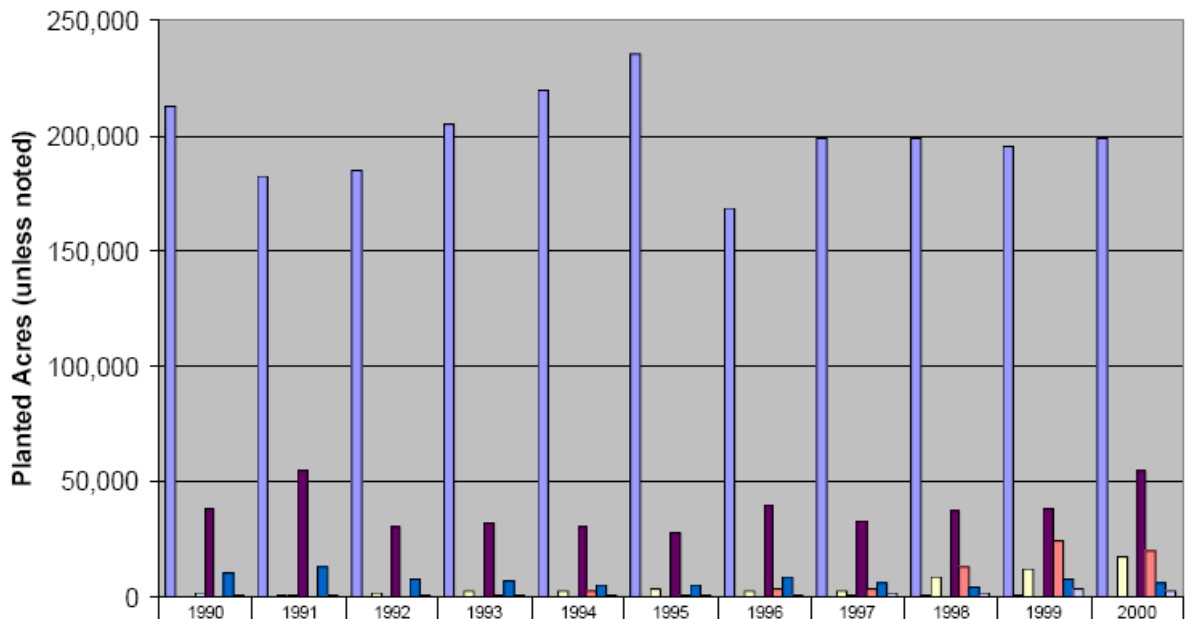
Regionwide, Kiowa County accounted for 82% of the sunflower production and 37% of the region's total winter wheat production in 2000. Total production of sorghum in the county accounted for 23% of the regional total, whereas 2% of the region's total corn production and 1% of both all hay and alfalfa hay production are found in Kiowa. Corn for grain had the greatest rate of increase, 784%, followed by a 345% increase in alfalfa hay production. Sorghum production increased by 8% for the decade, but the production of barley, all hay, and winter wheat, all declined by 93%, 14%, and 5%, respectively, over the decade.

### 9.12 Crop Production and Crop Acreage Conclusion

Agriculture production historically has consistently increased in productivity despite experiencing decreases in the number of farmers, farms and planted acres. The number of farmers has increased in the region, while the number of crop acres has declined for

