

MEMORANDUM

TO: Members of City Council

FROM: Jane Brautigam, City Manager
Paul Fetherston, Deputy City Manager
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Susan Richstone, Deputy Director, Community Planning and Sustainability
Liz Hanson, Economic Vitality Coordinator
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DATE: 8-16-12

SUBJECT: Study Session – August 28, 2012
Boulder Primary Employer Study

I. EXECUTIVE SUMMMARY

The purpose of this item is to update City Council on preliminary results of the Boulder Primary Employer Study. The update will specifically reference findings from a report authored by the University of Colorado (CU) Leeds School of Business, Business Research Division (BRD), a survey conducted by the Boulder Economic Council (BEC) and four stakeholder meetings. The results feature information on the following topics:

- **Profile of Boulder’s primary employers**
- **Identification of specific issues, needs, and challenges of Boulder’s primary employers**
- **Profile of Boulder’s commercial and industrial space**

City Council feedback is requested on potential next steps, including development of an Economic Sustainability Strategy to guide near- and long-term priorities for supporting the success of primary employers in a manner consistent with Boulder’s broader sustainability goals and values.

On November 29, 2011, City Council held a study session on the City’s Economic Vitality Program (see summary in **Attachment A**). Its purpose was to allow staff to update council on the continuing work to promote economic vitality and to discuss: (1)

the city's guiding principles for business retention and expansion and, (2) a proposed primary employer study. Council members expressed support for the study, which is designed to analyze the needs of primary employers in relation to the city's industrial and commercial areas.

Boulder is a desirable place to work, live, and play. Businesses in Boulder build on a highly educated workforce, superb quality of life, and synergies with the University of Colorado and 14 federal labs. Boulder attracts and grows talented entrepreneurs who have created a unique business community focused on cutting edge innovation and vision. Many people choose to work or live in Boulder because of its sense of place and amenities including extensive bike and walking trails, excellent bus service, easy access to open space and the mountain backdrop. These community characteristics have created a strategic economic advantage that is difficult to replicate, but require careful consideration and planning to ensure their viability into the future.

The city realizes how very fortunate it is to have a dynamic and innovative business community, and believes that the most important jobs are the ones we already have. Industries and technologies are changing rapidly. Successful business retention—and the growth of Boulder's homegrown companies—is a priority for Boulder's economic sustainability. As a land constrained community, Boulder needs to be strategic about economic vitality. While the city has studied its business climate, business services, and fees over the past few years, the primary employer study provides the city with new information on business locations, priorities and perspectives on a range of issues.

Some issues related to primary employers' space, location, and expansion are purely defined by the market. However, the city can have a direct influence on a number of important issues. The city's comprehensive plan sets broad economic policy and land use direction. The city's zoning districts define the uses allowed in different areas occupied by primary employers. Developing new space or upgrading existing buildings require review and permits by the city.

The city has identified four key issues that emerged from the primary employer study:

- 1. Limited availability of suitable space for primary employer expansion**
- 2. Lack of flexibility in allowed uses**
- 3. Cost of land / cost of doing business is high**
- 4. Lack of amenities in some areas of the city**

Based on the consultants' report findings, analysis of these issues, and feedback received in focus groups, staff recommends that the next steps of this project should include:

- A. Targeted improvements to city codes and processes** – This would include updating allowed uses in the city's industrial zones and improvements to the permitting process. These efforts would need to be prioritized in the city work plan

- B. Develop a work plan for an Economic Sustainability Strategy** – This would include a broader look at issues that require additional analysis and clear policy guidance, focusing initially on the needs of primary employers but expanding over time to address other business issues. Staff is recommending an approach that builds on key strengths, responds to key issues, and advances other areas of community sustainability in conjunction with economic vitality. This “place-based” approach to economic sustainability seeks to create vibrant, amenity-rich business districts that vary in their focus and intensity but all of which offer environments that support key industry clusters, retain talented workers and enhance a unique and sustainable “Boulder” quality of life.

Based on City Council’s direction at the August 28 study session, staff would come back to council in the fourth quarter with proposed goals and work plan for initial work on an Economic Sustainability Strategy. This work plan would provide more detail for the recommended action items listed above, including more specific goals and objectives to guide the recommended strategy.

QUESTIONS FOR CITY COUNCIL

1. Does City Council have feedback on the **key findings of the CU report, specifically the primary employer analysis and commercial real estate data**?
2. Does City Council have questions or comments on the **BEC’s primary employer survey results**?
3. Does City Council have feedback on the recommended framework and focus areas for the **Economic Sustainability Strategy**?

II. BACKGROUND

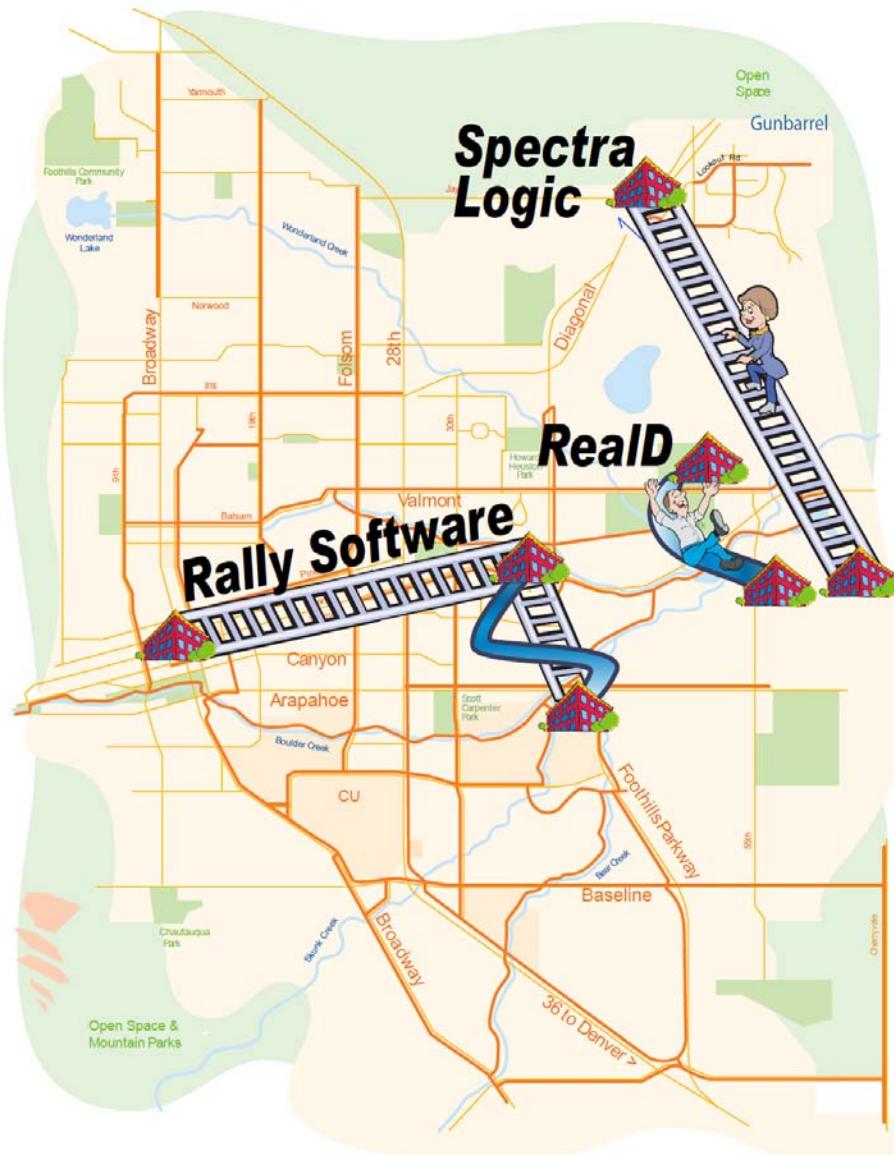
Boulder’s economy has grown over the past 15 years and has remained relatively stable throughout the recession. Today, Boulder has approximately 6,700 employers and 90,000 employees (approximately 100,000 if self-employed persons are added.) Of those, approximately 554 are considered “primary employers.” In 2006, the City of Boulder defined a primary employer by ordinance as:

A business or organization of any number of employees that generates more than 50 percent of its revenues from activities outside of Boulder County, and shall include, but is not limited to those facilities of such business and organization devoted to manufacturing, research and development, data processing, telecommunications and publishing, but shall not include hotels, motels, retailers, or food service facilities.

Whether primary employers have five or 500 employees, they bring “new money” into the Boulder economy and support local secondary employers (caterers, printers, restaurants, etc.) Boulder’s primary employers make up a core of the local economy.

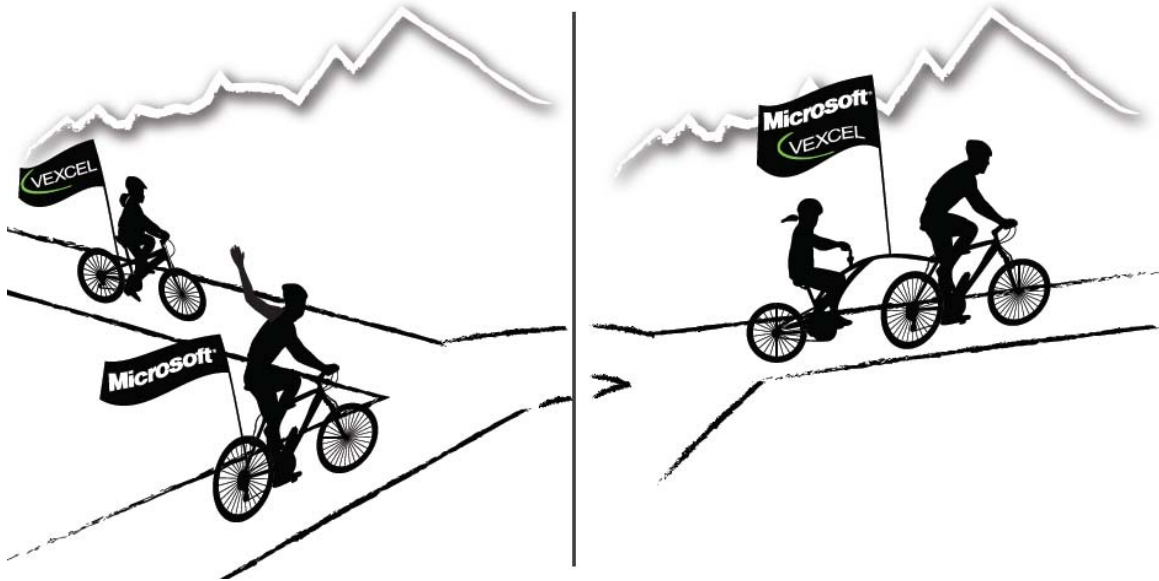
They—and their employees—pay substantial property taxes, sales and use taxes and permit and development fees to the city. The city’s previous and ongoing economic vitality efforts have helped to retain and assist primary employers.

Boulder’s primary employers are dynamic and many move regularly to keep up with employee growth and changing facility needs. Recent examples include three prominent local IT companies. Rally Software moved three times since 2007—from the Exeter building downtown, to a space in 3333 Walnut, to 4001 Discovery Drive and then back to 3333 Walnut to occupy the entire building. From 2008 to 2011, Tendril moved from Flatiron Parkway to Pearl Parkway to the 55th Street building previously occupied by Webroot. Spectra Logic grew from its 55th Street space to two Gunbarrel buildings, including the 83,000 square foot building along the Diagonal formerly occupied by Intrado.



Many primary employers—including manufacturers, software companies, natural food manufacturers, and high tech companies—were founded in Boulder as start-ups and have grown into second-stage companies (see **Attachment B** for the list of Boulder companies that have won 46 of the 200 Colorado Companies to Watch awards from 2009-2012.)

Boulder start-ups also draw investment here from industry leaders headquartered in other states. Google, Microsoft, and RealD came to Boulder when they acquired Boulder-based start-ups (@Last Software, Vexcel, and ColorLink, respectively).



Most of these companies want to stay here, but some face the challenge of finding suitable space in Boulder at a size and cost that fits their needs; retaining primary employers has become increasingly challenging. This challenge is exacerbated as many commercial and industrial buildings that can house primary employers have aged and become outdated in appearance, amenities and function. There is concern that these issues could become impediments to ongoing economic vitality in Boulder.

The Boulder Valley Comprehensive Plan recognizes the city's need to revitalize its older commercial and industrial areas, renovate "tired buildings" and support renovation and business growth in these areas. The city has taken several planning and regulatory actions over the years to support growth and expansion of local businesses while balancing other community goals especially in the areas of transportation and housing. The city has also taken actions to support the growth and expansion of primary employers, from updating the BVCP economic sustainability policies to providing flexible rebate incentives and business retention and outreach programs. However, as a mature, compact city with little remaining vacant land, Boulder must continually make adjustments to its commercial and industrial zoning to ensure continued economic vitality.

The last significant project in the city's industrial areas was the 1997 Comprehensive Rezoning Project, which grew out of concerns about the growing jobs/housing imbalance. The project resulted in the creation of new industrial zone districts, the

rezoning of all industrially zoned property, and the conversion of a few industrial sites to residential. The specific objectives for the industrial zones included the following:

- Preserve the community's industrial zones for industrial uses by limiting professional office uses that provide services primarily or to uses not located in the industrial zones.
- Recognize and accommodate the need for office uses that are directly related to industrial uses or are industrial in character.
- Provide flexibility for a wide range of employment uses, including service industrial uses, manufacturing, research and development facilities, as well as start-up businesses.
- Preserve existing larger lots for a wide range of large-scale light manufacturing, research and development, and service industrial uses.
- Assure that service industrial uses are available to the community and are conveniently located as the community builds out, and protect existing service-oriented enclaves, while allowing for their expansion over time in appropriate locations.
- Modernize the uses and definition in the industrial code to reflect current industrial uses.

Since 1997, the types of business and industries located in Boulder have continued to evolve, and an estimated 8,000-10,000 additional employees have been added in the city, resulting in an annual employment growth rate of approximately 0.7 percent. There is a concern that Boulder does not have enough constructed space or development potential to accommodate the community's primary employers into the future. Further, there is a belief that primary employers may leave Boulder because they are unable to find modern, first-class space within the city limits.

Additional background information on the city's commercial areas, comprehensive plan policies, economic vitality program, and business retention and expansion principles is found in **Attachment C**.

III. PRIMARY EMPLOYER STUDY AND SURVEY

As recommended to City Council in November 2011, the primary employer study is being conducted through two parts:

1. **Primary Employer Study:** Collection of information about the city's primary employers as well as its commercial and industrial space.
2. **Economic Sustainability Strategy:** Development of a strategy for increasing retention of primary employers. The strategy would consider Boulder's overall objectives for community sustainability and economic vitality and would help guide economic vitality efforts over the next five to 10 years.

For the Primary Employer Study, the city selected two consultants to assist with the project. The city contracted with the **University of Colorado (CU) Leeds School of**

Business, Business Research Division (BRD) to collect and analyze data on the city’s primary employers. Using confidential data provided by the Colorado Department of Labor and Employment (CDLE), CU sought to determine prominent characteristics of Boulder’s primary employers and aggregate that data by industry cluster and geographic area. The license agreement between the CDLE and the City of Boulder prohibits the publishing or disclosing of specific employer information; therefore, the primary employer data is aggregated accordingly. The CU Leeds Business Research Division also provided data on Boulder’s commercial real estate (land use, zoning, and building information) and the amenities available in the city’s commercial and industrial areas.

The **Boulder Economic Council (BEC)** was contracted to conduct a survey to help determine primary employers’ expansion and relocation plans, desired space characteristics and desired area amenities. The BEC conducted a third-party phone survey of a random sample of 158 Boulder primary employers to understand their needs and preferences as they pertain to their primary places of business. Most of the primary employers surveyed have less than 100 employees, which is consistent with the findings from the primary employer data compiled by CU. The survey also included questions about City of Boulder energy efficiency and waste reduction programs.

