Fort Collins City Plan Employment Land Demand Analysis

The Economics of Land Use

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City of Fort Collins

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1. INTRODUCTION AND SUMMARY OF FINDINGS

Project Background

The City of Fort Collins is updating its comprehensive land use and transportation plan—City Plan. A major component of the update to City Plan is the development of a revised Structure Plan map. The City has not done a major update to the Structure Plan map in 20 years. To inform the updates to the Structure Plan map and accompanying policies, an employment land demand study was desired. This report provides a summary of the employment land demand study. The report also contains summaries of regional and local employment conditions and trends; national and regional commercial and industrial development trends; and employment land demand estimates.

Summary of Findings

1. ***The Fort Collins-Loveland MSA has rebounded from the economic recession of 2008 and 2009 and has grown at an accelerated pace since 2010.***

   The rate of employment growth has increased significantly since 2010 in Larimer County. The annual rate of growth for employment in the County is less than found in the 1990's but the county is producing more total new jobs annually than in the 1990's. Employment has grown at annual rate of 3.2 percent since 2010 and adding 4,700 new jobs annually.

2. ***The major industries in Fort Collins including health care, education, retail trade and accommodations and food service continue to grow and produce new employment.***

   The economic base of Fort Collins is driven by health care and education. Growth in these two industries has produced over 6,000 jobs since 2010 in Larimer County. Retail trade and accommodations and food services are also growing and producing several new jobs as the county continues to be regional hub for northern Colorado and southern Wyoming.

3. ***Professional services, manufacturing, clean energy and transportation and warehousing are emerging industries in Larimer County with significant employment growth since 2010.***

   Professional and technical services is growing sector and is becoming one of the larger sectors in the region. Employment in transportation and warehousing is growing in the county but these jobs have largely not been locating in Fort Collins. Lastly, manufacturing has traditionally been a major industry in Fort Collins but the composition of manufacturing in Fort Collins and the county has shifted. Computer equipment manufacturing was a major component of the economy in the 1990's and early 2000's; however, employment has been declining in this subindustry. Manufacturing jobs have grown since 2010, driven by food and beverage manufacturing (e.g. brewing) and the growth of Woodward, Inc. Larimer County has an estimated 2,600 jobs related to Clean Energy and industry is bolstered in the City by research and development activities being generated through CSU.

4. ***Average wages in Larimer County are growing faster than inflation, however the majority of the wage growth is in industries with higher than average annual wages***

   Wages in the county have grown at an annual rate of 5.7 percent since 2010. The City's and County's major industries are a mixture of below and above average wage industries. Industries with a below average annual wage (more than 20% less than the county average) accounted for 42 percent of new jobs in the county since 2010, however industries with above average wages (more than 20% greater than county average) accounted for 54 percent of the wage growth since 2010.

5. ***Employment in Larimer County and Fort Collins outpaced household growth since 2010 and is forecasted to through 2040.***

   Employment continues to grow at a faster rate in the City and county than household growth and is forecast to continue. This miss-match in growth has several impacts on the community. From a workforce perspective, the miss-match puts greater pressure on an already tight labor market and has forced employers to aggressively seek ways to attract new workers to the region to fill jobs. The slower housing growth is increasing demand for housing, which is increasing housing prices within Fort Collins. The affordability of housing may impact the economic health of the City.

6. ***Fort Collins has captured a smaller share of commercial and industrial development over the past decade as the economic activity within the County has shifted toward I-25.***

   The City of Fort Collins is capturing a smaller share of county employment oriented development. Development has been clustering desirable areas and the center of economic gravity for the county has shift from the US 287 corridor to the I-25 corridor. Much of the recent commercial and industrial development has gravitated to I-25 or along arterials connecting to I-25, such as US 34, Harmony Road and Mulberry Street. The shift to the east has resulted in greater opportunities for neighboring communities. Fort Collins captured less than half of county wide development for commercial and industrial space over the past 10 years despite account for the majority of total space for all three uses (retail, office, and industrial).

7. ***The City has an adequate supply of land for employment uses however the land may not be development ready or in locations that are competitive for capturing future employment growth.***

   Employment forecasts estimate the County will grow in employment by 85,000 jobs by 2040, with jobs within the City's targeted industries and other primary industries account for 44 percent of job growth. The City has a total supply of buildable employment lands that exceeds estimated demand. The forecast new jobs are estimated to generate demand for 22 million square feet of new commercial and industrial development, with Fort Collins capturing 7.5 million square feet of new space (33 percent of county demand). This estimated new development will require an estimated 600 acres of land and the City has approximately 2,900 acres designated for employment uses. The majority of employment land capacity is on the edge of the City in the northeast portion of the Growth Management Area (GMA) and is in many cases lacking existing infrastructure. Areas that have been capturing new development within the City (primarily downtown area and Harmony Road) have limited

capacity for new development. The excess capacity would suggest that the City could be more flexible with use of employment lands in some areas. As well, the City should also focus efforts on a few primary areas to capture employment growth similar to their historic efforts along Harmony Road. The buildable lands designated for residential may need to be re-evaluated during the City Plan process as they may be better suited for employment lands (and vice-versa).

2. ECONOMIC CONDITIONS AND TRENDS

This chapter provides a summary of the economic conditions and trends impacting Fort Collins. Trends in employment for the Larimer County and the City of Fort Collins are summarized.

Regional Economic Base and Trends

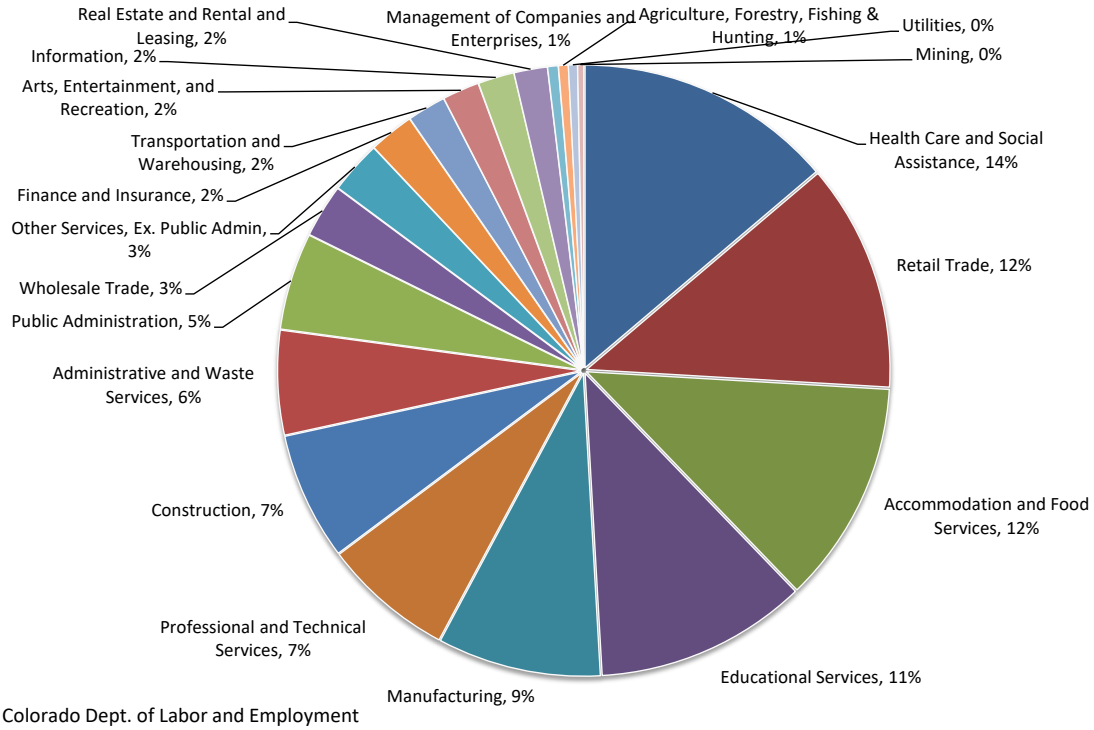
Fort Collins is the largest city (population) and economy (jobs) along the northern Front Range of Colorado. The largest communities in the northern Front Range are Fort Collins and Loveland, within Larimer County, and Greeley in Weld County. Combined there is over 250,000 jobs in the two counties (60 percent in Larimer County and 40 percent in Weld County). Historically, these cities have functioned more like stand-alone communities with distinct economies, but as the region grows the communities are becoming more intertwined. As a result, the economic activity has shifted somewhat away from the traditional downtown/city centers towards Interstate 25. Northern Colorado communities are becoming more intertwined in terms of employment and labor force, which has pushed economic leaders to begin discussions on how to work together to address these collective economic opportunities.

Economic Base

The City of Fort Collins is the county-seat and economic center of Larimer County, also known as the Fort-Collins metropolitan statistical area (MSA). The largest industries in Larimer County are Health Care (21,111 jobs), Retail Trade (18,582 jobs), Accommodation and Food Service (18,175 jobs) and Education (17,295 jobs). Combined these four industries account for half of the jobs in Larimer County, as shown in **Figure 1**.

Clean energy is a growing sector in Colorado's economy. The components of Clean Energy include renewable energy, energy efficiency, advanced grid technology, advanced transportation, and clean fuels. Larimer County has an estimated 2,600 jobs related to Clean Energy.

Figure 1
Larimer County Distribution of Jobs by Industry, 2016



Source: Colorado Dept. of Labor and Employment

Employment Trends

Over the past 30 years, the County has grown steadily in employment with periods of accelerated employment growth. Employment in the County grew by 4.5 percent annually from 1990 to 2000, as shown in **Table 1**. The two national economic recessions (01) and (08-09) that occurred from 2000 to 2010 reduced the rate of employment growth in the County to 0.8 percent annually. Since 2010 however, the County has begun to grow at a faster rate (3.2 percent annually from 2010 to 2016), producing more new jobs annually in this period than in the 1990's.

Table 1
Fort Collins-Loveland MSA Current Employment Statistics, 1990 to 2017

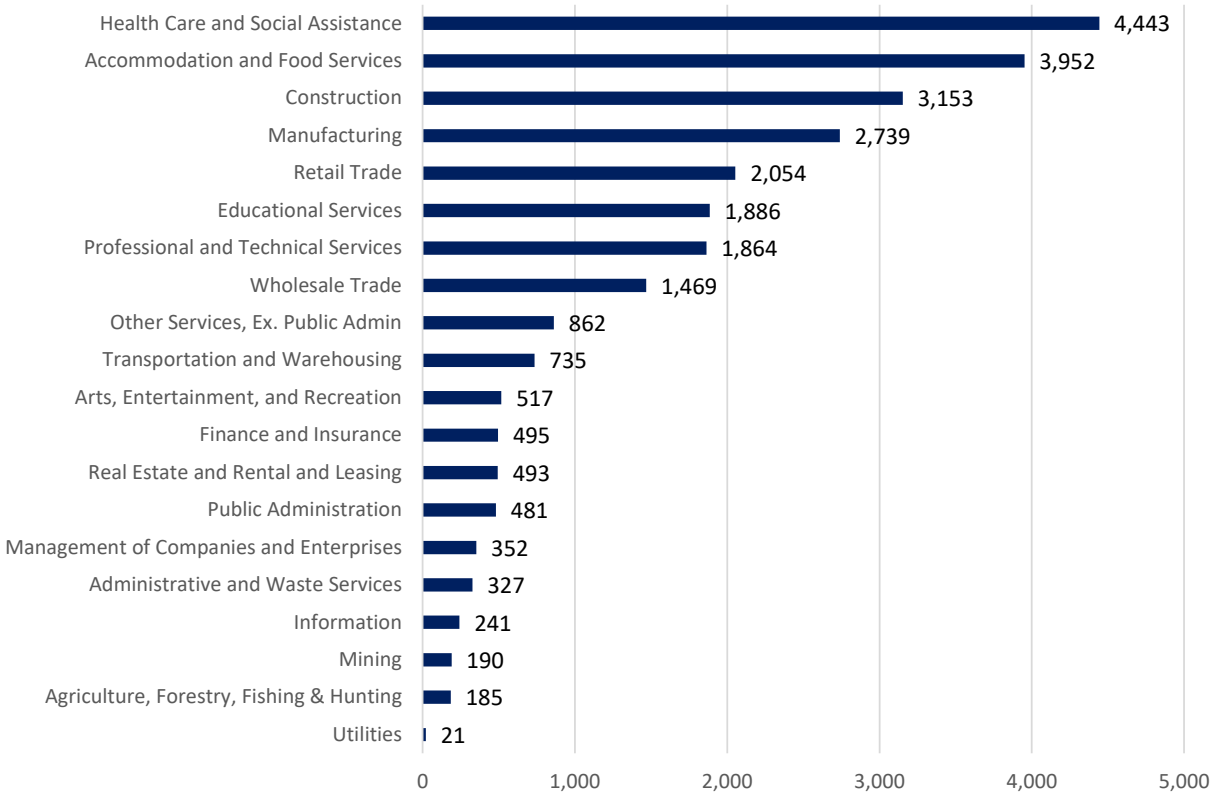
Description	1990	2000	2010	2017	1990-2000 Total	1990-2000 Ann.#	1990-2000 Ann. %	2000-2010 Total	2000-2010 Ann.#	2000-2010 Ann. %	Change 2010-2017 Total	Change 2010-2017 Ann.#	Change 2010-2017 Ann. %
Total Nonfarm	**79,200**	**123,400**	**133,900**	**167,100**	**44,200**	**4,420**	**4.5%**	**10,500**	**1,050**	**0.8%**	**33,200**	**4,743**	**3.2%**
Total Private	60,800	98,700	104,400	128,200	37,900	3,790	5.0%	5,700	570	0.6%	23,800	3,400	3.0%
Goods Producing	18,000	25,200	18,100	25,600	7,200	720	3.4%	-7,100	-710	-3.3%	7,500	1,071	5.1%
Service-Providing	61,200	98,200	115,800	141,500	37,000	3,700	4.8%	17,600	1,760	1.7%	25,700	3,671	2.9%

Source: US Bureau of Labor Statistics Current Employment Statistics (CES): Economic & Planning Systems

E:\Fort Collins\[163125-Employment Trends-1-8-18.xlsx]Table 1-CES

Larimer County had a total wage and salary employment of 153,103 in 2016, which is an increase of approximately 26,500 jobs since 2010. The traditional major industries in the County (Health Care, Retail, Food/Accommodations, and Education) continue to experience strong employment growth. The industries with the largest amount of employment increase since 2010 were Health Care (4,443 new jobs), Accommodation and Food Service (3,952 new jobs), Construction (3,153 new jobs), and Manufacturing (2,739 jobs), as shown in **Figure 2**.

