

Economic Impact Analysis of Growth in Banning Lewis Ranch

Prepared for:
City of Colorado Springs, Colorado

November 27, 2017



4701 Sangamore Road
Suite S240
Bethesda, MD 20816
(301) 320-6900
www.TischlerBise.com

[PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
OVERVIEW	1
GROWTH ANALYZED	2
<i>Scenario 1: Look Back.....</i>	<i>2</i>
<i>Scenario 2: 30-Year Projection.....</i>	<i>2</i>
APPROACH AND MAJOR ASSUMPTIONS.....	4
<i>Fiscal Impact Analysis</i>	<i>4</i>
Revenue Structure	4
Inflation Rate.....	4
<i>Economic Impact Analysis.....</i>	<i>4</i>
General Approach	5
SUMMARY OF REVENUE ANALYSIS RESULTS: LOOK BACK SCENARIO.....	5
SUMMARY OF ECONOMIC IMPACT ANALYSIS RESULTS: 30-YEAR PROJECTION	6
<i>Long-Term Impact.....</i>	<i>6</i>
<i>Temporary Impact.....</i>	<i>7</i>
BACKGROUND	8
GROWTH ANALYZED	10
FISCAL IMPACT ANALYSIS.....	12
<i>General Approach</i>	<i>12</i>
<i>Inflation Rate.....</i>	<i>12</i>
<i>Non-Fiscal Evaluations</i>	<i>12</i>
FINDINGS	13
ECONOMIC IMPACT ANALYSIS.....	15
<i>General Approach</i>	<i>15</i>
SUMMARY OF RECENT TRENDS	16
LONG-TERM ECONOMIC IMPACT OF FUTURE GROWTH.....	19
<i>Economic Impact of Nonresidential Development.....</i>	<i>20</i>
<i>Economic Impact of Residential Development.....</i>	<i>20</i>
TEMPORARY ECONOMIC IMPACTS FROM DEVELOPMENT.....	21
<i>Economic Impacts from Construction</i>	<i>22</i>
APPENDIX A: LAND USE PROTOTYPES.....	23
APPENDIX B: GROWTH SCENARIOS.....	25

EXECUTIVE SUMMARY

OVERVIEW

The City of Colorado Springs retained TischlerBise to conduct a Fiscal and Economic Impact Analysis of new development in Banning Lewis Ranch.

Banning Lewis Ranch, annexed by Colorado Springs in 1988, encompasses approximately 24,000 acres on the east side of the Colorado Springs Municipal Airport. The ultimate buildout of the site is anticipated to take at least 50 years. The economic analysis is based on a 30-year projection period. Also included is a “look back” revenue projection to examine public sector revenue if the developed had started in 1995.

Fiscal Impact Analysis (FIA) is a process to evaluate revenue generation and operating and capital costs to a jurisdiction associated with the provision of public services and facilities under a set of assumptions. A fiscal impact analysis shows direct revenues and costs from new development only and does not include revenues or costs generated from existing development.

Economic Impact Analysis (EIA) is a process to evaluate the economic benefit of an entity or industry/industries on a defined geographic location—either due to its presence, expansion, or contraction. The key components of any economic impact analysis are typically measured by increases in personal income, value added (or gross regional product), business output, and/or job creation. It identifies direct impacts—the actual number of employees of the entity or industry as well as the jobs supported by the spending of the entity/industry itself. Direct effects are also measured in personal income, gross regional product, and business output.

An economic impact analysis also evaluates the “spin-off” or “multiplier” effects that direct spending has on the location in terms of jobs, labor income, and total economic output or activity through what is referred to as indirect and induced effects.

Three reports are provided to the City of Colorado Springs on the overall fiscal and economic analysis of growth in Banning Lewis Ranch:

1. *Cost to Serve Fiscal Impact Analysis of Growth in Banning Lewis Ranch*: The report on the fiscal impacts of growth in Banning Lewis Ranch.
2. *Level of Service Document*: Appendix to the *Cost to Serve Fiscal Impact Analysis of Growth in Banning Lewis Ranch* providing supporting data, assumptions, and methodologies for the analyses.
3. **Economic Impact Analysis of Growth in Banning Lewis Ranch: The report on the economic impacts of growth in Banning Lewis Ranch and a revenue analysis of potential lost public revenues from leapfrogged development.**

This document is item number 3 above.

GROWTH ANALYZED

Two separate scenarios are analyzed for the Economic Impact Analysis and Revenue Analysis: (1) “Look Back” scenario and (2) 30-Year Projection. For organizational purposes, the scenarios are labeled Scenario 1 and 2, respectively.

Scenario 1: Look Back

The Look Back Scenario analyzes the potential lost revenue to Colorado Springs from development leapfrogging Banning Lewis Ranch and occurring elsewhere in unincorporated El Paso County. The analysis looks at the time period 1995 through 2016. Revenues include sales tax and property tax. Figure 1 summarizes residential and nonresidential development that could have occurred in Banning Lewis Ranch from 1995 through 2016.

Figure 1: Growth Summary of Look Back Scenario

	Look Back
TOTAL HOUSING UNITS	7,562
POPULATION	19,814
COMMERCIAL SF	444,083
INDUSTRIAL SF	184,283
OFFICE SF	112,742
TOTAL NONRESIDENTIAL SF	741,107
COMMERCIAL JOBS	888
INDUSTRIAL JOBS	426
OFFICE JOBS	374
DIRECT JOBS (LONG-TERM)	1,688

Scenario 2: 30-Year Projection

The growth scenario analyzed assumes developable land within Banning Lewis Ranch is developed using the land use breakdown presented by Oakwood in its BLR PUD Concept Plan except for any industrial land uses and activity center/office land uses near the future intersection of CO Hwy 94 and BLR Parkway.

This growth scenario assumes housing is developed based on Colorado Springs Utilities (CSU) projections for Banning Lewis Ranch. The housing mix is based on Oakwood’s concept plan and includes low-density single family detached (72.5 percent), medium-density single family detached (22.9 percent), townhouse (0.8 percent), and multi-family (3.8 percent) units. Based on CSU projections, buildout of planned residential units in Oakwood’s concept plan will occur in year 12. Using a comparable land use mix as Oakwood, a similar development would reach buildout in year 22, and a third buildout would occur in year 29.

Nonresidential development in this scenario includes 118 acres of institutional development for every 1,700 acres of residential development. Due to BLR’s proximity to the Colorado Springs Municipal Airport and the future intersection of Colorado Highway 94 and Banning Lewis Ranch Parkway, land exists for commercial, industrial, and office development. Over the 30-year projection timeframe, commercial development consumes 276 acres, industrial development consumes 130 acres, and office development consumes 259 acres with a total projected floor area of 9.6 million square feet by year 30.

