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4.4 ECONOMIC CONDITIONS

INTRODUCTION

Large construction projects such as the one investigated in this study can influence the economic conditions in and around the construction region. In particular, local employment would change to support the actual construction work and regional tax revenues would change if property is purchased for the facility's right-of-way. Economic changes of this type can have positive and negative influence on regional economies; however, it is often difficult to isolate such impacts because other regional economic factors can influence economic conditions more than a single project. This section of the document examines the common economic influences of large road construction and estimates their effects.

Public concerns expressed through the public process regarding Economic Conditions include impacts to residents and businesses in the areas of employment, tax revenues, growth, and home values. These concerns are addressed in **Section 4.4.2**.

Data used in calculations and estimates were taken from economic census, state revenue, DRCOG, Jefferson County Land Use, Jefferson County Assessor's and real estate reports. Unless otherwise stated, identified Broomfield data reflect conditions in the City of Broomfield prior to redefinition as a city and county.

4.4.1 AFFECTED ENVIRONMENT

4.4.1.1 EMPLOYMENT AND INDUSTRY CONDITIONS

Colorado experienced rapid population growth and an economic boom in the 1990s. In the early part of the 2000s, however, Colorado's economy weakened as a result of several factors including a state recession followed by the national recession in manufacturing. The terrorist attacks in September of 2001, as well as droughts and wild fires, impacted Colorado strongly due to the state's dependence on the airline industry and tourism. Tens of thousands of jobs have been lost since late in 2000, with the large majority in construction, manufacturing, telecommunications, technology, and tourism. Economic conditions started slowly to improve late in 2003.

Until World War II, the economy in Colorado was heavily dependent on mining and agriculture. The federal government spent heavily in Colorado during the war and postwar into the mid-sixties. During this era, Colorado's economy shifted from one based on natural resources to one based on the technology and service sectors. From the mid-1960s to the mid-1980s, Colorado's population and jobs boomed. Several major technology-based firms located in Colorado in this period. By 2000, Colorado's economy was driven by advanced technology and service.

In the latter part of 2001, jobs were not as bountiful and the number of unemployed people increased dramatically. There were several mass layoffs in the following year; job losses were more than twice that of the national average. Boulder County, in particular, lost a large number of jobs due to the preponderance of high-tech companies in the area. The state unemployment rate doubled to about 5.5 percent and remained steady through mid-2003. This compares to the national unemployment rate of 6.0 percent for 2003 (U.S. Department of Labor).

The national and state unemployment rates for 2004 averaged 5.5 percent. However, the Colorado Department of Labor and Employment reports an adjusted unemployment rate slightly under 5.0 percent for August 2005. This trend for 2005 shows moderate unemployment rates and regular job growth. The estimated number of employed Colorado residents increased by 14,700 from the 2004 level of 2,390,700. The estimated number of unemployed Colorado residents dropped by 11,800 from 138,900 during the same period. (Colorado Department of Labor, 2005).



Construction, professional and business services, administrative and support services, leisure and hospitality, trade, transportation, and utilities industries showed increased employment in 2005. The information sector did show a loss of employment during this same period.

The North American Industry Classification System (NAICS) developed new statistics about business activity throughout North America. The information displayed reflects 2002 figures for Colorado, Boulder and Jefferson counties, and nine municipalities for select employment categories (see **Table 4.4-1**).

Table 4.4-1 2002 NAICS Study Area Work Force (Total Number of Paid Employees)

	Manufacturing	Wholesale Trade	Retail Trade	Professional/Scientific, and Technical Services	Administration & Support, waste management, & Remediation Service	Educational Services	Healthcare and Social Assistance	Arts, Entertainment, and Recreation	Accommodation and food service	Other services (except public administration)
Colorado	148,824	101,108	247,264	155,868	258,614	9,360	202,409	45,265	206,597	64,100
Boulder County	16,770	7,185	18,243	27,369	8,805	720	13,464	2,285	13,773	4,650
Jefferson County	21,241	5,542	26,076	17,209	16,546	854	18,461	2,903	18,719	6,478
Broomfield ¹	5,682	(500–999)	3,432	2,135	1,468	(100–249)	749	170	2,061	(2,500–4,999)
Arvada	(1,000–2,499)	1,063	4,136	1,403	(1,000–2,499)	95	1,757	383	3,200	1,059
Golden	2,246	781	1,386	1,323	(2,500–4,999)	(20–99)	(500–999)	110	1,228	388
Lakewood	2,604	1,262	8,281	7,899	7,755	191	6,556	721	6,451	2,063
Lafayette	869	211	591	649	171	75	830	41	300	187
Louisville	1,658	2,436	843	1,200	(1,000–2,499)	(20–99)	1,210	(20–99)	753	153
Superior	²	(1–19)	428	84	(1–19)	(1–19)	(20–99)	(1–19)	201	(20–99)
Westminster	2,277	1,872	5,518	(1,000–2,499)	2,065	214	3,861	360	4,483	761
Wheat Ridge	1,241	(500–999)	187	1,654	(500–999)	(20–99)	4,940	(20–99)	1,391	976

Notes: ¹ A combination city and county.

² Indicates that data was not available and entity was not included for that computation of the total.

Source: 2002 Economic Census, U.S. Census Bureau.



4.4.1.2 INCOME CONDITIONS

The average wage per job in Colorado was \$38,289 in 2003. The Bureau of Economic Analysis defines an average wage as the “wage and salary disbursements divided by the number of wage and salary jobs (total wage and salary employment) for that year.”

The average wage per job for Boulder and Jefferson Counties was \$43,896 and \$38,278, respectively, putting these counties on a par with state incomes. However, the average wage per job for Broomfield County was \$49,538, which is distinctly above the average for the state. Data from the 2000 Economic Census (U.S. Census) of income allocation for these counties discussed in the section is shown (see **Figure 4.4-1**).