Figure 2
Larimer County Change in Employment by Industry, 2010 to 2016



Source: Colorado Dept. of Labor and Employment

Emerging industries in the county that are experiencing stronger growth than traditionally found in the community include manufacturing, logistics (wholesale trade and transportation and warehousing), and professional and technical services. Manufacturing has been growing at an annually rate of 3.9 percent since 2010 after declining in employment during the previous decade. In the 1990's and early 2000's, manufacturing was by computer and electronic product manufacturing, anchored by Hewitt-Packard. The recent growth has been more diversified within a variety of manufacturing subindustries, spurred on by growth in food and beverage manufacturing (e.g. breweries) and the growing presence of Woodward, Inc. The growth of the region in population and employment has increased demand for logistics related industries. Lastly, business services (which includes professional and technical services and also administrative support services) has traditionally been a growing industry in the region, but in the past six years professional services jobs have grown by over 1,800 jobs while growth in administrative services has been relatively flat.

Wage Trends

The average annual wage in Larimer County was $56,987 in 2016, as shown **Table 2**. Wages in the past six years have grown at a healthy 5.7 percent annual rate compared to 2.3 percent annually in the 2000's, indicating that even when accounting for inflation, wages are growing significantly.

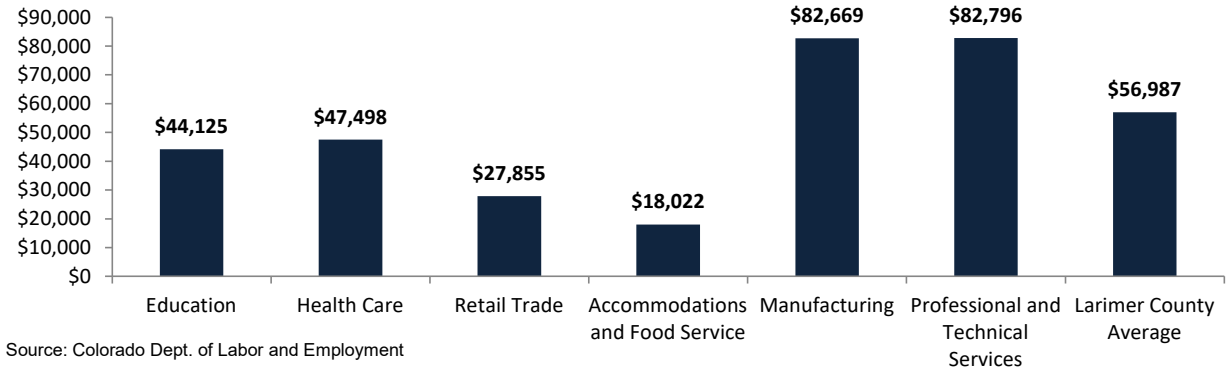
Table 2
Larimer County Average Annual Wage by Industry, 2000 to 2016

Description	2000	2010	2016	2000-2010 Total	2000-2010 Ann.#	2000-2010 Ann. %	Change 2010-2016 Total	Change 2010-2016 Ann.#	Change 2010-2016 Ann. %
Agriculture, Forestry, Fishing & Hunting	$20,842	$28,302	$33,123	$7,460	$746	3.1%	$4,822	$804	2.7%
Mining	$33,748	$46,061	$60,825	$12,313	$1,231	3.2%	$14,764	$2,461	4.7%
Utilities	$48,315	$68,556	$85,041	$20,241	$2,024	3.6%	$16,485	$2,748	3.7%
Construction	$34,156	$44,940	$53,649	$10,784	$1,078	2.8%	$8,710	$1,452	3.0%
Manufacturing	$60,184	$73,722	$82,669	$13,538	$1,354	2.0%	$8,947	$1,491	1.9%
Wholesale Trade	$37,190	$53,071	$65,326	$15,881	$1,588	3.6%	$12,255	$2,043	3.5%
Retail Trade	$20,333	$23,680	$27,855	$3,347	$335	1.5%	$4,175	$696	2.7%
Transportation and Warehousing	$29,335	$38,963	$43,522	$9,628	$963	2.9%	$4,559	$760	1.9%
Information	$39,041	$48,722	$49,659	$9,680	$968	2.2%	$937	$156	0.3%
Finance and Insurance	$40,277	$50,967	$70,103	$10,690	$1,069	2.4%	$19,136	$3,189	5.5%
Real Estate and Rental and Leasing	$23,373	$31,620	$43,845	$8,247	$825	3.1%	$12,225	$2,038	5.6%
Professional and Technical Services	$41,143	$69,407	$82,796	$28,264	$2,826	5.4%	$13,389	$2,232	3.0%
Management of Companies and Enterprises	$41,269	$84,847	$140,357	$43,578	$4,358	7.5%	$55,510	$9,252	8.8%
Administrative and Waste Services	$21,239	$28,906	$34,798	$7,667	$767	3.1%	$5,892	$982	3.1%
Educational Services	$31,910	$39,091	$44,125	$7,180	$718	2.1%	$5,034	$839	2.0%
Health Care and Social Assistance	$31,010	$42,583	$47,498	$11,572	$1,157	3.2%	$4,916	$819	1.8%
Arts, Entertainment, and Recreation	$14,737	$22,855	$24,678	$8,118	$812	4.5%	$1,823	$304	1.3%
Accommodation and Food Services	$10,923	$14,665	$18,022	$3,742	$374	3.0%	$3,357	$560	3.5%
Other Services, Ex. Public Admin	$20,388	$28,061	$34,048	$7,673	$767	3.2%	$5,987	$998	3.3%
Public Administration	$38,607	$55,219	$60,784	$16,612	$1,661	3.6%	$5,565	$928	1.6%
Unclassified	---	$60,293	$68,445						
Total	**$32,394**	**$40,810**	**$56,987**	**$8,417**	**$842**	**2.3%**	**$16,176**	**$2,696**	**5.7%**

Source: Colorado Dept. of Labor and Employment QCEW; Economic & Planning Systems

The City's six largest industries have a wide variety of average annual wages, with some much higher than average and some well below the County average. Education and Health Care have average wages of $44,125 and $47,498, which are slightly below average, as shown in **Figure 3**. Retail Trade and Accommodations and Food Service have average annual wages that are less than half of the County average. This reflects both lower hourly wage rates as well as higher percentage of part time jobs in these industries. Manufacturing and Professional and Technical Services have higher than average annual wages of $82,669 and $82,796 respectively.

Figure 3
Larimer County Largest Industry Average Annual Wage, 2016



Source: Colorado Dept. of Labor and Employment

Recent employment growth by industry was split based on average wages for that industry to understand how even the growth in employment has been between low paying, medium paying and high paying industries. Industries with an average annual wage greater than 20 percent less than the county average of $56,987 were considered below average wage industries (less than $46,000 annually). Industries with an average wage greater than 20 percent more than the county average were considered above average wage industries (greater than $68,000). Lastly, industries with an average wage within 20 percent of the average wage for the county were considered average wage jobs. From 2010 to 2016, below average wage jobs accounted for 42 percent of new jobs in the county, with majority within retail and accommodations and food service. Thirty eight percent of new jobs since 2010 were in average wage paying industries, with health care accounting for half of those jobs. Lastly, above average wage paying industries accounted for 21 percent of employment growth.

City Employment Conditions

The City of Fort Collins is the economic center of the northern Colorado region. Fort Collins accounts for over 55 percent of the employment in the Fort Collins/Loveland Metropolitan Statistical Area (MSA), with over 85,000 jobs in Fort Collins, with Colorado State University as the largest employer in the region. The economic strengths of Fort Collins are aligned with the identity of the City. Fort Collins is a community with quality educational options and natural assets and amenities that promote and encourage a healthy lifestyle. The two largest industries in Fort Collins, Education and Health Care, reflect these major assets. These assets that have produced an educated workforce and a high quality of life have historically attracted large employers in manufacturing and technology to locate in the city.

Economic Base Organization

The City's 2015 Economic Health Strategy Plan provides the roadmap for addressing the threats the city's economy faces and the opportunities it has for economic growth and diversity. The plan is organized around five major themes;

- Community prosperity – Enhancing opportunities for all residents to participate in the local economy.
- Grow our own – Continuing the City's history of producing new innovations and new businesses through entrepreneurship and investment in research and development.
- Place matters – A commitment to developing and maintaining the assets and amenities needed to support economic growth.
- The climate economy – Helping the business community adapt to the challenges presented by climate change and leveraging opportunities to create new economic activity through innovation in climate adaptation.
- Think regionally – Shifting and embracing the benefits in addressing economic health issues and opportunities through regional collaboration and strategies.

The City of Fort Collins has a total employment of approximately 85,000 jobs, as shown in **Table 3**. Traditionally, the economy has been driven by education and health care. However, the City has a long history of entrepreneurship and development of new ideas and products that serve not just residents but the nation and the world. The City's targeted industries are advanced manufacturing, health care and bioscience, and computer technology design and development. These are primary job industries that produce goods and service exported to the nation and the world. The City's economic health strategy also targets economic activities that are unique to Fort Collins, that not only create products and services but creates the quality of life and culture that fosters innovation. Examples of these industries and activities include breweries, bike manufacturing, local foods, and arts and culture.

Lastly, the City is committed to identifying ways to leverage the impacts of climate change to create opportunities to foster innovation in climate adaptation through clean energy and other industries. Defining clean energy and the climate economy through the traditional NAICS industries is difficult as many industries are involved in these activities so specific sector is not isolated, but the clean energy economy is represented in the several of the City's target industries and other primary industries, including manufacturing, professional and technical

services, mining/oil and gas, and others. As well, the City's utilities and other utility providers play a major role in the City's efforts to foster innovation in clean energy and climate adaptation.

The economic base was organized into three categories to help illustrate the composition of the City's employment and also the importance of the industries the City has targeted. Industries identified as target industries and other primary industries account for 48 percent of the City's employment base, as shown in **Table 3**. The other components of the economy are industries that support the business community (Business Support Services) and industries that support the residents of the city (Community Support Services). Business support service industries account for 16 percent of the economic base, and community support services industries account for 36 percent of employment.

The purpose of this organization is to isolate the industries that drive the economy to analyze what is needed to support these industries and estimate the demand for new development. The policies and locations needed to support these target industries are a key focus of City Plan. Organizing the industries in Fort Collins by business and community support industries also helps understand the demand related to how and where to support the target and primary businesses and how to support residents' quality of life.

Table 3
Fort Collins Employment by Industry, 2016

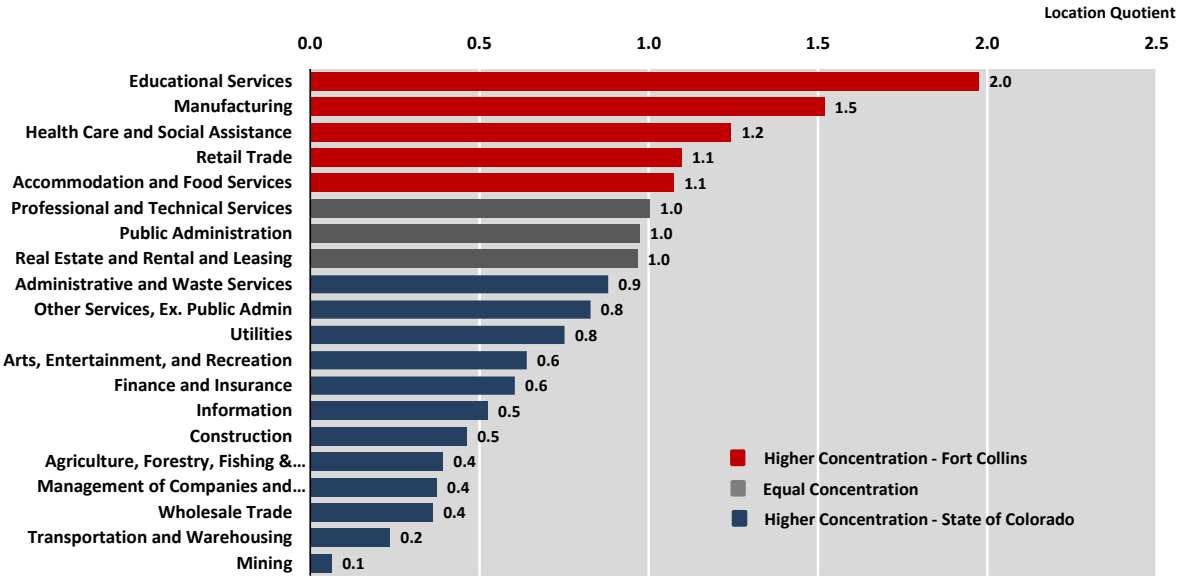
Sector	2016 Jobs	% of Jobs
Target and Other Primary Industries		
Hospitals and Health Providers	9,885	12%
Education	14,268	17%
Food and Beverage Production/Agriculture	1,718	2%
Manufacturing	5,733	7%
IT/Technology Development	446	1%
Professional and Technical Services	7,080	8%
Management of Companies	459	1%
Mining/Oil and Gas	51	0%
Arts and Entertainment	1,252	1%
Target/Primary Industries Total	**40,891**	**48%**
Business Support Services		
Utilities	355	0%
Construction	2,443	3%
Wholesale Trade	1,267	1%
Transportation and Warehousing	645	1%
Information (non-internet)	856	1%
Finance and Insurance	2,206	3%
Real Estate and Rental and Leasing	1,600	2%
Administrative and Waste Services	4,657	5%
Business Support Services Total	**14,029**	**16%**
Community Support Services		
Nursing/Social Assistance	3,712	4%
Retail Trade	9,887	12%
Accommodation and Food Service	9,720	11%
Other Services	2,181	3%
Public Administration	4,753	6%
Community Support Services Total	**30,252**	**36%**
Total	**85,173**	

Source: Colorado Department of Labor; Quarterly Census of Employment and Wages, Economic & Planning Systems

Industry Specialization

The largest industries in Fort Collins are also the industries that the City has higher concentrations of as compared to the State of Colorado. Education and Manufacturing have location quotients of 2.0 and 1.5 respectively, which means they have higher concentrations of employment in Fort Collins than in the State of Colorado, as shown in **Figure 4.** Fort Collins has much lower concentrations of Wholesale Trade and Transportation and Warehousing, as these industries have location quotients of 0.4 and 0.2, despite the growing number of jobs in these industries in Larimer County.