Figure 2: Growth Summary of Scenario 2

	BLR Growth Scenario: 30-Year Growth
SINGLE FAMILY DETACHED, LOW DENSITY	17,599
SINGLE FAMILY DETACHED, MEDIUM DENSITY	5,252
TOWNHOUSE	190
MULTIFAMILY	864
TOTAL HOUSING UNITS	23,905
<i>Total Growth from Base Year</i>	<i>12%</i>
POPULATION	61,770
<i>Total Growth from Base Year</i>	<i>13%</i>
RETAIL SF	3,005,500
OFFICE SF	2,824,200
INDUSTRIAL SF	1,411,400
INSTITUTIONAL SF	2,370,200
TOTAL NONRES SF	9,611,300
<i>Total Growth from Base Year</i>	<i>15%</i>
DIRECT JOBS	20,979
<i>Total Growth from Citywide Base Year</i>	<i>10%</i>
INDIRECT AND INDUCED JOBS (LONG-TERM)*	14,143
TOTAL JOBS (LONG-TERM)	35,122
<i>* Economic impact; not included in the Fiscal Model</i>	

APPROACH AND MAJOR ASSUMPTIONS

Fiscal Impact Analysis

A fiscal impact analysis determines whether revenues generated by new growth are sufficient to cover the resulting costs for service and facility demands placed on a jurisdiction. Fiscal analysis enables local governments to estimate the difference between the costs of providing services to development and the taxes, user fees, and other revenues that will be collected by the government as a result of new development. This fiscal impact analysis uses an average cost method to capture the incremental revenue generated by development.

This report addresses only potential “lost” **revenue** to the City from growth that did not occur in Banning Lewis Ranch. **A full Fiscal Impact Analysis of future growth in BLR is provided in the report, *Cost to Serve Fiscal Impact Analysis of Growth in Banning Lewis Ranch*.**

REVENUE STRUCTURE

Revenues are projected assuming that the current revenue structures and rates for Colorado Springs, as defined in the FY2017 budget, will not change during the analysis period.

INFLATION RATE

The rate of inflation is assumed to be zero throughout the projection period, and revenue projections are in constant 2017 dollars. This assumption is in accord with budget data and avoids the difficulty of speculating on inflation rates and their effect on revenue categories. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time. In general, including inflation is complicated and unpredictable. Using constant dollars avoids these issues.

Economic Impact Analysis

An economic impact analysis is place-specific. That is, the results will vary depending on the region being evaluated. The general concept is that money circulates in the economy until they are “leaked out” of the area under study. Therefore, the larger the geographic area is, the greater the likelihood for the impacts to be captured. It is important to distinguish an economic impact analysis from a fiscal impact analysis. Where a fiscal impact analysis projects cash flow to the public sector, an economic impact analysis focuses on the cash flow to the private sector—measured in income, jobs, output, and indirect impacts.

The economic impact analysis for the City of Colorado Springs is a projection of the gross economic impact from projected development in Banning Lewis Ranch. The analysis models the impact from the new development but does not make any assumptions about contractions, shifts, or displacements from one area of the economy to another due to new development or other economic forces.

GENERAL APPROACH

The analysis of the Colorado Springs and El Paso County economies were used to identify potential growth and applied to residential projection assumptions from Colorado Springs Utilities. These projections were modeled using IMPLAN to project potential economic impacts from future growth. In addition to long-term economic impacts from employment growth, short-term economic impacts from construction activity are modeled as well using the IMPLAN model. IMPLAN is an input-output model, which tracks the interdependence among various producing and consuming sectors of an economy. IMPLAN is one of several commercial models used for economic impact analysis (others include REMI and RIMS II).

SUMMARY OF REVENUE ANALYSIS RESULTS: LOOK BACK SCENARIO

The analysis of Scenario 1 looks at three revenue sources—sales tax on construction, other sales tax (retail), and property tax. Shown in Figure 3, of the total revenue from the “Look Back,” approximately \$88 million (72 percent) is estimated from residential growth and approximately \$34 million (28 percent) is estimated from nonresidential growth. Utility Charges account for the largest revenue stream, while Sales Tax from construction and other sectors account for significant portions of the total as well. It is estimated that had development started in Banning Lewis Ranch in 1995, there would have been a total of \$122.2 million generated in revenue by 2017.

Figure 3: Scenario 1 – Total Lost Revenue by 2017

	Residential	Nonresidential	Total
Sales Tax on Construction	\$27,883,927	\$808,083	\$28,692,010
Other Sales Tax	\$0	\$31,974,313	\$31,974,313
Property Tax	\$6,499,727	\$648,039	\$7,147,766
Utility Charges*	\$53,371,526	\$1,034,248	\$54,405,774
	\$87,755,180	\$34,464,683	\$122,219,863

* Fixed charges

Source: Summit Economics (estimate through 2014); TischlerBise extrapolation through 2016

SUMMARY OF ECONOMIC IMPACT ANALYSIS RESULTS: 30-YEAR PROJECTION

Long-Term Impact

The City of Colorado Springs is expected to add almost 21,000 direct jobs in Banning Lewis Ranch over the next 30 years. With this direct growth, additional economic impacts are anticipated given the local economy. The combined cumulative economic impact of projected nonresidential growth in Banning Lewis Ranch is summarized below in Figure 4. As shown, by year 30, over 35,000 jobs can be attributed to projected growth and an annual economic output of \$3.7 billion.

Figure 4: – Long-Term Economic Impacts

Long-Term Economic Effects

City of Colorado Springs - Banning Lewis Ranch Economic Impact Model

Category	Cumulative	Year 30
Direct Effect Jobs	20,979	20,979
Indirect and Induced Effect Jobs	14,143	14,143
TOTAL LONG-TERM JOBS CREATED	35,122	35,122
Direct Effect Labor Income	\$14,440,196,169	\$1,262,898,798
Indirect and Induced Effect Labor Income	\$7,102,897,462	\$622,704,439
TOTAL LABOR INCOME	\$21,543,093,631	\$1,885,603,237
Direct Effect Output	\$24,752,342,839	\$2,174,423,765
Indirect and Induced Effect Output	\$16,955,388,790	\$1,486,748,675
TOTAL LONG-TERM ECONOMIC IMPACT (Output \$)	\$41,707,731,629	\$3,661,172,439

Source: Employment and output multipliers and output value per job from IMPLAN for Colorado Springs MSA, 2014.