The CU report is provided in **Attachment D**. The BEC primary employer survey report is provided in **Attachment E**.

A. Key Findings of CU Report

Primary Employer Information

- Approximately 554 companies with an estimated 26,059 private-sector primary workers (total Boulder employment estimate: 90,400)
- More than 84 percent have between 5 and 50 employees

Real Estate and Land Use Distribution

- Of Boulder’s 25.75 square miles, 24 percent is zoned commercial, 48 percent is residential, and 28 percent is public
- Boulder’s 1,832 commercial buildings represent about 21.7 million square feet of space; primary employers occupy about 34 percent of this space
 - The average age for the 1,832 commercial buildings is 34.3 years: Downtown buildings are oldest (46.7 year average) and Industrial zoning has the newest buildings (28.6 year average)
- The greatest concentration of primary employers is in East Boulder (238 primary employers or 44 percent of all primary employers)
- East Boulder and Gunbarrel provide nearly 80 percent of primary jobs
- Using a WalkScore © to rank each primary employer’s “walkability” to amenities (0 to 100, with 100 being the most walkable), the average WalkScore © for primary employers was 58.8
 - Downtown had the highest WalkScore © of 95.4
 - East Boulder and Gunbarrel, which have the majority of primary employers, had the lowest WalkScore © of 43.7 and 40.3, respectively

CU Report Recommendations

1. Create **more flexible zoning** that allows real estate to dynamically adapt to changing business needs.
2. **Analyze commercial real estate for comparative cities** nationally (e.g., Madison, Portland), as well as for competitive cities in Colorado outside of Boulder County (e.g., Broomfield, Denver.)
3. Consider **allowing greater densities** in some areas and conduct an **economic impact study** to determine the costs and benefits associated with greater density.
4. Consider strategies for **increasing the amount of leasable space in the Downtown area** since this area has the greatest demand.
5. **Survey investors and entrepreneurs** about the attributes that attract them to Boulder.
6. Consider **providing subsidies** to rehabilitate the old stock of commercial real estate.
7. Reevaluate **procedures for obtaining construction approvals** in order to reduce the time and uncertainty associated with obtaining approvals.
8. Compare Boulder's **economic incentive program** to other comparable cities.

B. Key Findings of BEC survey

Perceptions about doing business in Boulder

- Primary employers are generally positive about Boulder; 53 percent think Boulder is better than other cities in the area as place for business like theirs.
 - These employers most frequently mentioned Boulder's business climate and workforce.
- 61 percent reported that having a Boulder address and being associated with Boulder's image and reputation helps their business.
- Fewer than half of those employers surveyed rated the cost of doing business in Boulder as positive; no one rated it as excellent, and only 10 percent rated it very good.
- 72 percent rated the ease of doing business in the city as positive, including 30 percent who rated it as excellent or very good.

Perceptions about business areas in Boulder

- 80 percent are completely or mostly satisfied with the area where their business is located; 17 percent are somewhat satisfied and 3 percent are dissatisfied.
- Positive aspects of having a business located in different areas of Boulder that were mentioned varied widely by the business location:
 - Those in Downtown, Central Boulder and the Crossroads/28th Street area were most likely to mention access to restaurants and shopping; parking was mentioned most often by businesses in North Boulder, East Boulder, and Gunbarrel.

- When asked about specific amenities, primary employers indicated they considered parking, access to public transportation, a walkable environment, and access to restaurants to be most important.

Uses and attitudes about space occupied by primary employers

- 81 percent of those surveyed currently lease the space their business occupies.
- 61 percent of all primary employers have leases that will expire within the next three years, including 26 percent with leases expiring within a year.
 - 73 percent that lease their space expect to renew their leases; 31 percent of those with leases expiring in the next year also expect to renew.
- 60 percent plan to expand their business in the next two to three years.
 - 70 percent of primary employers who expect to expand anticipate needing additional space.
 - Fewer than half of those believe they will be able to find the space they need in Boulder due to the cost and lack of availability of suitable space.
 - An estimated 47 percent will need 10,000 total square feet or more, including 32 percent that will need 20,000 square feet or more to accommodate their expanded operations.

Energy efficiency and waste reduction programs

- 58 percent of primary employers currently participate, and 27 percent are interested in a waste reduction program.
- 20 percent currently occupy, and 46 percent are interested in occupying energy efficient space.
- 34 percent participate, and 43 percent are interested in energy efficiency programs.
- 18 percent participate, and 43 percent are interested in water conservation programs.
 - While nearly two-thirds of those surveyed indicated some familiarity with the city’s Energy Smart programs, only 18 percent characterized themselves as “very familiar.”

BEC Survey Conclusions

1. Primary employers consider **commercial space an important factor** in running their business.
2. The **cost of doing business** in the city is a common concern.
3. Suggested **amenities** to make areas better for business include more restaurants, more parking, less traffic congestion, more shopping, and better access to public transportation.
4. Boulder remains **vulnerable to losing primary employers** to other cities; most lease their space and have leases expiring in a few years, plan to expand, anticipate moving to a new location, and have concerns about the cost and availability of space in Boulder.

5. There is opportunity to increase primary employers' knowledge and understanding of Boulder's **energy efficiency, zero waste, and water conservation programs.**

C. City Outreach to Key Stakeholders

City and BEC staff held focus groups on July 30 and 31 to obtain feedback from key stakeholders on draft report findings. Participants included local primary employers, real estate developers, architects, and brokers. Key findings from the focus group discussions are listed below. Summaries of the focus group meetings are found in **Attachment G.**

1. Because Boulder is a desirable business location and place to work, companies are willing to tolerate older space, but at some point that tolerance may diminish.
2. Current zoning limits on the use of space are too restrictive in some cases.
3. The city's discretionary review process can result in a wide range of outcomes; unpredictability increases the level of risk and associated costs are far more than other communities.
4. Be careful that it is not so expensive to do business here that the companies wonder if it is really worth it; have we built the Boulder brand strong enough?
5. There is lots of development capacity on paper, but the risk and reward calculation is an inhibitor.
6. The City needs long term plans for how to address these issues.

QUESTION #1 FOR COUNCIL

- Does City Council have feedback on the **key findings of CU report, specifically the primary employer analysis and commercial real estate data?**

QUESTION #2 FOR COUNCIL

- Does City Council have questions or comments on the **BEC's primary employer survey results?**

IV. ANALYSIS

The following four issues emerged from the findings of the CU Report and BEC survey in addition to the focus group discussions:

A. Limited availability of suitable space for primary employer expansion

Space limitations exist in Boulder's commercial building stock today and prevent some expanding companies from finding appropriately-sized space, particularly those that require floorplates of roughly 30,000 square feet and above. However, most of Boulder's current primary employers do not have those space requirements. CU reports that a primary employee utilized an average of about 308 square feet; the majority of primary employers have between five and 49

employees. Therefore, most of Boulder's primary employers currently occupy 1,540 to 15,092 square feet.

This is not to say that demand does not exist for larger floorplates. In fact, of the 158 businesses polled by the BEC, the majority expect to expand and will require additional space. Nearly 50 percent cited needing an additional 10,000 feet or less; but, over a third will be in the market for 20,000 square feet or more over the next two to three years. Several projects that are currently in the city's development review process could potentially respond to the space needs of Boulder's primary employers. See **Attachment F** for a list of proposed and approved projects.

According to the BEC survey, most primary employers (87 percent) responded that their current space meets their current business needs. However, roughly half of the survey participants said they would make changes if there were no zoning or other restrictions. Those who would make changes provided a wide variety of responses including increasing the size of their space, increasing functionality, improving energy efficiency, and adding more parking.

The age of Boulder's building stock is a potential concern for retaining the community's primary employers. The CU report shows that Boulder's commercial building stock is older than buildings in some other Boulder County municipalities, including Lafayette, Louisville and Superior. According to focus group participants, the increasing age of Boulder's commercial space and the addition of new space in competing areas along US 36 has forced several Boulder companies to move elsewhere to continue their growth.

Making upgrades to Boulder's existing commercial building stock may make older properties more attractive, especially to the primary employers who indicated that occupying "green" or energy efficient space is desirable. (Of the survey respondents, twenty percent currently occupy energy efficient space and 46% have at least some interest in occupying energy efficient space.) However, building upgrades are the property owners' responsibilities; and, many property owners and developers hesitate to make these major investments as they are costly and "invisible" to their potential tenants. (i.e., building infrastructure upgrades are hidden behind walls, under floors and in ceilings.) Further, according to focus group attendees, the low threshold for triggering site/concept review and land use code was a significant challenge to upgrading existing space. It was said that the combination of high fees and an unpredictable process deters some from pursuing upgrades at all, therefore limiting development potential because developers often take the path of least resistance. Also, because primary employers are lessees (81 percent) and they move frequently, employers and property owners may not invest the capital required for these upgrades since they tend to change spaces relatively frequently.

B. Lack of flexibility in allowed uses

Land and business owners often cite the lack of flexibility in the uses allowed in Boulder zoning districts as a constraint in locating and expanding businesses. This theme emerged in focus group interviews with developers, brokers, primary employers, and architects. Use constraints in the commercial and industrial zone districts sometimes prevent primary employers from doing business in certain areas of the city even though the use seems to “fit” within the zone (i.e., presents no negative impacts.) These constraints can limit space options in an already constrained real estate marketplace with low vacancy rates.

Boulder has historically taken a prescriptive approach to zoning to help implement the community’s goals as expressed in the BVCP. The land use regulations were written with the intent to protect the availability and affordability of industrially zoned land for traditional industrial uses, including primary employers and emerging business needs like commercial kitchens (often shared by start-up natural foods companies). Also, Boulder’s zoning code differentiates between professional offices that have client contact at the place of business (e.g. attorneys, accountants, architects) and technical offices (e.g. engineers, surveyors, industrial designers.) Professional offices are prohibited in industrial zones, while technical offices are allowed in those areas.

The BVCP recognizes that land use regulations can, at times, have an impact on the ability of businesses to evolve and has the responsibility to make sure those regulations and review processes provide a level of flexibility to allow businesses to be responsive to emerging technologies and evolving industry sectors. While other issues may be determined mostly by the market, the city has direct control over its zoning regulations. Recent Boulder code changes made in response to community demand relate to restaurants in industrial zones and the brewery, winery and distillery industries. Most recently, in a June 2012 work plan discussion, City Council indicated that looking at the area around the evolving Boulder Community Hospital Foothills campus on Arapahoe Avenue may be a priority due to an increased demand for medical uses in that area.

Land use flexibility also involves the zoning code’s bulk control methods. Boulder uses multiple devices to control the bulk and intensity of buildings: height, number of stories, floor area ratio (FAR), building size, open space, setbacks, and parking requirements. Many of these devices are complicated and difficult to calculate; some are not commonly used by other communities in industrial districts. They may be used to control what buildings look like or how large they are in areas where building appearances are not a main concern. Updating the zoning code may include evaluating these bulk control methods to see if they are resulting in good design appropriate to the city’s commercial areas.

C. Cost of land/cost of doing business is high

Primary employers expressed that finding affordable space in the City of Boulder is an impediment to doing business here. Developers noted that the supply of undeveloped land is limited, making land costs higher, which presents difficulties in building new, market rate space. Despite the higher cost for commercial space in Boulder, commercial brokers and property owners indicated that employers are willing to pay a premium for that space as the city offers unique characteristics and other amenities that aren't available in competing communities.

Outside of actual land and building costs, developers and property owners said that remaining price-competitive is becoming increasingly more challenging due to the high cost of doing business in Boulder. Developers, brokers, property owners and primary employers noted that the costs associated with the real estate development process are higher than other competitive communities. While several cited that fees were more costly in Boulder than in other Front Range communities, most indicated that the unpredictable development review and permitting process increases project costs. This unpredictability impacts the feasibility of developing or upgrading commercial space for primary employers as it significantly increases project risk. Further, the unpredictability dissuades primary employers from moving into spaces that require significant tenant improvements. Many Boulder primary employers (e.g., tech companies) have short timetables to make real estate decisions so predictability and timeliness of city review processes is important.

Many key stakeholders indicated that improvements to the review process for commercial tenant finish permits would have a high impact. Making the permit issuance times more predictable can affect a wide range of issues like business move-in dates and coordination with lease timing. Unanticipated code or permit requirements can affect the permit issuance dates while compliance issues are resolved. Also, upgrading older buildings can result in significant building improvements (energy code, accessibility, wiring, utilities) that may be surprising to a business tenant and may use the majority of funds allocated to tenant finish improvements.

D. Lack of amenities in some areas of the city

In today's economy, place matters more than ever before. Boulder is fortunate to be among the top locations for the "creative class" described by Richard Florida in his book "The Rise of the Creative Class," making up over 40% of the local workforce. Creating a great place to live and work does not happen by accident; it includes the natural environment, built environment, vibrancy of street life and outdoor life, arts and culture, diversity and an overall lifestyle.

The city's employment centers have varying infrastructure and amenities, and not all of them have the characteristics that today's talent and companies desire.

Downtown provides great walkability and access to restaurants and open space; downtown employers cite these as desirable amenities. On the other hand, East Boulder and Gunbarrel, which have the majority of primary employers, are generally less walkable but provide more easily accessible parking. Primary employers in these locations noted that additional amenities like restaurants would be desirable, but aren't necessary for doing business.

Today's primary employers are vastly different than the industries of a few decades ago and the city's industrial areas need to make a similar transformation. Each area of the city is different, and what staff believes is needed is a more place-based approach, looking at Boulder's various employment areas to identify desired change and tailored strategies for achieving that change. Not every area of the city can or should be like the downtown; however, there is enormous opportunity to improve employment areas to provide a greater diversity of uses and services, increased walkability, improved quality of the built environment, and increased access to public transportation, bicycle and pedestrian facilities.

V. RECOMMENDATIONS

The city has taken actions to support the growth and expansion of its primary employers, from updating the BVCP economic sustainability policies to providing incentives and business retention and outreach programs. These efforts have been balanced with other community goals especially in the areas of transportation and housing. Many of the city's economic vitality initiatives have been focused broadly on businesses throughout the city, with targeted programs for small businesses and primary employers. To date, these efforts have not been developed based on the differing needs of each geographic area.

The city regularly takes steps to be responsive to changes and challenges. Feedback from business climate and services studies as well as findings from fee studies inform city actions. Staffing adjustments have been made to move resources to areas where they are needed. A new, temporary two-year planner position in Community Planning and Sustainability is focusing on zoning code changes, and a major investment is underway to replace the city's Landlink system, creating significant customer service improvement opportunities. Past experience and the findings from the CU report and BEC survey on primary employers identify targeted areas where additional city attention and action should be focused.

The study results indicate that a "place-based" approach to economic vitality would be beneficial. Both the CU report and the BEC survey highlight the unique characteristics and needs of specific Boulder areas where primary employers are located. Desired public and private amenities like restaurants, shopping, parking, bike paths, and transportation – and the needs of primary employers – differ greatly between downtown, East Boulder, and Gunbarrel. Downtown restaurants, retail, and Pearl Street Mall outdoor space serve downtown employees, residents, and visitors. East Boulder employees seek more walkable access to restaurants. Gunbarrel is evolving, with an approved town center and new housing, retail, and

hotel development expected. City planning efforts can help define the unique needs and priorities of each area within an overall economic sustainability strategy. While supporting and sustaining these vibrant places, the city can help to retain and attract primary employers as well as enhance the unique character of Boulder's subcommunities and advance other community sustainability goals. City action can help incentivize private investment that can further place-based economic vitality goals.

The primary employer study results indicate that the next steps of this project should include both improvements to city codes and process as well as addressing broader policy issues. These next steps would follow two tracks:

A. Targeted improvements to codes and processes - Areas for improvement that are consistent with current policies (e.g. “code clean up” and permit process improvements) would need to be prioritized as part of the city work plan.