Figure 4
Fort Collins Location Quotient, 2016



Source: Colorado Department of Local Affairs; Economic & Planning Systems

Workforce Conditions

The Fort Collins Chamber of Commerce in concert with the City of Fort Collins and several other regional partners active in economic development commissioned studies of the workforce challenges and opportunities facing Fort Collins and northern Colorado. The most recent study, *Talent 2.0*, identified three major challenges related to workforce.

- First, employment growth has been outnumbering the growth in workforce in the recent past, which is creating a tight labor market and putting more pressures on companies to be proactive in recruitment.
- Second, the labor force is not expected to grow at the same rate that job openings will in the near term, putting more pressure on the labor market.
- Third, an estimated quarter of the labor force in Larimer County is 55 years or older and many will retire over the next 10 years.

The impact of these challenges on City Plan is the need to have a strategy that plans for a city that is attractive and accessible to a growing workforce. Housing diversity and affordability are key elements to the accessibility of the workforce. Another major concern coming out of the

Talent 2.0 study was the rate of underemployment. An estimated 45 percent of labor force has a bachelor's degree; however, only 20 percent of jobs require a college degree. The concern is much of the labor force is stuck in jobs that they are over-skilled or overqualified for.

3. REAL ESTATE DEVELOPMENT CONDITIONS AND TRENDS

This chapter includes a review of National real estate conditions and trends affecting real estate demand. It is followed by an analysis of office, retail, and industrial/flex development trend sin Larimer County.

National Trends

There are a number of trends impacting commercial and industrial development in the United States. These trends were analyzed and summarized below to understand their potential impact on commercial and industrial development in Fort Collins.

Office Development Trends

Office Park Development

Nationally, office development is moving away from the single use, suburban office park or corporate campus to more mixed use, centrally located, and often transit-accessible locations in major urban areas. Much of this trend has been driven by shifting preferences from the workforce, especially younger, college educated Millennial-aged workers, who wish to have more access to amenities near work such as shopping, services, and dining. Their choice of place to live is being driven by considerations of quality of life and opportunity for employment. As result, employers are making decisions on locations based centrality of the workforce and locations that have an attractive quality of life.

The focus on improving suburban business parks dates back at least 15 to 20 years. In 2002, the Urban Land Institute (ULI) published a study titled *Ten Principles for Reinventing America's Suburban Business Districts*. The report authors state that existing suburban business districts "encompass a disparate group of isolated uses with little or no integration, a transportation system that is auto oriented and often hostile to pedestrians, and a near total absence of civic identity". They suggest that in response to the social and economic forces identified above, there is a potential to "transform America's more than 200 suburban business districts into more integrated live-work-shop places". It also suggests that the same forces that led to the resurgence of central business districts in the 1990s—such as increasing development densities, improving pedestrian connections between buildings, and improving transit—will be focus of smart growth and the reinvention of suburban business districts. The report's principles include: "Break up the Superblocks and Optimize Connectivity; Embrace Mixed Uses; Honor the Human Scale by Creating a Pedestrian-friendly Place: and Think Transit - Think Density".

Notable efforts are underway at some of the most prominent business parks including a new 50-year master plan for Research Triangle Park that allows for mixed use and higher densities, and a study to evaluate innovation district potentials for Stanford Research Park. In some of the most vibrant urban markets (including San Francisco, Boston, Seattle, and Denver), the appeal of the downtown mixed use environment has grown to the point where real estate values are higher downtown than in the premier suburban business districts, including rents, occupancy rates, and even absorption. A significant portion of the millennial workforce, particularly those employed in technology and other knowledge based industries, are showing a preference for living in

downtowns and other mixed use activity centers where they can live and work in close proximity with available transit to minimize dependencies on the auto or long commute to work. As a result there are a greater number of small businesses forming or locating in these urban, mixed use areas and even some notable examples of larger companies moving from the suburbs back to the central city.

Office Space Trends

More Efficient Office Space - Businesses are leasing less office space per person than in past years. Technology has reduced the need for space, and new workplace designs are more efficient. Open floor plans and shared spaces are becoming more common. In these settings, workers are freer to move around an office with a laptop and mobile phone. The National Association for Industrial and Office Parks (NAIOP) reported in 2015 that the average office lease size had dropped by approximately 10 percent from 2004 through 2014. Some of the trend in efficiency (more workers per square foot of building area) is driven by cost. Fast growing industries like technology are not necessarily cutting space requirements as they desire spacious and luxurious offices to attract the highest skilled talent. Slower growth industries such as law and accounting are reducing their space requirements to cut costs.

Co-Working Space - Co-working space is a new type of office space in which tenants rent desk(s) space in a space shared with other workers and firms. They are popular with small new firms, which can be in any field including professional services, creative industries, and technology. Tenants have access to conference rooms and shared office equipment (e.g. printers). The benefits of co-working space are that they typically have lower tenant finish levels and lower cost than traditional office space and are flexible in that they give a firm a low-cost way to grow from one to a few employees. They also offer, and are marketed for, opportunities for collaboration and knowledge sharing with likeminded people and potential business partners. Some also offer events including networking, speakers, and skill development workshops. Co-working space is popular with entrepreneurs and remote workers. It is becoming more common in major and mid-sized cities but is still a small portion of the total office market. Fort Collins has captured its share of co-working spaces, primarily located in downtown and has an alliance (fo(co)works) of independent co-working spaces to jointly promote and market their spaces and events.

Innovation Districts

The centers of American innovation have evolved since the industrial revolution. The original locations for innovation were the concentrations of manufacturing jobs and large factories in cities in the same or similar industries (e.g. car manufacturing and Detroit). In the second half of the 20th century, innovation shifted to the suburban office/science park with clusters of firms in isolated campuses and buildings. The latest shift has been to areas with concentrations of assets, companies and institutions, often in urban areas, that foster innovation.

These concentrations have been identified, by Brookings Institute and others, as "Innovation Districts". The Brookings Institute defines Innovation Districts as "geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators. They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office and retail." Their research suggests there are three general models for innovation districts:

- **Anchored Districts** – These projects are clustered around major anchor research institutions and are typically in downtown or mid-town settings. Examples include the Kendall Square/ MID cluster in Cambridge; the University City/University of Pennsylvania cluster in Philadelphia; and the Saint Louis/Washington University and Saint Louis University cluster in Saint Louis. (The most applicable model for Fort Collins)
- **Re-imagined Urban Areas** – These projects include revitalizing industrial districts and waterfronts in major urban areas including: San Francisco's Mission Bay; Boston's South Waterfront; and Seattle's South Lake Union.
- **Urbanized Science Park** – This model is focused around the urbanization and diversification of traditional business research parks. Examples include the new master plans for Research Triangle Park and Stanford Research Park as well as similar efforts at the University of Wisconsin-Madison, University of Virginia-Charlottesville, and University of Arizona-Tucson.

The innovation district concept is a reaction to employment and workforce trends. The concept tries to leverage these trends. Innovation districts are promoted as being well suited to accommodate knowledge based economy. The U.S. economy is increasingly dependent on knowledge workers with skills to fill STEM related occupations. Research activities, firms, and jobs related to STEM fields are increasingly finding benefits to clustering of activities and of educated workers. The Innovation District concept provides the opportunity for these companies and activities to cluster in environments that foster interaction.

Another benefit of the district concept is that it provides the connections to jump-start entrepreneurship. New business creation plays an increasingly important role in economic growth in communities, but the rate of new business has been declining in the U.S. The rise of collaborative working spaces has decreased the cost and risk for new businesses, while the clustering of economic activities allows these new businesses to leverage assets needed to grow their ideas and businesses.

The districts also support formal and informal interactions. Regular interactions of workers and residents increase the social networks of workers in the districts and also grow the resources of the companies they work for. These districts—and entities that help manage them—are designed to facilitate increased interaction through formal events but also through every-day interactions and events. Lastly, planners and urban economist are promoting districts as having the ability to foster more inclusive job growth. Locating employers, research activities, and the spin-off social/ entertainment activities in centralized urban areas increases the diversity of jobs in the district. The superior connectivity of these areas makes it easier for workers of all backgrounds to work in the same area and share the same social networks, which is the opposite of the traditional models where knowledge workers were clustered in suburban office parks with little interaction with others outside the park.

Medical Districts

A related planning concept is medical districts that are intended to capitalize on the business and research associated with major medical institutions. These include city-initiated efforts that are intended to organize the spinoff business development surrounding major hospitals and/or clusters of hospitals, as well as university-driven projects created to capture commercialization of basic research taking place within university medical centers.

The recently completed University of Texas at Austin Medical District Master Plan creates a partnership between UT Austin, Seton Healthcare, and Central Texas Healthcare to create a compact urban development on the southern edge of the UT campus in downtown Austin. It will contain the university's planned new medical school and medical research building, as well as a new teaching hospital and medical office building. The vision for the district integrates health care teaching and research within an interdisciplinary setting taking advantage of adjacent university resources.

The University of Colorado Anschutz Medical Campus

A Colorado example is the creation of a medical district at the Anschutz Medical Campus in Aurora. The University of Colorado relocated its medical school, hospital and research facilities to a 200 acre campus site at the former Fitzsimons Army Medical Center. Children's Hospital of Denver and Veteran's Hospital are located on an adjacent 25 acre site. The public medical facilities are complemented by a 160-acre bioscience research park intended to facilitate the commercialization of university research as well as capture other private sector medical related businesses. The Anschutz Medical Campus has been the fastest growing employment center in the metro area since 2005, having captured nearly 20,000 jobs over the last 10 years.

Retail Development Trends

The retail industry has shifted greatly over the last 10 to 15 years, impacted by the growth of internet sales, declining brick and mortar store sales, retail chain consolidations, and demographic shifts and preferences. Collectively, these trends are impacting store sizes and reducing the overall demand for new retail space locally and nationally.

The Rise of E-Commerce

Between 2001 and 2015, total online retail purchases (excluding auto related) grew from approximately $29 billion to $310 billion, an 18.4 percent annual growth rate. Online sales accounted for 22 percent of total retail sales growth. During the same period, brick and mortar stores grew at a 3.7 percent annual growth rate, decreasing their share of the total retail market from 98 percent to 89 percent. Despite still accounting for only 11 percent of overall spending, the growth in online shopping is impacting the demand for traditional brick and mortar stores. This also affects the way retailers are doing business, pushing them to alter store formats and incorporate online sales and marketing into their business concepts. The list of top online retailers reinforces this point as many have a significant brick and mortar presence as well. This group includes such major retailers as Walmart, Target, Home Depot, Best Buy, and Bed Bath & Beyond.

Bifurcating of Retail Demand

Changes in spending patterns are also affecting the amount and mix of retail space. Consumer spending is split between low-cost, high convenience retail options—where the internet is making significant impacts—and more experience, community, locally oriented retail options. On the low cost, high convenience end of the spectrum, online retailers like Amazon and warehouse club retailers such as Costco are preforming the best. On the other end, the shift to more experience oriented retail is being driven by the millennial generation. A portion of this generation is highly mobile, are less likely to accumulate furniture and home furnishings and other large, high cost items. They are also more interested in experiences, emphasizing travel and entertainment. However, they still like to shop but in more experience-oriented retail areas and/or with retailers that match with their lifestyle. Their spending patterns are similar to the boomer generation who has already purchased much of the goods they need and are downsizing their homes and accumulated items. Boomers are also spending more of their income on travel, leisure, entertainment, and dining out.

Social Media and "Showrooming"

According to the National Retail Federation, 86 percent of American consumers at least occasionally research items online before buying in a store; of these, 22 percent conduct this research primarily on blogs and 32 percent primarily on Facebook. Electronics is most researched, followed by apparel, appliances, and then shoes. Many consumers will also look at or try on an item in a store and then price shop and purchase it online.

Changing Retail Mix

These changes in spending patterns are impacting the mix of retail space in aggregate as well as within individual districts, corridors, and centers. Sales for prepared foods are now outpacing sales for food for home consumption. The restaurant, bar, and microbrewery segment has grown rapidly and new food and beverage formats have been introduced (e.g., food halls and market halls, farm to table restaurants, and food trucks). These market/food hall establishments (Denver metro area examples include Denver Central Market, The Source, and Avanti in Denver and Stanley in Aurora) focus on creating a community atmosphere with shared eating and common spaces and a variety of food options and small format retail options.

Store and Chain Consolidation

Over the past five years, there have been nearly 200 retail chain bankruptcies. In 2017, CNN Money reported that there were 5,300 store closing announcements through June 20 compared to 6,200 in 2008 during the Great Recession—the worst year so far for store closings. There are fewer stores in the market now, making it more difficult to find tenants for new retail developments, as well as increasing vacancies in existing centers as large blocks of space are vacated by store brands that no longer exist.

