2008 Buildable Lands Inventory and Capacity Analysis

TECHNICAL REPORT

July 14, 2009

Advance Planning
281 North College Avenue
Fort Collins, CO 80524

970-221-6376
fcgov.com/advanceplanning

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Introduction

Purpose of This Report

This report is a product of *City Plan*, and the *City Plan Monitoring Project.* The monitoring project is a biennial reporting mechanism intended to monitor progress towards achieving certain *City Plan* goals. It reports on various indicators including "Land Absorption", which measures the capacity of the City's Growth Management Area (GMA).

Through the process of inventorying vacant and redevelopable lands, and land approved for development, the community can determine whether or not there exists an adequate supply of lands capable of accommodating development within the GMA. If it is determined future housing or employment needs will require more buildable land than is available, the City Council can make informed decisions, and implement the appropriate measures to provide for those needs. However, this report is intended to be informational in nature and not a policy document.

Methodology

The process of conducting a Buildable Lands Inventory (BLI) can be divided into two components: 1) land supply and 2) housing and employment demand. Supply figures representing the potential number of dwelling units and jobs available for development are calculated from the total amount of vacant land in the GMA. Adjustments are made for environmentally constrained land, approved projects, and potential redevelopment. Demand figures representing future need for housing and jobs are estimated from population and employment projections. The supply and demand figures are then compared to predict the year in which the supply is consumed. The methodology is shown in Appendix B.

The data contained in this report is valid as of December 31, 2008.

Caveats

In any large-scale analysis such as this report, there are bound to be a small number of errors in data or calculation. Such errors are not thought to significantly affect the major factual conclusions of the report.

In some cases, the City zoning or *Structure Plan* designations do not correspond to BLI classifications. The BLI classifications attempt to capture the most likely future scenario in order to provide the most accurate estimate of vacant land potential.

The report is not an attempt to fully analyze or depict the market feasibility or availability of a particular parcel or of a geographic area, the affordability of land, the availability or capacity of infrastructure, or the pace at which individual parcels of land will develop in the future. Rather, this report is intended to provide useful information and analysis for use in subsequent policy discussions and actions that implement *City Plan*. Again, this report is not a policy document and makes no policy recommendations or conclusions as to the effectiveness of, or need to revise, any plans, policies, or regulations.

Major Findings

The following findings are based on the assumptions presented in this report:

- The GMA contains 9,578 acres of vacant land (i.e., land not entitled). The amount of vacant land has been decreasing slowly over the past several years.

- Vacant land is concentrated in the north part of the GMA, particularly the area northeast of the Cache la Poudre River. Smaller, vacant residential and commercial parcels are scattered throughout the GMA. The I-25 Corridor is also a significant source of future commercial and employment development.

- Of all vacant land, 2,845 acres (30%) are constrained by floodplains or natural features.

- Under current zoning and the various assumptions used in this report, vacant land can accommodate approximately 13,000 housing units (equating to 31,000 people) and 13.6 million square feet of non-residential building space (equating to 29,000 jobs).

- There have been approximately 5,800 housing units approved by the City but not yet constructed. This represents 20% of the total future supply of housing. Approved projects have the potential to accommodate approximately 5,352 jobs.

- It is assumed that redevelopment could provide 7,000 housing units and 5,100 jobs. As vacant land is absorbed, it is anticipated that the pace of redevelopment will increase, and a significant source of new housing will be constructed in areas targeted for redevelopment. Many potential redevelopment sites have been identified along the Mason Corridor and Downtown. However, the increased redevelopment potential depends upon continued infrastructure upgrades and enhancements, particularly implementation of the Mason Corridor Bus Rapid Transit system.

- Future phases of approved Overall Development Plans can accommodate about 2,000 housing units and 5,500 jobs. Two significant sources for future employment include the Poudre Valley Hospital Harmony Campus area and the Harmony Technology Park.

- It is assumed that Colorado State University will provide an additional 1,000 beds for on-campus student housing and 780 jobs. The new jobs may comprise both private and public sector jobs located on the Foothills Campus.

- Total future land capacity is approximately 28,000 housing units, 66,000 people and 46,000 jobs. The buildout capacity is 95,000 housing units, 223,000 people and 143,000 jobs. These figures represent a 40% increase in population and a 47% increase in jobs from today's estimates.

- The GMA is anticipated to reach capacity in approximately 2030 for housing and 2026 for employment. In other words, the GMA contains enough land for 17-21 years of growth.

- The Buildable Lands Inventory shows that the ratio of housing and jobs will be 1.5 jobs per housing unit at buildout. Currently, the ratio is 1.45 to 1. A healthy balance is generally considered to be 1.5 jobs per housing unit.

FIGURE 1: COMPARISON OF SUPPLY TO DEMAND FOR HOUSING AND JOBS, 2007 & 2008

	2008			2007		
	Housing Units	Population	Jobs	Housing Units	Population	Jobs
Current Estimates[1]	66,900	156,931	97,466	66,285	155,765	95,322
Land Supply						
Vacant Land[2]	13,179	30,677	29,209	14,344	33,392	33,244
Approved Units[3]	5,839	13,590	5,352	6,684	15,557	5,765
Redevelopment[4]	7,000	16,293	5,113	7,000	16,293	5,113
Proposed Projects[5]	1,947	4,532	5,538	1,931	3,494	6,017
Colorado State University[6]	N/A	1,000	780	N/A	1,000	780
Total Vacant Land Supply	27,965	66,092	45,992	29,959	69,736	50,919
Capacity & Demand						
Total GMA Capacity[7]	94,865	223,023	143,458	96,244	225,501	146,241
2025 Demand[8]	88,221	212,753	138,535	88,221	212,753	138,535
Difference between Total GMA Capacity and 2025 Demand	6,644	10,270	4,923	8,023	12,748	7,706
Build-Out Year	2030	2030	2026	2032	2032	2029

Notes:
All figures are for the GMA, for December 31 of the year indicated.