B. Economic Sustainability Strategy – The strategy would address the issues that need additional analysis and policy direction. Staff would return with a work plan to guide this effort.

A. Targeted improvements to city codes and processes

1. Zoning uses and bulk standards

Objective: A number of issues surfaced relating to opportunities for improvements to city use and bulk charts in certain commercial and industrial zones. Staff recommends updating use charts and definitions to respond to changes in primary employers that are consistent with the current objectives of the commercial and industrial zones.

2. City review processes

Objective: Modify development review and permitting processes so that the processes are more streamlined, efficient and predictable for customers. Staff recommends developing improvements to the tenant finish permit process.

B. Develop a work plan for an Economic Sustainability Strategy

The proposed Economic Sustainability Strategy will further evaluate the key issues identified that need additional analysis to define priority actions. Examples of focus areas are listed below.

1. Zoning changes (use and bulk standards)
2. Financial tools to catalyze commercial upgrades
3. Area plans, with a focus on infrastructure and amenities

4. Implementation of adopted master plans
5. New incentives/funding to help retain primary employers

As part of the proposed effort, staff recommends further analysis be undertaken to understand the industry-specific needs of Boulder's primary employers.

QUESTION #3 FOR COUNCIL

- Does City Council have feedback on the recommended framework and focus areas for the **Economic Sustainability Strategy**?

VI. NEXT STEPS

Based on City Council's direction at the Aug. 28 study session, staff would come back to council in fourth quarter 2012 with the proposed goals and work plan for the Economic Sustainability Strategy. This work plan would provide more detail for the recommended action items listed above, including more specific goals and objectives to guide the recommended approach.

The proposed work plan would need to be prioritized as part of the 2013 City of Boulder work plan.

VII. ATTACHMENTS

- A. Summary of Nov. 29, 2011 City Council Study Session on the Economic Vitality Program
- B. Colorado Companies to Watch Program – Boulder Award Winners
- C. Background: Boulder's Primary Employers, the Boulder Valley Comprehensive Plan, and Business Retention and Expansion Principles
- D. Report by the University of Colorado Leeds School of Business, Business Research Division
- E. Report by the Boulder Economic Council: Primary Employer Survey
- F. Overview of Approved and Proposed Projects
- G. Summary of Focus Group Comments on Draft Study Findings



**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM**

MEETING DATE: February 7, 2012

AGENDA TITLE: Consideration of a motion to accept the summary of the November 29, 2011 Study Session on the Economic Vitality Program

PRESENTERS

Jane S. Brautigam, City Manager

Paul J. Fetherston, Deputy City Manager

David Driskell, Executive Director, Community Planning and Sustainability

EXECUTIVE SUMMARY

The purpose of this agenda item is to allow council to accept the summary of the Nov. 29, 2011 city council study session on the economic vitality program. The purpose of the study session was to update and summarize the continuing work to promote economic vitality in the City of Boulder and to discuss two key policy issues: the city's guiding principles for business retention and expansion and a proposed 2012 study of the needs of Boulder's primary employers in relation to existing industrial and commercial space as a step toward development of an economic sustainability strategy for the city. **Attachment A** is a summary of the presentation and the comments made at the study session.

STAFF RECOMMENDATION

Suggested Motion Language:

Staff requests council consideration of this matter and action in the form of the following motion:

Motion to accept the summary of the November 29, 2011 Study Session on the Economic Vitality Program

ATTACHMENT:

Attachment A: November 29, 2011 Study Session Summary

Attachment A

November 29, 2011 City Council Study Session Summary Economic Vitality Program

PRESENT: **City Council:** Mayor Appelbaum, Deputy Mayor Morzel and Council Members Ageton, Becker, Cowles, Jones, Karakehian, and Plass

Staff Members: City Manager Jane Brautigam, Executive Director of Community Planning and Sustainability David Driskell, Comprehensive Planning Division Manager Susan Richstone, Economic Vitality Coordinator Liz Hanson

PURPOSE:

The purpose of the study session was to update and summarize the continuing work to promote economic vitality (EV) in the City of Boulder and to discuss two key policy issues: the city's guiding principles for business retention and expansion and a proposed 2012 study of the needs of Boulder's primary employers in relation to existing industrial and commercial space as a step toward development of an economic sustainability strategy for the city.

OVERVIEW OF THE PRESENTATION AND DISCUSSION:

Economic Vitality Coordinator Liz Hanson began the presentation with an overview of the recent work of the economic vitality program, including business assistance and service improvements, development and redevelopment projects, flexible rebate and microloan business incentive programs, partnerships and sponsorships, the business outreach program, and the business service and business climate surveys.

Ms. Hanson then discussed the city's business retention and expansion program, which has been at the core of the economic vitality program since 2003. Many Boulder companies—primary employers like manufacturers, software companies, natural food makers, and high tech companies—were started in Boulder and have relocated several times as they have grown. Most of these companies want to stay here, but they face the challenge of finding suitable space in Boulder at a size and cost that fits their needs. Ms. Hanson reviewed Boulder's draft principles for business retention and expansion and requested city council feedback. These principles are:

- a) **BR&E takes priority over business attraction / recruitment:** the most important jobs in Boulder are the ones that are already here.
- b) **Understand and address the current and future needs of businesses in Boulder** so that city policy and program initiatives can be more proactive and responsive.

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- c) **Support the retention of entrepreneurial start-ups as a priority**, because they have potential to become high growth second-stage companies and add to Boulder's "entrepreneurial density."
- d) **Support companies in key industry clusters that play to Boulder's strengths:** primary employers in aerospace, bioscience, clean technology, natural/organic products, outdoor industry, and information technology are the core of Boulder's economy.
- e) **Boulder BR&E is in the context of regional business retention:** if there is not space available that fits a company's needs in Boulder, then Boulder or Broomfield counties would be the next preference to keep the company in the region (with the metro Denver area as the next option).
- f) **Provide good customer service to Boulder's businesses:** be responsive to their needs, wants, and expectations; use feedback to help create a positive business climate.
- g) **Outreach efforts are primary tools:** use a dedicated team and effective web tools to proactively share business resources and city services; a "seamless economic development delivery system."

The final portion of the staff presentation described a proposed 2012 economic sustainability study. Ms. Hanson indicated that staff believes it is time to confirm the purpose and focus of the city's business retention and expansion efforts and to take a careful look at the needs of primary employers in relation to the city's industrial and commercial areas. The proposed study would support the development of an economic sustainability strategy to accommodate a diversity of commercial and industrial activity consistent with the city's sustainability goals. The strategy would respond to the issues and concerns identified in the study and identify appropriate opportunities and action items in support of the city's near- and long-term economic sustainability goals.

****add into above**staff believes it is time to better understand what is happening in our industrial and commercial areas– particularly as an economic vitality strategy for Boulder's primary employers (last time we studied our industrial zones in depth was in 1997)**

As a land constrained community, we need to be strategic

This would be a first phase effort - provide info. & analysis to support development of a strategy

We haven't completed a detailed scoping of this study, wanting input from Council **preliminary feedback from Council** – if there is interest in pursuing this study, staff would bring it forward for consideration at the January Council retreat

- to be prioritized with other potential projects as part of the city's 2012 work program

COUNCIL QUESTIONS/COMMENTS:

Throughout the presentation, council members were asked to provide feedback on the following questions:

1. Does City Council have questions or feedback related to activities of the Economic Vitality Program in 2010 and 2011?

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2. Does City Council have feedback on the draft guiding principles for business retention and expansion in 2012?
3. Does City Council have feedback on the draft scope of activities proposed for an economic sustainability study focused on Boulder's primary employers in 2012?

Below is a summary of the feedback that City Council provided to these questions:

- **Economic Vitality Program –**

Business Climate Survey

Council questioned what needs to improve within city services, and emphasized focusing on the accessibility of information and improving the relationship with business and customer service.

- Regarding *least satisfied with city*: what should/needs to improve? Accessing info, regulations
 - Focus on improving both relationship with businesses and customer service

Flexible Rebate Program:

George Karakehian:

Council Member Karakehian questioned whether approving rebates for large companies like IBM and Microsoft is an effective use of money and asked if only giving flexible rebates to “primary employers” limited the scope of the incentives.

- Impressed with the program and economic vitality coordinator role
- Is giving IBM/Microsoft a rebate an effective use of money?
 - Microsoft- corporate being involved locally
 - IBM- demonstrate to corporate, increased jobs
- Does giving only “primary employers” rebates limit incentives?

- **Business Retention and Expansion –**

Outreach and BR&E

Council members emphasized focusing on small homegrown companies, which are at the core of Boulder's success. A future discussion should take place regarding whether rezoning, incentives, or another alternative is the best way to ensure the cycle of startups growing into large, successful companies continues. Mayor Appelbaum agrees with the EV principles for business retention and suggested keeping council members involved by inviting them to outreach meetings. Council Member Plass commented that being focused on retention and expansion rather than attraction is a good problem to have. Council Member Jones pointed out that there are iconic businesses, such as the Boulder Theater, that are important to retain.

- Keep business retention/expansion, but focus on small homegrown companies

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- Core of Boulder's success
- (Matt) Take advantage of the council members, keep them involved
 - George visited Fresh Produce, George and Jane went to Rudi's Bakery
- (Matt) Agrees with EV principles for business retention (moved from Study section)
- (Tim) These are good problems to have- we don't often have to convince companies to come to Boulder
 - keep homegrown businesses and Boulder's unique qualities
- The problem isn't keeping growing companies here, but making sure that cycle continues
- Council can decide if rezoning or incentive or something else is the right course
- (Suzanne) Don't lose sight of iconic businesses that we need to stay (e.g. Boulder Theater)
- Services are widespread

Space Concerns

A question regarding quantifying space needs (ie. class A, warehouse) was expressed by Council Member Cowles, which will be answered as part of the proposed Economic Sustainability Study. Cowles also pointed out that the medical marijuana industry takes up a significant amount of space, and in response, Council Member Karakehian mentioned that the medical marijuana industry is not a growth industry and could end should policy change. It was discussed that added space at the approved Golden Buff site and Boulder Junction will help meet space needs, but questions were raised as to whether this space would be zoned for start ups and growing companies, as it was expressed that small, inexpensive space for start-ups should not be lost.

- Quantified space needs? Class A? Warehouse? (Macon) -- part of the study
- Medical marijuana taking space (Macon) – not a growth industry, could end at any time due to policy changes (George)
- 300K sq. ft. already approved for Golden Buff site
- Boulder Junction will help meet 600K sq. ft. estimate (for 6 example large primary employers)? Zoned for startups/growing? (yes)
- 1990s- enough space for 60,000 more jobs- has this changed?
 - 60,000 jobs projected based on zoning
- more capacity in zoning for non-residential, but spread out
- keep sight of small, inexpensive space for small start-ups
- **Economic Sustainability Study –**

It was generally felt that the two phase Economic Sustainability Study would be worthwhile and helpful. Concerns were raised that both housing and office diversity are needed, but it was generally felt that the study should address the balance between improving/upgrading and price in order to ensure that all the upgraded space did not become too expensive.

- Need both housing and office diversity
 - Address in the study- balance between improving/upgrading and price (don't want all the upgraded space to be too expensive)

Macon Cowles:

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Council Member Cowles pointed out that physical expansion needs can be addressed by good planning (e.g. implementation of Gunbarrel Town Center) and generating small/inexpensive flexible space.

- Helpful to have the study
- Physical expansion needs can be addressed by good planning (e.g. implementation of Gunbarrel Town Center, generating small/inexpensive flexible space)

KC Becker:

Council Member Becker questioned the types and diversity of space is needed and asked what barriers exist (ie. Golden Buff, Boulder Junction) and how the city can facilitate additional space. She clarified that both additional space and space upgrades are needed, and felt the next step in the study would be problem solving. **An example was given that the Portland mayor was personally calling companies and Council Member Becker questioned how Boulder can respond to that.**

- Study makes sense
- What type of space (and diversity of space) is needed & how can the city help achieve it?
 - What barriers exist? (e.g. Golden Buff site, Boulder Junction) How can city facilitate it?
- Both additional space and space upgrades are needed?
- Example: Portland mayor calling companies; how do we respond to that?
- Next step: problem solving

Suzanne Jones:

Council Member Jones discussed a trade off the Boulder is faced with: whether to be an entrepreneurial incubator or to retain established companies. It will be important to balance the two and decide what Boulder can best provide. Council Member Jones supported the two phase approach to the study, emphasizing that it is important to first do the study, and then make policy decisions such as clusters or diversification. **Council Member Jones brought up the issue of commercial kitchens and suggested that the city should look at the zoning for them.** When executing the study, the questions must be asked in a way that answers are useful, but it will be important to start broad enough that current trends emerge.

- **Trade off: entrepreneurial incubator vs. retaining established companies**
 - Finding sweet spot and balancing the two
 - What can Boulder provide?
- First study, then make policy decisions
 - Clusters? Diversification?
- **Commercial kitchen issue (maybe look at zoning?)**
 - Ask questions in the right way so we get answers
 - Start broad enough to see trends

Lisa Morzel:

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Deputy Mayor Morzel questioned whether the city would know when “we’ve arrived” and if it would be apparent when to stop, considering the housing and transportation impacts of expanding business.

- How do we know “we’ve arrived”? When is enough enough?
 - Criteria, policies – address housing and transportation impacts
- How much more? Beyond just size
- Businesses leave – stopping point is where?
- “Don’t soil the nest”- *not sure what this means for the summary, but it was emphasized*

Suzy Ageton:

Council Member Ageton felt it was important to recognize the dynamic and evolving business climate in Boulder and ensure that the quality of life is preserved. She expressed concerns about the clarity of the study’s objectives, including the difficulty in asking the right questions when the final goals are not clear. A similar sentiment was also expressed by Council Member Jones. Council Member Ageton questioned whether specifics, such as the commercial kitchen concern raised by Council Member Jones, would be answered. In addition, she discussed the issue of methodology, including whether the results of the study would be data and statistics or opinions, anecdotes and challenges. She also asked for more clear and specific definitions (ie. sectors).

- Keeping the right dynamic; situation is constantly changing
- Making sure quality of life/values are preserved
- Concerned about the clarity of the study objectives
 - Ask the right questions (see Suzanne’s comments), but without final goals, its hard to ask the right questions
 - Would specifics (ie. commercial kitchens) be answered?
 - Methodology?
 - What do we want to get out of data vs. opinions; # of buildings/facilities (stats) vs. opinions/challenges
- Needs more definitions
 - Sectors?

Matt Appelbaum:

Mayor Appelbaum felt the study was worthwhile because something should be done to address the current concerns, and requested that staff send a memo to Council once a more specific scoping of the study has been completed. He felt a wide range of companies should be part of the study in order to receive specific answers, but emphasized that questions should not be too specific. In response to Deputy Mayor Morzel’s question of when to stop, Mayor Appelbaum felt it was a different issue, beyond the scope of the EV program. *In addition, he gave the example of Flatiron Park as an area that could become a suburban park if redevelopment. (Is that what the city wants?)*

- Study: do something
- Send memo to Council once we’ve gone more in depth
- Wide range of companies → specific answers
- Don’t get too specific with questions (not multiple choice)
- When to stop/how much is too much is a different issue; beyond EV scope

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- Example: Flatiron Park is suburban, but our current zoning may lead to a suburban park if redeveloped

Tim Plass

Council Member Plass thought the Economic Sustainability Study is worth pursuing and expressed support for phase one focusing on studying the issues and phase 2 being a strategy, but he would like to see “how much and what kind” answered in the study.