Industrial Development Trends

The industrial development industry is shifting significantly in reaction to increase in technology and the internet. The shifts are having both positive and negative impacts on the economic health of communities. Generally, the shifts are pushing towards more industrial oriented development but at the same time resulting in fewer jobs as automation improves efficiency.

Globalization and Automation Impact on Manufacturing

Industrial employment, particularly manufacturing, has recovered slightly since the economic recession of 2008 and 2009, but has not returned to pre-recession levels. Sharp declines in industrial employment often are precipitated by recessions, and employment either continues to decline or fails to recover to pre-recession levels. As a comparison, at the national level, manufacturing jobs are down 37 percent from their peak in 1979. Globalization and automation are the major reasons for these continual declines. The number of robots per capita employee has increased dramatically in the last 25 years and economists estimate that each additional robot reduces employment in a commuting area by 3 to 6 workers and wages by 0.25-0.5 percent. The rate of robot substitution varies across industries, but manufacturing tends to have high factors. Off-shoring of manufacturing has impacted numerous manufacturing subindustries including computer equipment manufacturing.

Growth of Logistics

As e-commerce has driven down demand for retail space, it has at the same time driven up demand for industrial development supporting its growth. Logistics and distribution oriented employment sectors (transportation and warehousing, wholesale trade) and industrial development are the largest drivers of new industrial development. As e-commerce retailers and traditional retailers are pushing for more convenience and more online shopping, demands for local distribution are growing. Industrial buildings and developments related to logistics want to locate centrally to their service market, and along major transportation routes. Industrial spaces

for logistics activities look for larger floor plates, with higher ceilings, which make newer buildings more attractive.

Middle Skill Jobs

Traditionally, jobs within industrial oriented businesses are an important source of "middle skill" jobs—jobs that don't require a college degree but rather some form of specialized training. Manufacturing wages are typically higher than wages in other industries accessible to workers without a college degree, such as retail and food service. Unlike service industries, manufacturing wages approach, and/or exceed, a living wage. However, there are trends impacting the presence of these middle skill jobs. Automation is reducing employment in industrial oriented employment sectors. As well, industrial areas in urban areas are under threat for redevelopment. In larger urban areas, including Denver, communities are considering policies related to industrial preservation as redevelopment pressures are pushing industrial uses to the fringes of metro areas and either driving middle, lower income residents out or increasing their commutes.

Small Urban Manufacturers (SUMs)

Urban manufacturing today is largely occupied by small, specialized firms in collaborative and interdependent networks. In Fort Collins, 80 percent of manufacturing firms have fewer than 20 employees. The average size of a manufacturing firm is 28 employees but the median size is six employees. Manufacturers nationally have also been trending towards smaller footprints and fewer employees. Research has shown that small urban manufacturers (SUMs) are more productive when located in denser urban areas. These firms desire the centrality within their market, which helps with employee attraction and also proximity to goods and services needed to support their businesses. SUMs also tend to pay higher median wages with higher wage growth and skill development opportunities. However, these smaller manufacturers are typically looking for existing, lower cost spaces at least initially. As they grow, finding locations with a larger building and/or the ability to build to suit their own facility is a need, which is increasingly harder to find in central locations and at an affordable cost.

Local Real Estate Development Conditions and Trends

Inventory, Rent and Vacancy Rates

Fort Collins has nearly 70 percent of the office space in Larimer County, and 57 and 56 percent of the retail and industrial space as well. However, over the past 10 years the City has been capturing a decreased share of new commercial and industrial development. Fort Collins captured only 45 percent of office development in the past 10 years and 46 percent of retail development since 2007. The City captured only 34 percent of industrial space, as shown in **Table 4**. As neighboring communities have grown, many have been able to attract and develop their own retail centers, primarily centered along I-25. As the labor force has become more interconnected within the region, I-25 has grown in importance and the market has responded. The City of Fort Collins has not made the same proactive efforts to grow along I-25. The declining capture illustrates this growing competition from neighboring communities for new development.

The job growth in the past five to seven years has been driving demand for spaces for businesses to locate. Vacancy rates for office, retail and industrial space in the City and Larimer County are low and in most cases indicate demand for new development. The office vacancy rate

at the end of 2017 was 3.7 percent, indicating demand for new inventory. The vacancy rate in the county for office space is also low at 4.7 percent. The county has a higher average rental rate of $22.11 per square foot, versus $16.05 in the city—which may be a result of the lack of newer office space in the city.

Retail space in Fort Collins has grown by an average of 150,000 new retail square feet per year in the past 10 years, with a total inventory of 11.3 million square feet. Capture of recent development is down from traditional amounts, as described above, but is outpacing the city's capture of population growth. Retail rates in the city are higher than the county's on average ($19.53 versus $18.51). The vacancy rate within the city is 6 percent, which is near equilibrium, but the county rate is 3.5 percent, which is low and indicates demand for new space. The city's vacancy rate is still relatively low considering the addition of space within the Foothills Mall redevelopment, which has been slow to absorb.

Strong demand for industrial and flex space in the City Fort Collins is reflected in the 3.1 percent vacancy rate in fourth quarter 2017. Vacancy in the county is higher at 6.8 percent but still low for industrial space. Rental rates have been growing in recent years and average rates are essentially the same in the city and elsewhere in the county.

Table 4
Larimer County Commercial and Industrial Development Inventory

Use	Fort Collins	% of County	Larimer County
Office			
Inventory (sq ft)	7,600,180	69%	11,005,512
New Development past 10 years (2007-2017)	839,547	45%	1,884,712
Average Rental Rates	$16.05		$22.11
Vacancy Rate	3.7%		4.7%
Retail			
Inventory (sq ft)	11,329,874	57%	19,866,822
New Development past 10 years (2007-2017)	1,506,387	46%	3,271,971
Average Rental Rates	$19.53		$18.51
Vacancy Rate	6.0%		3.5%
Industrial/Flex			
Inventory (sq ft)	12,019,153	56%	21,472,142
New Development past 10 years (2007-2017)	620,379	34%	1,837,487
Average Rental Rates	$9.44		$9.36
Vacancy Rate	3.1%		6.8%

Source: CoStar

Development Locations

Office development over the past 17 years has been clustered in three major locations. The three major clusters of new development are the Harmony Corridor, the Centerra development north of the intersection of I-25 and US-34 highways, and in and around downtown Fort Collins. The clusters along Harmony Road and in Centerra have been built over the past 15 to 20 years, as shown in **Figure 5**. The new development has moved employment away from the central locations along US 287 to the east towards I-25. The clustering of office development mirrors national trends of concentrations of office employment especially in central locations with superior transportation access and within more mixed-use environments, albeit largely suburban/auto-oriented in local context.

Retail development patterns in the past 15 to 20 years provide the most stark illustration of the shift of the economic activity in Larimer County away from US 287 to I-25. The majority of retail development in the county has occurred along US 34 and Harmony Road towards the intersections with I-25, as shown in **Figure 6**. The growth of the region has shifted the orientation of retail away from the individual communities to regional locations. The traditional location for regional retail was along College Avenue anchored by Foothills Mall. The Shops at Centerra and other retail components of the Centerra development create a major new node of regionally oriented retail in northern Colorado. The shift impacted Foothills Mall and led the City to proactively work to redevelop Foothills Mall. Smaller communities in northern Colorado, such as Windsor, Johnstown, and Timnath, have been making aggressive efforts to capture retail development primarily along I-25.

Industrial development has also been clustered in a few primary locations in Larimer County, as shown in **Figure 7**. The concentrations include the Mulberry Corridor (both outside and inside the city boundaries), near the intersection of US 34 and I-25, and smaller concentrations in Loveland near the intersection of US 34 and US 287 and at the northern edge of Loveland along US 287. The growth of the region and national retail trends have grown the concentrations of logistics/distribution related activities, which have gravitated to the US 34 and I-25 area.