1 – See page 20 for more detail
2 – See page 16 for more detail
3 – See page 18 for more detail
4 – See page 19 for more detail. Redevelopment figures have been revised upward from the 2007 Buildable Lands Inventory to account for new estimates of redevelopment potential provided by the "Mason Corridor Economic Analysis" (EPS, 2007).
5 – See page 19 for more detail
6 – See page 19 for more detail
7 – See page 20 for more detail
8 – See page 20 for more detail

Changes in the Buildable Lands Inventory

Vacant Land

The amount of vacant land decreased from 9,934 acres in 2007 to 9,578 acres in 2008.

Housing Unit Supply

The housing unit capacity of undeveloped/redevelopment land decreased from 29,959 to 27,965 between 2007 and 2008. This translates into a decrease in the population potential from 69,736 to 66,092. The decrease was not so much due to an increase in development as it was a refinement in the identification of natural feature and floodplain buffer constraints. These constraints comprised approximately 30% of vacant land in 2008 compared to 20% in 2007. The increase in constrained land was a result of a more detailed analysis rather than an actual increase in the amount.

Employment Supply

The supply of vacant employment land within the Fort Collins' GMA continued to decrease. One of the factors was the agreement between Fort Collins and Timnath to revise the GMA east of the Mountain Vista area, which resulted in the removal of 64 acres of buildable industrial land from the GMA.

Overview of Process

Developing the buildable lands inventory was a multi-step process (see Appendix B):

- Update vacant lands database
- Separate out constrained land
- Apply development assumptions
- Apply additions to housing, population and jobs
- Compare buildable lands supply with population and employment demand

Detailed Section I: Buildable Lands Capacity – Supply Analysis

Initial Determination of Land Status

In 2000, the City conducted a survey of tax parcels within the GMA boundary to determine their development status. The City's geographic information system (GIS) was used to select parcels that fell within the GMA boundary. A land category (current use) was assigned to each tax parcel according to whether it was developed or vacant. Parcels that met the status for vacant land, and that were not affected by approved development projects or public land, were included in a spatial database for the purposes of mapping and analysis.

Vacant Lands Database Updates

Since 2000, staff has updated the vacant lands database through a multi-step process resulting in the removal of records. Staff uses the following information to verify the accuracy of the database and provide updates:

- City and County building permits
- Development projects having at least preliminary approval by the City or County
- Phases of approved Overall Development Plans (ODPs) or lots identified on approved site plans for development
- Larimer County Assessor data
- City-owned land including parks, natural areas and stormwater facilities
- Aerial photography
- Field checks

Occasionally, new land is added to the database, such as the area south of Fossil Creek Reservoir where the GMA was expanded.

Current Status of Vacant Lands

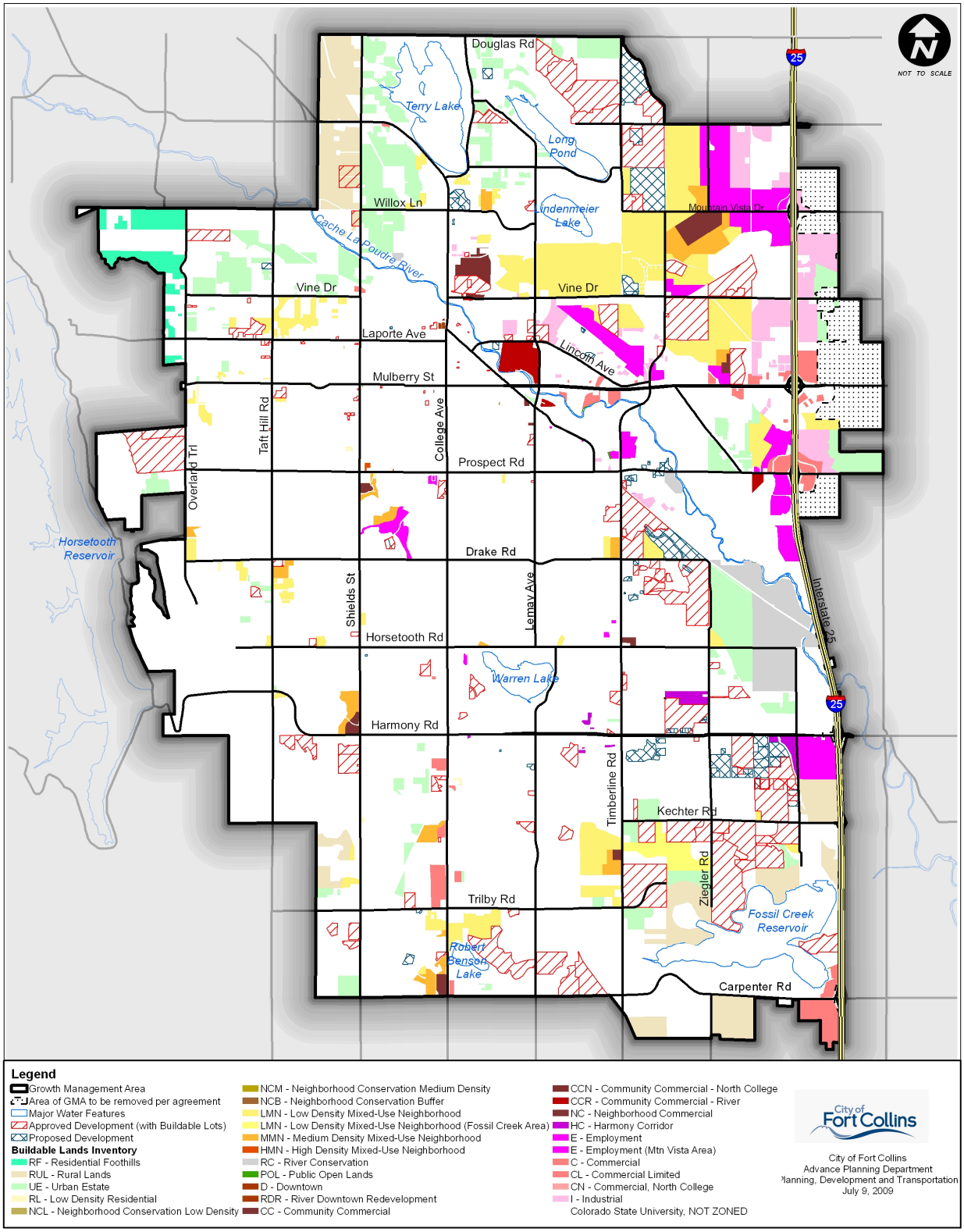
Twenty percent of all land in the GMA is considered vacant with the potential to accommodate new development.