Temporary Impact

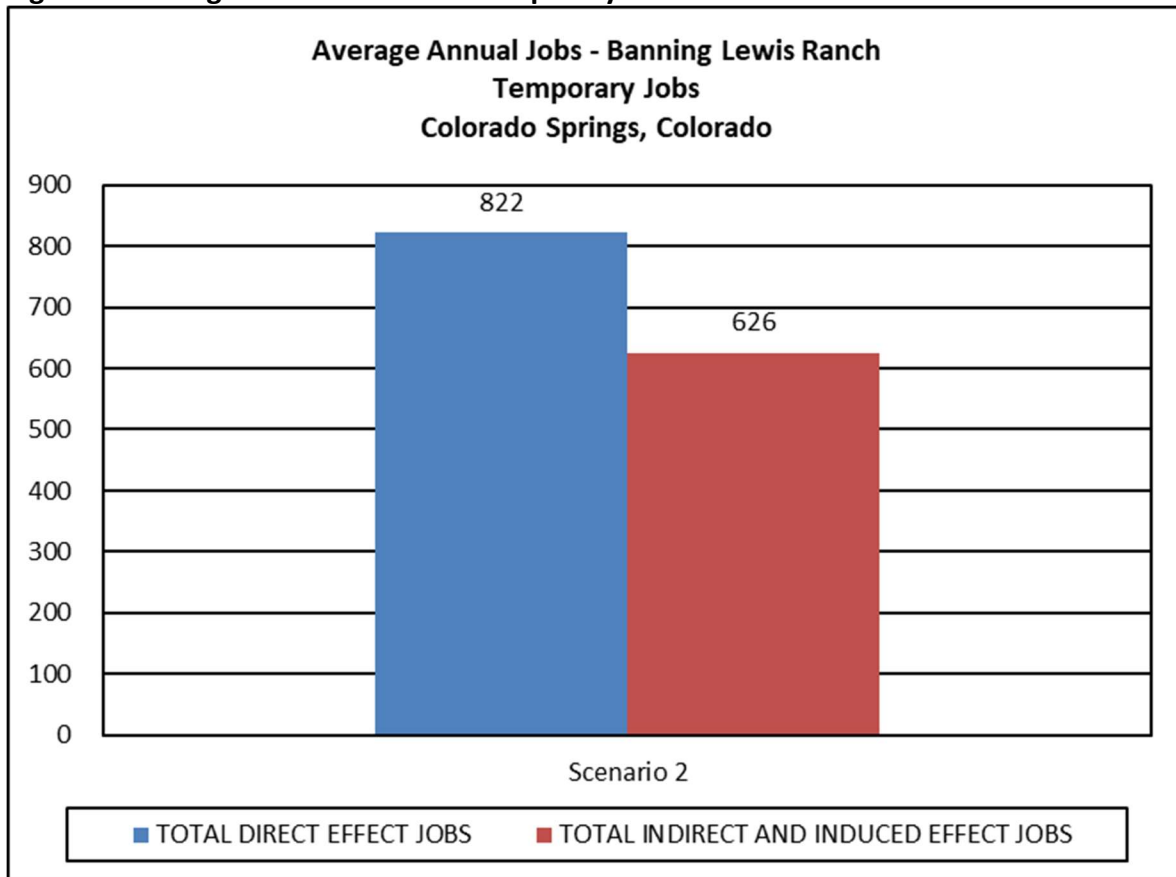
Construction activity will also lead to economic impacts. For construction impacts, we model average annual impacts based on assumptions for future residential and nonresidential development activity. Below is a summary of the average annual economic impacts from new construction. Over the 30-year analysis period, average annual temporary construction jobs total 1,448 with approximately \$181.8 million in total annual economic output.

Figure 5: Average Annual Results – Temporary Jobs

30-Year Average Annual Temporary Economic Effects (Construction) City of Colorado Springs - Banning Lewis Ranch Economic Impact Model	
Category	Scenario 2
TOTAL DIRECT EFFECT JOBS	822
TOTAL INDIRECT AND INDUCED EFFECT JOBS	626
TOTAL TEMPORARY JOBS CREATED	1,448
TOTAL TEMPORARY ECONOMIC IMPACT (Output \$)	\$181,847,008

Source: Employment and output multipliers and output value per job from IMPLAN for Colorado Springs MSA, 2014.

Figure 6: Average Annual Results – Temporary Jobs



BACKGROUND

The City of Colorado Springs retained TischlerBise to conduct a Fiscal and Economic Impact Analysis of new development in Banning Lewis Ranch.

Banning Lewis Ranch, annexed by Colorado Springs in 1988, encompasses approximately 24,000 acres on the east side of the Colorado Springs Municipal Airport. The ultimate buildout of the site is anticipated to take at least 50 years. The economic analysis is based on a 30-year projection period. Also included is a “look back” revenue projection to examine public sector revenue if the developed had started in 1995.

Fiscal Impact Analysis (FIA) is a process to evaluate revenue generation and operating and capital costs to a jurisdiction associated with the provision of public services and facilities under a set of assumptions. A fiscal impact analysis shows direct revenues and costs from new development only and does not include revenues or costs generated from existing development.

An **Economic Impact Analysis** is place-specific. That is, the results will vary depending on the region being evaluated. The general concept is that money circulates in the economy until they are “leaked out” of the area under study. Therefore, the larger the geographic area is, the greater the likelihood for the impacts to be captured. It is important to distinguish an economic impact analysis from a fiscal impact analysis. Where a fiscal impact analysis projects cash flow to the public sector, an economic impact analysis focuses on the cash flow to the private sector, measured in income, jobs, output, and indirect impacts.

The economic impact analysis for the City of Colorado Springs is a projection of gross economic impact from projected increase in development in Banning Lewis Ranch. The analysis models the impact from the net increase in development but does not make assumptions about contractions, shifts, or displacements from one area of the economy to another due to new development or other economic forces.

City staff and TischlerBise developed two development scenarios for Banning Lewis Ranch to conduct the fiscal and economic impact analysis—one looking back to 1995 and the other projecting 30 years into the future. The “Look Back” scenario estimates the fiscal impact, or lost revenue, from development occurring outside of Banning Lewis Ranch. These impacts are based on data from the El Paso County Assessor, Pikes Peak Regional Building Department, and city staff and are also represented by numerical projections of nonresidential building area, employment, housing units, and population. The forward projection scenario evaluates future development of Banning Lewis Ranch by numerical projections of nonresidential building area, employment, housing units, and population.

These projections are inputs to the fiscal and economic models. Summaries of development/land use assumptions are provided in the body of this document. All discussions and analysis in this document reflect the previous 22 years of lost development to unincorporated areas of El Paso County or the next 30 years of development in Banning Lewis Ranch (as reflected in the scenario land use assumptions).

After the scenarios are identified, the next major step of the analysis was to determine current service levels and associated revenues. This was done through on-site interviews, follow-up discussions with staff, and a review of applicable budgets and other relevant documents. Additionally, our local experience with Colorado jurisdictions as well as our national experience conducting over 800 fiscal impact analyses was beneficial. The results of the level-of-service analysis were used to develop fiscal and economic impact models to assess the impact of Banning Lewis Ranch on Colorado Springs. The assumptions are documented in *Level of Service* Appendix, issued under separate cover.