Figure 5
Larimer County Office Development, 2000 to 2017

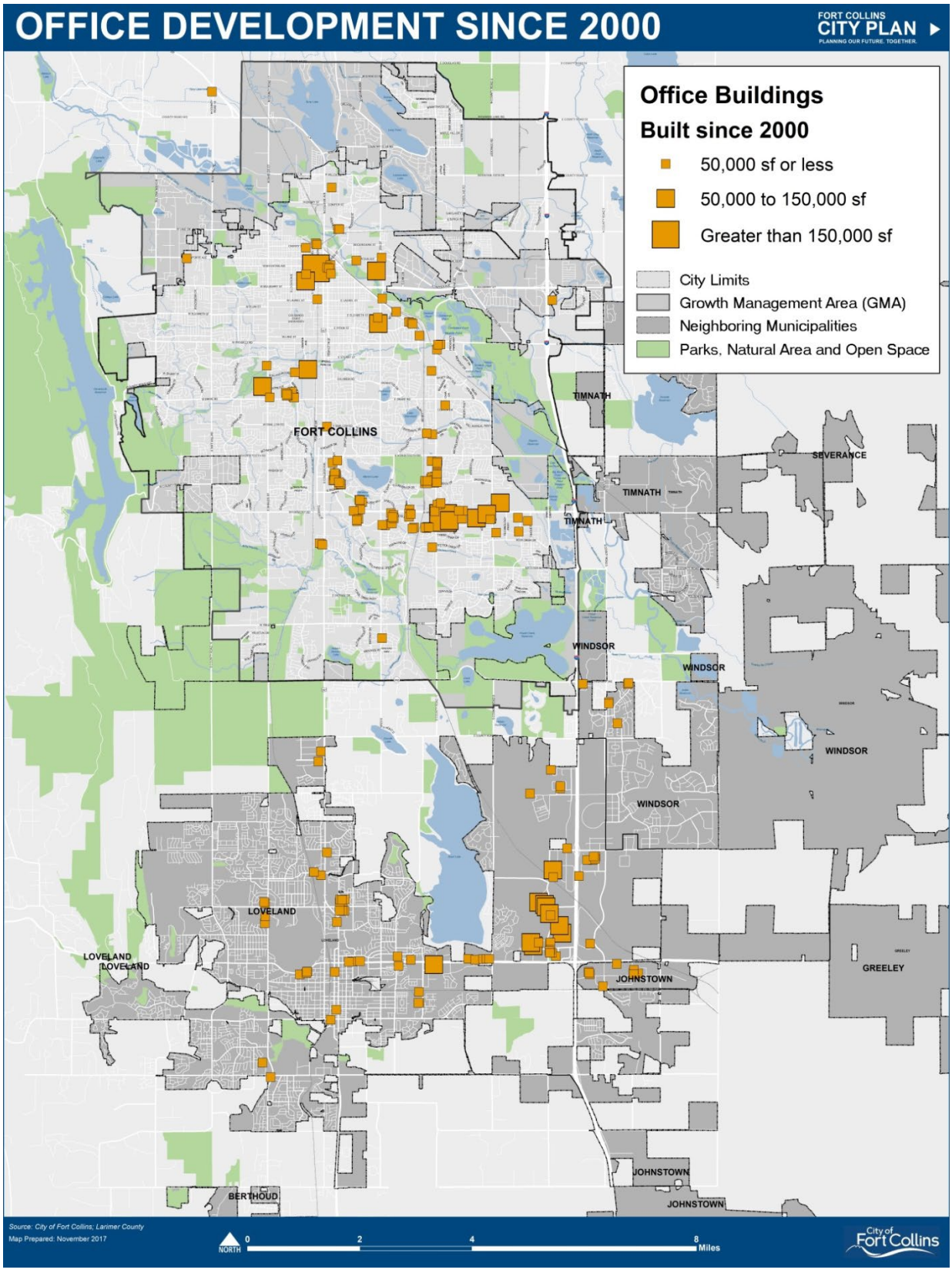


Figure 6
Larimer County Retail Development, 2000 to 2017

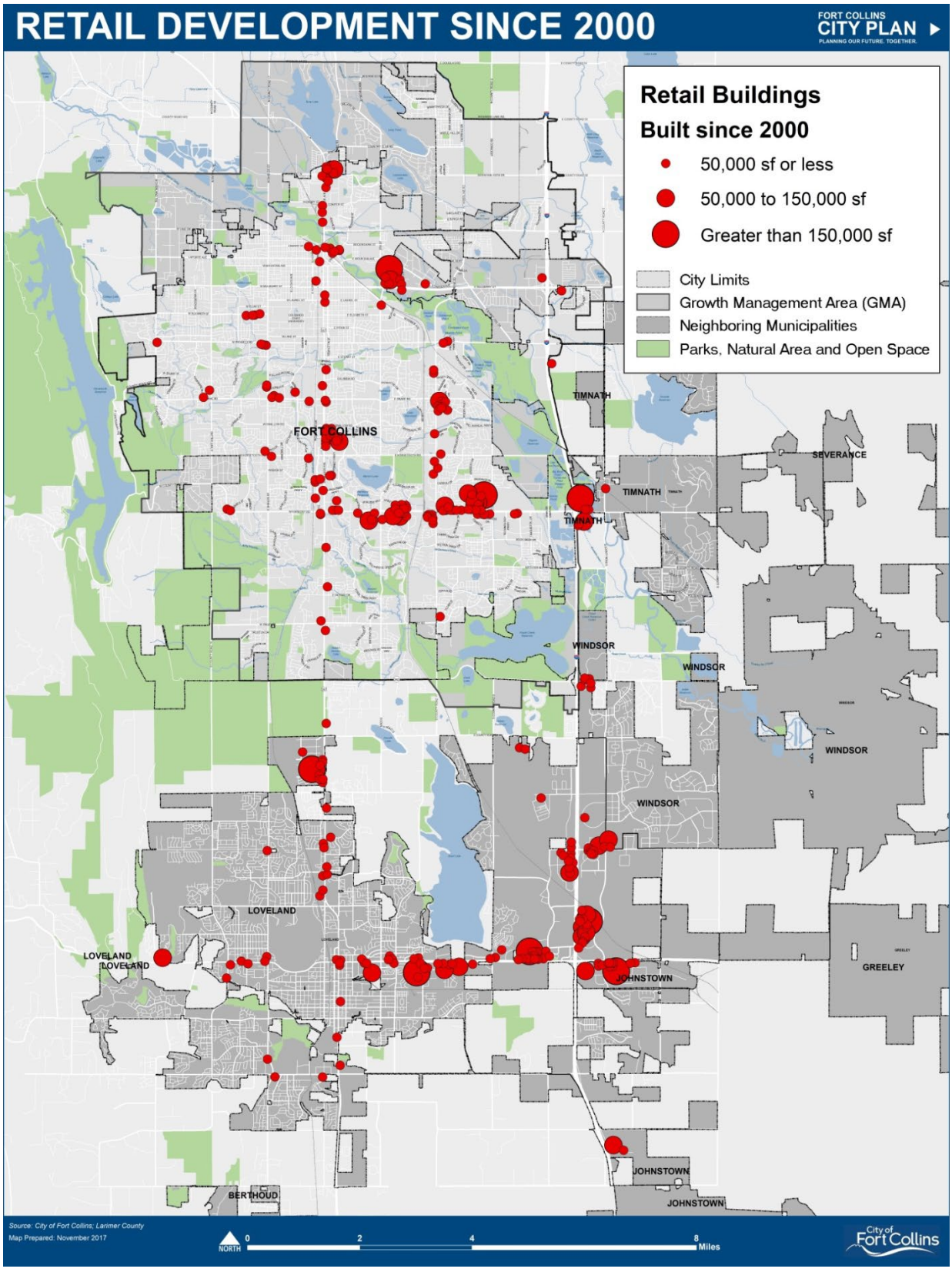
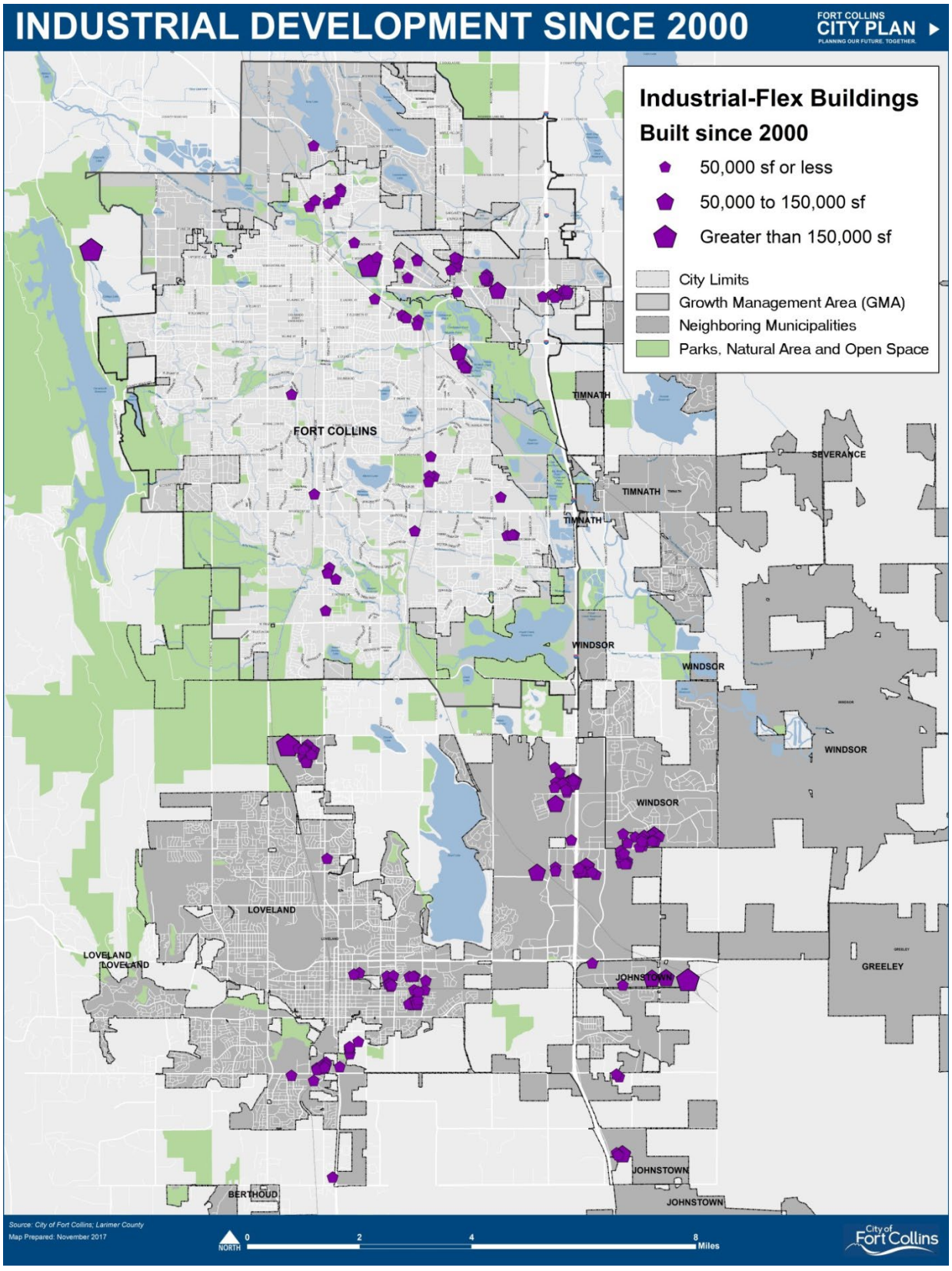


Figure 7
Larimer County Industrial Development, 2000 to 2017



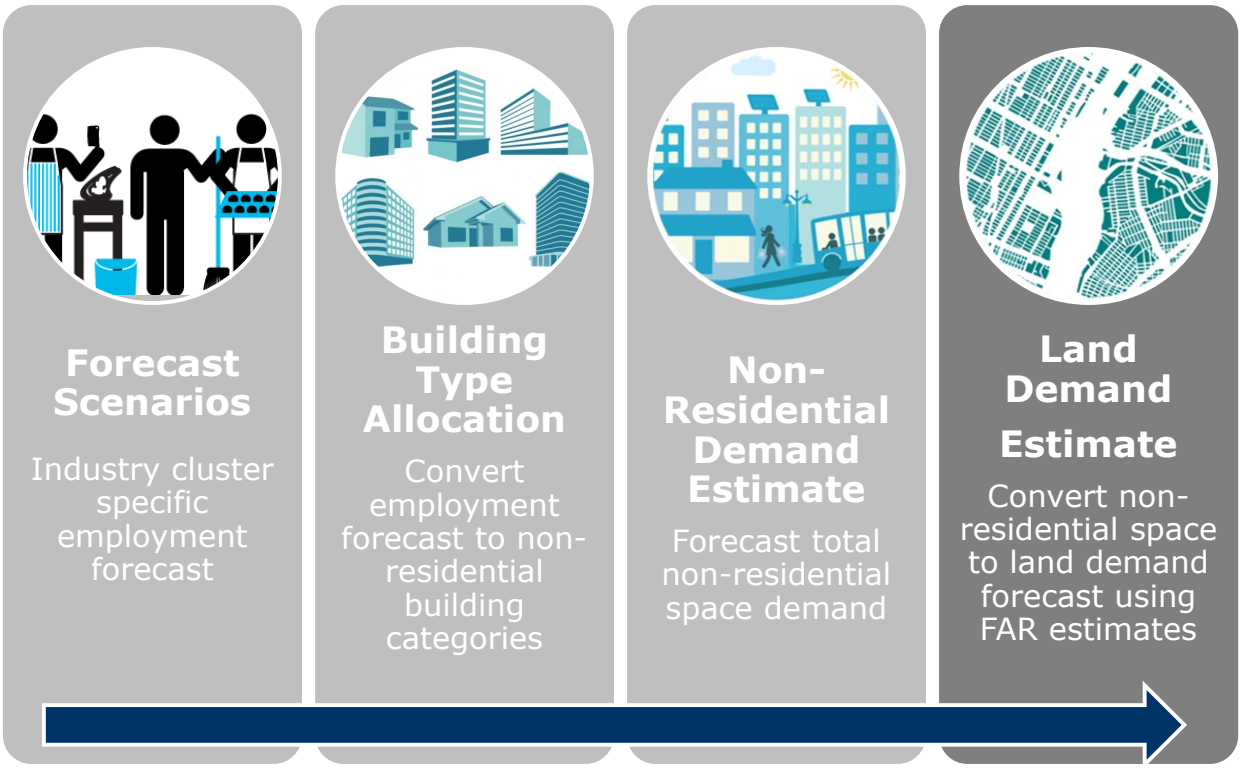
4. LAND DEMAND METHODOLOGY AND INPUTS

This chapter provides an overview of the land demand model and demand forecast developed for City Plan. The chapter provides an explanation of methodology, summary of employment forecasts, identifies major model inputs and assumptions, and provides a summary of the estimated land demand by development type and corresponding land use designations.

Methodology

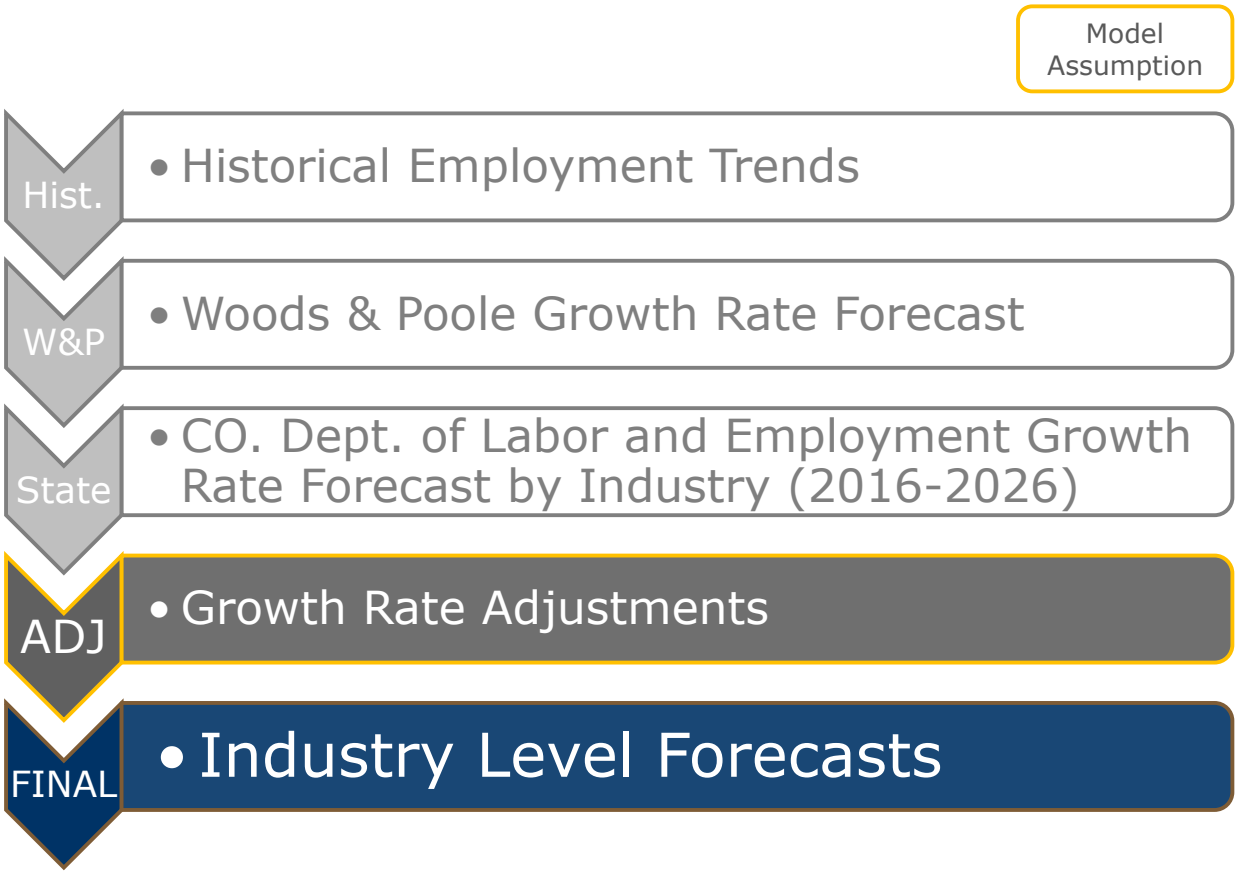
To estimate land demand for employment uses, EPS utilizes a four step process illustrated in **Figure 8.** Employment in the region is forecasted by industry sector and then allocated to building types based on existing location patterns by industry in the city. Estimated new jobs by building type are translated to demand for buildings square feet using national averages of employees per square feet. Lastly, density factors (floor area ratio) per building type are derived from existing and recent development within the region are used to estimate demand for land.

Figure 8
Employment Land Demand Methodology



To forecast future employment growth by industry, EPS relied on four major sources. First, the Northern Colorado MPO's total employment forecast for the county was used as a general guide towards the overall total employment growth between 2015 and 2040. Historic employment growth rates and annual new jobs averages, growth estimates from Woods & Poole (a secondary employment data provider), and growth estimates by industry provided by the Colorado Department of Labor and Employment are used to develop estimated growth rates in employment by sector from 2016 to 2040, as shown in **Figure 9**. The rates used largely rely on historic annual job growth averages and the state's forecast by industry.