FIGURE 2: GROSS VACANT ACRES

Total Acres in the GMA	48,471
Total Gross Vacant Acres	9,578
Percent Vacant	20%

Figure 3 shows the distribution of vacant land within the GMA. The solid colors indicate vacant land within a zone district. Large tracts of unplatted land are concentrated in the Mountain Vista and Fossil Creek Reservoir areas. Diagonally hatched areas (in red) indicate approved development projects that are not fully built out. Cross hatched areas (in light blue) indicate undeveloped phases of approved ODPs (labeled as proposed development).

FIGURE 3: VACANT LANDS WITHIN THE FORT COLLINS GMA



Environmentally Constrained Land

Thirty percent (nearly 3,000 acres) of vacant land is constrained by environmental features. Environmentally constrained land includes natural features and their associated buffers and City or Federal Emergency Management Agency (FEMA) floodplains.

FIGURE 4: ACRES OF CONSTRAINED VACANT LAND

Total Vacant Land	9,578
Constrained Vacant Land in Acres	2,845
Percent Constrained	30%

This analysis assumes that environmental constraints will either prevent all development or reduce the amount of development on vacant lands. The percentage of reduction varies by the expected type of future development. Figure 5 shows the percentage of reduction for residential and non-residential uses by constraint type.

FIGURE 5: REDUCTION OF DEVELOPMENT POTENTIAL BY ENVIRONMENTAL CONSTRAINT

Constraint	Residential Development Reduction	Non-residential Development Reduction
Non-Poudre River 100-Year Floodplain	50%	50%
Poudre River 100-Year Floodplain	100%	50%
Natural Resource Buffer	90%	90%
Poudre River 100-Year Floodplain + Natural Resource Buffer	100%	90%
Floodway	100%	100%

Environmental constraints are further explained as follows:

Natural Features: Natural feature constraints correspond to *Land Use Code Division 3.4 - Environmental, Natural Area, Recreational and Cultural Resource Protection Standards*. The City's *Natural Features and Habitats Inventory Map* (updated in 2002) shows the approximate locations of natural features. The *Map* is based on a survey of ecological features using aerial photography and, in limited cases, observations in the field. Vacant lands are overlaid with *Map* features and their associated buffer zones per the Buffer Zone Table in Section 3.4.1 (E) of the *Land Use Code*.

Since the *Map* shows only approximate boundaries of features, the BLI process assumes that a small amount (10%) of constrained land is developable.

Floodplains: Floodplains were broken down into the floodways, Poudre River 100-year floodplain, other floodplains within the City, and FEMA designated floodplains in the County. These distinctions were made to define regulatory differences between the various types of floodplains. The development reductions are based on Municipal Code requirements (Chapter 10 - Flood Prevention and Protection), field observations, and estimates of likely construction potential. The table also distinguishes between residential and commercial land uses, since the City's floodplain regulations are generally stricter for residential buildings than for commercial buildings.

The division of vacant land by environmental constraints is not intended to be used for a determination of a parcel's actual development potential. The assumptions used represent best approximations of what

may be constrained in a typical situation. These assumptions should therefore be viewed as representing "average" situations. The analysis of constrained land provides a general indication of vacant land that probably cannot be developed in most cases.

Development Potential

Vacant land is the basis for estimated the potential for adding new housing units, population and jobs within the GMA. The development potential of vacant land is built on a variety of assumptions, beginning with information drawn from Land Use Code zone districts. These assumptions are explained in detail later in this section. Figure 6 shows the development potential within each zone district.

FIGURE 6: HOUSING AND JOB CAPACITY OF VACANT LAND BY ZONE DISTRICT

	Zone District	Acres	Housing Units	Population	Building SF	Jobs
C	Commercial	415	0	0	1,812,765	3,625
CC	Community Commercial	80	296	689	494,714	989
CCN	Community Commercial, North College	67	74	172	369,706	740
CCR	Community Commercial, River	119	50	117	353,853	707
CL	Commercial, Limited	18	0	0	94,771	190
CS	Service Commercial	101	0	0	716,870	1,441
D	Downtown	3	4	10	95,966	320
E	Employment	603	201	469	2,430,751	6,077
E-MV	Employment - Mountain Vista	402	0	0	2,972,422	7,431
HC	Harmony Corridor	78	44	104	490,735	1,236
HMN	High Density Mixed-Use Neighborhood	3	57	132	953	2
I	Industrial	755	0	0	2,868,899	4,414
LMN-FC	Low Density Mixed-Use Neighborhood - Fossil Creek	141	288	671	29,362	58
LMN	Low Density Mixed-Use Neighborhood	2,131	6,622	15,411	404,392	809
MMN	Medium Density Mixed-Use Neighborhood	398	3,072	7,151	78,181	156
NC	Neighborhood Commercial	74	88	205	442,995	886
NCL	Neighborhood Commercial Low Density	.44	1	2	0	0
NCM	Neighborhood Conservation Medium Density	.31	1	3	0	0
RC	River Conservation	524	0	0	76,407	128
RF	Residential Foothills	268	71	164	0	0
RL	Low Density Residential	17	44	103	0	0
RUL	Rural Open Lands	1,294	263	611	0	0
UE	Urban Estate	2,080	2,003	4,663	0	0
	Total	**9,572**	**13,179**	**30,677**	**13,733,742**	**29,209**

A significant number of parcels are within the Low Density Mixed-Use District or Urban Estate District. These two districts make up much of the potential new housing units (8,625 units, or 65% of future units). Another source is the Medium Density Mixed-Use District (MMN), which has the potential to accommodate about 3,000 units, or 23% of the total.