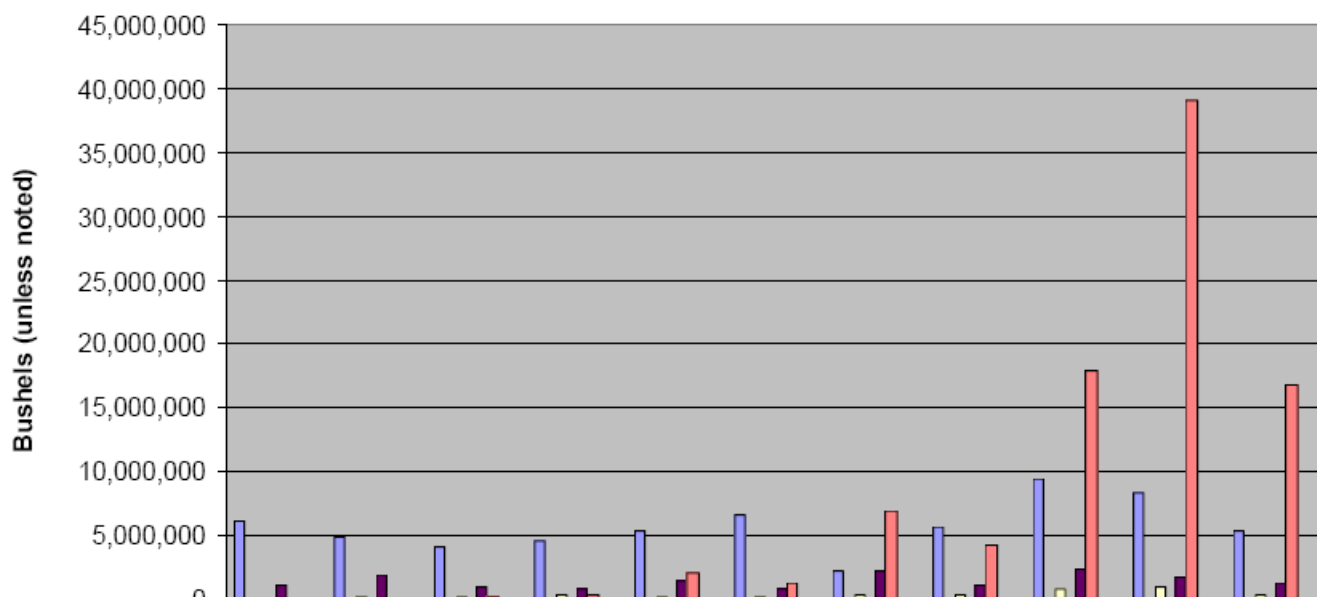


### Kiowa County Crop Acreage



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
■ Winter Wheat	213,000	182,000	185,000	205,000	220,000	235,000	168,500	198,500	199,000	195,500	199,000
■ Spring Wheat									700	700	
□ Corn for grain	300	1,000	1,800	2,600	2,400	3,500	2,900	2,900	8,500	12,500	17,400
□ Barley	1,900	800	300	200			200	500	300	300	200
■ Sorghum	38,500	55,000	30,000	32,000	30,000	27,400	40,000	32,900	37,400	38,500	55,000
■ Sunflowers			300	500	2,400	1,300	3,500	3,600	13,000	24,000	20,000
■ All Hay (Harvested ac.)	10,800	12,700	7,700	7,200	5,000	5,500	9,000	6,500	4,700	7,500	6,000
■ Alfalfa Hay (Harvested ac.)	800	700	700	700	1,000	500	1,000	2,000	1,700	3,500	2,500

### Kiowa County Crop Production



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Winter Wheat	6,120,000	4,923,000	4,030,000	4,535,000	5,275,000	6,550,000	2,250,000	5,700,000	9,340,000	8,267,000	5,280,000
Spring Wheat									13,000	15,000	
Corn for Grain	43,000	83,000	177,000	273,000	224,000	215,000	345,000	300,000	790,000	950,000	380,000
Barley	60,000	24,000	9,000	2,000			3,000	14,000	7,000	5,000	4,000
Sorghum	1,143,000	1,880,000	952,000	858,000	1,409,000	765,000	2,136,000	1,150,000	2,290,000	1,703,000	1,235,000
Sunflowers (lbs)			225,000	360,000	1,960,000	1,230,000	6,840,000	4,200,000	17,900,000	39,000,000	16,830,000
All Hay (tons)	14,200	24,600	14,100	13,300	11,500	7,000	23,500	15,200	11,800	20,000	13,500
Alfalfa Hay (tons)	2,300	2,600	2,500	2,400	4,500	2,000	3,000	4,700	4,800	12,500	10,200

the period. Despite this, the region has experienced an increase in the production of every crop except for wheat, barley, and sorghum. Farms, rural residents and urban residents value working landscapes for their productive potential, but also for many other attributes that agricultural lands provide. The number of acres dedicated to crop production has declined in seven of the thirteen counties over the period. In the worst case Crowley County declined by 23% in the number of acres dedicated to crop production, while the greatest increase of production acres was in Costilla County.

**9.13 Summary and overview of cattle operations and value of sales**

Colorado was the third largest producer of cattle on feed in the United States in 2000. Cattle and calves cash receipts accounted for 53% of total farm cash receipts for Colorado agriculture in 1999. The number of farms that consider themselves cattle operations has increased over the period. Likewise the value of sales increased over the decade.

Statewide, the dollar amount received from cattle and calves sold has increased over the observation period, while decreasing in the region. The number of cattle operations throughout the state and the region also increased over the period by 7% and 5%, respectively.

Regionwide, the highest number of cattle operations was in Pueblo County, followed by Las Animas County and Baca County. The lowest number of cattle operation in the region occurred in Custer, Costilla, and Alamosa County. The highest value of cattle sales came from Prowers, Otero and Crowley County.

Costilla, Custer, and Alamosa County had the lowest value of cattle sales in 1997.

Colorado cattle and calves sales increased by 29% over the decade, while the number of livestock operations increased by 7%.

The ACT Region accounted for 12% of the state’s total value of cattle sales and 20% of the cattle operations in 1997. The value of cattle sold declined by 29% between 1987 and 1997, whereas the number of cattle operations increased by 5% over the period.