Figure 9
Employment Forecast Methodology



Next, the forecast of employment by industry are allocated to building types. Four simple building types were used; retail, office, industrial/flex and industrial. These building types were chosen to align with the City's three major land use designation categories for employment, which are commercial/mixed use, employment, and industrial. Square foot per employee factor, which were developed using national/industry averages, were used to estimate demand for building space in the county. The factors used are shown in **Figure 10**. The estimated capture of new building space in Fort Collin's GMA was estimated using historic capture rates for new development. The demand for building space was then translated into demand for land using floor area ratios for each building type, as shown in **Table 5**.

Figure 10
Future Employees to Future Building Demand Methodology

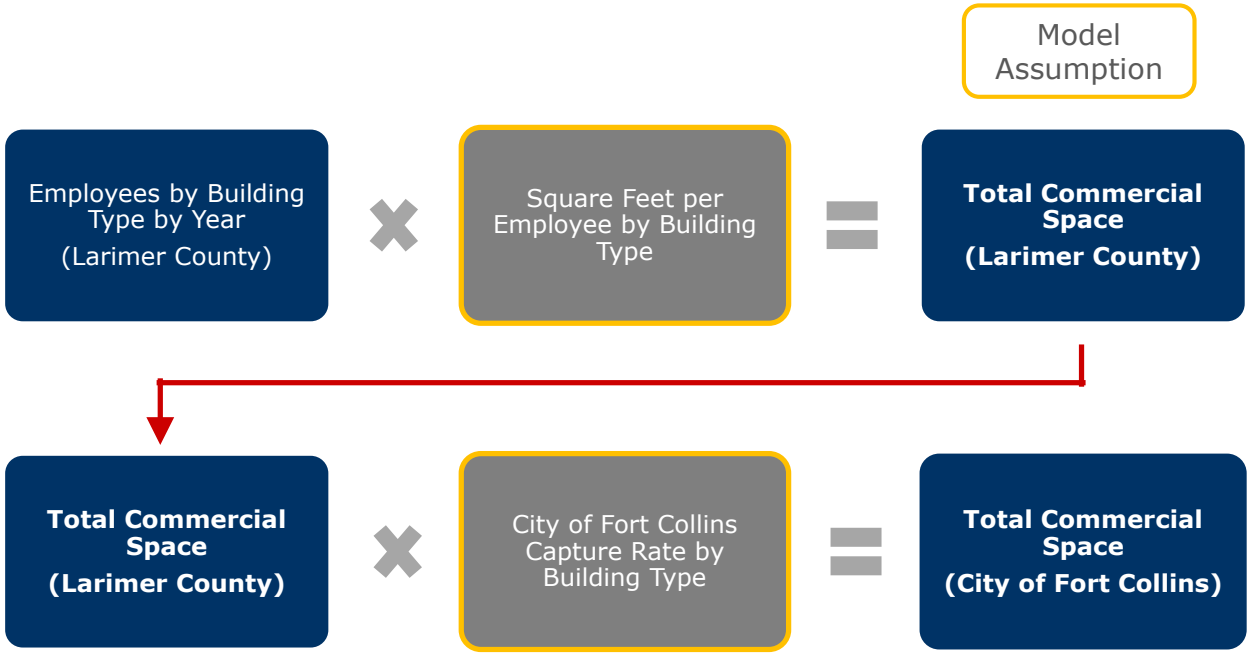


Table 5
Employee per Square Feet and Floor Area Ratio Factors

	Commercial/Mixed Use		Employment		
Factors	**Retail**	**Office**	**Office**	**Industrial/Flex**	**Industrial**
Square Feet per Employee	350	225	225	400	700
Floor Area Ratio	0.25	0.50	0.40	0.30	0.20

Source: Economic & Planning Systems

E:\[163125-Employment Land Demand.xlsx]Conversion Factors

Employment Forecast

The growth in wage and salary jobs in the county was estimated by industry from 2016 to 2040 to estimate the demand for new commercial and industrial development. Wage and salary employment is estimated to grow by 85,633 jobs, which is an annual rate of 1.9 percent, as shown in **Table 6**. It is important to note job growth is forecast to outpace housing growth in the county, which unless otherwise addressed will continue the inflow workers from other counties.

Table 6
Larimer County Employment Forecast by Industry, 2016 to 2040

Sector	2016	2026	2040	Change 2016 to 2040 Total	Ann. #	Ann. %
Target and Other Primary Industries						
Hospitals and Health Providers	15,372	20,659	27,259	11,887	495	2.4%
Education	17,295	20,471	24,869	7,574	316	1.5%
Food and Beverage Production/Agriculture	2,811	4,365	5,604	2,793	116	2.9%
Manufacturing	11,237	13,698	14,688	3,451	144	1.1%
Technology Development	862	1,276	1,803	941	39	3.1%
Professional and Technical Services	10,662	14,329	18,394	7,732	322	2.3%
Management of Companies	860	1,156	1,525	665	28	2.4%
Mining/Oil and Gas	498	702	853	355	15	2.3%
Arts and Entertainment	3,006	3,962	5,228	2,222	93	2.3%
Target/Primary industries Total	**62,603**	**80,618**	**100,224**	**37,621**	**1,568**	**2.0%**
Business Support Services						
Utilities	737	775	819	82	3	0.4%
Construction	10,426	14,850	19,594	9,168	382	2.7%
Wholesale Trade	4,359	6,149	7,574	3,215	134	2.3%
Transportation and Warehousing	3,151	4,034	4,833	1,682	70	1.8%
Information (non-internet)	2,088	2,109	2,139	51	2	0.1%
Finance and Insurance	3,673	4,566	5,781	2,108	88	1.9%
Real Estate and Rental and Leasing	2,721	3,449	4,489	1,768	74	2.1%
Administrative and Waste Services	8,518	8,954	9,337	819	34	0.4%
Business Support Services Total	**35,673**	**44,884**	**54,566**	**18,893**	**787**	**1.8%**
Community Support Services						
Nursing/Social Assistance	5,740	7,348	9,695	3,955	165	2.2%
Retail Trade	18,582	21,565	25,485	6,903	288	1.3%
Accommodation and Food Service	18,175	24,190	31,918	13,743	573	2.4%
Other Services	4,314	5,742	7,371	3,057	127	2.3%
Public Administration	7,926	8,755	9,388	1,462	61	0.7%
Community Support Services Total	**54,737**	**67,599**	**83,856**	**29,119**	**1,213**	**1.8%**
Total	**153,013**	**193,101**	**238,646**	**85,633**	**3,568**	**1.9%**

Source: Colorado Department of Labor; Quarterly Census of Employment and Wages, Economic & Planning Systems

Future Land Demand

The estimated new 85,633 jobs by 2040 are estimated to generate demand for 22 million square feet of commercial and industrial development. The City of Fort Collins (including the current GMA) is estimated to capture a third of new development in the county, with an estimated 2.8 million square feet of retail, 2.4 million square feet of office/general commercial space, and 2.2 million square feet of industrial/flex space, as shown in **Table 7**. The estimate land demand (between 2016 and 2040) for Commercial/Mixed Use areas is 11.8 million square feet or 294 acres; the demand for Employment areas is estimated to be 7.7 million square feet or 176 acres; and the demand for Industrial areas is estimated to be 5.6 million square feet or 128 acres.

Table 7
Fort Collins Estimated Employment Building and Land Demand, 2016 to 2040

	Commercial/Mixed Use		Employment		
	Retail	Office	Office	Indust/Flex	Industrial
All Industries					
Larimer County Building Demand	7,861,668	1,968,470	3,721,565	2,995,443	5,588,382
% Capture in Fort Collins GMA	35%	45%	45%	35%	20%
Fort Collins Building Demand	2,751,584	885,812	1,674,704	1,048,405	1,117,676
Fort Collins Land Demand (Sq Ft)	11,006,335	1,771,623	4,186,760	3,494,684	5,588,382
Fort Collins Land Demand (Acres)	253	41	96	80	128

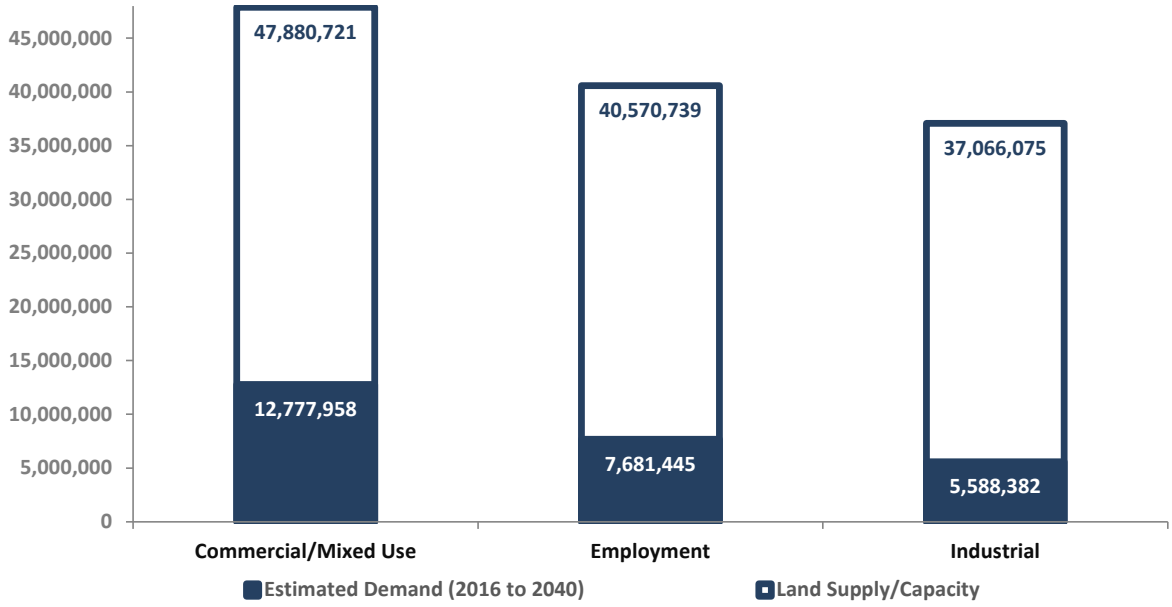
Source: Economic & Planning Systems

Comparison of Demand to Supply

The City of Fort Collins has an estimated 7,556 acres of vacant and potential redevelopment land capacity for growth, as estimated by the City of Fort Collins. The majority, 90 percent, of the land in the capacity estimate is "vacant" land. Thirty-eight percent of the land capacity is estimated to be for employment uses within three categories; commercial/mixed-use, employment, and industrial. This totals to 2,882 acres or 125 million square feet.

As shown in **Table 7,** the estimated demand for new employment land is approximately 600 acres. The estimated demand for employment oriented development accounts for 20 percent of the estimated supply. The estimated demand for commercial/mixed-use development accounts for 27 percent of capacity, and demand for employment and industrial development account for 19 and 15 percent of estimated supply.

Figure 11
Estimated Land Demand versus Supply, 2016 to 2040



Source: Economic & Planning Systems; City of Fort Collins

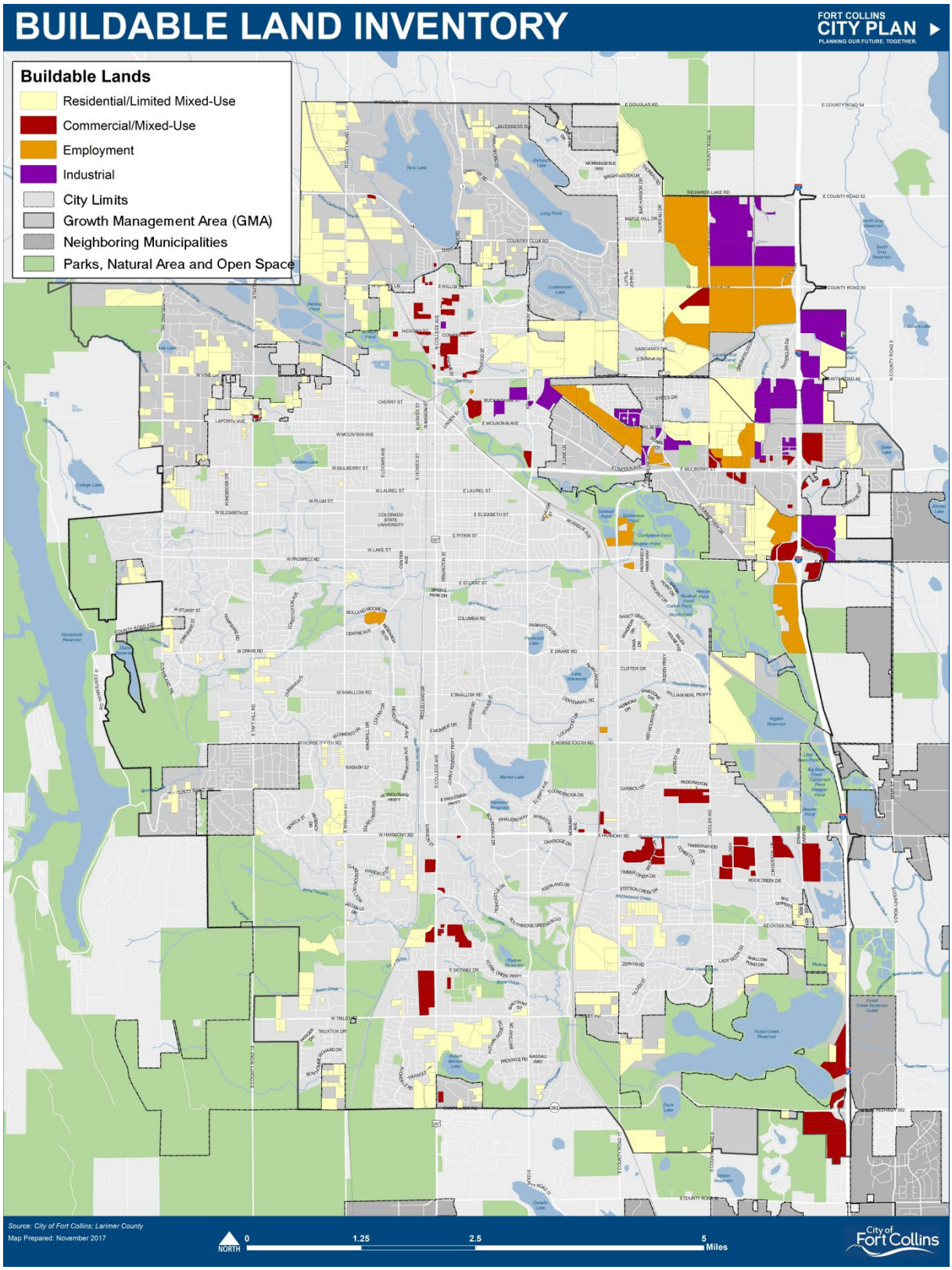
Location of Capacity and City Plan Implications

The locations of buildable land capacity (vacant land), as identified by the City of Fort Collins, are shown in **Figure 12**, based on current zoning**.** The majority of land zoned for new employment development is located in the northeast portion of the city along Mulberry and along I-25. There are also a number of larger development sites along the Harmony Corridor, which are zoned for commercial/mixed-use. Other commercial/mixed-use parcels are located around the I-25/Highway 392 interchange in the southeast edge of the city, and along College Avenue on the northern and southern edges of the community. Areas with potential for redevelopment were also evaluated by the City of Fort Collins. These sites are generally scattered throughout the city and only account for 10 percent of land capacity.