The greatest source of employment is likely to be contained in the Employment District at 46% of all new jobs (about 13,508 jobs). The Industrial District will also continue to be a large source of new jobs in the future (4,414 jobs, or 15% of the total).

Figure 7 shows the number of vacant parcels by zone district and size. There are 220 parcels over 10 acres in size, or 24% of the total. Forty-four (5%) of these are larger than 50 acres. Most of the remaining large parcels are located in the Mountain Vista area.

At the time of this writing, Advance Planning staff was preparing an update to the Mountain Vista Subarea Plan that could affect the land use designation of vacant lands. The preferred alternative shows more Employment land, and less Community Commercial and residential land, than the existing land use designations. If approved, new land use designations will be incorporated into the 2009 Buildable Lands Inventory report.

FIGURE 7: NUMBER OF VACANT PARCELS BY ZONE DISTRICT AND SIZE

		Acres							
Zone District		**0 - 1**	**1 - 5**	**5 - 10**	**10 - 20**	**20 - 50**	**50 - 100**	**100+**	**Total**
C	Commercial	26	25	7	5	6	0	0	69
CC	Community Commercial	1	0	0	1	0	1	0	3
CCN	Community Commercial, North College	3	7	1	0	1	0	0	12
CCR	Community Commercial, River	4	2	2	3	2	0	0	13
CL	Commercial, Limited	5	5	0	0	0	0	0	10
CS	Service Commercial	15	13	4	1	1	0	0	34
D	Downtown	5	1	0	0	0	0	0	6
E	Employment	10	7	4	3	10	1	1	36
E-MV	Employment - Mountain Vista	0	0	0	1	2	2	1	6
HC	Harmony Corridor	4	5	3	1	1	0	0	14
HMN	High Density Mixed-Use Neighborhood	1	1	0	0	0	0	0	2
I	Industrial	60	28	8	4	6	4	1	111
LMN-FC	Low Density Mixed-Use Neighborhood - Fossil Creek	0	0	0	1	1	1	0	3
LMN	Low Density Mixed-Use Neighborhood	164*	49	16	23	13	6	6	277
MMN	Medium Density Mixed-Use Neighborhood	13	9	9	8	3	1	0	43
NC	Neighborhood Commercial	4	6	4	2	0	0	0	16
NCL	Neighborhood Conservation Low Density	2	0	0	0	0	0	0	2
NCM	Neighborhood Conservation Medium Density	1	0	0	0	0	0	0	1
RC	River Conservation	1	1	3	1	2	2	2	12
RF	Residential Foothills	2	5	1	4	0	2	0	14
RL	Low Density Residential	6	7	1	0	0	1	1	16
RUL	Rural Open Lands	0	5	9	9	9	5	2	39
UE	Urban Estate	19	69	45	29	23	3	1	189
Total		346	245	117	96	80	29	15	928
% of Total		**37.3%**	**26.4%**	**12.6%**	**10.3%**	**8.6%**	**3.1%**	**1.6%**	**100.0%**

* Includes 157 lots on a total of 30 acres in the Waterglen subdivision. The land use approval of this subdivision has expired.

Development Assumptions

Zone Districts

A series of development assumptions were identified for each zone district in order to generate development potential on vacant lands. Each zone district is comprised of a residential portion and a non-residential portion based upon allowable uses (otherwise known as land use mix). These portions are defined by a land use ratio and a density. The land use ratio is the percentage of an area that will contain building construction. The density is calculated with housing units per acre or floor area ratios. These assumptions are explained later in this section, and are also detailed in Appendix C.

The *Zoning Map* provides the zone districts for vacant land within the city limits. In the unincorporated area of the GMA, the City's *Structure Plan* is translated into an appropriate City zone for vacant land. However, some modifications to the zone districts are necessary to account for special conditions in some areas of the city. In particular, the assumptions in two areas have been modified:

1) Low Density Mixed-Use Neighborhood – Fossil Creek: This area corresponds to the Low Density Mixed-Use Neighborhood district south of Kechter Road (East County Road 36) and east of South Timberline Road, as identified in the *Fossil Creek Reservoir Area Plan*. The density is lower than the City's actual Low Density Mixed-Use Neighborhood zone – three dwelling units per acre versus five dwelling units per acre.

2) Employment – Mountain Vista Area (Anheuser-Busch properties): Approximately 610 acres of vacant employment land are owned by Anheuser-Busch. The company has indicated that it will not allow residential uses in this area. Therefore, BLI assumes no residential uses will be constructed in the area.

In addition, a couple areas are within the Transition zone district. The BLI assumes that these areas will be developed according to the zone district that matches the underlying *Structure Plan* designation.

Land Use Mix

Most of the City's zone districts allow a mix of uses. For the purposes of estimating future housing and jobs, each district was assigned a residential percentage and a non-residential percentage. While a significant amount of subjectivity exists with these assumptions, the residential – non-residential breakdown was primarily based on land use standards for each zone district and the percentages of existing development.

Land Use Ratio

The land use ratio is the factor used to account for layout inefficiencies and non-buildable areas of parcels. Some of the elements included in the factor are arterial streets, outdoor spaces, public alleys, bicycle path connections, boulevard strips, and unusual lot dimensions.

The ratio does not net out park and school sites. Instead, proposed future park sites were identified and removed as public land from the raw vacant land acres. 174 acres of future park land was removed from the LMN and UE zone districts. All anticipated future school sites have already been acquired by the school district and therefore no land is removed for schools from vacant lands.