Figure 4.4-1 Distribution of Wealth: Household Income

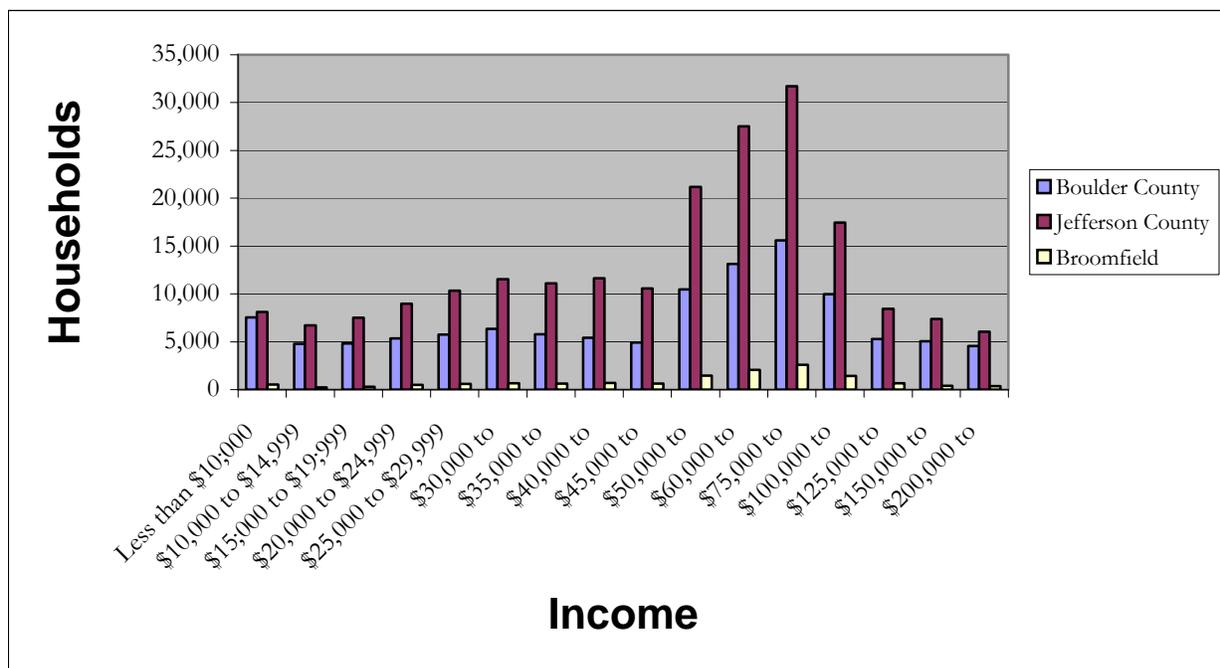




Table 4.4-2 2004 State Sales Tax Rates and Retail Sales

Location	Sales Tax Rate (%)	Retail Sales in Thousands of Dollars
Colorado	2.9	—
Boulder County	0.65	6,550,737
Jefferson County	0.5	11,807,444
Arvada	3.21	1,569,630
Broomfield	4.15	2,385,058
Golden	3.0	1,462,581
Lakewood	2.0	3,419,693
Lafayette	3.5	358,491
Louisville	3.375	577,788
Superior	3.46	280,207
Westminster	3.85	1,031,019
Wheat Ridge	3.0	1,725,904

Note: Regional Transportation District, Scientific and Cultural Facilities District, Metropolitan Football Stadium District, and Local Improvement District rates are not included in the above figures. Broomfield data are for the City and County of Broomfield.

Source: Colorado Department of Revenue (DOR) 2005; DOR 2004 Annual Reports.

4.4.1.4 PLANNED AND FORECASTED GROWTH

The study area includes regional open space, residential areas, agricultural operations, mixed-use employment centers, commercial properties, and industrial properties.

Factors influencing forecasted regional development are defined by DRCOG with the help of a task force comprised of business analysts, forecasters, and planners representing both the public and private sectors. According to DRCOG forecasts, the population growth for the Denver region is expected to match its current rate for the next few years, slow to 1.6 percent for 2005–2015, and further slow to 1.2 percent from 2015–2020 (slightly above the national growth rate). Employment growth is expected to follow a similar pattern. The average annual employment growth rate in the Denver region for the next few years is estimated to be 2.0 percent, slowing to 1.5 percent from 2005–2015, and nearly matching the national rate at 1.1 percent from 2015–2020. The suburban communities will continue to experience growth in population and households, and have shown a high rate of growth in recent history. The improved roadway network in the study area could increase development rates by 2030 as opposed to increasing the overall level of development (see **Section 4.1**).

DRCOG also publishes a long-range plan that can be used to manage growth within the Denver area. This plan, Metro Vision 2030, addresses development, transportation needs, and environmental quality. The current plan was adopted in January 2005. Data from this plan include population growth forecasts for specific Denver metro regions; including areas that could be impacted by the construction of new facilities in the Northwest Corridor (see **Table 4.4-3**).



Table 4.4-3 Annual Population Growth Rates Per 2030 Metro Vision Regional Transportation Plan

County	Growth Rate Per Year (%)
Boulder	1.17
Broomfield	2.04
Adams	2.02
Jefferson	1.08
Total	1.46

Source: DRCOG, 2030 Metro Vision Regional Transportation Plan, November 2004.

The DRCOG 2030 household and employment forecasts for the generalized study area are totaled (see **Table 4.4-4**). The study area used for compiling demographic data is somewhat different from the study area used for the rest of the environmental analysis due to 2030 demographic data only being available in zonal format. See **Section 3.1.4** for more information and the figure corresponding to this study area. Demographic study area totals are approximately 10.6 percent of regional household totals and are approximately 11.2 percent of regional employment totals (see **Table 4.4-4**).