GROWTH ANALYZED

Two scenarios for Banning Lewis Ranch are analyzed in this report. Scenario 1 analyzes the potential lost revenue to Colorado Springs from development leapfrogging Banning Lewis Ranch and occurring elsewhere in unincorporated El Paso County. The analysis looks 22 years into the past, from 1995 through 2016. Revenues include sales tax and property tax. The second scenario projects 30 years forward, and includes the same amount of residential development based on the Planned Unit Development (PUD) Concept Plan developed by Oakwood Homes. Scenario 2 is used in the Economic Analysis Model. For organizational purposes, the scenarios are labeled Scenario 1 and 2, respectively.

- 1. Scenario 1: Look Back.** This development scenario assumes Banning Lewis Ranch would have captured a portion of the development activity in unincorporated El Paso County since 1995. Residential development is limited to parcels of less than one half of an acre since parcels larger than that are less common in an urbanized area.
- 2. Scenario 2: 30 Year Projection.** This development scenario assumes housing is developed based on Colorado Springs Utilities (CSU) projections for Banning Lewis Ranch. The housing mix is based on Oakwood's concept plan and includes low-density single family detached (72.5 percent), medium-density single family detached (22.9 percent), townhouse (0.8 percent), and multi-family (3.8 percent) units. Based on CSU projections, buildout of planned residential units in Oakwood's concept plan will occur in Year 12. Using a comparable land use mix as Oakwood, a similar development would reach buildout in Year 22, and a third buildout would occur in Year 29. Nonresidential development in this scenario includes ten acres of commercial development and 118 acres of institutional development for every 1,700 acres of residential development. Commercial development is reliant on residential development and occurs in Year 8, Year 19, and Year 27. Institutional development occurs evenly throughout each buildout cycle. Due to BLR's proximity to the Colorado Springs Municipal Airport and the future intersection of Colorado Highway 94 and Banning Lewis Ranch Parkway, office and commercial development are projected in this scenario.

A summary of demand assumptions is provided in the figures below. Figure 7 provides a 22-year summary of the "Look Back" scenario. Figure 8 summarizes the 30-year development assumptions for Scenario 2 and includes data for the projected net increases in housing units, population, nonresidential square feet, and jobs in each scenario. Further detail on each scenario is provided in the *Level of Service Document* issued separately as an Appendix.

Figure 7: Scenario 1 - Projected Net Increases (1995-2016)

	Look Back
TOTAL HOUSING UNITS	7,562
POPULATION	19,814
COMMERCIAL SF	444,083
INDUSTRIAL SF	184,283
OFFICE SF	112,742
TOTAL NONRESIDENTIAL SF	741,107
COMMERCIAL JOBS	888
INDUSTRIAL JOBS	426
OFFICE JOBS	374
DIRECT JOBS (LONG-TERM)	1,688

Figure 8: Scenario 2 – Projected Net Increases (30-Year Period)

	BLR Growth Scenario: 30-Year Growth
SINGLE FAMILY DETACHED, LOW DENSITY	17,599
SINGLE FAMILY DETACHED, MEDIUM DENSITY	5,252
TOWNHOUSE	190
MULTIFAMILY	864
TOTAL HOUSING UNITS	23,905
<i>Total Growth from Base Year</i>	<i>12%</i>
POPULATION	61,770
<i>Total Growth from Base Year</i>	<i>13%</i>
RETAIL SF	3,005,500
OFFICE SF	2,824,200
INDUSTRIAL SF	1,411,400
INSTITUTIONAL SF	2,370,200
TOTAL NONRES SF	9,611,300
<i>Total Growth from Base Year</i>	<i>15%</i>
DIRECT JOBS	20,979
<i>Total Growth from Citywide Base Year</i>	<i>10%</i>
INDIRECT AND INDUCED JOBS (LONG-TERM)*	14,143
TOTAL JOBS (LONG-TERM)	35,122
<i>* Economic impact; not included in the Fiscal Model</i>	

FISCAL IMPACT ANALYSIS

As noted elsewhere, a fiscal impact analysis determines whether revenues generated by new growth are sufficient to cover the resulting costs for service and facility demands placed on a jurisdiction. In this report, only potential “lost” revenues are estimated for the “Look Back” scenario reflecting potential growth that did not occur in Banning Lewis Ranch. **A full fiscal impact analysis is conducted and provided in the report: *Cost to Serve Fiscal Impact Analysis of Growth in Banning Lewis Ranch.***

General Approach

For the “Look Back” fiscal analysis revenues from Sales Tax, Property Tax, and Utility Charges are calculated. Demographic changes are not expected to impact some revenues, and these revenues are therefore considered “fixed” in this analysis. TischlerBise reviewed the FY2017 budget and available supporting documentation and interviewed staff to develop baseline assumptions for the analysis. Assumptions are documented in the *Level of Service Document* issued as an Appendix to this report. For revenues affected by development, the impacts of Banning Lewis Ranch are projected based on net new development.

Inflation Rate

The rate of inflation is assumed to be zero throughout the projection period, and revenue projections are in constant 2017 dollars. This assumption is in accord with budget data and avoids the difficulty of speculating on inflation rates and their effect on revenue categories. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time. In general, including inflation is complicated and unpredictable. Using constant dollars avoids these issues.

Non-Fiscal Evaluations

It should be noted that while a fiscal impact analysis is an important consideration in planning and policy decisions, it is only one of several issues that should be considered. Environmental and social issues, for example, should also be considered when making planning and policy decisions. The above notwithstanding, this analysis will enable interested parties to understand the fiscal implications of future development.

FINDINGS

For the Look Back Scenario, the study analyzes the potential lost revenue to Colorado Springs from development leapfrogging Banning Lewis Ranch and occurring elsewhere in unincorporated El Paso County. The analysis includes residential and nonresidential growth from 1995 through 2016. Six zip codes in unincorporated El Paso County that experienced development during this timeframe are used in this analysis. The analysis examines four streams of revenue: sales tax on construction, other sales tax, property tax, and utility charges. In Figure 9, the residential and nonresidential growth is listed. This analysis assumes that the Banning Lewis Ranch would have captured 78 percent of the housing growth and 68 percent of the nonresidential floor area in the six zip codes.¹

Figure 9. Residential and Nonresidential Growth

Zip Code	El Paso County Housing Units	% Reallocated	Reallocated Housing Units
80106	1,799	100%	1,799
80831	2,476	85%	2,105
80915	757	67%	507
80922	1,269	67%	850
80925	1,935	67%	1,296
80951	1,500	67%	1,005
TOTAL	9,736	78%	7,562

Type	El Paso County Square Feet	% Reallocated	Reallocated Square Feet	Reallocated Jobs
Merchandising	428,636	80%	342,909	686
Warehouse	368,565	50%	184,283	426
Office	140,927	80%	112,742	375
Special Use	148,785	68%	101,174	202
TOTAL	1,086,913	68%	741,107	1,688

By utilizing the revenue factors estimated for housing units and nonresidential land uses, potential lost revenue was estimated and shown in Figure 10. From housing units that may have been captured in Banning Lewis Ranch, \$87.8 million in revenue is estimated as potential “lost” revenue by 2017. From nonresidential development that may have been captured in Banning Lewis Ranch, \$34.5 million in revenue is estimated as potential “lost” revenue by 2017.