To verify land use ratio figures, the City prepared a survey of large residential development projects submitted, approved or constructed under the *Land Use Code* (see Appendix D). The amount of land netted out varies between 0% and 30%. A Land Use Ratio of .75 (i.e., 25% netted out) was used as a conservative estimate for the LMN and similar zone districts, with higher ratios for lower density zone districts and zone districts in built-up areas.

Density Assumptions

Density assumptions for residential zone districts are primarily based on Land Use Code requirements. For the most part, the densities reflect the minimum required density for a particular district. The density assumptions were applied to the net residential vacant acres, resulting in dwelling units per acre by zone district.

Non-residential density assumptions were based on code requirements and a survey of current floor to area ratios (FAR) in various parts of the City (see Appendix D). The FAR was applied to the net non-residential vacant acres, resulting in building square feet by zone district. Building square feet was converted into jobs using industry standards of building square feet per job, which varies between 300 – 650 square feet per employee.

Population Estimates

Housing units are the basis for population estimates. The formula for converting housing units to population is:

*Population = housing units * vacancy rate * persons per household*

The vacancy rate is assumed to be 5%, which represents equilibrium in the housing market. The persons per household assumption is 2.45, which is the 2000 U.S. Census estimate for Fort Collins.

Additions to Vacant Lands Capacity

Development potential on vacant lands is one of several future sources of new housing units and jobs. The other sources are approved development projects (not yet constructed), future phases of approved Overall Development Plans (ODPs, labeled in this report as proposed development projects), redevelopment potential, and Colorado State University growth. Figure 8 shows additional housing units and commercial square feet/jobs added to available land capacity for each type of future development source.

FIGURE 8: ADDITIONS TO VACANT LANDS CAPACITY

	Acres	Housing Units	Population	Commercial Building SF	Jobs
Buildable Vacant Land (Figure 6)	9,578	13,179	30,677	13,733,742	29,209
Approved Development Projects	N/A	5,839	13,590	2,969,640	5,352
Proposed Development Projects	N/A	1,947	4,532	4,070,618	5,538
Redevelopment Potential	N/A	7,000	16,293	2,556,500	5,113
Colorado State University Growth	N/A	N/A	1,000	N/A	780
Total	9,578	27,965	66,092	23,330,500	45,992

Population estimates are based on the standard assumptions mentioned earlier, plus 238 beds within three approved group quarter facilities (i.e., senior care housing). Each bed represents one person in the population estimate.

Jobs are calculated from the square footage of the building and an assumption about jobs per square foot as shown in Figure 15.

Approved Development Projects

Approved development projects refer to development projects that have received at least preliminary approval through the City's development review process, but are not yet built out. Housing units and commercial square footage from these projects are added to the vacant land capacity. For recorded projects, only lots that have not received a building permit are included.

Figures 9 and 10 show additional information about approved residential lots. Figure 9 breaks down approved and not yet constructed lots by housing type. Figure 10 shows the number of recorded single family detached lots not yet constructed by size. The total single family detached lots in these figures are different from one another because Figure 9 includes all approved lots, whereas Figure 10 includes only recorded lots.

FIGURE 9: APPROVED HOUSING UNITS BY UNIT TYPE

Single Family Detached	Single Family Attached	Duplex	Multi-family	Total
3,186	1,058	236	1,382	5,839

FIGURE 10: RECORDED, UNDEVELOPED SINGLE FAMILY DETACHED LOTS

	Up to 6,000 square feet	6,000 - 10,000 square feet	10,000 square feet - 1/2 acre	1/2 - 1 acre	Over 1 acre	Total Lots
No. of Lots	1,276	915	187	110	7	2,495
Percent	51.2%	36.7%	7.5%	4.4%	0.3%	

Single family detached lots would be absorbed in four years assuming a 1% growth rate.

There are 49 recorded, undeveloped commercial lots containing a total of 1,360,746 square feet of building space within the GMA. These lots have been approved for a variety of commercial uses, such as day care facilities, offices, retail and restaurants. Building sizes on these approved lots will vary between 1,800 square feet to 145,000 square feet. Thirty-five are less than 10,000 square feet (67%), and 14 are greater than 10,000 square feet (33%). The largest project is the Harmony Technology Park site off East Harmony Road. The project has not yet been platted, but the recorded site plan shows six buildings ranging from 100,000 – 145,000 square feet on 50 acres.

Proposed Development Projects

Proposed development projects refer to phases of approved ODPs that are likely to be constructed in the near term. Examples of this type of project are the Lind ODP in the Mountain Vista area and phases of the Harmony Technology Park ODP. Proposed development also refers to those portions of approved project development plans that are identified for future development. One example is Lot 2 of the Neenan Office Building Second Minor Subdivision, which is labeled as "Future Medical/Office Building Use" within a 153,200 square foot building on the recorded site plan. The proposed number of housing units and commercial square footage provided on the recorded ODPs or site plans are added to the BLI capacity.

Redevelopment Potential

Since 1999, 271 housing units have been constructed on sites previously containing other non-residential structures. In addition, in 2007, 208 units were under construction and another 91 units were under review for a total of 570 housing units likely to be constructed through redevelopment. While

development on land containing existing structures is proceeding at a slow pace, several reports suggest that this pace will quicken as vacant land becomes increasingly scarce.

The "Market Analysis for Fort Collins City Plan Update" - January 2003, by Economic Planning Systems Inc. (EPS), estimated that the City could support 10% of the future housing and 10% of all future jobs through redevelopment. This translated into 2,872 housing units and 5,113 jobs by 2025. The next report, "Mason Corridor Economic Analysis" – October, 2007, also by EPS, estimated that there is the capacity for 7,000 housing units to be created through redevelopment, particularly if the Mason Bus Rapid Transit (BRT) system is completed. Of this amount, 50% (3,500 units) could be built in the Mason Corridor and, of that amount, 3,300 units were possible in the Corridor by 2030. No estimates were given for jobs.