Table 4.4-4 Demographic Study Area Forecasts Per 2030 Metro Vision Regional Transportation Plan

	Households	Percent of DRCOG Travel Modeling Area	Employment	Percent of DRCOG Travel Modeling Area
DRCOG Region	1,606,314	—	2,078,284	—
Demographic Study Area	170,343	10.6	231,906	11.2

Source: DRCOG Compass Regional Travel Model Version 93 Modified, 2005.

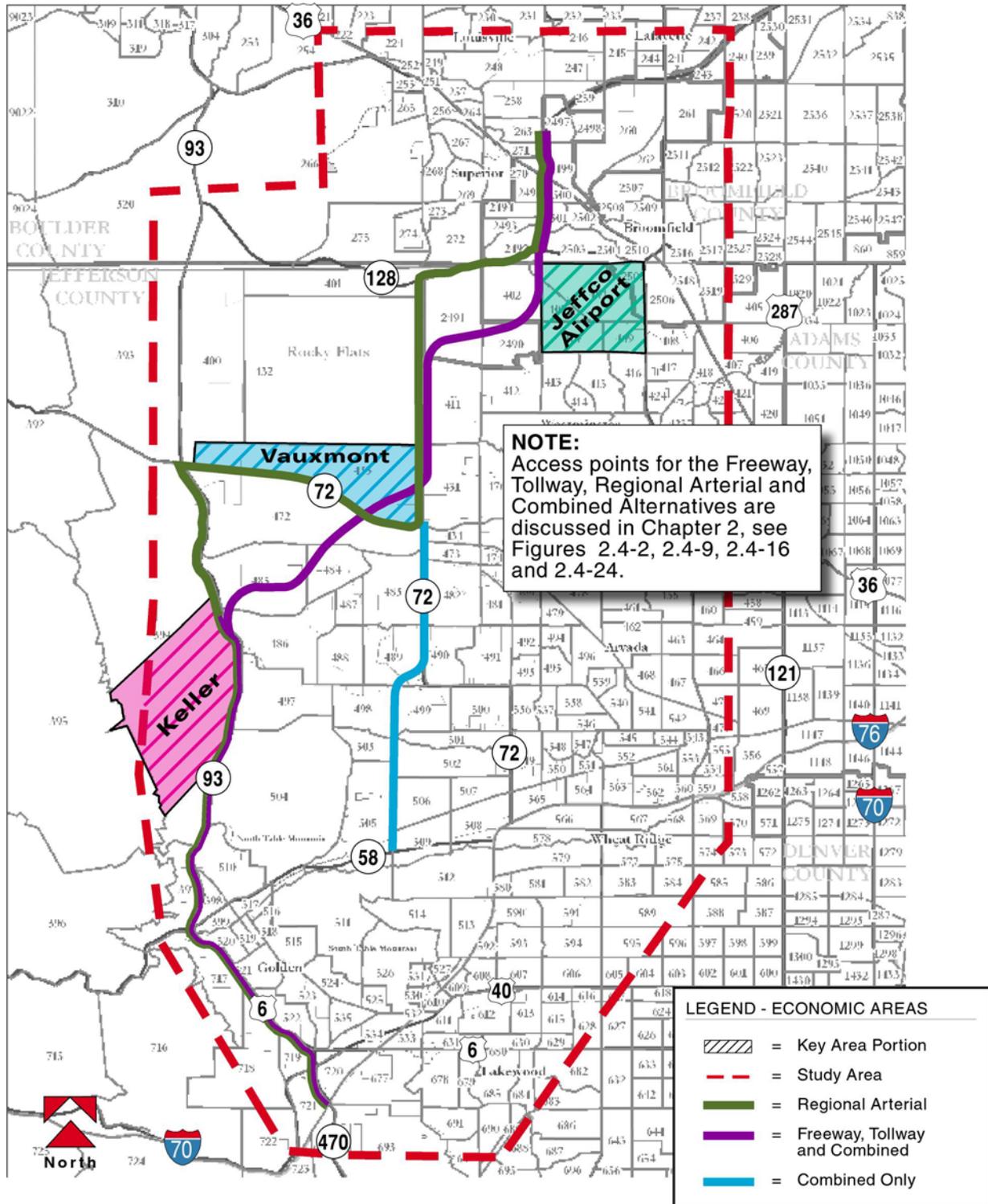
Greater details of land use forecasts are presented in **Section 4.1** of this document. That section discusses development plans that will occur “regardless of whether the proposed transportation improvements are constructed.” As stated there, Broomfield estimates reaching build out by 2030. Consistent with existing trends, currently undeveloped land north of US 36 near the Flatiron Crossing development would primarily develop as commercial land use. Land use planning by the City and County of Broomfield, Jefferson County, and the City of Arvada makes the assumption that some roadway improvements will be provided regardless of whether that occurs as a result of the construction of a build alternative or as a result of privately funded actions.

4.4.1.5 KEY GROWTH AREAS

A land use expert panel, consisting of county and municipal planners and other agency and private experts, was convened as part of the Northwest Corridor study. The panel identified two key areas within the Northwest Corridor study area in which the level and pace of development could be influenced by a Northwest Corridor build alternative: (1) north of SH 72 between SH 93 and Indiana Street, also called the Vauxmont and Cimarron Park developments, and (2) west of SH 93 near 64th Parkway, also called the Keller area. A third area, immediately west of the Rocky Mountain Metropolitan Airport (formerly the Jefferson County Airport) has been identified by Jefferson County as another key location where development could be influenced by the selection of a build or No Action Alternative.(see **Figure 4.4-2**).



Figure 4.4-2 Key Growth Areas



Source: Compiled by FHU, 2005.