¹ Source: Summit Economics, "Opportunity Lost from Development Leapfrogging Banning Lewis Ranch," Pre-Distribution Draft, March 2016.

Figure 10. Total Lost Revenue by 2017

	Residential	Nonresidential	Total
Sales Tax on Construction	\$27,883,927	\$808,083	\$28,692,010
Other Sales Tax	\$0	\$31,974,313	\$31,974,313
Property Tax	\$6,499,727	\$648,039	\$7,147,766
Utility Charges*	\$53,371,526	\$1,034,248	\$54,405,774
	\$87,755,180	\$34,464,683	\$122,219,863

* Fixed charges

Source: Summit Economics (estimate through 2014); TischlerBise extrapolation through 2016

ECONOMIC IMPACT ANALYSIS

An economic impact analysis is place-specific. That is, the results will vary depending on the region being evaluated. The general concept is that money circulates in the economy until they are “leaked out” of the area under study. Therefore, the larger the geographic area is, the greater the likelihood for the impacts to be captured. It is important to distinguish an economic impact analysis from a fiscal impact analysis. Where a fiscal impact analysis projects cash flow to the public sector, an economic impact analysis focuses on the cash flow to the private sector—measured in income, jobs, output, and indirect impacts.

The economic impact analysis for the City of Colorado Springs is a projection of the gross economic impact from projected development in Banning Lewis Ranch. The analysis models the impact from the new development but does not make any assumptions about contractions, shifts, or displacements from one area of the economy to another due to new development or other economic forces.

General Approach

The analysis of the Colorado Springs and El Paso County economies were used to identify potential growth and applied to residential projection assumptions from Colorado Springs Utilities. These projections were modeled using IMPLAN to project potential economic impacts from future growth. In addition to long-term economic impacts from employment growth, short-term economic impacts from construction activity are modeled as well using the IMPLAN model. IMPLAN is an input-output model, which tracks the interdependence among various producing and consuming sectors of an economy. IMPLAN is one of several commercial models used for economic impact analysis (others include REMI and RIMS II).

SUMMARY OF RECENT TRENDS

This section includes a brief overview of recent trends and current conditions in the City of Colorado Springs economy. The goal of this analysis is to quantify the potential economic impact of new development therefore an extensive evaluation of the Colorado Springs economy is beyond the scope of this assignment. However, to make assumptions about potential future growth, an examination of recent trends was warranted and summarized below.

The City of Colorado Springs currently has approximately 200,000 jobs spread across several major industries. A summary of 2014 annual employment by industry category is shown below in Figure 11.

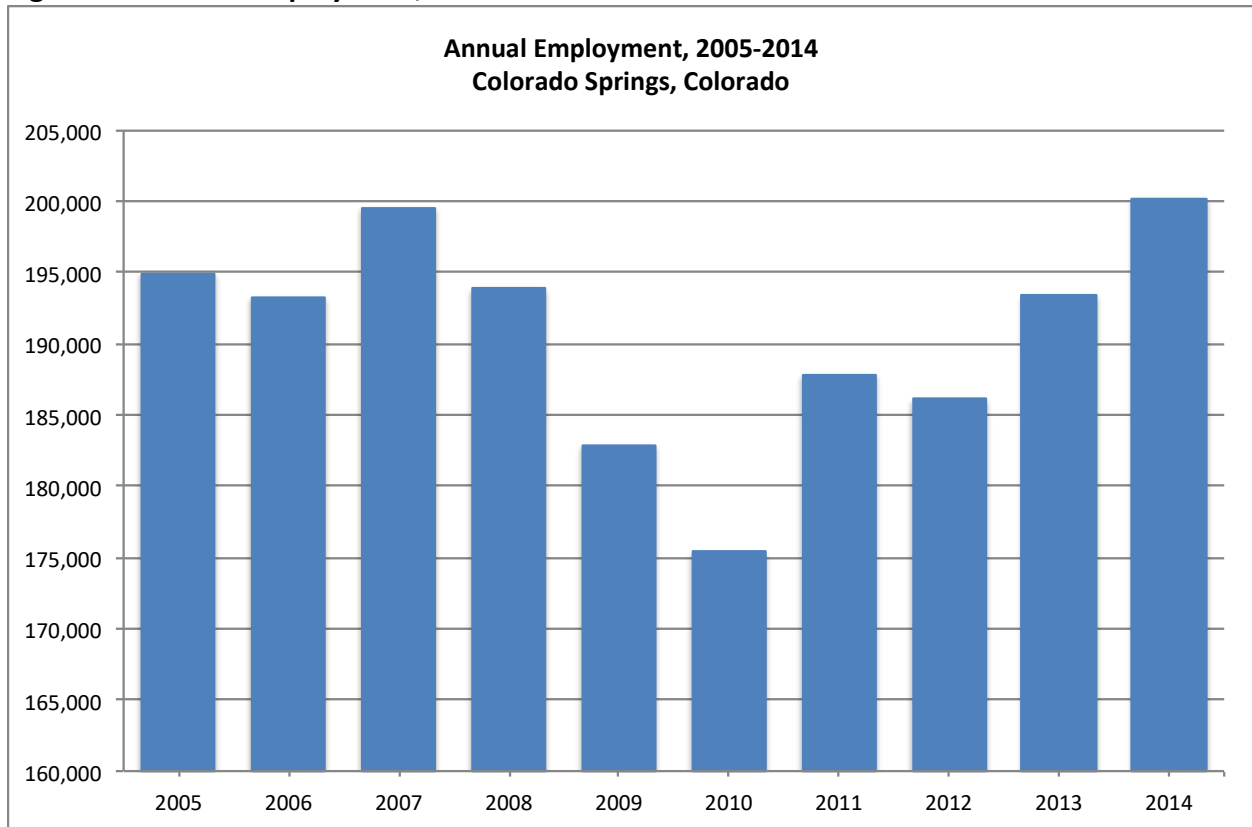
Figure 11. Employment in Colorado Springs (2014)

<i>Industry</i>	<i>2014 Jobs</i>
NAICS 11 Agriculture, Forestry, Fishing and Hunting	63
NAICS 21 Mining	80
NAICS 22 Utilities	355
NAICS 23 Construction	9,130
NAICS 31-33 Manufacturing	9,485
NAICS 42 Wholesale Trade	4,183
NAICS 44-45 Retail trade	24,580
NAICS 48-49 Transportation and warehousing	2,503
NAICS 51 Information	8,409
NAICS 52 Finance and insurance	11,683
NAICS 53 Real estate and rental and leasing	3,678
NAICS 54 Professional and technical services	19,462
NAICS 55 Management of companies and enterprises	1,284
NAICS 56 Administrative and waste services	15,925
NAICS 61 Educational services	17,551
NAICS 62 Health care and social assistance	30,854
NAICS 71 Arts, entertainment, and recreation	3,799
NAICS 72 Accommodation and Food Services	22,519
NAICS 81 Other services, except public administration	8,273
NAICS 92 Public administration	6,327
Total Employment	200,143

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2014.