The 2008 BLI report uses the housing unit capacity (7,000 units) from the latest EPS report and the job capacity (5,113 jobs) from the earlier EPS report for its redevelopment potential. These figures could turn out to be too high if job and housing growth stagnates or public support for redevelopment (e.g., construction of the Mason Bus Rapid Transit) is reduced.

Estimated Colorado State University Growth

The University has a goal of adding 5,000 students, requiring 1,000 new beds for freshmen within ten years. Each of these potential new beds is equivalent to adding a new person, and thus is shown under the population number in Figure 8. Also, jobs are estimated to increase moderately at the CSU campuses, up to approximately 780 new jobs, with most occurring on the Foothills Campus, which is assumed to be part of the future GMA.

Detail Section II: Comparing Demand to Supply

Population and Employment Forecast

Population and employment forecasts for the GMA were prepared for the *City Plan* update in 2003. Economic Planning Systems, Inc. (EPS) forecasted a 2.0% average growth rate for population and a 1.9% average growth rate for jobs between 2000 and 2025. Figure 11 shows current estimates and the 2025 forecast:

FIGURE 11: HOUSING UNIT (2008) AND JOB ESTIMATES (2008) AND FORECASTS (2025), GMA

	Housing Units	Population	Jobs
2008 Estimate	66,900	156,931	97,466
2025 Forecast	88,221	212,753	138,535

The estimate for housing units includes the same housing unit estimate provided by the Advance Planning Department for Fort Collins (in 2008, there were 58,369 housing units in the city limits only). This figure starts with the 2007 Colorado State Demographer's Office estimate for Fort Collins, and modified with 2008 building permit data. Housing units permitted in the unincorporated portion of the GMA (8,531 housing units) are added to the 2008 City estimate. The population figures are likewise based on the State Demographer's Office estimates, modified with 2008 data.

The 2008 estimate for jobs is based on Quarterly Census of Employment and Wages (QCEW) data for the first quarter, 2008. Advance Planning staff address matches QCEW data to GMA boundaries to give an estimated job count for the area. Sole proprietors, which are not part of the QCEW dataset, are added into the figures, based on State Demography Office estimates.

Comparison of Housing and Jobs Supply to Demand

The potential supply of housing units and jobs through vacant land, approved development projects, proposed development projects, redevelopment potential, and estimated CSU growth is added to the 2008 estimate of housing units and jobs, giving a total supply of housing units and jobs within the GMA.

This supply is then compared to estimated demand, or forecasts, for housing units and jobs (demand minus supply). The results are shown in Figure 12. The capacity of the GMA is projected to accommodate up to 94,865 housing units while, the demand is 88,221 housing units. This results in the potential for accommodating 6,644 additional housing units and 10,270 additional people in 2025. At a 2.0% annual growth rate (the growth rate assumed by EPS to occur between 2000 and 2025 for population), the GMA would be sufficient to accommodate the demand for housing and population until around 2030, at which time the GMA would be built-out.

On the jobs side, the capacity of the GMA is sufficient to accommodate the entire projected job demand. The demand for jobs in 2025 is 138,535, while the capacity of the GMA is 143,458. This results in the potential for accommodating 4,923 additional jobs within the GMA beyond 2025. At a 1.9% annual growth rate (the growth rate assumed by EPS to occur between 2000 and 2025 for jobs), the GMA would be sufficient to accommodate the demand for jobs until 2026, at which time the GMA would be built out.

FIGURE 12: COMPARISON OF SUPPLY TO DEMAND FOR HOUSING AND JOBS

	Housing Units	Population	Jobs
Current Estimates (2008)	66,900	156,931	97,466
Land Supply			
Vacant Land	13,179	30,677	29,209
Approved Units	5,839	13,590	5,352
Redevelopment	7,000	16,293	5,113
Proposed	1,947	4,532	5,538
CSU	N/A	1,000	780
Total Land Supply	27,965	66,092	45,992
Capacity & Demand			
Total GMA Capacity (Current Estimates + Total Land Supply)	94,865	223,023	143,458
2025 Demand (Housing and Job Forecasts from City Plan)	88,221	212,753	138,535
Difference between Total GMA Capacity and 2025 Demand	6,644	10,270	4,923
Build-Out Year	2030	2030	2026

Housing to Jobs Ratio

The housing to jobs ratio is currently at 1.45 jobs per housing unit. At buildout, the ratio will be at 1.5 jobs per housing unit. A healthy balance is generally considered to be 1.5 jobs per housing unit.

Appendix A: Report Definitions

Definitions specific to this report are provided below:

Vacant Land

Constrained or unconstrained land without significant improvements. It does not include underutilized land, except on larger single family lots (typically over ten acres in size). Public land is generally not included in vacant land.

Buildable Lands

All land likely to be developed for residential and non-residential uses. It includes unconstrained vacant land, land at reduced development potential because of environmental constraints, land approved for development, and land having redevelopment potential. The acreage, housing unit, population and job figures provided in this report represent the "supply" provided by vacant land, approved units and redevelopment.

Redevelopment

Development on properties having significant existing structures or on small, infill lots not part of an approved overall development plan. Redevelopment increases the number of housing units and/or jobs on a site.

Land Capacity

The amount of development a parcel of land is expected to accommodate given existing zoning regulations and site conditions.