4.4.1.6 HOME VALUE CONDITIONS

An independent review was performed on the home values in the southern portion of the study area to determine existing sales price conditions relative to proximity to major roadways. Cases investigated were the home values in the Canyon Point and Parfet Estates areas. Observations of this review show that homes located closer to US 6 and SH 93 were valued, on average, at slightly less than homes farther away from the road. The overall trend in the neighborhood also indicates longer days on the market for homes closer to the road in comparison to homes farther away.

Individual home sales evaluated between 2003 and 2005 showed a history of increasing values over time for all homes in the Canyon Point and Parfet Estates neighborhoods. The average sales price for the neighborhoods showed that homes closest to the highway have been stable, while homes farther away have been steadily increasing. Specifically, data show that the average sales price for homes farther from the road increased less than 3 percent in the last year. Conversely, the average sales price for homes closest to the road neither increased nor decreased during the same period.

To examine whether or not this effect is experienced in other parts of the Denver metro area, other new housing construction located adjacent to a mature highway facility was also evaluated. Several new condominium complexes are under construction in the Highlands Ranch vicinity near C-470. One complex, Shadow Canyon, is located in very close proximity to C-470 just off Colorado Boulevard. This planned community is completely visible to C-470 traffic and sells for approximately \$162/square foot. The values of this new housing complex are compared to a second new condominium complex, Tresana, currently under construction less than five miles away from the first but approximately one mile from C-470 and selling for roughly \$155/square foot. Both complexes have similar amenities. This second complex sells for a comparable but slightly lower price per square foot even though it is not located adjacent to C-470. Given these data, the correlation between road proximity and home values is uncertain and quite variable.

4.4.2 ECONOMIC CONSEQUENCES

This section details how each alternative could affect employment, tax revenues, growth, and home values. These measures are indications of the economic implications of implementing one of the alternatives.

The impact analysis was based on information collected from field research in the study area, county assessor parcel data, site visits to interchanges and proposed stations, and an in-depth review of aerial photography of the study area. The following summarizes the area of evaluation and details the methodology used. To allow comparison with other regional projects, this evaluation was structured to be comparable with the approach used for the US 36 EIS.

4.4.2.1 NO ACTION ALTERNATIVE

Implementing the No Action Alternative will not generate employment changes beyond that already considered by planners. This alternative would not require the relocation of any existing businesses or residences and would therefore not result in a loss of retail sales or property tax base and revenues.

4.4.2.2 EMPLOYMENT AND INDUSTRY CONSEQUENCES

Employment changes along the build alternatives could be a result of direct impacts (construction employment) and indirect effects (induced employment) associated with their construction. Therefore, both direct construction and indirect employment changes were evaluated in this section. Employment changes are difficult to quantify because employees may be hired from other states and indirect effect multipliers are influenced by regional economics. Definitive conclusions are challenging to portray in most economic analyses and particularly prior to evaluation of detailed designs.



Construction employment was estimated by taking the project construction cost and attributing a portion of it to labor costs (assuming an industry standard of 50 percent). The estimated labor cost was then divided by the average income for a construction worker in the Denver/Boulder metro Area (estimated at \$61,000, including benefits). This produced an approximate number of construction employees for the project. The jobs multiplier of 1.6 (IMPLAN² Regional Model multiplier) was applied to the direct employment to quantify indirect jobs generated by the proposed project. For example, an employment multiplier for a direct industry change of 1.6 indicates that the creation of one new direct job will result in a total of 1.6 jobs in the local economy or a sixty percent indirect increase in employment. The value of this multiplier is consistent with the value used for the US 36 EIS and updated employment multipliers stated in the Updated Employment Multipliers for the US Economy 2003 (Economic Policy Institute for 2003). These total numbers of jobs were then annualized over a 5-year construction period for comparative purposes. The number of jobs created was derived solely from the calculation described herein and IMPLAN software was not used for analysis. Employment changes are detailed for each build alternative (see **Section 4.4.2.4**).

The study area is characterized as an area of mature employment base and household income (see **Section 4.4.1.1**). The temporary nature of a construction project does not support the notion that employment and income in the study area will change drastically because of this potential project.

Employment is also impacted by the relocation of businesses along the alternatives due to the construction of any of the build alternatives. The impact to employment is related to the size of the businesses that are to be relocated. Larger businesses will have a greater impact on employment due to the larger amount of employees where smaller businesses will have less of an impact. The numbers of businesses to be relocated are categorized by the size of the business and are detailed for each of the build alternatives (see **Table 4.4-5**).

Table 4.4-5 Business Relocations

Business Relocations Categorized by Size (number of employees)	Freeway Alternative	Tollway Alternative	Regional Arterial Alternative	Combined Alternative (Recommended Alternative)
Small (less than 5 employees)	0	4	0	0
Medium (5-50 employees)	1	2	1	8
Large (50+ employees)	1	1	2	1
Total:	2	7	3	9

Note: Data assembled from indirect information sources.

Source: H. C. Peck and Associates, 2006.

4.4.2.3 INCOME CONSEQUENCES

Households in the study area are at or above the state average income (see **Section 4.4.1.2**). Depending on the number of household displacements resulting from right-of-way needs, there is the potential for a change in average household income if displaced residents choose to move outside their current county. Although the exact probability that this would occur cannot be quantified, a conservative approach is to presume all the residents change counties. This is not an exact method but is a conventional estimate of the potential income decreases per county under these circumstances. In contrast, **Section 4.5**, of this document explains residential relocation in more detail and states, “residential building permits remain steady and emphasis on affordable housing remains high.” Given this information, the potential for residents to relocate to a different county is reduced from the conservative assumption used here.



The decrease in county income is estimated from a percentage of the households that leave the county out of the total households currently in the county. This percentage is applied to the average income to calculate the potential decrease. For example, construction of the Freeway Alternative relocates three households in Jefferson County. Three households is 0.0014 percent of the 213,262 households currently in Jefferson County (DRCOG 2005 Household Forecast). Using this approximation method, the average income of Jefferson County could decrease by 0.0014 percent or by \$0.54. There are 17,521 households currently in Broomfield County. The DRCOG (2005) household data by county and alternative construction estimates are used to assess this impact (see **Table 4.4-6**).