Colorado Springs has experienced positive overall employment growth over the last ten years, but total employment contracted during the height of the recession. However, the number of at-place jobs has rebounded and surpasses pre-recession figures. A summary of 10-year growth in employment is shown below in Figure 12.

Figure 12: Annual Employment, 2005-2014



To evaluate the economic impacts from future growth and development in Banning Lewis Ranch, TischlerBise utilized the growth projections for the 30-year projection period. Summaries of growth projections are provided below in Figure 13. Further detail on each scenario is available in the Appendix of this report.

Figure 13: Banning Lewis Ranch Growth Projections

	BLR Growth Scenario: 30-Year Growth
SINGLE FAMILY DETACHED, LOW DENSITY	17,599
SINGLE FAMILY DETACHED, MEDIUM DENSITY	5,252
TOWNHOUSE	190
MULTIFAMILY	864
TOTAL HOUSING UNITS	23,905
<i>Total Growth from Base Year</i>	<i>12%</i>
POPULATION	61,770
<i>Total Growth from Base Year</i>	<i>13%</i>
RETAIL SF	3,005,500
OFFICE SF	2,824,200
INDUSTRIAL SF	1,411,400
INSTITUTIONAL SF	2,370,200
TOTAL NONRES SF	9,611,300
<i>Total Growth from Base Year</i>	<i>15%</i>
DIRECT JOBS	20,979
<i>Total Growth from Citywide Base Year</i>	<i>10%</i>

TischlerBise used these projections as the foundation / control totals for general industry categories of Commercial, Institutional, Industrial, and Office as shown above in Figure 13. For the economic impact analysis, these categories are then used in the IMPLAN model. A 30-year time period is used to project economic impacts from projected growth.

LONG-TERM ECONOMIC IMPACT OF FUTURE GROWTH

To examine potential projected long-term economic impacts of growth from nonresidential growth, TischlerBise modeled the change in employment in each of the IMPLAN sectors identified. Total economic impact includes: (1) direct impacts, (2) indirect and induced impacts, and (3) sum of all impacts.

1. Economic impact analysis identifies direct impacts, that is, the actual number of employees in the industry as well as the jobs supported by the spending of the businesses in the industry itself.
2. The jobs and economic activity generated by industry spending for payroll, purchasing, and construction are not limited to the **direct** impacts cited above. Some spending by businesses is used to buy goods and services from other local companies; and the latter companies in turn buy goods and services from still other local businesses. The economic impact analysis also evaluates these “spin-off” or “multiplier” effects that direct spending has on the location in terms of jobs, labor income, and total economic output or activity.
 - a. Income received by suppliers of goods and services is then used to buy goods and services from other local companies (**indirect** effect).
 - b. Additionally, household income is used in part to buy goods and services within the local region, which creates other economic benefits (**induced** effect).
3. In summary, the total effects are the result of direct impacts as well as the recirculation of income throughout the local economy.

Based on potential changes to the Colorado Springs economy in the industries identified above, the following economic impacts are projected to occur. Results are reported in the following categories:

- A. **Jobs:**
 - *Direct:* Represents the number of direct jobs projected plus those jobs estimated as a result of direct spending within each industry. The analysis includes estimated jobs created from new development—direct jobs created from the industry, direct jobs as a result of construction spending;
 - *Indirect and Induced:* Represents the number of indirect and induced jobs projected due to a change in direct employment.
- B. **Labor Income:**
 - Income consists of wages and salaries paid to employees (direct and indirect) as well as income generated from other direct impacts.
- C. **Output:**
 - Value of gross economic activity projected for direct, indirect, and induced economic activity.

Economic Impact of Nonresidential Development

Given the projected employment growth in Colorado Springs over the next 30 years—as detailed in Figure 13—annual economic impact supported by this growth is projected at approximately \$3.7 billion in Year 30. Shown in Figure 14, 35,122 jobs are attributed to this growth, which reflects the direct growth (20,979 jobs) as well as additional jobs supported by indirect and induced economic activity (14,143). Total labor income in Year 30 is projected at approximately \$1.9 billion. Also shown below are aggregated economic results (total from years 1 to 30) and an average annual figure (aggregated divided by 30 years).

Figure 14: Scenario 2 Economic Impacts from Nonresidential Growth, Year 30

Long-Term Economic Effects

City of Colorado Springs - Banning Lewis Ranch Economic Impact Model

Category	Cumulative	Year 30	Average Annual
Direct Effect Jobs	20,979	20,979	699
Indirect and Induced Effect Jobs	14,143	14,143	471
TOTAL LONG-TERM JOBS CREATED	35,122	35,122	1,170
Direct Effect Labor Income	\$14,440,196,169	\$1,262,898,798	\$481,339,872
Indirect and Induced Effect Labor Income	\$7,102,897,462	\$622,704,439	\$236,763,249
TOTAL LABOR INCOME	\$21,543,093,631	\$1,885,603,237	\$718,103,121
Direct Effect Output	\$24,752,342,839	\$2,174,423,765	\$825,078,095
Indirect and Induced Effect Output	\$16,955,388,790	\$1,486,748,675	\$565,179,626
TOTAL LONG-TERM ECONOMIC IMPACT (Output \$)	\$41,707,731,629	\$3,661,172,439	\$1,390,257,721

Source: Employment and output multipliers and output value per job from IMPLAN for Colorado Springs MSA, 2014.

Economic Impact of Residential Development

It should be noted that the long-term indirect and induced impacts from residential growth are embedded in the nonresidential projections—and likewise, the reported economic impacts from that nonresidential growth above. In other words, the growth projections used as the basis for this analysis are market-based and reflect the overall impact and effects of residential growth. That is, for example, residential growth will lead to additional retail development, which is already captured in the scenario.