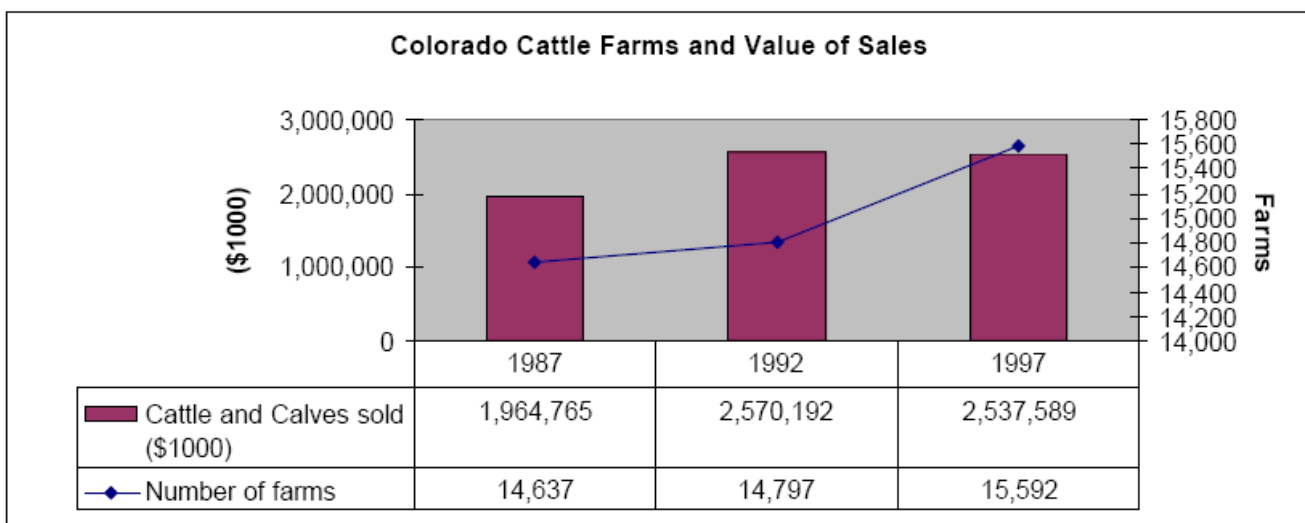
**9.14 County trend of cattle operations and value of sales**

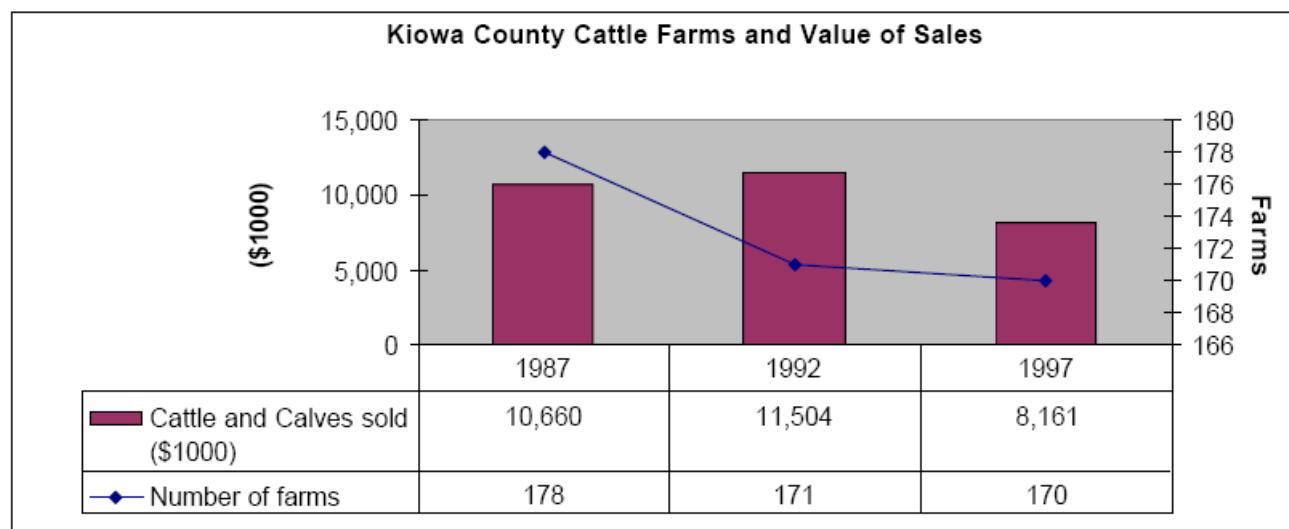
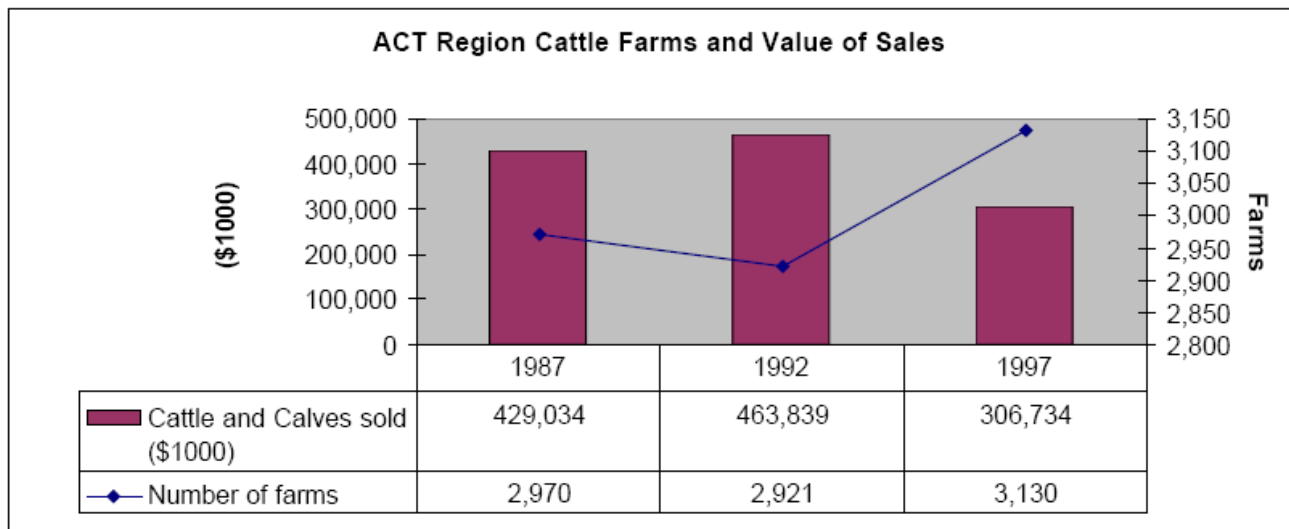
The value of cattle and calves sold in Kiowa County decreased over the period by 23% and accounted for 3% of the region’s total sales value in 1997. The number of cattle operations also decreased, but by 4%, and accounted for 5% of the region’s total number of cattle operations in 1997.