Table 4.4-6 Summary of Estimated Income Change

Alternatives	Residential Relocations	Decrease in Number of Households (%)	Potential Average Income Decrease
Freeway Alternative	3 (Jefferson)	0.0014 (Jefferson)	\$0.54 (Jefferson)
Tollway Alternative	3 (Jefferson)	0.0014 (Jefferson)	\$0.54 (Jefferson)
Regional Arterial Alternative	5 (Jefferson)	0.0023 (Jefferson)	\$0.90 (Jefferson)
	1 (Broomfield)	0.006 (Broomfield)	\$2.83 (Broomfield)
Combined Alternative (Recommended Alternative)	29 (Jefferson)	0.014 (Jefferson)	\$5.21 (Jefferson)

Source: Compiled by FHU from 2005 DRCOG Household Forecast and H. C. Peck and Associates, 2006.

4.4.2.4 RETAIL SALES AND TAX BASE CONSEQUENCES

The impact to retail sales is estimated using the approximation method explained for income impacts (see **Section 4.4.2.3**). Using that method, retail sales in a particular county would decrease if residents relocated to other counties due to facility construction. It is projected that the Combined Alternative (Recommended Alternative), for example, will require 29 residential relocations. Although undesirable, these relocations represent less than 0.02 percent of the total households in the study area forecast by the DRCOG 2005 Regional Transportation Plan (see **Table 4.4-6**). This small reduction in residents accounts for approximately \$1,604,600 of the \$11.8 billion in annual retail sales in Jefferson County for 2004. The other three build alternatives induce less relocation. The chance that all of the relocated residents choose new housing in counties outside the study area is less than this conservative analysis because affordable housing is available within the study area (see **Section 4.4.2.3**). The reduction of retail sales due to relocations therefore, is expected to be minor compared to the direct and indirect employment increases related to facility construction.

Changes to property tax base and revenues were estimated utilizing county assessor data for each parcel to be acquired, either partially or fully. To calculate these changes, parcels with exempt status (i.e., municipality-owned land) or insufficient data (no value or tax data available) were removed from the calculations. To avoid overstating the changes, if only a partial acquisition was required, only a portion of the total assessed value was used. For example, if 10 percent of a parcel is impacted then 10 percent of the assessed value is counted as the impact. The tax base and revenues were calculated utilizing the adopted 2005 assessment rates. Only the county mill levy was applied to the taxable base to determine the tax rate. These are annual losses that add up to larger sums in the long run. A potential exists to offset these losses with gains from construction employment income and material purchase taxes although those gains are not quantified in this analysis. Employment impacts and property tax revenue losses are detailed for the build alternatives (see **Table 4.4-7**).

Table 4.4-7 Summary of Direct and Indirect Impacts from Build Alternatives

Impacts	Freeway Alternative	Tollway Alternative	Regional Arterial Alternative	Combined Alternative (Recommended Alternative)
Direct Construction Employment annualized over five years	1,400 Jobs	1,415 Jobs	790 Jobs	1,060 Jobs
Business Relocations	2 Properties	7 Properties	3 Properties	9 Properties
Indirect (spin-off) Employment from Construction (annualized over five years)	840 Jobs	850 Jobs	475 Jobs	635 Jobs
Annual Tax Base Change (in Millions of dollars)	Loss of \$0.591	Loss of \$0.808	Loss of \$0.692	Loss of \$1.303

Source: Compiled by FHU from August Gram Consulting, Inc. and H.C. Peck and Associates, 2006.

The losses can be contrasted to the changes in state property tax revenues to add perspective to the numbers calculated. Overall, the state collected an increase of 4.3 percent in property tax revenues from 2003 to 2004 and realized total state revenue of \$64.630 billion (Department of Local Affairs 2004 Annual Report). Locally, the revenues collected for Broomfield County declined 0.39 percent and increased 0.26 percent for Jefferson County during the same period (Department of Local Affairs 2004 Annual Report). If the losses shown are compared to 2004 state collections, these changes are minor (see **Table 4.4-7**).

4.4.2.5 ACCESS IMPLICATIONS

There are numerous commercial centers in the study area that could have their access affected by the build alternatives (see **Figure 4.4-3**). Commercial centers are defined here as areas having a grouping of business or retail activities. Easy access to retail areas is necessary to sustain sales. Easy access to the major transportation facilities is necessary for manufacturing and wholesaling businesses that rely on trucking for the receipt of raw materials and for the distribution of finished products. Successful business centers are frequently located near major transportation facilities that provide efficient access for office workers. New transportation facilities have the potential to affect commercial access within the study area and thus economic conditions. Retail sales and tax base can be affected if access to local businesses is dramatically changed by construction of a build alternative.

The largest commercial center within the study area is at Interlocken/Flatiron Crossing where there are mixed business, retail, and residential land uses. Access to these areas of Interlocken/Flatiron Crossing will be somewhat modified by several of the build alternatives. For the Freeway Alternative and Tollway Alternative, the proposed alignments will not change access along Interlocken Loop, which will continue to be accessible from SH 128 at the south and the Northwest Parkway at the north. However, through the immediate Interlocken/Flatiron Crossing area, travelers along either of these two alternatives would not have access to Interlocken/Flatiron Crossing because of the elevated design of the alternatives. Travelers wishing to access Interlocken/Flatiron Crossing would have to become familiar with the access points to Intelocken Loop at the north and south. There would be no appreciable travel distance difference between these build alternatives and the No Action Alternative. The Regional Arterial Alternative and Combined Alternative (Recommended Alternative) would maintain access to Interlocken/Flatiron Crossing because these alternatives would only expand the capacity of the existing roadway system and would not be elevated through Interlocken/Flatiron Crossing.