TEMPORARY ECONOMIC IMPACTS FROM DEVELOPMENT

This section of the analysis documents the short-term/temporary economic impacts from private sector residential and nonresidential development activity. This results in the same economic impact measures of jobs, labor income, and output but reflects short-term, temporary economic impacts supported by economic investment—as opposed to an aggregating effect over the growth period projection timeframe. Results are shown on an annual basis—and reflect the projected economic activity associated with residential and nonresidential construction in Banning Lewis Ranch each year.

For this analysis, TischlerBise assumed construction values reflect approximately 50 percent of market value for residential development and 75 percent of market value for nonresidential development. From this assumption of development costs, TischlerBise used the IMPLAN model to identify direct and indirect economic impacts from private sector construction activity.

While there is additional economic activity generated from remodeling and rehabilitation activity, this is not a “growth-related” impact but rather investment on existing structures. Eventually, today’s growth will be tomorrow’s remodeling/rehabilitation investment opportunity; but for this analysis, this economic activity is not modeled. Using construction values shown in Figure 15, average annual construction values are projected for residential and nonresidential development based on average annual development in the future growth scenario.

Figure 15: Summary of Construction Values

RESIDENTIAL PROTOTYPES

<i>Land Use Prototype</i>	<i>Median Market Value Per Unit^{1,2}</i>	<i>Median Assessed Value Per Unit³</i>	<i>Construction Value Per Unit</i>
Single Family Detached	\$280,000	\$22,000	\$140,000
Townhouse	\$217,000	\$17,000	\$108,500
Multi-Family	\$128,000	\$10,000	\$64,000

1. El Paso County Tax Assessor.
2. Based on recent sales within a 10-mile radius of Banning Lewis Ranch.
3. Residential assessed value is 7.96% of market value.

NONRESIDENTIAL PROTOTYPES

<i>Land Use Prototype</i>	<i>Total Market Value Per SF⁴</i>	<i>Total Assessed Value Per SF⁵</i>	<i>Construction Value Per SF</i>
Office	\$43	\$12	\$32
Commercial	\$77	\$22	\$58
Industrial	\$35	\$10	\$26

4. El Paso County Tax Assessor.
5. Nonresidential assessed value is 29% of market value.

Average annual construction values for Year 30 are shown below in Figure 16. For example, in year 30 average annual multi-family construction is projected at 29 units. With a construction value of \$64,000 per unit, the average annual multi-family construction value totals \$1.8 million.

Figure 16: Projected Construction Investment, Average Annual

	Average Annual
SINGLE FAMILY DETACHED, LOW DENSITY	553
SINGLE FAMILY DETACHED, MEDIUM DENSITY	175
TOWNHOUSE	6
MULTI-FAMILY	29
	Average Annual
COMMERCIAL SF	100,183
INSTITUTIONAL SF	79,007
INDUSTRIAL SF	47,047
OFFICE SF	94,140
SINGLE FAMILY CONSTRUCTION VALUE	\$102,661,223
MULTI-FAMILY CONSTRUCTION VALUE	\$1,842,183
COMMERCIAL CONSTRUCTION VALUE	\$5,785,588
INDUSTRIAL CONSTRUCTION VALUE	\$1,234,975
OFFICE CONSTRUCTION VALUE	\$3,036,015
TOTAL CONSTRUCTION VALUE	\$114,559,984

Economic Impacts from Construction

Given the assumptions on average annual construction activity and investment as shown above, economic impacts can be projected. Using the IMPLAN model, the average annual direct and indirect temporary economic impacts are projected from both residential and nonresidential construction activity. Results are shown in Figure 17.

Figure 17: Temporary Economic Impacts from All Construction

Temporary Economic Effects (Construction)

Category	Cumulative	Year 30	Average Annual
TOTAL DIRECT EFFECT JOBS		1,373	822
TOTAL INDIRECT AND INDUCED EFFECT JOBS		1,039	626
TOTAL TEMPORARY JOBS CREATED		2,412	1,448
TOTAL TEMPORARY ECONOMIC IMPACT (Output \$)	\$5,455,410,251	\$302,873,202	\$181,847,008

APPENDIX A: LAND USE PROTOTYPES

Four residential prototypes—Figure A1—and four nonresidential prototypes—Figure A2—used in the analysis are shown in the tables below. The El Paso Tax Assessor provided median market value per unit for single-family detached units. For townhouses and multi-family units, market value is based on recent construction in Colorado Springs. Assessed value for residential units is 7.96 percent of market value. Construction value is 50 percent of market value. Persons per housing unit for single family units (detached and townhouse) is based on 2015 ACS 1-year estimates for single family units in Figure A2 above adjusted by persons per housing unit estimates for detached and townhouse units in El Paso County. Units per acre for each prototype are determined based on housing units per acre in Oakwood’s PUD Concept Plan.

Figure A1: Residential Prototypes

Type of Unit	Median Market Value per Unit ^{1,2}	Median Assessed Value per Unit ³	Construction Value per Unit	Persons per Housing Unit ⁴	Units per Acre ⁵	Vehicles per Unit ⁴
Single Family Detached, Low	\$280,000	\$22,000	\$140,000	2.62	3.69	1.85
Single Family Detached, Medium	\$280,000	\$22,000	\$140,000	2.62	6.70	1.85
Townhouse	\$217,000	\$17,000	\$108,500	2.22	4.44	1.85
Multi-Family	\$128,000	\$10,000	\$64,000	1.71	18.15	1.33

1. El Paso County Tax Assessor (Single Family).

2. Based on recent sales within a 10-mile radius of Banning Lewis Ranch as listed on Zillow.com and Redfin.com (Townhouse and Multi-Family).

3. Residential assessed value is 7.96% of market value.

4. U.S. Census Bureau, American Community Survey 1-Year Estimates, 2015.

5. Oakwood PUD Concept Plan.

For nonresidential development, the El Paso County Tax Assessor provided the market value per square foot of floor area. Assessed values are 29 percent of market values, and construction values are 75 percent of market values. The Institute of Transportation Engineers provides factors for jobs per 1,000 square feet for each nonresidential prototype. Floor area ratios are 0.15 for institutional development and 0.25 for all other nonresidential development.

Figure A2: Nonresidential Prototypes

Land Use Type	Market Value per Square Foot ⁶	Assessed Value per Square Foot ⁷	Construction Value per Square Foot	Empl. Density (Jobs per 1,000 SF) ⁸	Floor Area Ratio (FAR)	Sales per Square Feet ⁹
Office	\$43	\$12	\$32	3.32	0.25	
Commercial	\$77	\$22	\$58	2.00	0.25	\$300
Industrial	\$35	\$10	\$26	2.31	0.25	
Institutional	\$0	\$0	\$0	0.98	0.15	

6. El Paso County Tax Assessor.

7. Nonresidential assessed value is 29% of market value.

8. Institute of Transportation Engineers, 2012.

9. Urban Land Institute, Dollars and Cents of Shopping Centers.

Sales per square feet estimates in Figure A3 are from the Urban Land Institute’s Dollars and Cents of Shopping Center report (2008) adjusted to 2016 dollars based on the Bureau of Labor Statistics Consumer Price Index. Convenience Center reflects sales per square feet revenues in Colorado Springs.