:

- Great; likes phase 1 study & phase 2 strategy; worth going forward
- These are good problems to have- we don't often have to convince companies to come to Boulder (mentioned in BR&E section)
- Would like to see “how much & what kind?” in study/survey
- To keep businesses growing here in Boulder

George Karakehian:

Council Member Karakehian felt the study is important, and felt that “how much and what kind of space” should be answered in the outcome. In response to concerns about housing and transportation issues, he felt that numbers of jobs and space types should be the focus of the study and that housing and transportation issues did not need to be part of the study. Council Member Karakehian noted that businesses will grow too big and leave, for example GE Access moved to Broomfield, but that that shouldn't be a primary concern. In addition, he asked what types of zoning and incentives the city might want to pursue.

- The study is important; how much and what *kind* of space?
- It doesn't need to deal with housing and transportation; we need the number of jobs and space types
- Businesses will grow too big and leave (e.g. GE Access to Broomfield); don't worry about those that get too big
- Zoning? Incentives?

Redevelopment

Areas of focus were East Arapahoe, east of 55th, where types of buildings and pedestrian access need to be improved, and Flatirons Industrial Park, which council members felt needs to be connected to the rest of the city. Council Member Cowles brought up the Gunbarrel town center as an area for redevelopment, as the need for space could jumpstart Gunbarrel and its downtown area. Mayor Appelbaum emphasized that zoning is a separate issue from the economic sustainability study, and the Council needs to look at the big picture (ie. Flatirons), and consider hospital zoning as well.

- East Arapahoe, east of 55th- improving types of buildings, pedestrian access
- Connect Flatirons to the rest of the city
- Gunbarrel town center (*Macon*)
 - 60% of zoning capacity in Gunbarrel
 - need for space could jumpstart Gunbarrel & its downtown
- Zoning is separate issue from study (*Matt*)
 - Council needs to look at the big picture (ie. Flatirons)
 - Hospital zoning

ATTACHMENT B

Colorado Companies to Watch Program – Boulder Award Winners

[Colorado Companies to Watch](#) is statewide award program that recognizes extraordinary second-stage companies. For the four years of the program, Boulder companies have been awarded the most of any Colorado community, with 15 this year, 11 in 2009 and 2010, and nine in 2011.

2012

Agloves	Manufacturing	Gloves for use with smart phones
Air Comm Corp	Manufacturing	HVAC for helicopters
Applied Trust	Software	IT consulting
Backflip Studios	Software	Games for mobile devices
Boulder Ice Cream	Manufacturing	Natural ice cream
Connexall	Software	Healthcare
Gnip	Social media marketing	Delivers social media activities
Gorilla Logic	Application development	Web/mobile applications
LEC Global (Lightning Eliminators)	Manufacturing	Lightning protection devices
SendGrid	Software	Cloud-based email
Solid Fire	Data storage	Cloud-based storage
Sophonon	Manufacturing	Hearing devices
Symplified	Manufacturing	Cloud-based application security
Tensentric	Engineering	Medical equipment design
Zia Consulting	Software	Application development

2011

Amadeus Consulting	Software	Custom software
Bhakti Chai	Manufacturing	Chai
Bobo's Oat Bars	Manufacturing	Natural Oat Bars
Confio Software	Software	Database performance
Flaik Inc	Software	Ski resorts
Pike Research	Consulting	Clean tech industry research
ShipCompliant	Software	Wine shipping
Trada	Software	Internet search
University Parent Media	Publishing	University information guides

2010

Albeo Technologies	Manufacturing	LED lighting fixtures
Backcountry Access	Manufacturing	Avalanche safety equipment
Chocolove	Manufacturing	Chocolate bars
Eetrex	Manufacturing	Electrical vehicle batteries, chargers

EVOL Foods	Manufacturing	Natural burritos and other foods
Funovation	Entertainment	Laser mazes
InDevR	Biotechnology	Virus counters, medical testing devices
OPX Biotechnologies	Manufacturing	Biofuels
Product Architects	Manufacturing	Polar Bottle sports bottles
SurveyGizmo	Software	Internet surveys
Zolo Technologies	Manufacturing	Power plant efficiency tools

2009

Camp Bow Wow	Services	Doggy day care
Cocona Technology	Manufacturing	Fabric from coconut husks
EcoProducts	Manufacturing	Compostable products
Justin's Nut Butter	Manufacturing	Natural nut butters
KM Labs	Manufacturing	Lasers
LogRhythm	Software	IT security management
Namaste Solar	Manufacturing	Solar panels
Pangea Organics	Manufacturing	Natural skin care products
Precision Photonics	Manufacturing	Optics
RecycOil	Manufacturing	Biofuel from recycled cooking oil
SparkFun Electronics	Manufacturing	Electronic parts and kits

ATTACHMENT C

Background Information

Background: From 1997 Rezoning to Current Trends

From 1980 to 1995, the rate of job growth in the city was more than double the rate of housing growth leading to concerns about the growing imbalance between jobs and housing, upward pressure on housing prices, and increasing in-commuting. In response, the city initiated a comprehensive rezoning in 1997 that included the rezoning of all industrial areas in the city, and the downtown, Gunbarrel, and University Hill commercial areas. The main impetus for the Comprehensive Rezoning Project was to reduce projected job growth while addressing the needs for businesses to grow and expand. In the industrial areas of the city, the project resulted in the creation of new industrial zone districts, the rezoning of all industrially zoned property in the city, and the conversion of a few industrial sites from industrial to residential.

Boulder Valley Comprehensive Plan – Economic Policies

Boulder has prioritized this issue in the recent 2010 update to the Boulder Valley Comprehensive Plan (BVCP), as reflected in its new policies on the economy:

From 2010 BVCP, Economic Policies:

Boulder recognizes the need to revitalize its older commercial and industrial areas, renovate “tired buildings” and support renovation and business growth in these areas. As a mature, compact city with little remaining vacant land, the city must engage in strategic planning for redevelopment areas and ensure that economic benefit is a primary outcome....The city will collaborate with the business community to facilitate growth, development, and infrastructure improvements that benefit residents and businesses.

Strategic Redevelopment Opportunities and Sustainable Employment

5.01 Revitalizing Commercial and Industrial Areas

The city will develop specific strategies to optimize redevelopment opportunities, partner with the private sector and proactively support redevelopment of commercial and industrial areas. Examples of areas for revitalization that have been identified are Diagonal Plaza, University Hill Commercial district and the East Boulder Industrial area.

The city will use a variety of tools to create public/private partnerships that lead to successful redevelopment. These tools may include, but are not limited to, area planning, infrastructure improvements, changes to zoning or development standards and incentives including financial incentives, increased development potential or urban renewal authority.

Principles for Boulder Business Retention and Expansion

At the November 29, 2011 Study Session, staff reviewed with City Council a set of guiding principles for business retention and expansion. Business retention has been at the core of Boulder's EV program since 2003, when an EV policy statement included "guiding principles in promoting economic vitality." The list below reflects the guiding principles that city staff and the Boulder Economic Council use while working to keep primary employers in Boulder and helping them to expand here.

- 1. BR&E takes priority over business attraction / recruitment:** the most important jobs in Boulder are the ones that are already here.
- 2. Understand and address the current and future needs of businesses in Boulder** so that city policy and program initiatives can be more proactive and responsive.
- 3. Support the retention of entrepreneurial start-ups as a priority,** because they have potential to become high growth second-stage companies and add to Boulder's "entrepreneurial density."
- 4. Support companies in key industry clusters that play to Boulder's strengths:** primary employers in aerospace, bioscience, clean technology, natural/organic products, outdoor industry, and information technology are the core of Boulder's economy.
- 5. Boulder BR&E is in the context of regional business retention:** if there is not space available that fits a company's needs in Boulder, then Boulder or Broomfield counties would be the next preference to keep the company in the region (with the metro Denver area as the next option).
- 6. Provide good customer service to Boulder's businesses:** be responsive to their needs, wants, and expectations; use feedback to help create a positive business climate.
- 7. Outreach efforts are primary tools:** use a dedicated team and effective web tools to proactively share business resources and city services; a "seamless economic development delivery system."

Economic Vitality Program

The city's EV program began in 2003 and is now a program of the Department of Community Planning and Sustainability. With the goal of nurturing and enhancing the entrepreneurial spirit of our community, the EV program focuses on the retention and expansion of existing businesses and the incubation of innovative new businesses that build upon and contribute to the City of Boulder's values. EV partners with the Local

Environmental Action Division (LEAD) as well as other city divisions and nonprofit business organizations to deliver services, provide resources to Boulder businesses, and to further the city's sustainability goals. The EV program provides business assistance and support to Boulder businesses of all sizes and types. Certain outreach program efforts and the flexible rebate incentive program are targeted to primary employers.

Business Services Assessments and Improvements

To obtain an independent assessment of how primary employers view “doing business in Boulder,” the city hired business consultant Ray Wilson in 2005 and 2007 to conduct confidential interviews and report his findings to city staff and City Council. Also, in 2011, the BEC conducted a business services and business climate survey to obtain feedback on service delivery from business customers and business partner representatives about what the city is doing well and where it can improve (findings included in the Nov. 29, 2011 City Council study session packet). The subject of this study session – the primary employer study – is the first time the city has conducted a comprehensive study of Boulder's primary employers based on companies, real estate data, and a quantitative survey.

Transportation Master Plan

Since 2003, the Transportation Master Plan (TMP) has identified regional connections as one of four focus areas due to the number of employees that in-commute and the need for improvements on the regional facilities connecting to Boulder. Fewer than half of Boulder employees live in town and an estimated 52,000 employees in-commute for work. A significant number of future Boulder employees are expected to live in East Boulder County and Weld County. How in-commuting employees travel on their commute and during the work day has a significant effect on Boulder traffic and greenhouse gas emissions. Transportation is currently preparing an assessment report as the first phase of a TMP update and regional connections will remain a focus area. In-commuting employees have a significantly higher single occupant vehicle (SOV) mode share than Boulder residents, and many come from areas where transit service is not available. Providing time competitive transit connections and increased vanpools are among the strategies that provide options to these employees.

As part of preparing for the TMP update, Transportation has been working with the city's geographic information systems (GIS) vendor on an enhance process for accessibility mapping. This process would provide a more detailed assessment of accessibility than the Walk Score by using the city's own GIS data and a more precise analysis process. The TMP expert panel in their discussion with TAB identified that Boulder has the opportunity to increase “utility” walking and biking. The benefits of accommodating daily activities within a “20 minute” neighborhood is consistent with the identified desires of primary employers to be close to services and restaurants.

Housing

The city's affordable housing policies were developed, in part, to address concerns that a lack of affordable housing could have a negative influence on the employment environment. For more than a decade the city has pursued a goal of having 10 percent of all housing be permanently affordable to low and moderate income households, an important part of the workforce. An additional goal of having 450 homes affordable to middle income households was adopted in 2009 and expands the home ownership opportunities for employees. As 85-90 percent of the approximately 3,000 affordable homes in Boulder are occupied by people who work in the community, the program is providing workforce housing.

**STUDY OF PRIMARY EMPLOYERS IN THE CITY OF BOULDER
2012**

FINAL REPORT

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August 15, 2012



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EXECUTIVE SUMMARY

Generally, primary employers are characterized as companies that export a significant portion of the goods and services they produce; the revenues from those exports support the local economy. Primary employers have two important impacts on local economic activities. First, primary employers have a direct impact on the local community by providing direct jobs for area residents. Second, the income generated by those direct jobs supports a variety of goods and services providers. This second effect is often referred to as the indirect, or multiplier, effect. Primary employers are, in essence, companies that serve customers outside the local area and could thus locate nearly anywhere. Other characteristics of these industries may include highly skilled labor and high wages. Segments of these industries work together in related fields, forming industry clusters like aerospace, information technology, natural products, bioscience, and others.

This study identifies industries, companies, and employment for primary employers in the city of Boulder. It compares the economy in the city of Boulder with the Boulder Metropolitan Statistical Area (i.e., Boulder County) because of the economic ties between the city and surrounding communities, particularly the workforce and housing. The study presents the spatial distribution of primary employers, compares the distribution of zoning classifications for all employers to the distribution of zoning classifications for primary employers, identifies location and property attributes that are important to primary employers, identifies reasons why primary employers leave Boulder, and suggests strategies that Boulder can adopt to encourage primary employers to locate and stay in the city.

More specifically, for this report the City of Boulder defines a primary employer by ordinance as a business or organization of any number of employees that generates more than 50% of its revenues from activities outside of Boulder County and excludes hotels, motels, retailers, or food service facilities. This study limits the analysis of primary employers to private-sector employers with at least five employees. For simplicity, we refer to this group of employers as commercial employers throughout. Without having individual company revenue and customer data, primary employers were classified using industry trade flow data (information on the import and export of goods and services). In 2011, nearly 29% of total employment (i.e., jobs) in Boulder (26,059 employees) and 8.2% of firms in Boulder (554 firms) were classified as private primary employers based on this definition. Over the past six years, Boulder's primary employer industries have remained relatively strong when measured against other metropolitan areas, the state, and the nation. However, primary companies are fluid: firms are created, dissolved, migrate in and out of Boulder, and relocate to different areas within the city. Retaining an appealing environment for these employers is very important to the city's economic diversity and success.

The city of Boulder allocates about half of its usable land to commercial uses. Primary employers (i.e., firms), while providing 27% of total private employment, occupy about 20% of the City's land area. The majority of land used by primary employers is zoned Industrial and is located in Gunbarrel and East Boulder. The majority of primary jobs (75.2%) are on land zoned Industrial, followed by land zoned Business (12.8%) and land zoned Downtown (5.9%). Together, the Gunbarrel and East Boulder subcommunities contain nearly 80% of the primary jobs in the city of Boulder. A significant difference exists between the distribution of all commercial land in the City and the land utilized by primary employers. On a percentage basis, primary employers occupy more than twice the land zoned Industrial relative to all employers.

According to the Boulder County Assessor's database, more than 1,800 buildings contain 21.7 million square feet of office/industrial space used by private employers in the city of Boulder, and primary employers occupy more than 7.4 million square feet of this space. On average, a primary employee uses about 310 square feet of space—less in the Downtown area office market (about 280 square feet of space per primary employee) and more in the East Boulder industrial market (about 334 square feet of space per employee).

The average age of private commercial buildings in the city of Boulder is 34.5 years old, compared to 33.3 years old for commercial buildings located in Boulder County but outside City boundaries. The building stock is newer in Louisville and Superior, with average ages of 24.7 years and 22.5 years, respectively, confirming perceptions of Boulder's aging commercial building stock. About 14% of the city's commercial building stock is more than 50 years old and approximately 5.5% of the commercial stock in the city of Boulder is over 100 years old.

An analysis of primary employers' access to amenities in each of the nine Boulder subcommunities (Central Boulder, Crossroads, East Boulder, Gunbarrel, North Boulder, Palo Park, University of Colorado, South Boulder, and Southeast Boulder) illustrates significant differences between access to amenities in the Downtown area and access to amenities in tertiary subcommunities. Amenities examined include access to grocery stores, restaurants and bars, shopping, coffee shops, banks, parks, schools, book stores, and entertainment. Primary employers in the Downtown area have outstanding access to most of these amenities, while the tertiary subcommunities have comparatively limited access, particularly in the East Boulder and Gunbarrel subcommunities, confirming perceptions of both primary employers and focus groups.

Real estate broker/developer focus groups identified a number of reasons why primary employers leave the city of Boulder:

- A lack of available space in the Downtown area;
- A lack of amenities (e.g., restaurants and services) in the tertiary subcommunities;
- The age of commercial space (competing markets outside Boulder offer newer space with more building amenities at competitive prices);
- Inflexible zoning (e.g., medical uses prohibited on Industrial zoned land);
- The cost of doing business in Boulder;
- Inadequate parking in the Downtown area;
- The high cost of electricity;
- Better access to the Denver metropolitan area's labor markets; and
- The developers mentioned that high land costs drive up the rents necessary to make new construction feasible.