Business and retail land uses can be found at numerous locations along Indiana Street and McIntyre Street. There are multiple commercial centers near the intersections of Indiana Street/McIntyre Street and 64th Avenue. These commercial centers include: Arvada Technological Center, Arvada West Town Center, Indiana Business Center, Kendrick 64 Business Park, Sundstrand Fluid Handling Complex, Westwoods Center, and Westwoods Shopping Center. Other commercial centers along Indiana Street and McIntyre Street are the Cimarron Park commercial center at SH 72 and Indiana Street, the 44th Avenue Commercial Center at 44th Avenue and McIntyre Street, and the Coors Technology Center at SH 58 and McIntyre Street. Only one alternative expands the roadway capacity in this area, a portion of the Combined Alternative (Recommended Alternative). The planned changes to Indiana Street and McIntyre Street under this alternative are to improve the roadway to a principal arterial classification (see **Table 2.3-1**). Access to these commercial centers would be improved because of the enhanced capacity with the principal arterial roadway and the added connectivity between Indiana Street and McIntyre Street near 64th Avenue.

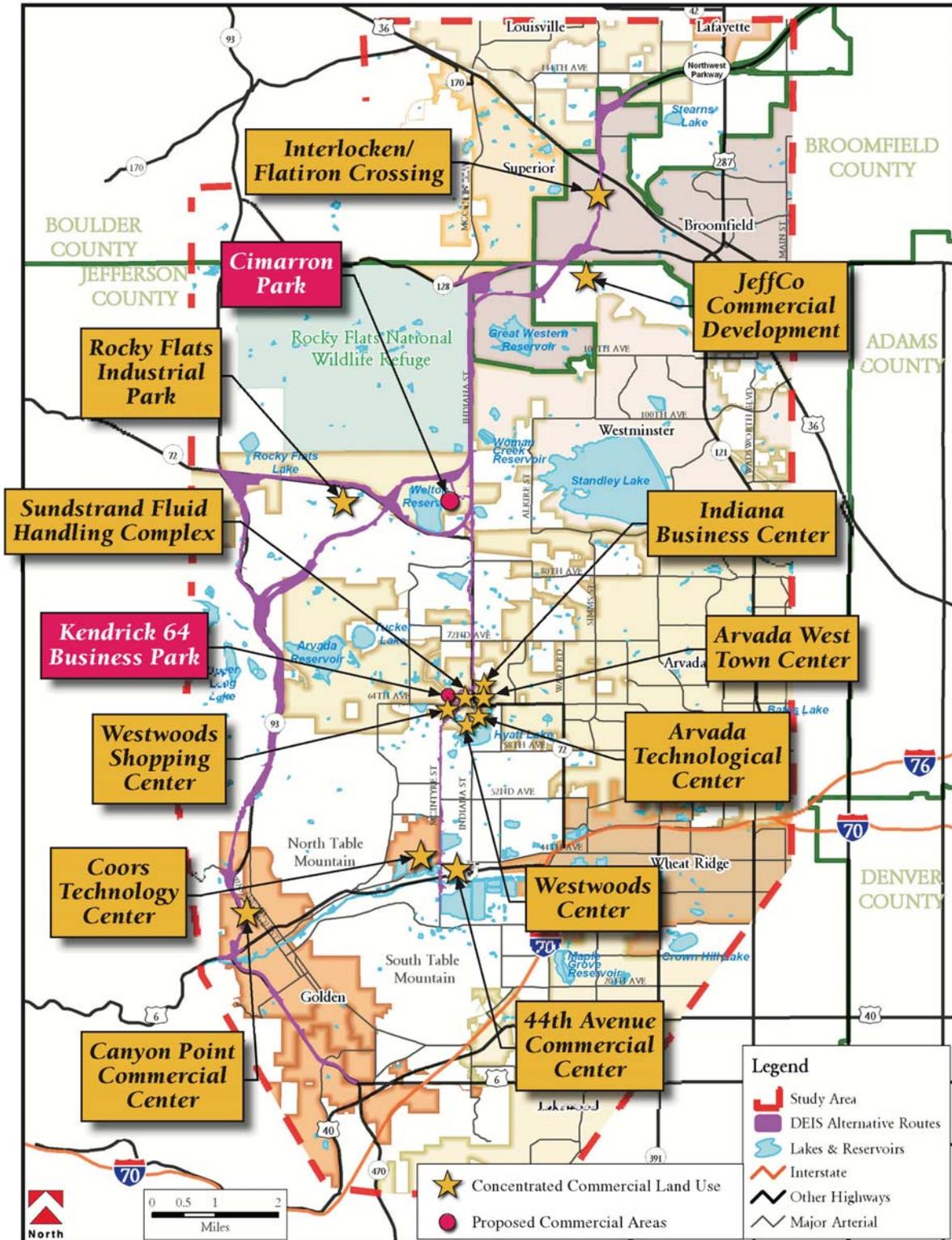
A grouping of businesses at the Rocky Flats Industrial Park is located south of SH 72 between Indiana Street and SH 93. These businesses will have their access to SH 72 somewhat altered by the Regional Arterial Alternative. Access to SH 72 is accommodated by this alternative but patrons of some businesses will have to drive an additional 1/4 mile because the alternative consolidates access onto SH 72, a change from current conditions that should improve safety. The business park will have enhanced regional access with the other build alternatives because of a planned interchange with SH 72 that would be in close proximity to the business park.