The buildable employment lands the City has greatly exceeds the demand for new employment lands by 2040. The majority of employment and industrial capacity within the city is located north of Mulberry and are in areas with limited infrastructure to support new development. As well, the majority of the buildable land capacity in the city is outside of the City's current water service boundary. The location of areas designated for employment uses needs to be re-examined through the City Plan process.

As described above, development pressures for office have primarily been in downtown, along the Harmony Corridor, or at Centerra. As well, industrial development has located primarily near the Mulberry Corridor and in Loveland. There are also large portions of land designated for residential to the east of downtown and along Mulberry, which could be re-examined. The excess capacity would suggest that the City could be more flexible with use of employment lands in some areas. The City should also focus efforts on a few primary areas to capture employment growth, similar to its historic efforts along Harmony Road.

Figure 12
Buildable Lands Inventory



CITY PLAN

Employment Land Suitability Analysis

METHODOLOGY

MAJOR TASKS

1. Develop attributes desired by regional/community retail, office/employment, and industrial space users

2. Measure the presence of the attributes in the Growth Management Area for each use utilizing a grid of approximately 40 acre squares.

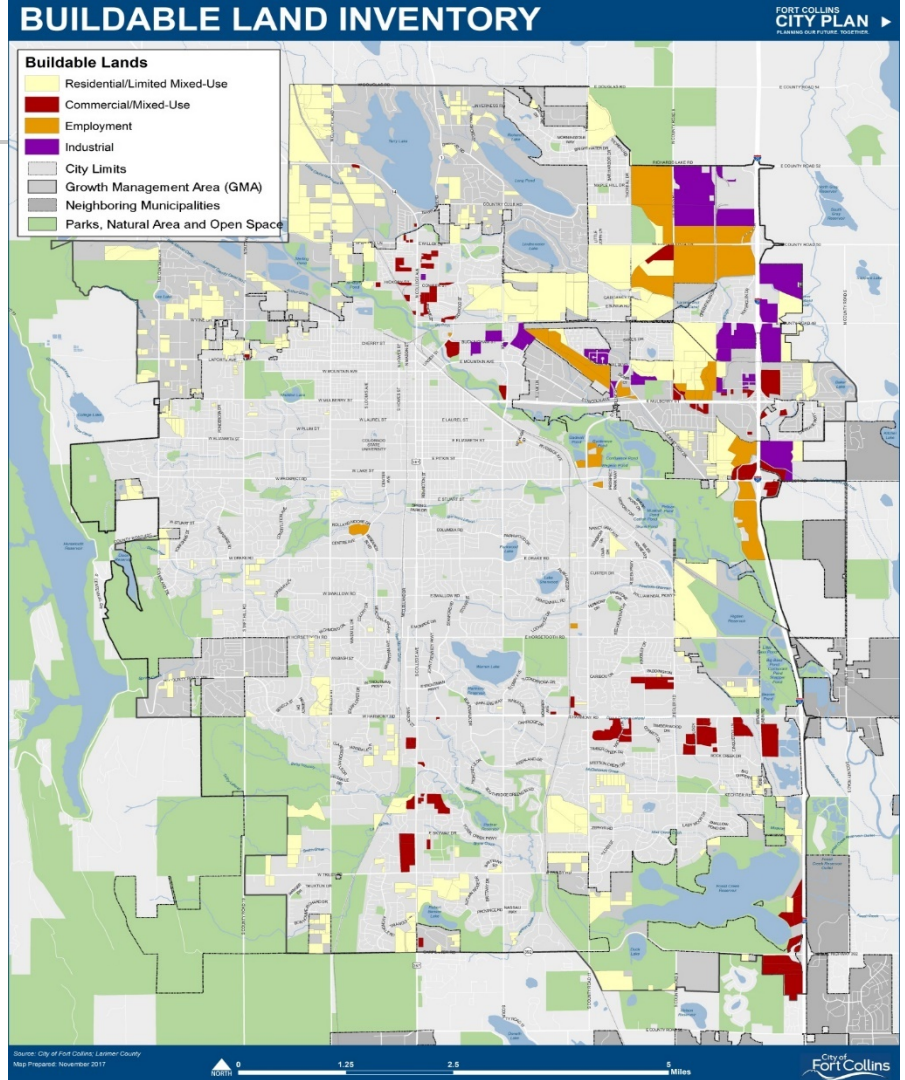
3. Develop a desirability score for each use for each of the grids and compare them to the Opportunity Areas

4. Assess the desirability of each use type in the Opportunity Areas

DEVELOPMENT CAPACITY

VACANT AND UNDERUTILIZED LAND

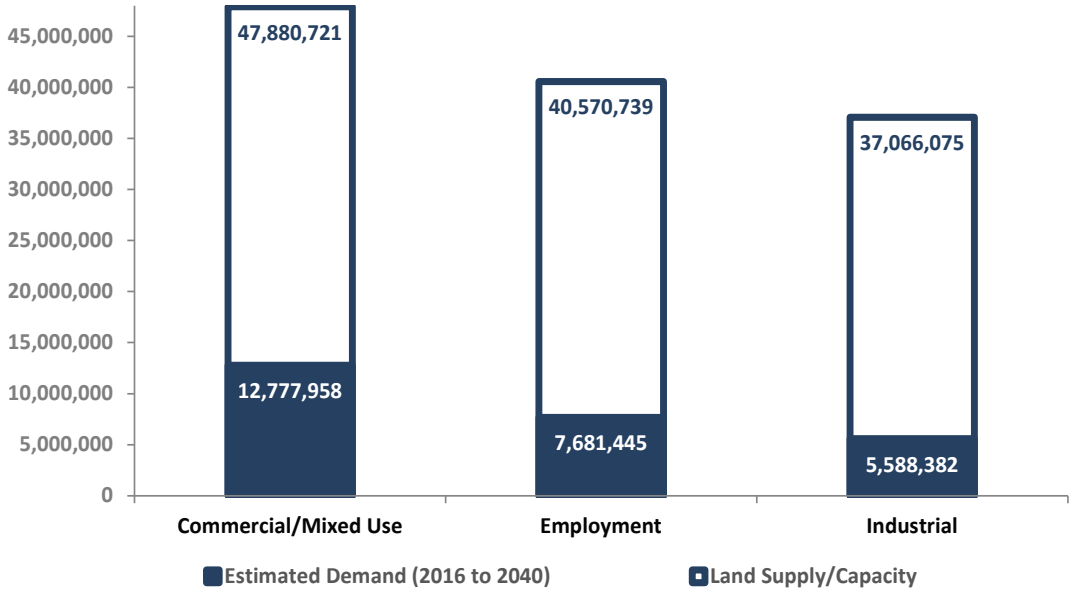
- Much of capacity is near I-25
- Large amount of vacant employment in area lacking infrastructure and access to I-25
- Likely more redevelopment capacity than estimated



DEMAND VS CAPACITY

LAND ACRES OF DEMAND VS CAPACITY

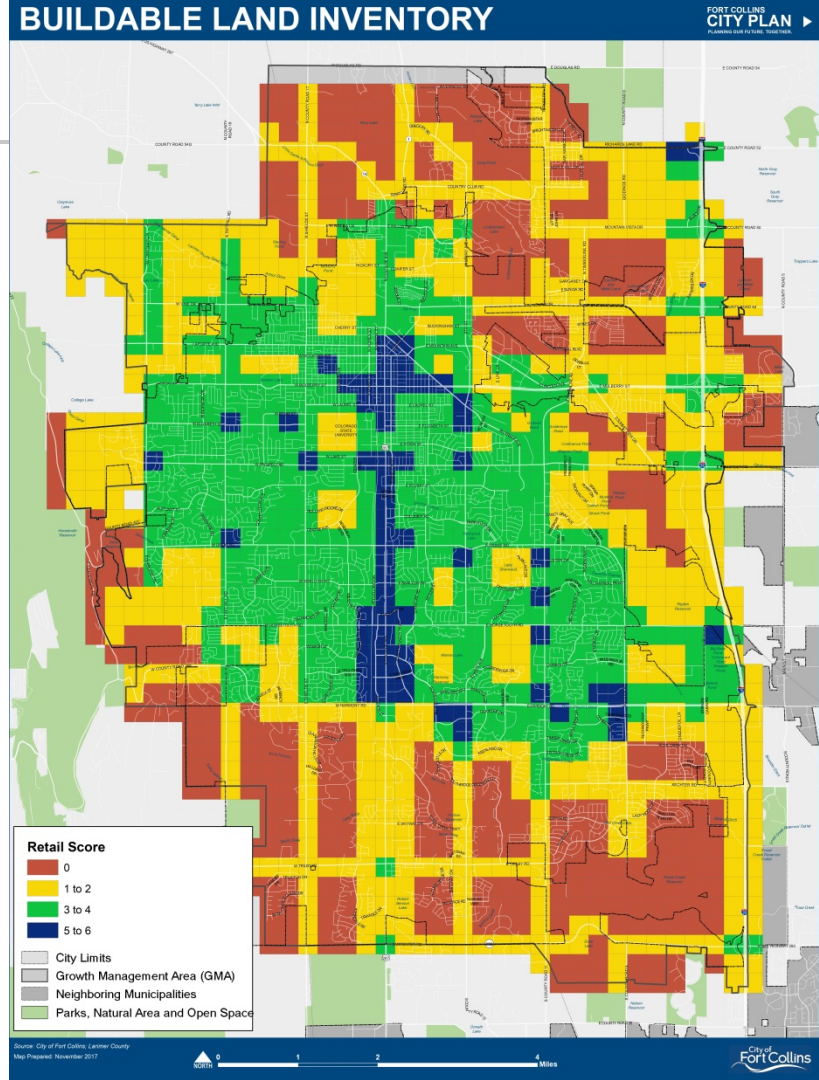
- Excess capacity of employment land
- Large amount of vacant employment in area lacking infrastructure and access to I-25
- Likely more redevelopment capacity than estimated
- Existing employment land often not desirable to prospective employers



REGIONAL/COMMUNITY RETAIL

ATTRIBUTES MEASURED

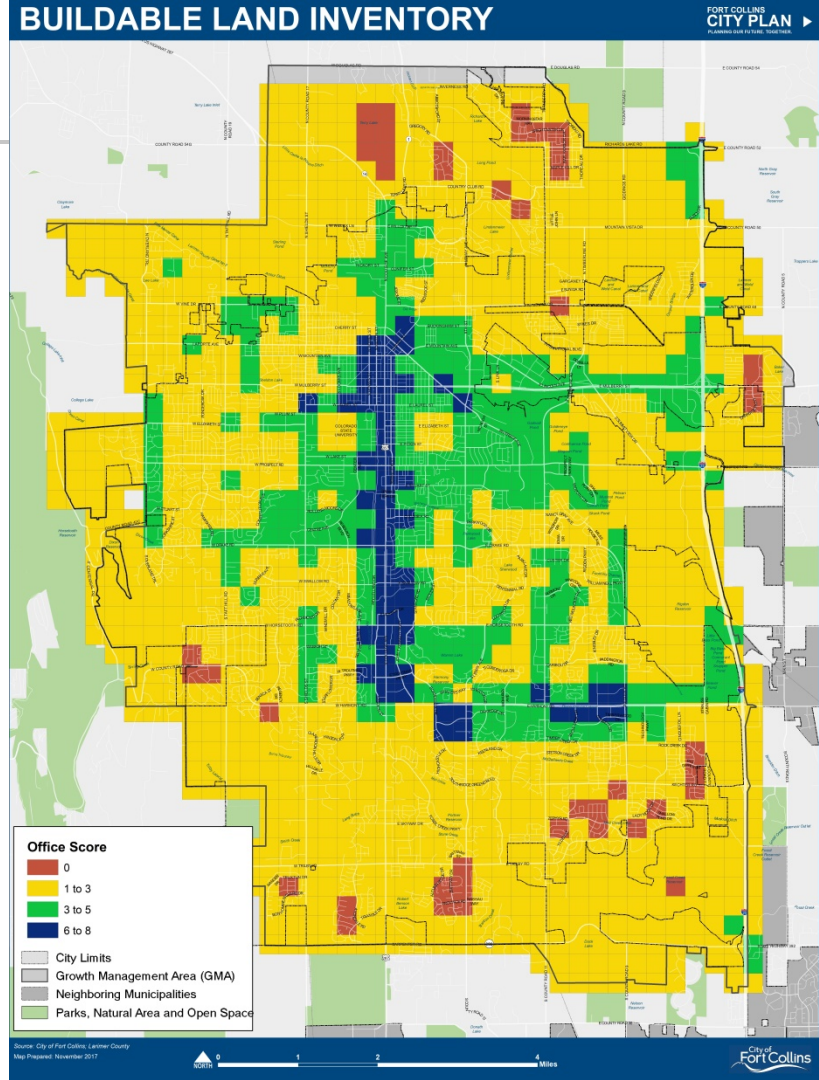
- Surrounding Housing density
  - Average housing density in grid of greater than 2 households per acre
- Visibility and Access from highways/major arterials
  - Within ¼ mile of Major Arterial or Highway
  - Adjacent to Arterial
- Highway Interchange
  - Adjacent to interchange
- Presence of Existing Retailers
  - Greater than 4 retailers in grid
- Served by City's Water and Sewer
  - Water – Yes/No
  - Sewer – Yes/No