Constrained Land

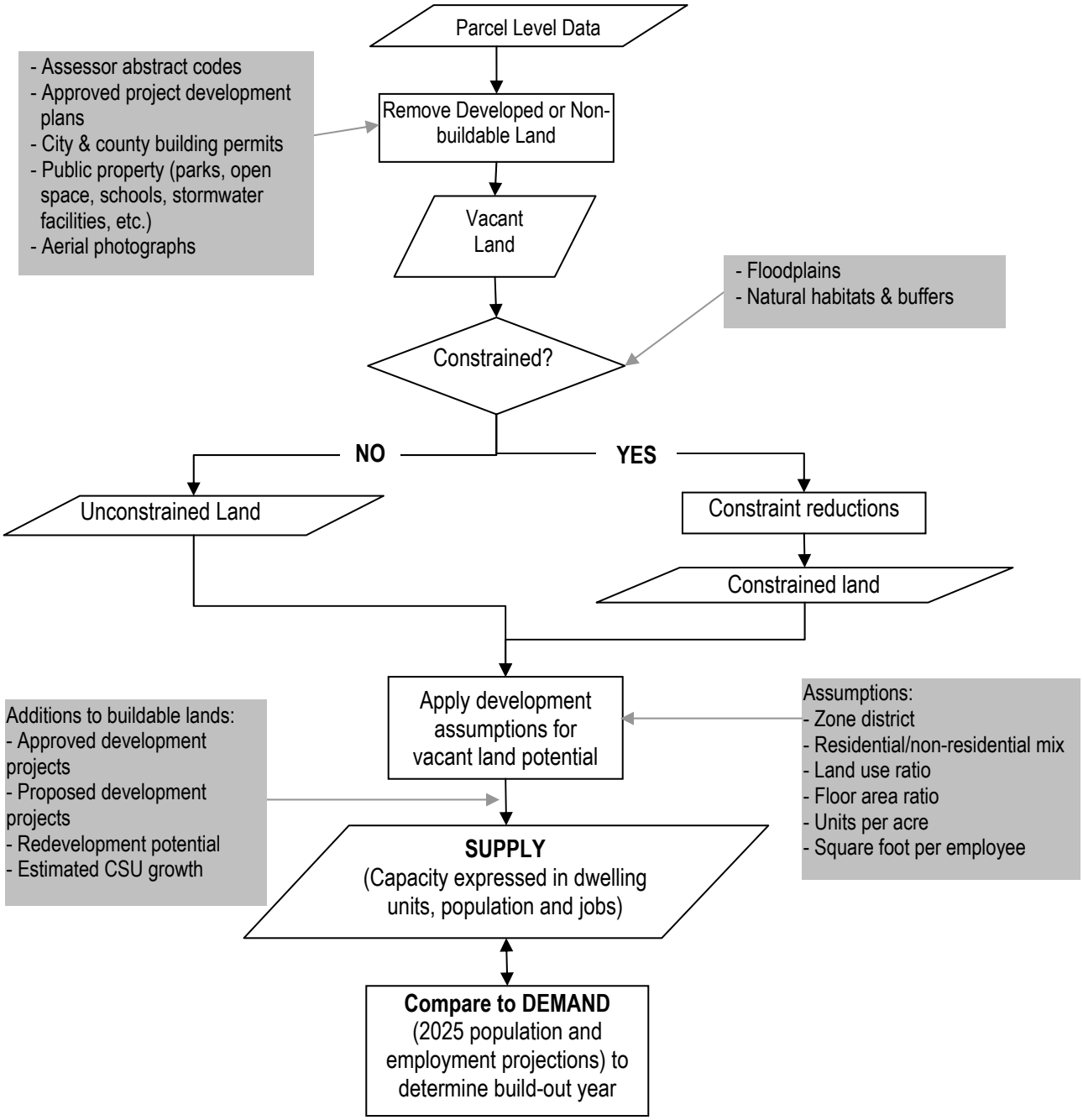
The land area associated with both the natural features and habitats and any required buffers.

Land Use Ratio

The percentage of vacant land actually developable. Ratios represent non-local roads, layout inefficiencies, and vacancies netted out of the gross land supply.

Appendix B: Process Flowchart

FIGURE 13: PROCESS FLOWCHART



Appendix C: Development Assumptions

FIGURE 14: DEVELOPMENT ASSUMPTIONS BY ZONE DISTRICT

ZONE DISTRICT	LAND USE MIX		LAND USE RATIO		DENSITY		
	Residential %	Non-residential %	Res-idential	Non-residential	Dwelling Units/ Acre	Floor Area Ratio	Square Feet/ Employee
C - Commercial	0	1	0	0.85	0	0.2	500
CC - Community Commercial	0.33	0.67	0.75	0.85	15	0.25	500
CCN - Community Commercial, North College	0.33	0.67	0.75	0.85	5	0.25	500
CCR - Community Commercial, River	0.33	0.67	0.75	0.85	5	0.25	500
CL - Limited Commercial	0	1	0	0.85	0	0.2	500
CS - Service Commercial	0	1	0	0.85	0	0.2	500
CSU - Colorado State University	0	0	0	0	0	0	1
D - Downtown	0.33	0.67	0.85	1	4.5	1	300
E - Employment	0.1	0.9	0.75	0.85	8	0.2	400
E - Employment (Anheuser-Busch Properties in Mountain Vista)	0	1	0	0.85	0	0.2	400
HC - Harmony Corridor	0.1	0.9	0.75	0.85	8	0.2	400
HMN - High Density Mixed-Use Neighborhood	0.97	0.03	0.85	0.85	20	0.25	500
I - Industrial	0	1	0	0.85	0	0.15	650
LMN - Low Density Mixed-Use Neighborhood (Fossil Creek Area)	0.97	0.03	0.75	0.85	3	0.2	500
LMN - Low Density Mixed-Use Neighborhood	0.97	0.03	0.75	0.85	5	0.2	500
MMN - Medium Density Mixed-Use Neighborhood	0.97	0.03	0.75	0.85	12	0.2	500
NC - Neighborhood Commercial	0.33	0.67	0.75	0.85	5	0.25	500
NCB - Neighborhood Conservation Buffer	0.5	0.5	0.85	0.85	8	0.25	500
NCL - Neighborhood Conservation Low Density	1	0	0.85	0	3.5	0	1
NCM - Neighborhood Conservation Medium Density	1	0	0.85	0	5	0	1
POL - Public Open Lands	0	0	0	0	0	0	1
RC - River Conservation	0	1	0	0.85	0	0.01	600
RDR - River Downtown Redevelopment	0.33	0.67	0.75	0.85	5	0.25	300
RF - Residential Foothills	1	0	0.8	0	0.4	0	1
RL - Low Density Residential	1	0	0.75	0	3.5	0	1
UE - Urban Estate	1	0	0.8	0	1.5	0	1
RUL - Rural Lands	1	0	0.8	0	0.43	0	1