The Canyon Point Commercial Center located between Iowa Street and Washington Avenue in north Golden will have its access modified with three of the four build alternatives. Currently, patrons can access the commercial center directly from SH 93 using either Iowa Street or Washington Avenue. With the Freeway Alternative, access to the commercial center will be provided from the new Golden Gate Canyon Road interchange. Patrons will exit the freeway facility at this interchange and use a frontage road constructed on the west side of the alignment to access Washington Avenue. From Washington Avenue, the commercial center can be reached by crossing over the freeway facility via a grade separation along Washington Avenue. This new route will require patrons to travel an additional 1.50 miles compared to the current configuration of access. The Tollway Alternative will not modify access from SH 93 itself resulting in no impact to local patrons. Travelers on the tollway facility will be required to access SH 93 from the north or south in order to access the commercial center. For both the Regional Arterial Alternative and the Combined Alternative, the access to the commercial center will be strictly from Washington Avenue. Patrons normally accessing the commercial center from Iowa Street will have to travel an additional 0.36 miles in order to access the commercial center from Washington Avenue. Because the local street configuration will be maintained regardless of the alternative chosen, local access to the commercial center will be unaffected.

An increase in the travel distance for shoppers could change the market for the goods and services provided at this center and could affect the viability of the current shops.



Figure 4.4-3 Commercial Centers



Source: Compiled by FHU, 2006.



4.4.2.6 ALTERNATIVES' POTENTIAL FOR INDUCING GROWTH

DRCOG has a rigorous process to develop population and employment forecasts for future years and to allocate regional forecasts to specific communities of the metropolitan area. These are based on direct input from local communities' land use plans, master plans for specific areas, zoning designations, transportation plans and quantifications of remaining area available for development to accommodate future growth.

This regional planning data is the basis for the comparative analysis of the alternatives with their configurations, footprints, and traffic performance.

It is recognized that forecasts into the future can be affected by variables of timing and market events that might prove different from the assumptions used in the forecasts.

There are key areas where the build alternatives could potentially induce growth and have an accelerated development impact due to the type, timing, or intensity of development (see **Figure 4.4-2**). The land use expert panel discussed two of these, the Vauxmont/Cimarron Park area and the Keller area. The third, the Rocky Mountain Metropolitan Airport (formerly the Jefferson County Airport) area, was identified as a key area through conversations with Jefferson County planners and the Jefferson County Economic Development Council.

Of the key areas, the Vauxmont/Cimarron Park is furthest along in the Planned Unit Development (PUD) approval process with Arvada. Both the Keller and the Rocky Mountain Metropolitan Airport (formerly the Jefferson County Airport) areas are in very early planning investigations. Additionally, mineral resources are mined on the western portion of the Keller area and this use is expected to continue for a 20-year period.

The accessibility provided by all of the alternatives would provide immediate or adjacent access opportunities if constructed (see **Figure 4.4-2**). Mobility factors as measured by volume and speed, are best provided by the Freeway Alternative, followed by the Tollway Alternative, then by the Combined Alternative (Recommended Alternative), and finally by the Regional Arterial Alternative.

The Freeway Alternative and Regional Arterial Alternative would have a more uncertain timeframe for construction because no current source of funding has been identified. Alternatives with tolling, the Tollway Alternative and Combined Alternative (Recommended Alternative), would have an identified funding source for some of the roadway construction. Bond proceeds would be able to cover partial construction costs and would allow portions of the facility to be built sooner than an alternative without tolling. The additional elapsed time for the alternatives without tolling could be a constraint to the timing of economic growth. Given this set of variables that affect market share capture and timing, it is not foreseen that any of the build alternatives would include a greater outcome than forecasted by DRCOG (Metro Vision, 2030).

Comparisons are from DRCOG traffic analysis zone (TAZ) data for the economic areas to show the change in growth forecasts for households and employment for the years 2005 to 2015 and the years 2015 and 2030.

An additional comparison of households and employment between the 2030 DRCOG data and forecasts by Jefferson County has been prepared (see **Table 4.4-8**). The Jefferson County data does not have a firm forecast date, but reflects an approximate build out.

For the economic areas, Jefferson County foresees a lesser amount of household development, but greater employment activity than does DRCOG. However, both entities forecast dramatic levels of community development for the No Action Alternative (see **Section 4.1**).

Economic forecasts are highly dependent on modeling assumptions and available data. Forecasts are subject to change as soon as new data are available and when economic conditions change. While these forecasts are useful for planning, they should be viewed with an understanding of the uncertainty inherent in their nature. Therefore, based on existing conditions, informed forecasts, current planning, and ongoing build out of the adjacent communities, none of the alternatives are expected to have a large influence on DRCOG forecasts of the study area.



Table 4.4-8 Economic Area Comparisons between DRCOG and Jefferson County Forecasts

Economic Area	DRCOG vs. Jefferson County 2030 Land Use Model Data							
	2030 DRCOG Land Use Model		Jefferson County Forecast		Households Jefferson County Versus DRCOG		Employment Jefferson County Versus DRCOG	
	Households	Employment	Households	Employment	Absolute Change	Percent Change	Absolute Change	Percent Change
Key Area within SH 93: Keller	4,100	678	1,000	1,500	-3,100	-75.6	822	121.2
Key Area within SH 72: Vauxmont	74	7,439	74	7,439	0	0.0	0	0.0
Key Area within SH 128: Rocky Mountain Metropolitan Airport (formerly the Jefferson County Airport)	1,503	2,680	8	23,775	-1,495	-99.5	21,095	787.1
Total	5,677	10,797	1,082	32,714	-4,595	-80.9	21,917	203.0

Source: DRCOG, 2030 Metro Vision Regional Transportation Plan, November 2004; Jefferson County Land Use Forecasts, 2004.