**9.15 Summary and overview of hog and pig farms and value of sales**

Cash receipts for hog operations in the state have remained relatively constant between 1996 and 1999, while both years accounted for 4.3% of total agriculture cash receipts. In 2000, Colorado ranked 15th in the production of hogs in the nation. In Colorado, the majority of hog production is located outside of the ACT Region.

The number of hog farms throughout the state decreased by 27%, while the ACT Region experienced a





40% decrease in hog farms. Since information at the county level on value of sales cannot be disclosed, the aggregated values at the regional level cannot be effectively compared to the state aggregated value. Due to the small number of hog farmers in Baca, Bent, Costilla, and Kiowa Counties the total value of swine sales of each respective county has been suppressed from the regional assessment to avoid disclosing information about specific hog farmers in those counties. Despite this, a regional comparison among the other nine remaining counties for the most recent data must suffice.

The lowest number of hog farms in the region occurred in Costilla County, followed by the Huerfano County and then Custer County. The highest number of hog farms existed in Pueblo County, followed by Prowers and Otero County. The highest value of hogs sold

occurred in Prowers County followed by Otero and then Pueblo County.

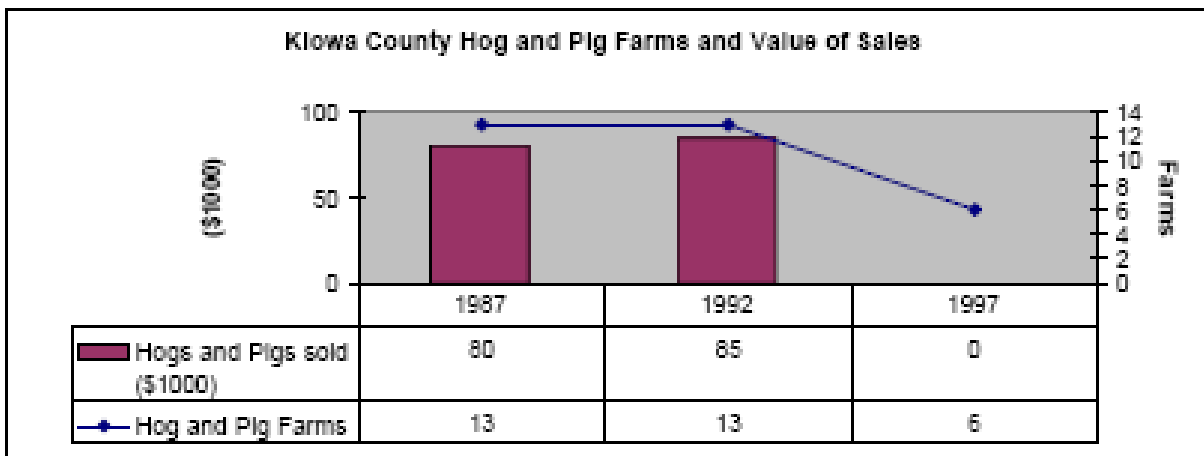
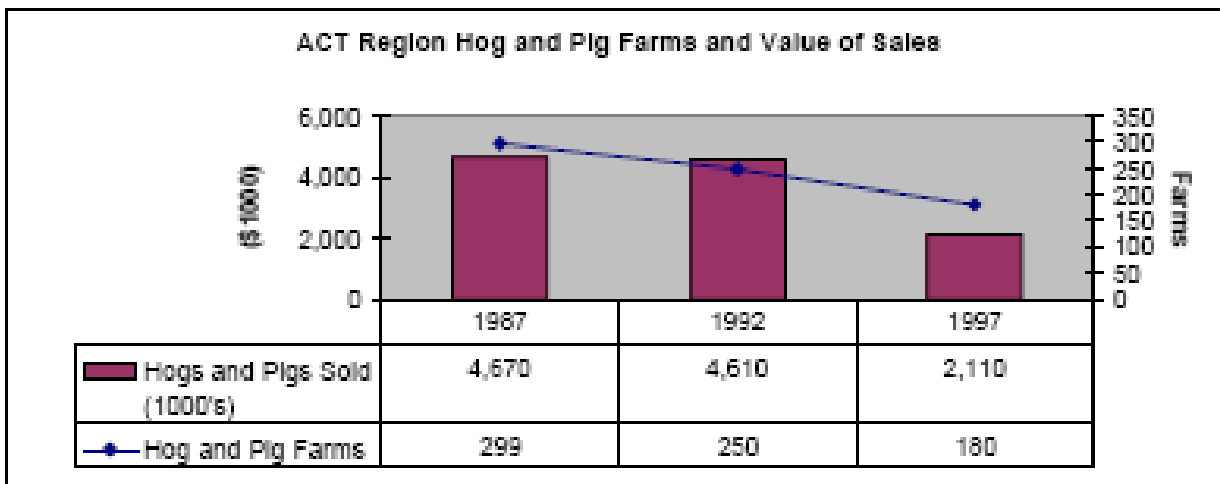
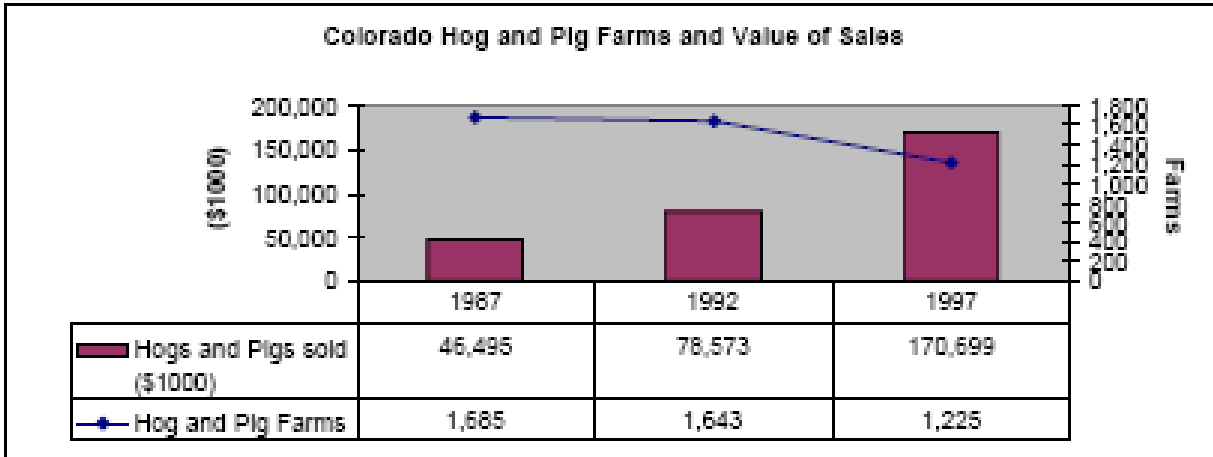
Hog and pig farms in Colorado have decreased in number by 27% over the observed period, while there has been a 267% increase in the value of hogs and pigs sold. The above graph shows an inverse relationship between these two categories over the period.