The BRD research team recommendations:

- Create more flexible zoning that allows real estate to dynamically adapt to changing business needs. The City could survey other metropolitan areas to identify places with more flexible zoning.
- Analyze commercial real estate for comparative cities nationally (e.g., Madison, Portland), as well as for competitive cities in Colorado outside of Boulder County (e.g., Broomfield, Denver).

- Consider allowing greater densities in some areas and conduct an economic impact study to determine the benefits associated with greater density. Permitting higher densities accomplishes two things:
 1. Higher density allows real estate developers to amortize high land costs over more square feet of leasable space, reducing the rent required to make construction feasible; and
 2. Higher densities of jobs and residents allow the market to support more services and amenities (e.g., restaurants, hotels, coffee shops, etc.).
- Consider strategies for increasing the amount of leasable space in the Downtown area since this area has the greatest demand.
- Survey investors and entrepreneurs about the attributes that attract them to Boulder.
- Consider providing subsidies to rehabilitate the old stock of commercial real estate.
- Reevaluate procedures for obtaining construction approvals in order to reduce the time and uncertainty associated with obtaining approvals.
- Compare Boulder's economic incentive program to other comparable cities.

PROJECT OVERVIEW

In response to a request for proposals by the city of Boulder, the Business Research Division (BRD) of the Leeds School of Business at the University of Colorado Boulder was pleased to offer its services to conduct an analysis of Boulder's primary employers. Real estate space requirements for all employers, in general, and for primary employers in particular change over time as firms adapt to changing markets for goods and services. In addition, there are limited growth opportunities to accommodate expansions of economic activity in the city of Boulder. It is imperative that the City continue to be proactive with a retention strategy that focuses on primary employers and ensures that Boulder has the appropriate mix of amenities in subcommunities where primary employers are located.

This study bridges economic and employment analysis with the study of local real estate and zoning. The reports, maps, and data contained in this document serve to increase the knowledge base and inform various decision-making constituents in Boulder, including policy makers, businesses, landowners, developers, and others. Ultimately, the purpose of the study was to:

- 1) Identify issues, trends, and needs of Boulder's primary employers relative to the city's existing industrial and commercial space, and
- 2) Inform the development of a primary employer economic strategy that is consistent with the City's economic policies, sustainability framework, and core values.

The real estate analysis examines the amount of land used by employers, by zoning classification (according to Title 9, Chapter 5 of the City's Land Use Code) and for each of nine subcommunities (Central Boulder, Crossroads, East Boulder, Gunbarrel, North Boulder, Palo Park, University of Colorado, South Boulder, and Southeast Boulder). The report also provides information for the Downtown area separately. In addition to reporting the amount of land used by employers, we report the number of employees, the number of commercial buildings, the square feet of space used by employers, the square feet of space per employee, and average building ages. We provide most of this information for all employers (to provide a baseline or reference group) and for Boulder's primary employers. Access to amenities for primary employers was evaluated using Walk Score® data. Walk Score® is a commercial data provider that has established an international measure for "walkability." The "Street Smart" Walk Score® algorithm analyzes the characteristics of the neighborhood surrounding a location to generate an estimate of the walkability of the environment.

METHODOLOGY

The research team utilized multiple data sets from numerous sources to characterize the current composition and spatial distribution of primary employers and commercial real estate:

- Boulder's GIS files (e.g., zoning, subcommunity boundaries, etc.)
- Bureau of Economic Analysis
- Bureau of Labor Statistics
- U.S. Census Bureau
- City of Boulder Planning and Development Services
- Colorado Department of Labor and Employment
- Co-Star®
- Federal Housing Finance Agency
- Hoover's

- IMPLAN¹
- McGraw-Hill Construction Dodge Research and Analytics
- Metro Denver Economic Development Corporation
- National Science Foundation
- PricewaterhouseCoopers Money Tree Survey
- Reference USA
- Small Business Administration
- Boulder County Assessor's database
- U.S. Patent and Trademark Office
- Xceligent®
- Walk Score®

The research team began by analyzing current and historical City employment, number of firms, and wages, which are detailed in this study for economic context. Boulder's economic strengths were then highlighted by identifying industries that have: (1) high concentrations of employment (i.e., high location quotients); (2) high percentages of employment; (3) pay above-average wages; or (4) participate in an important cluster (e.g., advanced technology). Boulder data were compared to similar data for Colorado metropolitan statistical areas (MSAs), the state, and the nation. Data presented include year-end data on employment, firms, wages, location quotients, growth rates, and concentrations.

Using the City's definition of a primary employer, the research team identified substitute data metrics that capture the essence of the definition. This included leveraging IMPLAN data, which estimate domestic and international exports and imports by industry sector. It also included examining relative concentrations (i.e., location quotients) of employment and output locally, as well as qualitatively identifying industries that serve the local community versus exporting goods and services outside Boulder County (either domestically or internationally). Primary employers were identified by 6-digit standardized North American Industry Classification System (NAICS) codes. NAICS codes are hierarchical—6-digit NAICS subsectors collapse into sectors and industries. NAICS codes may be combined by common characteristics to form industry clusters (e.g., aerospace, IT, energy, cleantech, etc.).

Quarterly Census of Employment and Wages (QCEW) data were utilized to identify companies in Boulder that possess the primary employer qualification by NAICS code. Addresses were verified using multiple data sources, including a combination of QCEW, Hoover's, Reference USA, company websites, and others. The addresses of these firms were converted to latitude and longitude, which allowed for spatial analysis and mapping by subcommunity.

Real estate property data for commercial space were extracted from the City's geographic information system (GIS) files, Boulder County Assessor's database, Xceligent, and Co-Star. Within a GIS, this information was linked to parcel boundaries and primary employer locations, allowing for analysis of spatial patterns in commercial real estate use and availability. The research team merged the employment data, the property data, and the zoning data to analyze how well the existing stock of commercial space is addressing the demands of primary employers. The research team generated maps illustrating the densities of primary employers and primary employees, by subcommunity (i.e., Gunbarrel, Palo Park, North Boulder, Central Boulder, East Boulder, Crossroads, Southeast Boulder, South Boulder, and the University of Colorado Boulder). The City project team requested that data

¹ For more information on the IMPLAN Company, visit www.IMPLAN.com.

for the Downtown area be reported separately. The information in this report separates the Downtown area from the rest of the Central Boulder subcommunity.

The maps characterize the current geographical distribution of primary employment within Boulder and the location of the stock of commercial and industrial space used by primary employers. In total, these spatial analyses yielded valuable descriptive statistics regarding the employment-real estate nexus in Boulder, with an emphasis on the impacts of zoning.

Concurrent with the research conducted by the BRD, the Boulder Economic Council (BEC) conducted a survey of primary employers in the city of Boulder. The BRD assisted in the critique of survey questions that addressed barriers to conducting business in Boulder. The BEC's preliminary survey results led to further analysis of primary employer access to amenities, including restaurants, transportation, and walkable environment.

The research team also conducted focus groups with real estate brokers and developers who serve the Denver-Boulder corridor in order to learn about the perceptions of developing commercial space, leasing space, and being a tenant in Boulder. These individuals described property quality, vacancy, size, and other building attributes in Boulder and surrounding markets. Additionally, these real estate professionals provided insight into the Boulder market traits that make commercial real estate appealing, as well as the attributes that inhibit real estate activity in Boulder.

Based on the results from the BEC survey of primary employers and from the focus groups, amenities were identified that are important to primary employers. Walk Score® is a commercial data provider that has established an international measure for "walkability" that measures access to various amenities based on the neighborhood walking environment. A high score (on a scale of 0 to 100) is indicative of a very walkable location to various amenities (e.g., restaurants, public transit, recreation, etc.). Aggregate scores are reported at the subcommunity level by averaging the Walk Score® for each individual primary employer.

The Appendices provide additional analyses: Appendix 1 provides the details of the methodology used to identify primary employers; Appendix 2 contains definitions of terms; Appendix 3 provides an in-depth economic overview; Appendix 4 provides details for the real estate analysis; Appendix 5 contains primary employer and employee maps; Appendix 6 provides primary employer access to amenity maps; Appendices 7 and 8 contain the agendas for the real estate broker and real estate developer focus groups, respectively; and Appendix 9 provides summaries for the focus group discussions.

ECONOMIC OVERVIEW

Primary employers in the city of Boulder operate in an economy that regularly outperforms the United States as a whole, emphasizes innovation and entrepreneurship, and shows signs of an incipient real estate recovery. Nevertheless, national and global economic woes drag on the local economy. See Appendix 3 for a comprehensive economic overview.

Table 1 illustrates each industry's contribution to real gross domestic product (GDP) on a percentage basis for both the state of Colorado and for Boulder in 2010. For Colorado, the largest contributors to real GDP (on a percentage basis) are Real Estate, Rental and Leasing (at 12.4%) and Government (at 12.2%). For Boulder, the largest contributors to real GDP are Professional & Technical Services (17.5%), Manufacturing (17.4%), Information (12.3%), and Government (10.9%).

Since 2002, real GDP in both Boulder and in Colorado has tended to increase more rapidly than national real GDP. In 2010, Boulder’s real GDP grew just over 4% year-over-year, well above the 3.1% real GDP growth the nation experienced over the same period. Also, Boulder’s 2010 real GDP per capita (\$57,755) surpassed that of the nation (\$41,764). National and statewide real GDP have continued to expand moderately since 2010.

TABLE 1: PERCENT OF TOTAL REAL GROSS DOMESTIC PRODUCT, 2010

NAICS	Industry	Colorado	Boulder
11	Agriculture, Forestry, Fishing, Hunting	0.9%	0.2%
21	Mining	4.0%	1.1%
22	Utilities	1.2%	0.6%
23	Construction	3.5%	2.0%
42	Wholesale Trade	4.9%	5.3%
31-33	Manufacturing	8.4%	17.4%
51	Information	9.7%	12.3%
44-45	Retail Trade	6.3%	5.1%
48-49	Transportation & Warehousing	2.4%	0.6%
52	Finance & Insurance	6.8%	4.4%
53	Real Estate, Rental & Leasing	12.4%	9.0%
54	Professional & Technical Services	9.5%	17.5%
55	Management Of Companies & Enterprises	1.7%	0.6%
56	Administrative & Waste Services	3.1%	1.7%
61	Educational Services	0.7%	0.5%
62	Health Care & Social Assistance	6.1%	6.5%
71	Arts, Entertainment & Recreation	1.2%	0.7%
72	Accommodation & Food Services	3.1%	2.3%
81	Other Services	2.3%	2.1%
Gov't	Government	12.2%	10.9%
Private	Private (Nongovernment)	87.7%	89.2%
Total	Total All Industries	100.0%	100.0%

Source: Bureau of Economic Analysis.

Table 2 lists total employment, number of firms, total wages in millions and average wages for each industry in Boulder for the 12 months ending Q3 2011. With more than 18,700 jobs, the government (local, state and federal) is the largest employer in the City. With 13,200 jobs, the Professional, Scientific, and Technical Services industry is the second largest employer. The Professional, Scientific, and Technical Services industry also has the most firms (1,890) and generates the most total wages (\$1,167.6 million).

While employment started strong in 2012 nationally, slowing job growth has begun to weigh on the economy. Initial jobless claims have remained volatile; the national unemployment rate ticked up from 8.1% to 8.2% between the first and second quarter. Indeed, in 2012 the Federal Reserve extended expansionary policies in order to address employment concerns. Although employment levels remain well below pre-recession peaks, employment has improved more quickly in Boulder County than it has in the state of Colorado and in the nation. Also, local wages have nearly returned to peak levels. Half of Boulder County’s industries posted job gains over the five years ending 2011, with the largest number of jobs added in Health Care and Government.

TABLE 2: CITY OF BOULDER EMPLOYMENT, FIRMS, AND WAGES

NAICS CODE	INDUSTRY	EMPLOYMENT	FIRMS	TOTAL WAGES	AVERAGE WAGES
11	Agriculture, Forestry, Fishing and Hunting	NA	NA	NA	NA
21	Mining	NA	NA	NA	NA
22	Utilities	NA	NA	NA	NA
23	Construction	1,457	318	\$69.3	\$47,549
31-33	Manufacturing	8,784	261.8	\$726.2	\$82,668
42	Wholesale Trade	2,641	430.5	\$207.6	\$78,620
44-45	Retail Trade	7,739	572.3	\$226.3	\$29,247
48-49	Transportation and Warehousing	781	43.75	\$32.1	\$41,064
51	Information	6,428	223.5	\$633.7	\$98,584
52	Finance and Insurance	3,170	386.8	\$260.9	\$82,310
53	Real Estate and Rental and Leasing	1,288	366	\$54.5	\$42,361
54	Professional, Scientific, and Technical Services	13,204	1,890	\$1,167.6	\$88,431
55	Management of Companies and Enterprises	380	55	\$36.6	\$96,148
56	Administrative and Waste Management	2,919	293.5	\$110.1	\$37,717
61	Educational Services	1,308	156.3	\$38.9	\$29,757
62	Health Care and Social Assistance	7,963	690.3	\$354.8	\$44,562
71	Arts, Entertainment, and Recreation	1,801	139.3	\$34.9	\$19,383
72	Accommodation and Food Services	8,716	418	\$159.2	\$18,267
81	Other Services	2,759	498.3	\$106.4	\$38,570
Government	Government	18,732	42.5	\$986.7	\$52,673
All	Total	90,400	6,826	\$5,229.5	\$57,849

Note: Green shading denotes the five highest for each metric. Source: Colorado Department of Labor and Employment, QCEW. Data for the 12 months ending Q3 2011.

Boulder’s ability to adapt to an environment emphasizing technological progress has served its economy well. Boulder County has a remarkably high concentration of such high-technology clusters as Aerospace, Bioscience, and Information Technology. An emphasis on innovation in the city of Boulder is demonstrated by National Science Foundation awards of \$2,689 per capita (\$66 per capita statewide), small business innovation research funding of \$214 per capita (\$16 per capita statewide), and patents regularly accounting for some 20% of the state total. Highlighting the prominence of entrepreneurship in Boulder, the county’s companies closed on \$579 per capita (\$123 per capita statewide) in venture capital funding, 519% higher than the U.S. average. Innovation and entrepreneurship are crucial drivers of economic growth, so Boulder’s high concentration of high-tech industry augurs well for the City’s future.

The real estate market is showing some signs of stabilization in Colorado. Foreclosure rates have been dropping, but prices remain fragile despite extremely low mortgage rates. In Boulder County, the value of construction and the number of permits for April 2012 year-to-date are higher than levels a year earlier, with particularly large gains in residential construction. Further construction is in the pipeline, with the *Daily Camera* reporting that developers are planning more than 30 building projects in Boulder over the next two years (Wallace 2012).

On the whole, the current macroeconomic landscape is lackluster. The United States has posted modest economic growth amid unrelenting bad news from Europe, mixed signals in retail sales and manufacturing, and disappointing trends in employment. Still, some positive trends in Boulder indicate the City may continue to make gains.

Boulder's Industry Composition

The BLS defines a metropolitan statistical area (MSA) as follows:

The general concept of an MSA is one of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration with that nucleus. The Office of Management and Budget defines the term as a standard for Federal agencies in the preparation and publication of statistics relating to metropolitan areas. (<http://www.bls.gov/cex/csxgloss.htm>, retrieved July 15, 2012)

The city of Boulder is part of the Boulder MSA, which includes all of Boulder County, demonstrating the economic ties between Boulder and surrounding communities. Surrounding communities are particularly important suppliers of Boulder's labor force, and provide comparatively affordable housing options.

To illustrate, the Boulder Economic Council reported 32% of individuals who work in the city of Boulder live in the city of Boulder and 35% live in other Boulder County communities and commute to Boulder (Boulder Economic Council 2008).