4.4.2.7 HOME VALUE EFFECTS

An article published in the Denver Post on September 18, 2005, further discussed the issue of home values for properties located near major facilities. The focus of the article was the impact to home values during and after construction of the T-REX project along Interstate 25. “According to Denver assessor’s office records, of 13 neighborhoods bordering T-REX along I-25, appreciation rates in all or portions of nine neighborhoods have fallen below the city’s overall 24.3 percent increase in median home values since 2001, at times reaching only half that growth rate since the project began.” This analysis and conclusion in Denver is consistent with the discussion provided in this chapter (see **Section 4.4.1.6**).

Historically the value of homes located in close proximity to facilities such as US 6, SH 93, and I-25 are slightly lower than those homes located several blocks away. Conversely, the values of new housing currently under construction located in close proximity to C-470 have similar values to those located a mile away from the same facility. Based on existing home value analysis, the construction of alternatives in close proximity to existing houses is anticipated to lessen the rate of appreciation in values over time.



4.4.3 SUMMARY

The potential losses and gains for the study area in employment, tax revenues, growth, and home values were examined in this section. Analyses are based on currently available data and require updating as conditions change. Methods used to approximate the economic impacts are generally conservative. Results are compared to current state conditions when known.

The increases in facility construction employment along with spin-off employment are much larger than the estimated decreases in average county income for all of the build alternatives. For the build alternatives, the average county income is estimated to decline less than \$6 per year given the worst-case circumstances. Small changes in local retail sales may also result if all of the residents relocate to settle in new counties. These changes are deemed to be small as compared to the robust retail economies in the counties investigated. Although changes in the property tax revenues are projected, particularly with the Combined Alternative (Recommended Alternative), the total losses are negligible compared to state collections. Long-term impacts to home values are inconclusive.

All of the build alternatives will affect access to commercial centers within the study area. The Freeway Alternative will affect access to the Interlocken/Flatiron Crossing area and the Canyon Point Commercial Center. The Tollway Alternative will affect access to the Interlocken/Flatiron Crossing area. The Regional Arterial Alternative will affect access to the Rocky Flats Industrial Park and the Canyon Point Commercial Center. The Combined Alternative will affect access to the Canyon Point Commercial Center. The commercial centers along Indiana Street and McIntyre Street will have improved access with the implementation of this alternative.

Land use forecasts within the study area project continued growth and development through 2030 regardless of the implementation of any build alternative (see **Section 4.1**). As indicated in Section 4.1 of this document, existing area land use plans show very little undeveloped land remaining in the area, as “there is also a greater focus on redevelopment and infill and more mixed use and higher density developments. For example, Arvada is currently approaching full build out with approximately 20 percent of the land within its planning area undeveloped to be divided among residential, non-residential, and open space land uses. Broomfield’s plan also addresses the issue and indicates that of its 34 square miles, the majority of land has been developed or has approved development plans. Broomfield further identifies the amount of land for each type of major land use (residential, open lands, etc.) currently and at projected build out.” Given these development plans, it is assumed that growth induced by a build alternative would be greatly limited in scope and magnitude. Additionally, building facilities in the study area may accelerate projected growth but there is no evidence that it would induce new growth.

Considering the economic impact items discussed in this section, the alternative with the least effect is the No Action Alternative. The impacts for the Freeway Alternative, Tollway Alternative, and Regional Arterial Alternative are similar while the Combined Alternative (Recommended Alternative) is expected to have greater impacts. The Combined Alternative (Recommended Alternative) also provides access benefits to commercial centers along Indiana Street/McIntyre Street that the other build alternatives do not provide.



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REFERENCES

- Colorado Department of Local Affairs. 2004 Annual Report, Table 5.
- Colorado Department of Revenue. 2005 Published Statistics. Available at:
http://www.revneue.state.co.us/TPS_Dir/wrap.asp?incl=Jan06salestaxincreases
(accessed December 2005).
- Colorado Department of Revenue. Annual Report 2004, pp. 54-57. Available at:
http://www.revenue.state.co.us/Stats_Dir/AR2004.pdf
(accessed December 2005).
- Denver Regional Council of Governments. Household Forecast, 2005. Available at:
<http://www.drcog.org/documents/drcog%20socioeconomic%20forecasts%20pop%20and%20hhholds.xls>
(accessed December 2005).
- Denver Regional Council of Governments (DRCOG). *2030 Metro Vision Regional Transportation Plan*. November 2004
- . 2005. *Compass Regional Travel Model Version 93 Modified* (July).
- Economic Policy Institute for 2003. Updated Employment Multipliers for U.S. Economy 2003, Table 6. Josh Bivens. Available at:
http://www.epinet.org/workingpapers/epi_wp_268.pdf
(accessed December 2005).
- United States, 2000 Census. Income Distribution in 1999 of Households and Families. Available at:
[http://factfinder.census.gov/servlet/QITTable?_bm=y&-context=qt&-Tables=\(DEC_2000_SF3_U_QTP32\)&-qr_name=DEC_2000_SF3_U_QTP32&-ds_name=DEC_2000_SF3_U&-CONTEXT=qt&-tree_id=403&-redoLog=true&-all_geo_types=N&-_caller=geoselect&-geo_id=05000US08013&-geo_id=05000US08059&-geo_id=16000US0809280&-search_results=01000US&-format=&-lang=en](http://factfinder.census.gov/servlet/QITTable?_bm=y&-context=qt&-Tables=(DEC_2000_SF3_U_QTP32)&-qr_name=DEC_2000_SF3_U_QTP32&-ds_name=DEC_2000_SF3_U&-CONTEXT=qt&-tree_id=403&-redoLog=true&-all_geo_types=N&-_caller=geoselect&-geo_id=05000US08013&-geo_id=05000US08059&-geo_id=16000US0809280&-search_results=01000US&-format=&-lang=en)
(accessed December 2005).
- United States Department of Labor. Available at:
www.bls.gov
(accessed December 2005).
- United States, NAICS. 2002 Economic Census Summary Statistics. Available at:
<http://www.census.gov/econ/census02/data/us/us000.htm>
(accessed December 2005).



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