The total number of hog and pig farms in the region decreased by 55% over the observed period and accounted for 1% of the state's total in 1997. Hog farms in the region have decrease over the same period, but by 40%. The 1997 total number of hog farms in the region accounted for 15% of the hog farms in the state.

**9.16 County trend of hog and pig farms and value of sales**

Like Custer County, Kiowa County ranks eleventh regionally in the number of hog farms. Hog and pig

farms in the county have decreased by 54% over the period, whereas the value of hogs sold increased by 6% between 1987 and 1992. The value of hogs sold accounted for 2% of the regional total in 1992.





### 9.17 Summary and overview of sheep and lamb farms and value

Colorado was the fourth largest producer of sheep and lambs in the nation in 2000. In 1999 sheep and lambs cash receipts accounted for 2.4% of all farm cash receipts. The national trend for sheep and lamb production has been in decline since its peak in 1942 when production reached 56 million head. In comparison, the number of lambs and sheep reached only 6.92 million in 2001. Much like the national trend of negative growth, there has been a decrease in the number of sheep farms in Colorado. The value of sheep and lamb sales in the ACT Region has declined, while the number of farms in the region has also decreased. However, there have been increases in sheep farms and the value of sales in some of the counties of the ACT Region.

The value of sheep and lambs sold statewide increased, while the ACT Region felt a decrease over the period. Sheep farm numbers in the region declined by 21% and by 18% statewide over the period. Within the state, the ACT Region accounted for 15% of the total lamb farms in 1997.