Five industries comprise 63% of employment in the city of Boulder (Table 3):

1. Government;
2. Professional, Scientific, and Technical Services;
3. Accommodation and Food Services;
4. Manufacturing; and
5. Health Care and Social Assistance.

Illustrating the city of Boulder's high-tech economy compared to the state, the City has much higher concentrations of Professional, Scientific, and Technical Services; Manufacturing; Information; and Government (including federal labs and the University of Colorado) than the state as a whole (Table 3).

Boulder's economy, like the economies of the state and the nation, lost employment during the recession, causing many industries to record negative five-year cumulative annual growth rates (CAGR) (Table 4). Lost employment has been regained in many industries in Boulder, rebounding, in many cases, faster than Boulder County and faster than the State of Colorado. Given the broad-based geographical impact of the recession, Boulder maintained high relative concentrations of employment in key high-tech industries (e.g., Manufacturing; Information; and Professional, Scientific, and Technical Services).

Boulder's largest employers represent both the private sector and the public sector, including the University of Colorado Boulder, the Boulder Valley School District, and IBM (Table 5). The majority of the 26,059 primary jobs in Boulder are in two industries: 9,353 in Professional, Scientific and Technical Services and 8,063 in Manufacturing. The majority of the 554 primary employers are also in these two industry categories: 274 in Professional, Scientific and Technical Services and 119 in Manufacturing (Table 6).

TABLE 3: SHARE OF EMPLOYMENT, COLORADO AND BOULDER

NAICS Code	Industry	Colorado Employment Share	Boulder Employment Share
11	Agriculture, Forestry, Fishing and Hunting	0.6%	0.1%
21	Mining	1.2%	0.1%
22	Utilities	0.4%	0.2%
23	Construction	5.1%	1.6%
31-33	Manufacturing	5.8%	9.7%
42	Wholesale Trade	4.2%	2.9%
44-45	Retail Trade	10.8%	8.6%
48-49	Transportation and Warehousing	2.6%	0.9%
51	Information	3.3%	7.1%
52	Finance and Insurance	4.4%	3.5%
53	Real Estate and Rental and Leasing	1.9%	1.4%
54	Professional, Scientific, and Technical Services	7.8%	14.6%
55	Management of Companies and Enterprises	1.3%	0.4%
56	Administrative and Waste Management	6.2%	3.2%
61	Educational Services	1.4%	1.4%
62	Health Care and Social Assistance	10.8%	8.8%
71	Arts, Entertainment, and Recreation	2.1%	2.0%
72	Accommodation and Food Services	10.2%	9.6%
81	Other Services	3.0%	3.1%
Gov't	Government	17.0%	20.7%

Note: Green shading denotes industries with a larger relative share than the state.

Source: Colorado Department of Labor and Employment, QCEW. Data for the 12 months ending Q3 2011.

TABLE 4: INDUSTRY GROWTH RATES AND CONCENTRATIONS, COLORADO AND BOULDER

NAICS Code	Industry	Colorado Employment CAGR '06-'11	Boulder Employment CAGR '06-'11	Colorado LQ	Boulder LQ
11	Agriculture, Forestry, Fishing and Hunting	-1.4%	2.0%	0.70	NA
21	Mining	6.3%	-1.4%	2.43	NA
22	Utilities	0.3%	1.4%	0.86	NA
23	Construction	-7.6%	0.1%	1.18	0.36
31-33	Manufacturing	-3.1%	1.5%	0.65	1.08
42	Wholesale Trade	-0.8%	1.4%	0.97	0.69
44-45	Retail Trade	-0.8%	0.3%	0.96	0.76
48-49	Transportation and Warehousing	-1.4%	1.4%	0.85	0.28
51	Information	-1.1%	-0.1%	1.53	3.34
52	Finance and Insurance	-2.1%	0.0%	1.03	0.81
53	Real Estate and Rental and Leasing	-2.8%	-0.4%	1.24	0.94
54	Professional, Scientific, and Technical Services	1.2%	1.8%	1.33	2.54
55	Management of Companies and Enterprises	2.3%	0.5%	0.93	0.29
56	Administrative and Waste Management	-0.6%	1.2%	1.08	0.56
61	Educational Services	3.2%	-0.2%	0.70	0.75
62	Health Care and Social Assistance	3.5%	0.7%	0.86	0.69
71	Arts, Entertainment, and Recreation	0.7%	0.6%	1.38	1.33
72	Accommodation and Food Services	0.5%	1.2%	1.17	1.10
81	Other Services	0.1%	0.3%	0.88	0.90
Gov't	Government	1.3%	0.0%	1.00	1.22
All	Total	-0.2%	0.7%	1.00	1.00

Sources: Bureau of Labor Statistics and the Colorado Department of Labor and Employment, QCEW.

TABLE 5: LARGEST EMPLOYERS IN THE CITY OF BOULDER

Boulder Employers	
Amgen	Markit on Demand
Array BioPharma	MicroMotion
Ball Aerospace	National Institute of Standards and Technology (NIST)
Boulder Community Hospital	National Oceanic and Atmospheric Administration (NOAA)
Boulder County	Research Electro Optics
Boulder Valley School District	Ricoh Production Print Solutions
City of Boulder	Spectra Logic
Corden Pharma Colorado	The Hain Celestial Group
Covidien	University Corporation for Atmospheric Research (UCAR/NCAR)
Crispin Porter + Bogusky	University of Colorado Boulder
Google	Whole Foods
IBM	YMCA of Boulder Valley
Lockheed Martin	

Sources: Boulder Economic Council.

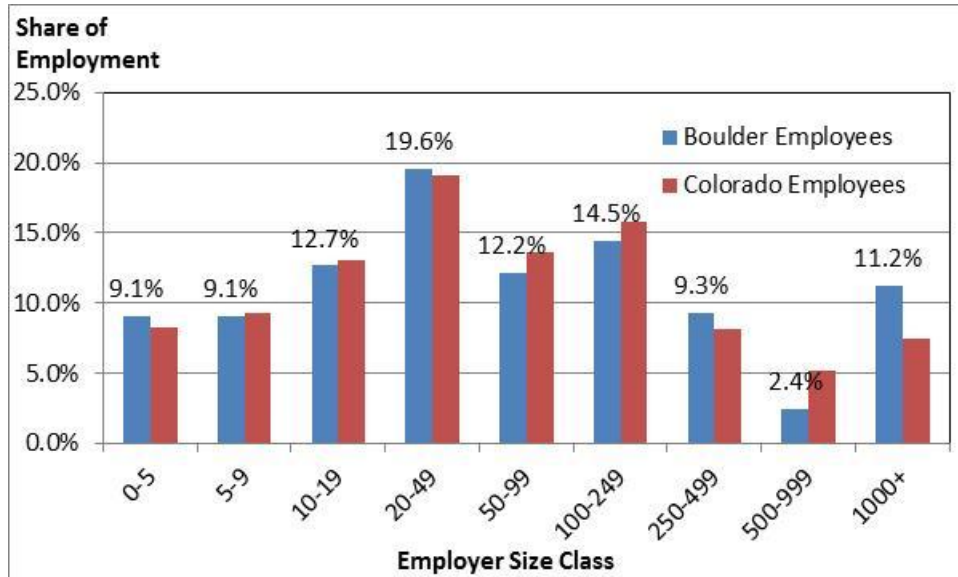
Boulder’s share of *employers* by size demonstrates a slightly higher concentration of small firms (0-5 employees) than the state (Boulder, 65.8%; Colorado, 63.2%) (Figure 1).

FIGURE 1: SHARE OF PRIVATE EMPLOYERS BY EMPLOYEE SIZE CLASS



Similarly, Boulder’s share of *employees* by size demonstrates a slightly higher concentration of small firms (0-5 employees) than the state (Boulder, 9.1%; Colorado, 8.2%) (Figure 2).

FIGURE 2: SHARE OF PRIVATE EMPLOYMENT BY EMPLOYER SIZE CLASS



Economic Vitality

The city of Boulder has an active retention and expansion program that specifically targets primary employers. Under the direction of Community Planning and Sustainability, Boulder’s Economic Vitality Program offers retention, relocation, redevelopment, and incentive assistance to employers operating in the city of Boulder, with some of these resources targeting primary employers. According to the program website:

The city of Boulder established its Economic Vitality Program to reinforce the importance of economic health to our overall quality of life and to demonstrate the City's support of business and economic sustainability. Boulder recognizes the responsibility it has to cultivate the long term health of the natural environment, the economy, and the social fabric of our community. Economic vitality in Boulder is pursued through partnerships among public agencies, private companies and non-profit organizations. The City's economic vitality programs and strategies foster innovation, competitiveness, and entrepreneurship.

Boulder supports the retention and expansion of existing local businesses and maintains a positive business climate. Primary employers such as manufacturing and research/development companies, the University of Colorado, federal labs, retail businesses, local government, arts and culture and tourism all play strong roles in the Boulder economy. A goal of Boulder's Economic Vitality Program is to leverage all of these components of our community to build a sustainable economic base to support the quality of life we all desire. (http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=13707&Itemid=128#retention, retrieved July 15, 2012).

PRIMARY EMPLOYERS

In the city of Boulder, a primary employer is currently defined by ordinance as:

A business or organization of any number of employees that generates more than 50% of its revenues from activities outside of Boulder County, and shall include, but is not limited to those facilities of such business and organization devoted to manufacturing, research and development, data processing, telecommunications and publishing, but shall not include hotels, motels, retailers, or food service facilities.

Secondary employers, then, are the companies that export less than 50% of their goods and services, and are thus primarily serving the local community, including Boulder's residents and local companies (including Boulder's primary employers).

As directed by City staff, this study examined private-sector employers (including nonprofits) with five or more employees. Using data on the flow of trade into and out of Boulder County, portions of nine private-sector industries were identified that exhibited exporting characteristics in excess of 50%. From this methodology, primary employers were identified representing 26,059 private-sector workers and 554 private-sector firms in the city of Boulder. More than 95% of primary employment and 94% of primary employers are concentrated in five industries:

- Health Care and Social Assistance (e.g., Boulder Community Hospital)
- Information (e.g., IBM, Google)
- Manufacturing
- Professional, Scientific, and Technical Services (e.g., Crispin Porter Bogusky, Tendril)
- Wholesale Trade (e.g., Spyder, Kelty)

Four other industries that collectively represent less than 5% of primary employment include: Arts, Entertainment, and Recreation; Educational Services; Mining; and Other Services.

Boulder's primary employers are larger than the average firm in the City, with more than 84% of Boulder's primary employers recording between 5 and 50 employees (the primary employer average is 47 employees).

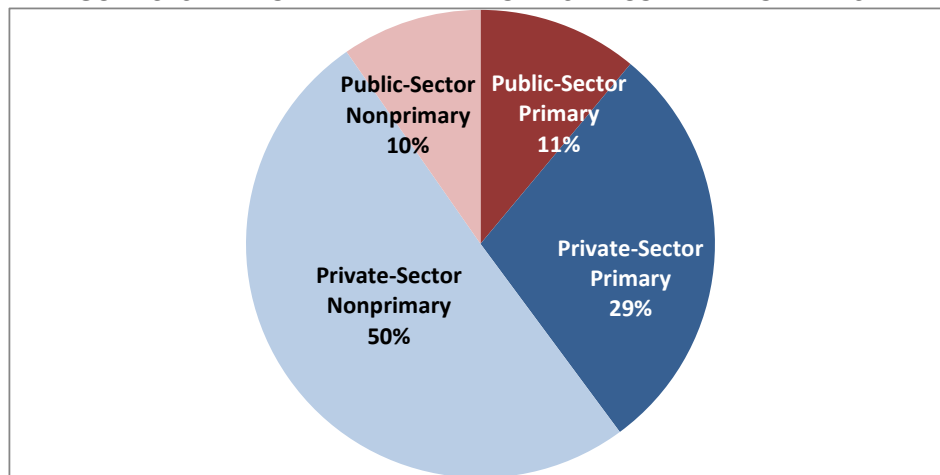
TABLE 6: CITY OF BOULDER EMPLOYMENT, BY INDUSTRY

NAICS Code	Industry	Employment	Firms	Primary Employment	Primary Employers
11	Agriculture, Forestry, Fishing and Hunting	63	17		
21	Mining	57	12	ND	ND
22	Utilities	204	11		
23	Construction	1,427	310		
31-33	Manufacturing	8,810	260	8,063	119
42	Wholesale Trade	2,658	429	1,200	74
44-45	Retail Trade	7,754	569		
48-49	Transportation and Warehousing	780	43		
51	Information	6,427	224	3,806	37
52	Finance and Insurance	3,149	383		
53	Real Estate and Rental and Leasing	1,280	362		
54	Professional, Scientific, and Technical Services	13,375	1,873	9,353	274
55	Management of Companies and Enterprises	378	55		
56	Administrative and Waste Management	2,894	290		
61	Educational Services	1,295	155	ND	ND
62	Health Care and Social Assistance	7,917	686	2,396	17
71	Arts, Entertainment, and Recreation	1,790	138	112	6
72	Accommodation and Food Services	8,636	413		
81	Other Services (except Public Administration)	2,752	496	766	24
Gov't	Government	18,696	40		
All	Total	90,342	6,763	26,059	554

Note: Primary employer industries with few employers have not been disclosed (ND).

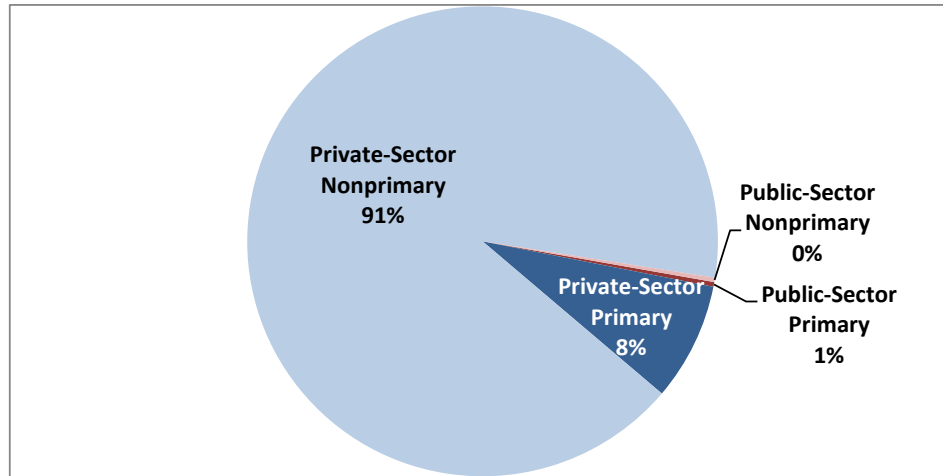
Although this is a study of private primary employers, it is recognized that some public (government) entities may be considered primary employers under the City’s definition. Private primary employers employ 29% of Boulder’s total nonfarm employment, while public entities, including federal labs and the University of Colorado Boulder, account for 11% of Boulder employment. The majority of Boulder’s employment is in private, nonprimary establishments, such as firms that operate in retail trade and transportation. Other government entities, such as the postal service, local education, and state and local government offices, account for 10% of public nonprimary employment (Figure 3).

FIGURE 3: SHARE OF PRIMARY EMPLOYEES BY COMPANY OWNERSHIP



Overall, city of Boulder total employment from Q4 2010 through Q3 2011 was estimated at 90,400, with private primary employees representing 26,059 of this total. The concentration of firms, however, rests largely with private nonprimary entities, comprising 91% of Boulder companies (Figure 4).