Sources: City Plan, Land Use Code, Mountain Vista Subarea Plan, Fossil Creek Reservoir Area Plan

Appendix D: Data on Land Use Ratios in Selected LMN Areas

FIGURE 15: LAND USE RATIOS FOR SELECTED LMN AREAS

Project	Gross Acres	Net Acres	Units	Gross Density	Net Density	Land Use Ratio	Average Land Use Ratio
Rigden Farm LMN Area							
1st Filing	39.26	35.26	131	3.34	3.72	0.90	
LaGrange	8.66	8.66	97	11.20	11.20	1.00	
Parkside West	3.49	3.49	48	13.75	13.75	1.00	
Parkside East	3.24	3.24	38	11.73	11.73	1.00	
Settlers Green	4.5	3.79	51	11.33	13.46	0.84	
6th Filing	123.99	98.68	393	3.17	3.98	0.80	
7th Filing	15.09	13.59	158	10.47	11.63	0.90	
Timberline Church	34.81	n/a	n/a	n/a	n/a	n/a	
Total	*233.04*	*166.71*	*916*	*3.93*	*5.49*	*0.72*	**0.72**
Fossil Creek LMN Area							
Willowbrook 1st	93.2	82.37	369	3.96	4.48	0.88	
Willowbrook 2nd	10.6	10.6	87	8.21	8.21	1.00	
Subtotal	*103.8*	*92.97*	*456*	*4.39*	*4.90*	*0.90*	
Harvest Park	106.63	92.52	470	4.41	5.08	0.87	
Sage Creek	56.95	38.09	225	3.95	5.91	0.67	
Subtotal	*163.58*	*130.61*	*695*	*4.25*	*5.32*	*0.80*	
Total	*267.38*	*223.58*	*1,151*	*4.30*	*5.15*	*0.84*	**0.79**
Miscellaneous Residential LMN Projects							
Eagle Cliffs	10.3	8.24	42	4.08	5.10	*0.80*	
Stanton Creek 1st	51.2	47.5	241	4.71	5.07	*0.93*	
Peakview	9.21	6.9	58	6.30	8.41	*0.75*	
Warren Farm 3rd	27.8	19.87	149	5.36	7.50	*0.71*	
Stetson Creek 5th	13.4	11.31	102	7.61	9.02	*0.84*	
Linden Park PDP	38.2	37.3	184	4.82	4.93	*0.98*	
Storybook	16.4	11.8	66	4.03	5.60	0.72	
Lind 1st	45.0	34.4	180	4.00	5.24	0.76	
Maple Hill	154.8	130.5	655	4.23	5.02	0.84	
Side Hill	43.7	39.3	300	6.86	7.63	0.90	
Mansion Park	48.2	43.6	598	12.41	13.72	0.90	
Total	*166.47*	*142.91*	*2,575*	*15.47*	*18.02*	*0.86*	**0.83**
Other LMN Projects							
Westchase PUD (LMN portion only)	114.8	109.98	364	3.17	3.31	*0.96*	
Willow Springs (LMN portion only)	91.33	88.26	597	6.54	6.76	*0.97*	
Fossil Lake PUD 1st (LMN portion only)	69.52	62.99	361	5.19	5.73	0.91	
Fossil Lake PUD 2nd	88	81	352	4.00	4.35	0.92	
Sources: Current Planning Department, Advance Planning Department, Engineering Department							
January, 2003							

Appendix E: Data on Floor to Area Ratios for Selected Areas

FIGURE 16: FLOOR TO AREA RATIOS FOR SELECTED NON-RESIDENTIAL AREAS OR PROJECTS

District Type	Location	Area SF	Building SF	Floor Area Ratio
Downtown	Downtown - Oak to Mulberry; Meldrum to College (includes Core)	19,708,720	2,585,922	0.13
Downtown	Core (includes Old Town triangle blocks)	6,984,127	4,400,000	0.63
Downtown	Old Town triangle blocks	201,277	287,428	1.43
River Downtown Redevelopment	River Corridor	1,340,671	231,009	0.17
Community Commercial	Midtown	1,882,065	668,725	0.36
Community Commercial	Campus West	889,875	181,996	0.20
Neighborhood Commercial	Rigden Farm	457,894	115,291	0.25
Commercial	East Mulberry (entire commercial area)	72,588,327	13,587,700	0.19
Commercial	South College at Horsetooth & Swallow	1,801,179	361,780	0.20
Commercial	University Mall	1,727,650	425,559	0.25
Commercial	South College (Prospect to Harmony, excluding Foothills Mall)	4,638,768	583,966	0.13
Commercial	Foothills Mall	5,193,861	1,362,020	0.26
Commercial, North College	North College - all	7,803,446	857,731	0.11
Employment	Prospect east of Timberline	3,493,308	673,203	0.19
Employment	Drake/Timberline	509,607	162,843	0.32
Employment	Timberline	2,943,334	472,591	0.16
Harmony Corridor	Oakridge	1,431,816	362,802	0.25
Harmony Corridor	HP/Celestica/Agilent	9,128,495	1,641,442	0.18
Harmony Corridor	Harmony Center	2,148,028	560,865	0.26
Harmony Corridor	Harmony Market	1,945,991	347,117	0.18
Harmony Corridor	Harmony School Shops	833,269	194,904	0.23
Industrial	Airpark Area	14,379,050	2,258,621	0.16
Industrial	Linden/Lincoln near Buckingham	2,503,707	554,506	0.22
Industrial	North College	1,114,296	468,302	0.42

Sources: Larimer County Assessor, Engineering Department, Current Planning Department, and Advance Planning Department. Data is based on recorded site plans.
Caveats: No vacant lands, only areas with similar or complementary uses, non-residential portions only.