OFFICE/EMPLOYMENT

ATTRIBUTES MEASURED

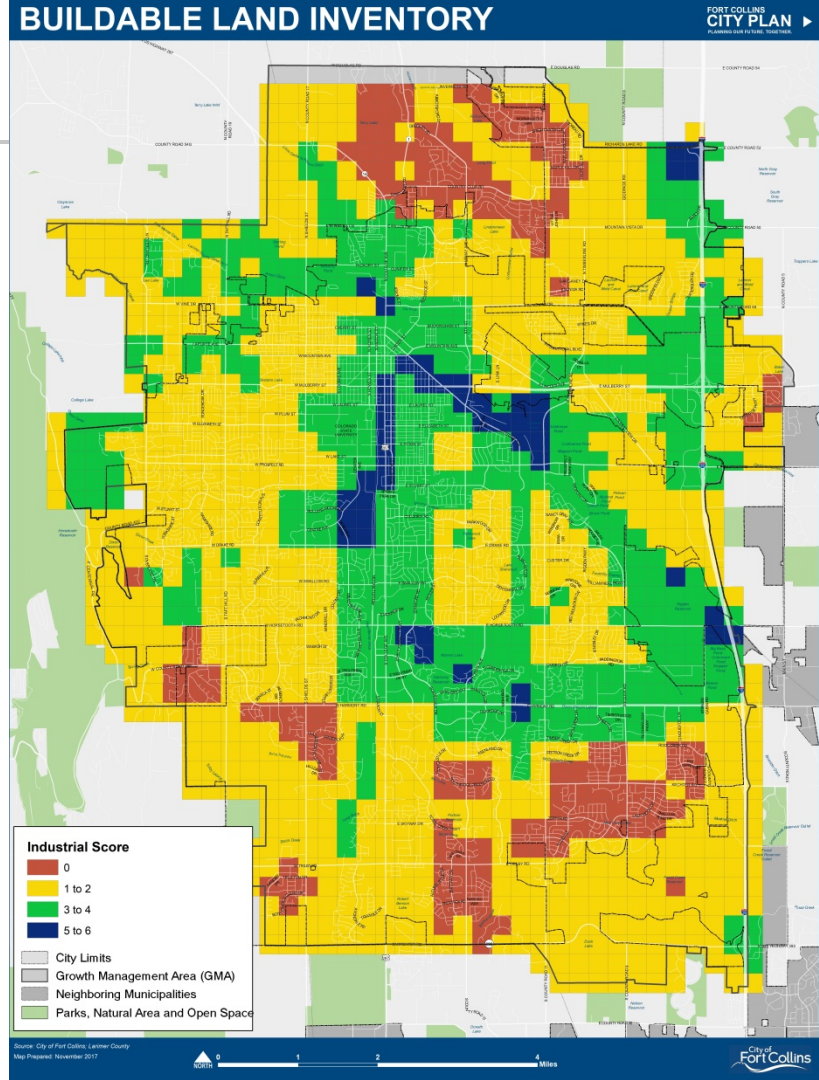
- Employment Density
  - Average employment density of greater than 60 jobs per grid
- Housing Density
  - Average housing density in grid of greater than 2 households per acre
- Proximity to highways/major arterials
  - Within 1/4 mile of Major Arterial/Highway
- Highway Interchange
  - Adjacent to interchange
- Access to Transit
  - Adjacent to Max Stop
- Presence of Enterprise Zone
  - In a enterprise zone Y/N
- Served by City's Water and Sewer
  - Yes/No
- Average parcel size
  - Average parcel size of greater than 0.5 acres



INDUSTRIAL

ATTRIBUTES MEASURED

- Access to highways/major arterials
  - Within ½ mile of Major Arterial or Highway
- Highway Interchange
  - Adjacent to interchange
- Access to freight transportation
  - Adjacent to rail
- Presence of Enterprise Zone
  - In an enterprise zone Y/N
- Served by City's Water and Sewer
  - Water – Yes/No
  - Sewer – Yes/No
- Average parcel size
  - Average parcel size of greater than 2 acres



COMPARISON TO OPPORTUNITY AREAS

QUALITATIVE ASSESSMENT BASED ON SCORING

- Retail Focus Areas
  - Downtown, College and Harmony Corridors and select Highway interchanges
- Office Focus Areas
  - Greater downtown area, Midtown and Harmony Corridors, select opportunities near interchanges
- Industrial Focus Areas
  - Interstate/interchanges, Mulberry Corridor, North College

	Regional/Community Retail	Office/Employment	Industrial
Downtown			
Mountain Vista Area (north of Vine, excluding interchange areas)			
North College Corridor			
East Mulberry Corridor (except interchange area)			
Midtown Corridor			
Harmony Corridor			
Timberline Corridor (Horsetooth to Harmony)			
W. Elizabeth Corridor			
Mountain Visa Interchange			
Vine Interchange			
Mulberry Interchange			
Prospect Interchange			
Harmony Interchange			
Hwy 392 Interchange			

LEGEND

	Limited	Adequate	Good
Desirability			

FUTURE LAND USE SCENARIO DIRECTION

AREA SPECIFIC RECOMMENDATIONS

- Downtown, I-25 interchanges, and major corridors (College Avenue, Harmony Road, and Mulberry Street) should be the focus areas for employment uses
- Areas near downtown should be designated for employment areas. Specifically, areas between Vine and Mulberry from the river to Timberline Road should be prioritized for employment uses, expect where residential uses are already present. Suggested changes to the future land use map include changing residential areas to employment and/or industrial.
- The north side of the Mulberry corridor should be designated for employment and industrial uses (behind commercial frontages) where not already designated. This area is more attractive for employment areas than other areas currently designated for employment. However, the infrastructure issues in the area may be limiting in terms of development potential.
- Large portions of the Mountain Vista subarea currently designated for employment uses likely will not be able to attract the desired employment uses over the plan horizon. Different uses should be considered for these areas aside from areas near I-25 and with access to I-25.
- The City should focus regional commercial/retail oriented designations along I-25 around key interchanges including Highway 392, Harmony Road, and Mulberry.

FUTURE LAND USE SCENARIO DIRECTION

AREA SPECIFIC RECOMMENDATIONS CONTINUED

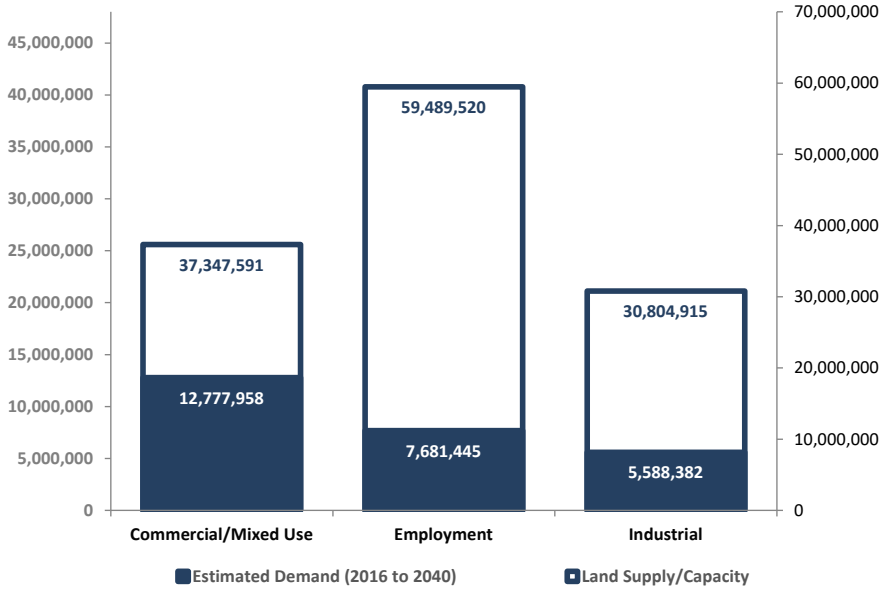
- The demand and attractiveness for industrial development in Fort Collin's industrial areas is lower than the demand and value to the City than uses that could fit in employment areas. The potential for logistics oriented industrial uses exists and is attracted primarily to areas along I-25. However, the demand likely exceeds what is currently designated along I-25. Portions of industrial and commercial designated lands currently along I-25, specifically near the Prospect interchange and north of the Mulberry interchange, could be designated for employment as a way to replace employment areas re-designated to other uses in less attractive areas.
- Certain remaining parcels along Harmony Road that are further from Harmony Road and behind larger commercial and employment uses could be considered for designation as residential uses. Specifically the City should strive for higher density residential uses in these areas given their proximity to employment and potential enhanced transit routes.
- Lastly, even with changes to the future land use plan map, the city will still have plenty of land to accommodate employment growth. However, the current and potentially new, larger areas designated for employment uses still may not be attractive to desired employers and developments. The areas designated to for employment need to be support with investments to enhance their attractiveness and development readiness.

IMPACT OF SCENARIOS ON LAND SUPPLY

CHANGES TO SUPPLY VS DEMAND BASED ON POTENTIAL SCENARIOS

- Capacity in the Baseline Scenario is based on the Baseline growth framework plan. The totals do not match the City's current estimates of capacity based on zoning but are approximately the same.
- Under the Baseline Scenario, the City has ample land to accommodate future employment demand in all categories, with a large surplus of employment land.
- Reductions in employment and industrial designated lands likely won't impact the City negatively if areas of lower value for employment uses are re-designated to other uses.

Baseline Scenario

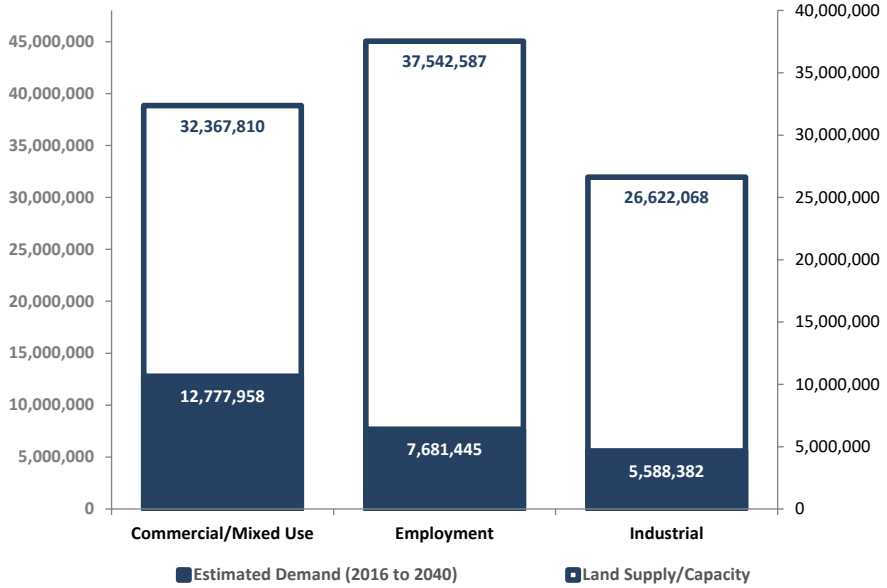


Source: Economic & Planning Systems; Clarion Associates, City of Fort Collins

IMPACT OF SCENARIOS ON LAND SUPPLY

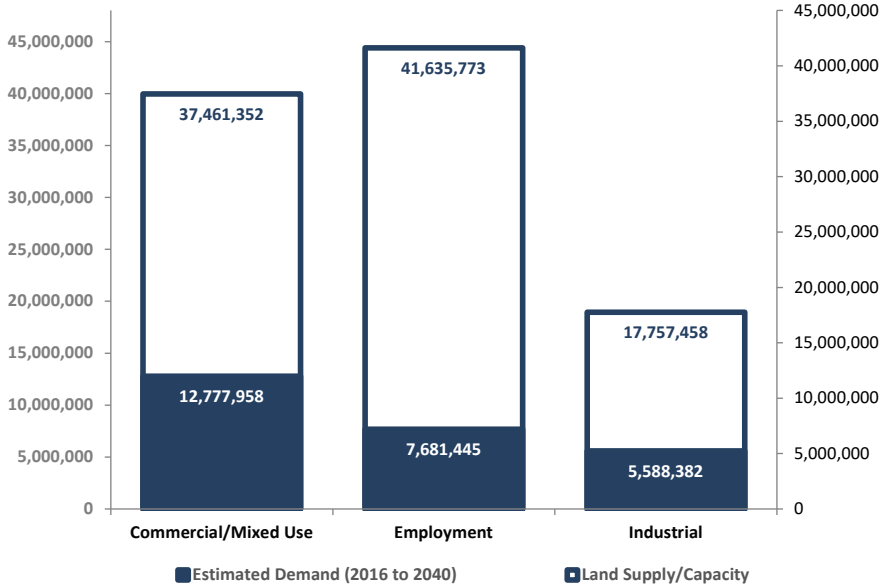
CHANGES TO SUPPLY VS DEMAND BASED ON POTENTIAL SCENARIOS

Scenario 2



Source: Economic & Planning Systems; Clarion Associates, City of Fort Collins

Scenario 3



Source: Economic & Planning Systems; Clarion Associates, City of Fort Collins