FIGURE 4: SHARE OF PRIMARY EMPLOYERS BY OWNERSHIP

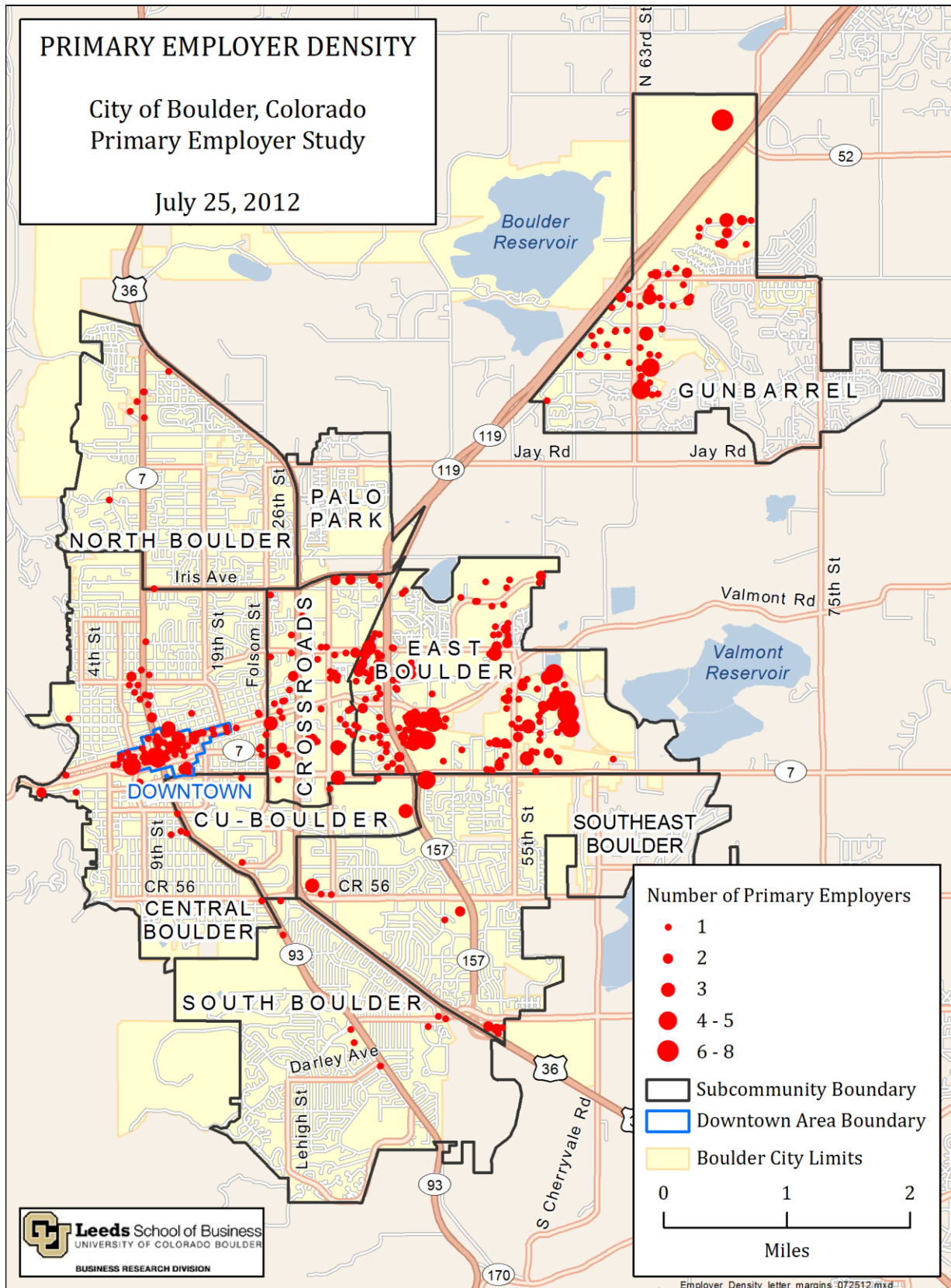


Map 1 depicts the variation in density of primary *employers* across the subcommunities. Graduated symbols are used to represent locations where multiple primary employers share the same address.

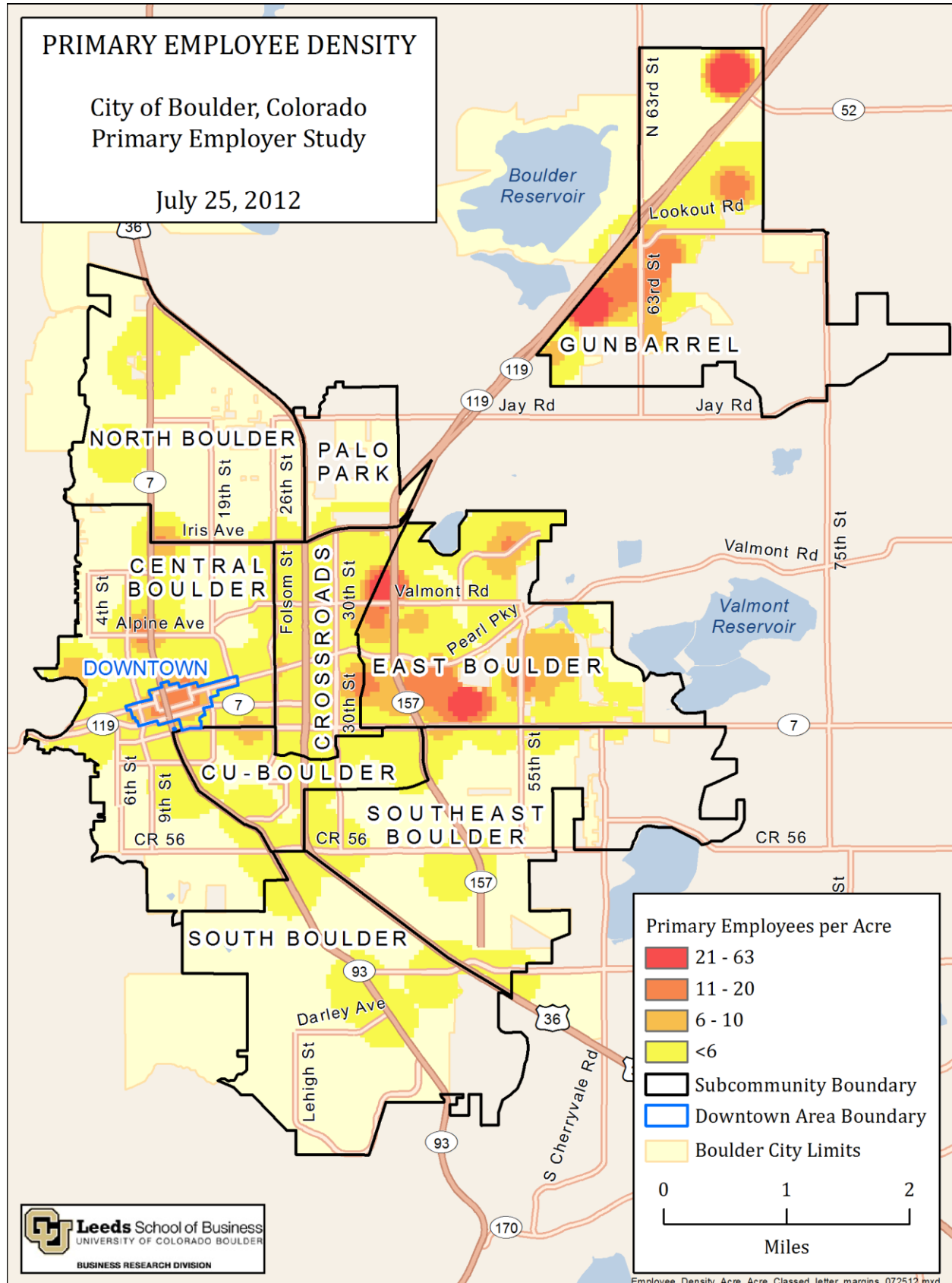
Map 2 shows the variation in density of primary *employees* across the subcommunities. Density is presented as the number of employees likely to be located in each acre-sized cell of a grid covering the entire City limits.

The density estimates were created using kernel density estimation, which effectively spreads out the population of employees found at each primary employer point over the surrounding area using a 0.25-mile radius. This method provides a smoother visual effect, obscuring the employment totals at isolated points, which may be sensitive information. Kernel density estimation also mimics reality by accounting for the likelihood that employees are not likely to remain at a single location within a building, but rather may be spread out over a small radius centered on the building. The 0.25-mile radius was selected because it represents the average distance a person could walk in five minutes, assuming a walking speed of 3 miles per hour.

MAP 1: PRIMARY EMPLOYER DENSITY MAP



MAP 2: PRIMARY EMPLOYEE DENSITY MAP



Employee_Density_Acre_Acre_Classified_letter_margins_072512.mxd

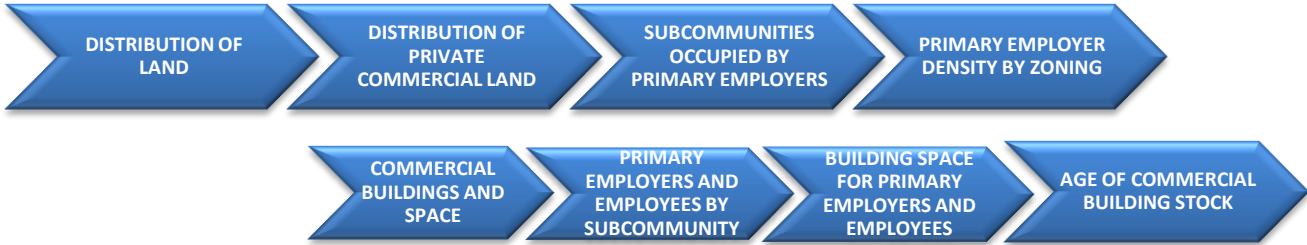
REAL ESTATE

Analyzing the nexus of primary employers and real estate was a process that began with the examination of land utilization in the city of Boulder. Given the private sector focus of this study, all nonpublic parcels were identified, followed by land occupied by primary employers. The amount of space available to employers in the city of Boulder, in general, and available to primary employers, in particular, depends on two things: (1) the amount of land allocated to commercial and industrial uses and (2) the amount of improved space, or building area, that can be developed on that land. The analysis of primary employers begins with a description of how land in Boulder is used, first for all employers then for primary employers. The report compares the distribution of land used by all employers to the distribution of land used by primary employers. The distributions are provided by zoning district classification (e.g., Agricultural, Industrial, Mixed Use, etc.), as well as by Boulder subcommunity (subcommunity boundaries are illustrated in Maps 1 and 2).

The study then examines the amount of commercial space that currently exists in Boulder. The study compares the number of commercial buildings in the City to the number of buildings utilized by primary employers. The study also reports commercial space utilization as the square feet of commercial space. Next, commercial space utilization is indicated by providing the amount of square feet of space used by primary employees. Space utilization is also reported by zoning classification and for each subcommunity. Knowing where the primary employers are located and how the land occupied by primary employers is zoned allows City officials to evaluate whether the primary employers have adequate access to amenities and whether the current system of zoning meets the needs of primary employers.

The study then examines the distribution of commercial building ages for properties in the City and compares that distribution to properties located inside Boulder County but outside the City.

FIGURE 5: REAL ESTATE ANALYSIS FLOW



DISTRIBUTION OF LAND

Information on land use in this report is presented in square miles. As a reference, the Boulder Reservoir is approximately one square mile, University of Colorado Boulder and some of the surrounding neighborhood is one-half square mile, Flatirons Golf Course is approximately one-quarter square mile, and Fairview High School is roughly one-tenth of a square mile (Figure 6).

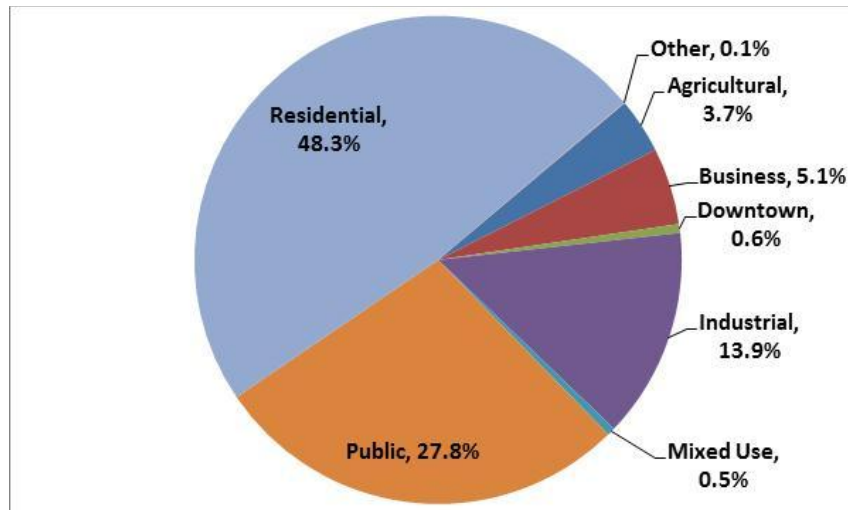
FIGURE 6: LAND SIZE REFERENCE MAP



City of Boulder

The city of Boulder covers 25.75 square miles in area, including all public and private land, water, and roads. Nearly half of this area is zoned Residential, and 28% is zoned for Public Use (e.g., federal lands, open space, municipal government, etc.). Less than one-quarter of Boulder’s land is zoned for commercial use (Figure 7). Zoning for commercial use includes Industrial (13.9%), Business (5.1%), Agriculture (3.7%), Downtown (0.6%), Mixed Use (0.5%), and Other (0.1%).

FIGURE 7: DIVISION OF ZONING IN THE CITY OF BOULDER

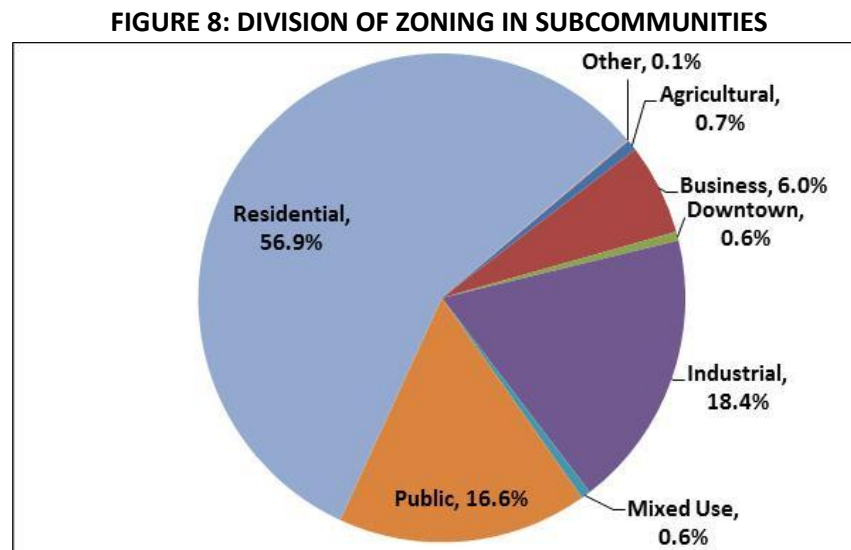


Note: This chart is based on all area within the City’s boundaries.

Subcommunities

The nine Boulder subcommunities (Central Boulder², Crossroads, East Boulder, Gunbarrel, North Boulder, Palo Park, University of Colorado Boulder, South Boulder, and Southeast Boulder) cover 20.85 square miles, and include residential areas and areas of commerce in the city of Boulder, but exclude some public parcels (e.g., U.S. government-owned land occupied by NCAR, some Open Space Mountain Park land). Excluding the nearly 4 square miles of roads, parcels within subcommunities total 16.87 square miles of area. Table 38 in Appendix 4 provides the distribution of City land by major zoning classification district (e.g., Agricultural, Downtown, Industrial, etc.) and by subcommunity.

Figure 8 details the distribution of zoning by subcommunity. Of the 16.87 square miles of subcommunity parcels, 56.9% is zoned Residential, 18.4% Industrial, and 16.6% Public space (owned by the federal government, the State of Colorado, or local government, including public open space). The remained 8% includes: Business (6%), Agriculture (0.7%), Mixed Use (0.6%), Downtown (0.6%), and Other (0.1%). See Figure 8.