The highest number of sheep and lamb farms were located in Conejos County. Conejos County also had the highest value of sheep, lambs and wool sold regionally in 1997. Otero County had the second highest of both assessed categories, followed by Pueblo County with the third highest number of sheep farms in the region. The third highest value of sheep, lambs and wool sold regionwide were in Costilla County. Regionally, the lowest number of sheep

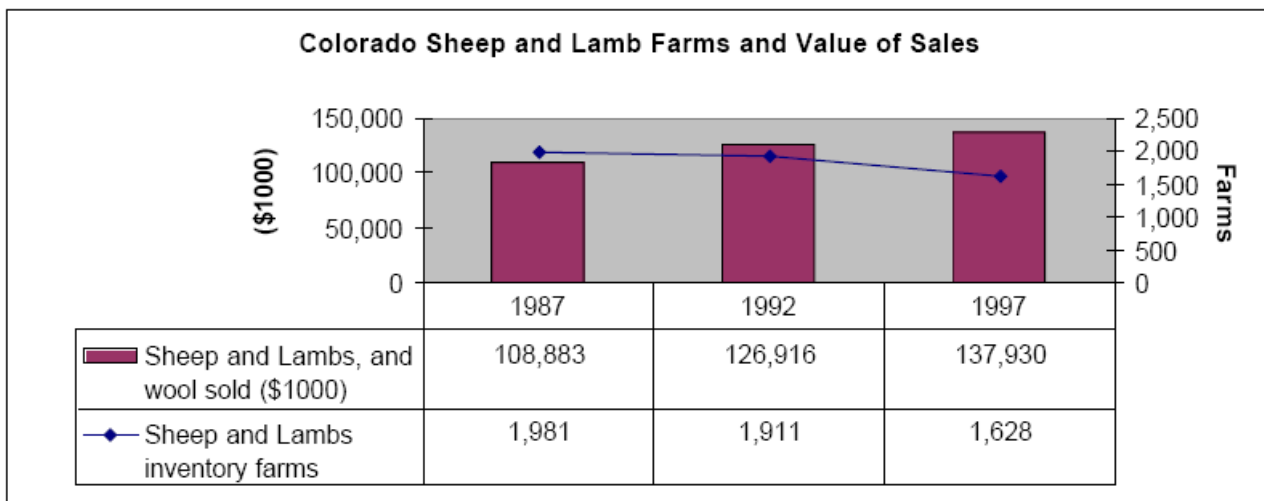
farms were found in Custer County followed by Kiowa County. Las Animas had the eleventh ranked number of sheep farms in the region. The lowest value of sheep, lambs and wool sold also were in these same three counties.

The value of sheep, lamb, and wool sold increased by 27% for Colorado over the period. The number of sheep and lamb farms decreased by 18% statewide over the period. Like the hog and pig data, the state totals reflect the actual number of both sheep farms and the value of sheep and wool sold. However, the value of sheep and wool sold has been suppressed for some counties within the region in order to keep from disclosing income information for specific farms. The state total has these producers included, whereas the regional assessment does not.

The ACT Region accounted for 1% of the total value of sheep, lambs and wool sold in Colorado in 1997, but accounted for 15% of the state's total number of sheep farms. The value of sheep, lambs, and wool sold decreased by 26%, while the number of sheep farms decreased by 21% over the period. Due to disclosure issues, Baca County is excluded from the ACT Region totals.

### 9.18 County trend of sheep and lamb farms and value

Kiowa County had the lowest value of sheep, lambs, and wool sold and was ranked twelfth in the number of sheep farms in the region in 1997. The value of sheep, lambs, and wool sold decreased by 87% and accounted for less than 1% of the regional total in 1997. Sheep farms in the county declined by 56%, accounting for



2% of the regional total number of sheep farms in 1997.