Figure A3: Sales per Square Feet Factors

	2008*	2016 (Adjusted)
Sales per SF - Convenience Center	\$272.60	\$300.00
Sales per SF - Neighborhood Center	\$301.40	\$340.00
Sales per SF - Entertainment/Community	\$76.61	\$90.00
2008 Consumer Price Index (Annual)**	215.30	
2016 Consumer Price Index (August)**	240.31	
Consumer Price Index Adjustment	11.61%	

*Urban Land Institute, Dollars and Cents of Shopping Centers/The SCORE 2008.

**Bureau of Labor Statistics, Consumer Price Index, 2008-2016.

APPENDIX B: GROWTH SCENARIOS

Two growth scenarios for Banning Lewis Ranch are analyzed. Scenario 1 analyzes the potential lost revenue to Colorado Springs from development leapfrogging Banning Lewis Ranch and occurring elsewhere in unincorporated El Paso County. The analysis looks 22 years into the past, from 1995 through 2016. Revenues include sales tax and property tax. The second scenario projects for 30 years, includes the same amount of residential development based on the Planned Unit Development (PUD) Concept Plan developed by Oakwood Homes—discussed in detail later in this report. Scenario 2 is used in the Economic Analysis Model.

Scenario 1: Look Back. Shown below in Figure B1, the study analyzes the lost revenue to Colorado Springs from development leapfrogging Banning Lewis Ranch and occurring elsewhere in unincorporated El Paso County. The analysis looks at 1995 through 2016. Six zip codes in unincorporated El Paso County that experienced development during this timeframe are used in this analysis. Because lot size plays an important role in the type of development that occurs—urban or rural—only lots of less than one acre are included in this analysis. Based on El Paso County Assessor data, residential development in the selected zip codes on lots of less than one acre are reallocated from El Paso County to Banning Lewis Ranch. In total, 7,562 housing units—approximately 78 percent of total units—are reallocated to Banning Lewis Ranch.

For nonresidential development, a similar approach is used to reallocate development from El Paso County to Banning Lewis Ranch. Based on land use descriptions from the El Paso County Assessor, most commercial development, merchandising and special use, is reallocated to Banning Lewis Ranch since commercial development follows residential development. Most office development is also reallocated to Banning Lewis Ranch since this type of development is generally located near commercial and residential development. Warehouse, or industrial, development is less dependent on other types of land uses when determining a location, and some industrial uses require larger parcels of land. Only 50 percent of industrial development is reallocated to Banning Lewis Ranch.²

² Source: Summit Economics, "Opportunity Lost from Development Leapfrogging Banning Lewis Ranch," Pre-Distribution Draft, March 2016.

Figure B1: Potential Lost Development in Banning Lewis Ranch, 1995-2016

<i>Zip Code</i>	<i>El Paso County Housing Units</i>	<i>% Reallocated</i>	<i>Reallocated Housing Units</i>
80106	1,799	100%	1,799
80831	2,476	85%	2,105
80915	757	67%	507
80922	1,269	67%	850
80925	1,935	67%	1,296
80951	1,500	67%	1,005
TOTAL	9,736	78%	7,562

<i>Type</i>	<i>El Paso County Square Feet</i>	<i>% Reallocated</i>	<i>Reallocated Square Feet</i>	<i>Reallocated Jobs</i>
Merchandising	428,636	80%	342,909	686
Warehouse	368,565	50%	184,283	426
Office	140,927	80%	112,742	375
Special Use	148,785	68%	101,174	202
TOTAL	1,086,913	68%	741,107	1,688

Figure B2 summarizes residential and nonresidential development that could have occurred in Banning Lewis Ranch from 1995 through 2016.

Figure B2. Scenario 1, Residential and Nonresidential Growth

	Look Back
TOTAL HOUSING UNITS	7,562
POPULATION	19,814
COMMERCIAL SF	444,083
INDUSTRIAL SF	184,283
OFFICE SF	112,742
TOTAL NONRESIDENTIAL SF	741,107
COMMERCIAL JOBS	888
INDUSTRIAL JOBS	426
OFFICE JOBS	374
DIRECT JOBS (LONG-TERM)	1,688

Scenario 2: 30-Year Projection. This development scenario assumes housing is developed based on Colorado Springs Utilities (CSU) projections for Banning Lewis Ranch. The housing mix is based on Oakwood’s concept plan and includes low-density single family detached (72.5 percent), medium-density single family detached (22.9 percent), townhouse (0.8 percent), and multi-family (3.8 percent) units. Based on CSU projections, buildout of planned residential units in Oakwood’s concept plan will occur in Year 12. Using a comparable land use mix as Oakwood, a similar development would reach buildout in Year 22, and a third buildout would occur in Year 29. Nonresidential development in this scenario includes ten acres of commercial development and 118 acres of institutional development for every 1,700 acres of residential development. Commercial development is reliant on residential development and occurs in Year 8, Year 19, and Year 27. Institutional development occurs evenly throughout each buildout cycle. Due to BLR’s proximity to the Colorado Springs Municipal Airport and the future intersection of Colorado Highway 94 and Banning Lewis Ranch Parkway, office and commercial development are projected in this scenario. Figure B3 summarizes the annual growth projected in Banning Lewis Ranch over the next 30 years.

Figure B3. 30-Year Growth Projection

	BLR Growth Scenario		
	10-Year Summary	20-Year Summary	TOTAL: 30-Year Summary
SINGLE FAMILY DETACHED, LOW DENSITY	4,736	9,922	17,599
SINGLE FAMILY DETACHED, MEDIUM DENSITY	1,182	2,823	5,252
TOWNHOUSE	43	102	190
MULTIFAMILY	194	464	864
TOTAL UNITS	6,156	13,312	23,905
<i>Total Growth from Base Year</i>	3%	7%	12%
POPULATION	15,934	34,413	61,770
<i>Total Growth from Base Year</i>	3%	8%	13%
RETAIL SF	254,500	1,363,500	3,005,500
OFFICE SF	443,400	1,403,300	2,824,200
INDUSTRIAL SF	221,200	701,000	1,411,400
INSTITUTIONAL SF	595,000	1,332,400	2,370,200
TOTAL SF	1,514,100	4,800,200	9,611,300
<i>Total Growth from Base Year</i>	2%	7%	15%
JOBS	3,077	10,316	20,979
<i>Total Growth from Citywide Base Year</i>	2%	5%	10%



4701 Sangamore Road
Suite S240
Bethesda, MD 20816
(301) 320-6900
www.TischlerBise.com