### 9.19 Livestock Information Conclusion

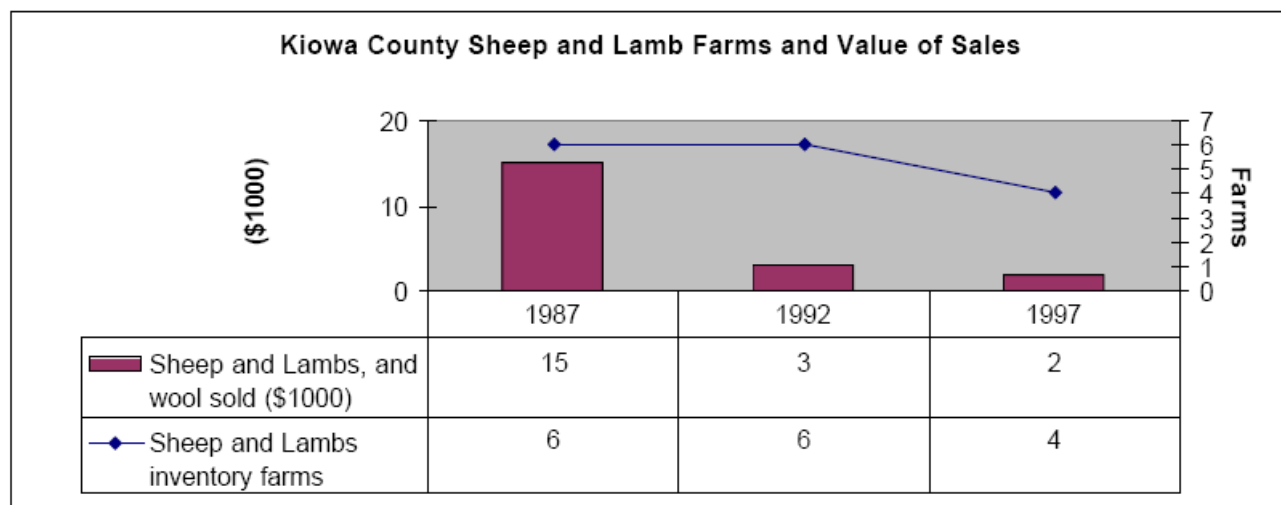
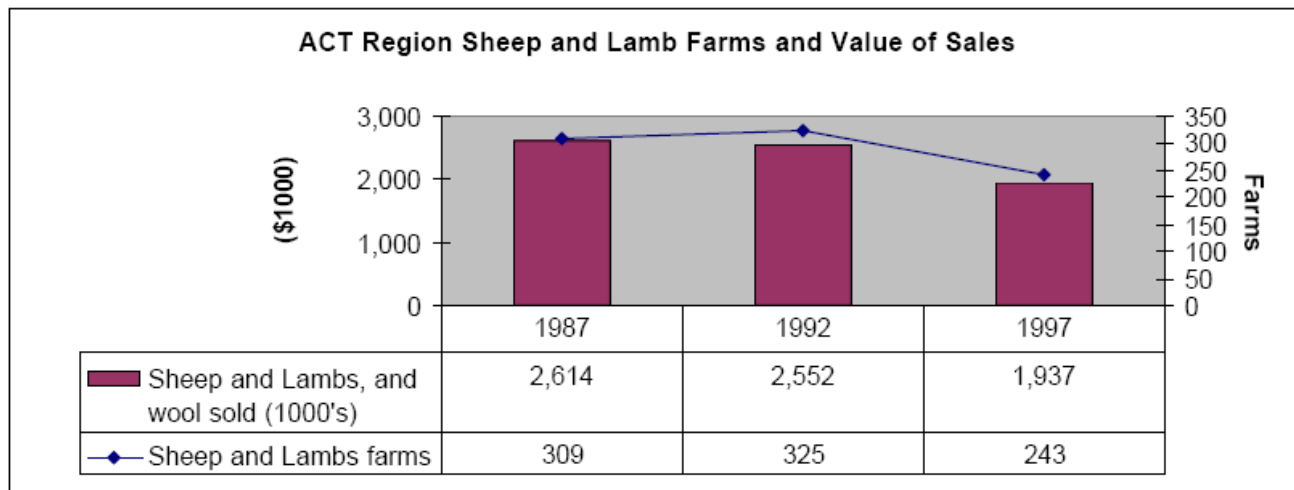
Colorado is a major supplier of livestock to domestic and foreign markets. In 2000, Colorado ranked third in the production of lambs, tenth in all cattle and calves and ninth in pig production. These rankings have remained relatively stable over time. Using county production expense data, there has been a decrease in the amount of feed purchases and livestock purchased expenditures over the 1990s. In addition, the value of livestock sales has also declined for in the region. Based upon the 1990s, it seems that livestock production in the region is in general decline regionally.

### 10. State and Regional Summary

This report provides an economic profile of the 13 Colorado counties, located in the southeast and south-central region of the state, that comprise the Agricultural Coalition for Tomorrow (ACT). The objective of

the report is to lay a foundation of understanding of ACT counties' economies in order to facilitate collaboration in strategic planning for future economic development in the region. Comparison and contrast techniques for growth rates and numerical data were used to show differences and similarities between counties and to show how counties may share some economic characteristics that would otherwise go undetected. In view of the likely uses of this information, the overall report has been released as separate county reports with state and regional assessments included.

The report illustrates potential areas of common interest or concern within ACT counties such as agriculture, jobs, housing, education, taxes, and other economic areas. This report also brings to focus unique features of counties that are less likely to be advanced through collaboration. This information provides an essential starting point that minimizes inefficiency in the search for regional and subregional economic development strategies, but can only fulfill this role if



the information is actively used, updated and matched with complementary sources of local information to reflect changes in the regional economy over time. A general overview of the state and the region for each area of economic investigation is as follows.

### **10.1 State and Region Overview**

The population of the ACT Region was 6% of state population in 2000, while most people in the ACT Region were between the ages of 25-44. The 45-64 year old age category was the fastest growing age group (35%) in the region over the period, followed by people between the ages of 15 and 24 (21%). The categories of 25 to 44 years of age and under 14 years increased at the relatively low rate of 6% over the period. In 2000, the total Hispanic/Latino population accounted for 37% of the ACT regional population. The Mexican population accounted for 16%, while Other Hispanics accounted for 21% of the regional total. African American and American Indian populations grew far more quickly in the ACT Region than statewide, while the states' White population grew faster than the ACT Region.

In 2000, the total housing stock in the ACT Region accounted for 6% of the state's total housing stock. The rate of increase in housing units statewide (22%) was higher than the region (14%). The average household size in Colorado and the region both showed decreases over the period. Vacancy rates for both the state and the region have decreased over the period, while the ACT Region had a higher vacancy rate than the state.

Colorado had an increase of 48% in all jobs, while the region increased 26%. The ACT Region accounted for 4% of the state's total jobs in 2000. The highest number of jobs in Colorado and the region were in the service, wholesale & retail, and the government sectors. The service sector grew most quickly in Colorado, while construction jobs increased the most quickly in the region. The total estimated jobs in Colorado increased by 42%, 13% in the ACT Region. The state labor force grew by 29% and the regional labor force grew by 2%. Wage & salary jobs comprised 85% of total jobs at the state level and accounted for 78% of the region's total jobs in 2000. The number of unemployed people decreased in the region and the state overall.

In Colorado, total property value increased by 68% from 1990-2000, while property values in the region

increased by 44%. In both cases the property tax rate declined over the period. Retail sales tax revenues increased by 140% statewide, while regional tax revenues increased by 103%.

The ACT Region grades 1-8 enrollment increased by 3% for the period, while the state underwent a 21% increase. School district revenue for Colorado declined by 7% and increased by 14% in the region. Colorado and regional school district expenditures both changed little.

The number of farms statewide increased by 4%, while the region experienced a 2% increase in the number of farms. The land in farms statewide decreased by 4% over the period, while land in farms in the ACT Region decreased by 5%. The average estimated value of farmland and buildings in Colorado increased by 54%, while average estimated value of farmland increased by 46% in the ACT Region.

Statewide, the majority of cash receipts came from livestock sales and fell by 1% over the period, while the region declined by 17%. Both Coloradoan farms and regional farms realized an increase in cash receipts from crops. Other income at the state level increased by 85% and grew by 146% in the ACT Region. Imputed and miscellaneous income for the state grew by 113%, while growing by 315% in the region. At the state and regional level, increases were present in all production expense categories with one exception. Cash receipts and other income increased by 12% at the state level and decreased by 8% in the region. Statewide, total net income including corporate farms decreased by 34% while the region decreased by 22%. Both the state and region experienced a change in inventory that drastically decreased over the period and led to decreases in income for the state and region.

The state and the region both had the greatest concentration of CRP acres in established grass acres and both had the second highest concentration in native grass acres.

The ACT Region and the state experienced an increase in acreage dedicated to sorghum, while productivity declined. Generally speaking, production of crops in Colorado and the region expanded, with dry beans and winter wheat production declining. Statewide, silage and oat production declined, while the region experienced an increase.

Statewide, receipts from cattle and calves increased over the observation period, while decreasing in the region. The number of cattle farms throughout the state and the region also increased over the period by similar rates, while the number of hog farms decreased throughout the state (27%) and the region (40%). The value of sheep and lambs sold increased statewide and decreased in the region, while the number of sheep farms declined for both.

## 10.2 Overall Conclusion

Population and income growth fuel the local and regional demand for housing and other goods and services that people consume. This increased level of economic activity ripples through the local and regional economy and generates additional government revenues through increasing tax receipts. As the population in the ACT counties has expanded the trend has been for an increase in non-urban home and property purchases, which has caused the property values of the surrounding farmland to increase beyond that which is justified by the returns to agricultural production.

Upward pressure on farmland prices creates additional challenges to farmers in the region and provides additional incentives for them to sell their lands for higher intensity, rural residential or commercial, uses. Land use change of this sort can reduce the provision of aspects of agricultural lands that do not enter fully into market transactions (e.g., rural lifestyle, open space, flood control, wildlife habitat) and may result in lower multiplier effects through the local economy. This type of growth may or may not be in the best interests of the ACT region or of individual localities within the region from a fiscal (service provision versus tax revenue) or a social perspective. A close look at taxation trends against population trends and land use trends may facilitate decision-making in the planning arena.

Throughout the period there was an increased dependence on the construction sector and this was accompanied by an increase in housing numbers for both the state and the region. This showed an increase dependence on the sector for labor. County planners in counties with a high percentage of jobs in specific sectors may want to consider economic development strategies that encourage diversification of the employment base. Diversification allows for the economy to be able to absorb more shocks, rather than being strongly impacted when one sector or another experiences a slowing of economic activity.

This outlined information could be extended to examine the number of smaller farms in the region, in terms of acreage, and how these contribute to the overall agricultural community. Another extension of this research could be measuring county's specialization in a specific industry. Such a study can be accomplished and compared to the surrounding area as well as to the entire nation, through the use of location quotients. Inter-industry expenditures affect and contribute to one another; showing how expenditures in one industry affect another can be established through the use of an Input-Output model.

The use of the presented data is an essential starting point for ACT counties to examine their strengths and commonalities and address areas of regional or local concern. Overall the ACT Region demonstrates strong economic fundamentals and some areas that could use attention. The region contributed heavily to the state totals for some categories of interest, such as agricultural production, but less so in terms of tax revenues generated, for example, with the exception of a few counties. County leaders may want to explore areas in which they wish to place attention in view of the common interests with neighboring or regional county partners. Focused collaboration among selected ACT Region counties on issues of sustained economic development can create opportunities for long term economic health that may not be achievable by individual counties acting on their own.

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