In terms of land area, the Central Boulder subcommunity is the largest, with 2.96 square miles of parcels, followed by South Boulder (2.75 sq. mi.), East Boulder (2.26 sq. mi.), Southeast Boulder (2.24 sq. mi.), North Boulder (2.15 sq. mi.), and Gunbarrel (1.98 sq. mi.). The Downtown area is the smallest market, with just under 0.12 square miles of parcels. The Downtown Boulder market has its own zoning, thus 100% of the Downtown area is zoned Downtown. More than 96% of the land zoned Industrial is located in either Gunbarrel (51.3%) or East Boulder (45.1%). Approximately 59% of the land in the Crossroads subcommunity is zoned Business, while in North Boulder 41.9% of the land is zoned Mixed Use.

Takeaways:

- About 57% of subcommunity land is zoned Residential, 17% Public Use, and about 25% is zoned for commercial uses (i.e., Industrial, Business, Downtown, Agriculture, Mixed Use, and Other).

² Central Boulder includes the Downtown area as defined by the Business Improvement District.

- The largest subcommunity in terms of land area is the Central Boulder subcommunity, with 17.5% of the land area, followed by South Boulder (16.3%), East Boulder (13.4%), Southeast Boulder (13.3%), North Boulder (12.8%), and Gunbarrel (11.7%).
- The Downtown area has the smallest land area, with 0.12 square miles (0.68% of Boulder’s land area).

DISTRIBUTION OF PRIVATE COMMERCIAL LAND

Table 7 compares the distribution of commercial land use in the city of Boulder for all employers to the distribution of land use for primary employers. Commercial land includes all Business, Downtown, Flex District, Industrial, Mixed Use, and some Residential zoned land in the city of Boulder. Select Residential zones are included (RH-1, RH-2, RH-4, RH-5, RL-2, RM-1, RM-2, RM-3, and RMX-1) because some commercial uses are permitted in these zones.

The city of Boulder has more than 8.2 square miles of parcels devoted to commercial uses.³ Primary employers are located on parcels that encompass about 2.0 square miles of land. Compared to all commercial parcels in the city of Boulder, primary employers are more densely concentrated in Downtown and Industrial zoning districts. Of parcels containing primary employers, nearly 87% are Industrial, and 9% are Business, with Residential, Downtown, and Mixed Use comprising the remaining 4% (Figure 9).

Figure 9 graphically illustrates the information in Table 7. It shows that while 12.4% of all commercial land in the city of Boulder is classified Business, a slightly smaller 9.1% of all land utilized by primary employers is classified Business. On the other hand, while about 38% of all land in the city of Boulder is classified Industrial, nearly 87% of all land utilized by primary employers is classified Industrial.

The last two columns in Table 7 illustrate differences between the distribution of commercial land utilization for all employers and the distribution of land utilization for primary employers. The differences in percentages column simply subtract the percent of land used by all employers from the percent of land used by primary employers. Positive differences indicate more land is used by primary employers (on a percentage basis) relative to the land used by all commercial employers. The last column in Table 7 reports the ratio of the percent of land used by primary employers to the percent of land utilized by all commercial employers. Ratios exceeding one indicate primary employers utilize a greater percentage of land in a given zoning classification while ratios less than one indicate a lower percentage of land use utilization. For example, a ratio of 2.0 for a particular zoning district indicates that primary employers utilize twice the amount of land in that zoning district relative to all employers. The last column of Table 7 indicates that, relative to all employers, primary employers utilize over twice the amount of land zoned Industrial but just two-thirds of the quantity of land zoned Mixed Use.

Takeaway:

- Relative to all commercial employers in the city of Boulder, primary employers utilize significantly higher percentages of land zoned Industrial.

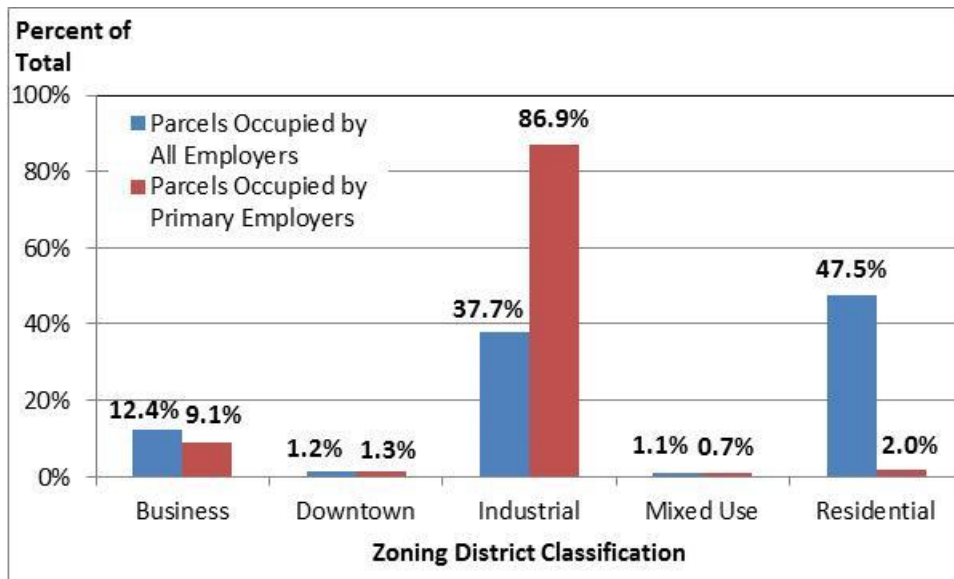
³ Includes Palo Park and Flex zoning districts.

TABLE 7: PRIVATE COMMERCIAL LAND USE: ALL EMPLOYERS VS PRIMARY EMPLOYERS

Zoning District Classification	Parcels Occupied by All Employers		Parcels Occupied by Primary Employers		Comparison	
	Land Area (Sq. Mi.)	Percent of Total	Land Area (Sq. Mi.)	Percent of Total	Difference in Percentages	Ratio of Percentages
Business	1.0173	12.35%	0.1807	9.07%	-3.28%	0.73
Downtown	0.0976	1.18%	0.0263	1.32%	0.13%	1.11
Flex District	0.0152	0.18%	0.0000	0.00%	-0.18%	0.00
Industrial	3.1035	37.69%	1.7317	86.93%	49.24%	2.31
Mixed Use	0.0913	1.11%	0.0144	0.72%	-0.38%	0.65
Residential ^a	3.9096	47.48%	0.0390	1.96%	-45.52%	0.04
Total	8.2344	100.00%	1.9921	100.00%		

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review. This includes the Palo Park subcommunity, as well as Flex zoning districts. See Appendix 4, Table 39 for detailed table.

FIGURE 9: PRIVATE COMMERCIAL LAND USE: ALL EMPLOYERS VS PRIMARY EMPLOYERS



SUBCOMMUNITIES OCCUPIED BY PRIMARY EMPLOYERS

Table 8 provides the distribution of commercial land use in the city of Boulder for the nine subcommunities and the Downtown area. The majority of land occupied by primary employers is in the Gunbarrel and East Boulder subcommunities. Of the 2 square miles of land occupied by primary employers, 1.1 square miles are occupied by primary employers in Gunbarrel. Primary employers in East Boulder occupy 0.6 square miles of land. The comparatively small Downtown area has 0.03 square miles occupied by primary employers.

Takeaway:

- Nearly 86% of the land utilized by Boulder’s primary employers is located in the Gunbarrel and East Boulder subcommunities.

TABLE 8: LAND AREAS FOR PARCELS CONTAINING PRIMARY EMPLOYERS BY SUBCOMMUNITY

Subcommunity	Square Miles	Share of Total
Downtown Area ^a	0.03207	1.6%
Central Boulder	0.02871	1.4%
Crossroads	0.13072	6.6%
East Boulder	0.58886	29.6%
Gunbarrel	1.11630	56.0%
North Boulder	0.01244	0.6%
CU-Boulder	0.00621	0.3%
South Boulder	0.03451	1.7%
Southeast Boulder	0.04228	2.1%
Total	1.99210	100.0%

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 40 for detailed table.

PRIMARY EMPLOYER DENSITY BY ZONING

Primary employers occupy nearly 25% of commercially zoned land in the city of Boulder. Examining primary employers by zoning district classification, nearly 56% of all parcels zoned Industrial is occupied by primary employers, while 26.9% of parcels zoned Downtown is utilized by primary employers. Comparatively smaller proportions of Business (18.4%) and Mixed Use (15.8%) are occupied by primary employers.

Takeaway:

- While primary employers utilized about 25% of all land occupied by commercial employers, primary employers utilize nearly 56% of all land classified Industrial.

TABLE 9: PERCENT OF COMMERCIAL LAND CONTAINING PRIMARY EMPLOYERS FOR ALL SUBCOMMUNITIES BY ZONING DISTRICT

Zoning District Classification	Percent of All Subcommunities
Business	18.4%
Downtown	26.9%
Industrial	55.8%
Mixed Use	15.8%
Residential ^a	1.0%
Total	24.9%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review. This excludes Palo Park and Flex zoning districts. See Appendix 4, Table 41 for detailed table.

COMMERCIAL BUILDINGS AND SPACE

This section provides information about all commercial properties in the city of Boulder. Data from the Boulder County Assessor’s file show a total of 1,832 nonexempt (private) commercial buildings in the

city of Boulder. These include properties assessed at 29% of market value for tax purposes and exclude properties described as public/retail/lodging and other property types not related to this study. That is, these are the types of buildings typically occupied by the City’s primary employers.

Two-thirds of the 1,832 nonexempt commercial buildings in the city of Boulder are situated on land zoned Industrial or Business (Table 10). By zoning district classification, there are 821 (44.8%) Industrial buildings, and 425 (23.2%) Business buildings.

By subcommunity, East Boulder, the Downtown area, and Gunbarrel have the most commercial buildings, with three-fifths of the total building stock (Table 11). East Boulder has 472 buildings (25.8%), Downtown includes 340 buildings (18.6%), and Gunbarrel has 260 commercial buildings (14.2%).

Table 42 in Appendix 4 shows that nearly 28% of the commercial buildings are on land zoned Industrial-General. Zoning districts with more than 100 commercial buildings include Industrial-Manufacturing (163); Downtown 2 (123); Business-Transitional 2 (108); Industrial-Service 1 (105), and Business-Transitional 1 (106).

TABLE 10: NUMBER OF NONEXEMPT COMMERCIAL BUILDINGS BY ZONING DISTRICT

Zoning District Classification	Buildings	Share of Total
Business	425	23.2%
Downtown	286	15.6%
Industrial	821	44.8%
Mixed Use	67	3.7%
Residential ^a	233	12.7%
Total	1,832	100.0%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review.

See Appendix 4, Table 42 for detailed table.

TABLE 11: NUMBER OF NONEXEMPT COMMERCIAL BUILDINGS BY SUBCOMMUNITY

Subcommunity	Buildings	Share of Total
Downtown ^a	340	18.6%
Central Boulder	183	10.0%
Crossroads	276	15.1%
East Boulder	472	25.8%
Gunbarrel	260	14.2%
North Boulder	157	8.6%
CU-Boulder	7	0.4%
South Boulder	39	2.1%
Southeast Boulder	98	5.3%
Subcommunity Totals	1,832	100.0%

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 42 for detailed table.

According to the Boulder County Assessor’s database, nonexempt (private) commercial space in the city of Boulder totals about 21.7 million square feet (Table 12). About 16.5 million square feet of space (76.2%) is on land zoned Industrial. Another 2.4 million square feet of space (11%) is on land zoned Business, and 1.7 million square feet (7.9%) is on land zoned Downtown.

The distribution of square footage is similar to the distribution of number of buildings, with 8.3 million square feet of commercial space located in East Boulder; 7.8 million square feet of space in Gunbarrel; nearly 2 million square feet in Crossroads; and 1.9 million square feet in the Downtown area (Table 13).

TABLE 12: TOTAL SQUARE FEET OF NONEXEMPT COMMERCIAL SPACE BY ZONING DISTRICT

Zoning District Classification	Square Feet	Share of Total
Business	2,384,628	11.0%
Downtown	1,711,046	7.9%
Industrial	16,522,712	76.2%
Mixed Use	259,235	1.2%
Residential ^a	806,788	3.7%
Total	21,684,409	100.0%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review.

See Appendix 4, Table 43 for detailed table.

TABLE 13: TOTAL SQUARE FEET OF NONEXEMPT COMMERCIAL SPACE BY SUBCOMMUNITY

Subcommunity	Square Feet	Share of Total
Downtown ^a	1,893,935	8.7%
Central Boulder	677,845	3.1%
Crossroads	1,986,316	9.2%
East Boulder	8,317,456	38.4%
Gunbarrel	7,818,101	36.1%
North Boulder	414,419	1.9%
CU-Boulder	41,767	0.2%
South Boulder	131,866	0.6%
Southeast Boulder	402,704	1.9%
Subcommunity Totals	21,684,409	100.0%

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 43 for detailed table.

Takeaways:

- Of the 1,832 commercial buildings in the city of Boulder, nearly 45% are located on land classified Industrial, 23% on land zoned Business, and nearly 16% on land zoned Downtown.
- The 1,832 commercial buildings represent about 21.7 million square feet of space.
- About 76% of the 21.7 million square feet of usable space is located on land classified Industrial, 11% on land classified Business, and about 8% on land classified Downtown.

PRIMARY EMPLOYERS AND EMPLOYEES BY SUBCOMMUNITY

This section describes the zoning and geographic distribution of primary employers and employees.

Nearly 78% of primary employers occupy land zoned Industrial and Business. Industrial zoning accounts for 328 (61%) primary employers, while Business zoning accounts for 91 (16.9%) of primary employers (Table 14). Mixed Use accounts for the smallest number of primary employers, 12 (2.2%).

The greatest concentration of primary employers is in the East Boulder subcommunity (238 primary employers or 44% of all primary employers) (Table 15). The Gunbarrel subcommunity (82 employers) and the Downtown area (80 employers) each account for about 15% of primary employers.

Nearly half of all primary employers are located on land zoned Industrial-General. Under 10% (53) of primary employers are located on land zoned Industrial-Manufacturing (Table 44).

TABLE 14: NUMBER OF PRIMARY EMPLOYERS BY ZONING DISTRICT

Zoning District Classification	Primary Employers	Share of Total
Business	91	16.9%
Downtown	67	12.5%
Industrial	328	61.0%
Mixed Use	12	2.2%
Residential ^a	40	7.4%
Total	538	100.0%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review.

See Appendix 4, Table 44 for detailed table.

TABLE 15: NUMBER OF PRIMARY EMPLOYERS BY SUBCOMMUNITY

Subcommunity	Primary Employers	Share of Total
Downtown ^a	80	14.9%
Central Boulder	37	6.9%
Crossroads	64	11.9%
East Boulder	238	44.2%
Gunbarrel	82	15.2%
North Boulder	7	1.3%
CU-Boulder	3	0.6%
South Boulder	7	1.3%
Southeast Boulder	20	3.7%
Subcommunity Totals	538	100.0%

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 44 for details.

The majority of primary jobs are land zoned Industrial (18,136, 75.2%), followed by Business (12.8%) and Downtown (5.9%) (Table 16).

Together, East Boulder and Gunbarrel provide nearly 80% of the primary jobs in the city of Boulder (Table 17). East Boulder has about 9,800 primary jobs (mostly on land zoned Industrial), while Gunbarrel has about 9,500 primary jobs, also largely on land zoned Industrial. The Downtown subcommunity has 1,650 primary jobs, and the Crossroads subcommunity has fewer than 1,500 primary jobs.

TABLE 16: NUMBER OF PRIMARY EMPLOYEES BY ZONING DISTRICT

Zoning District Classification	Primary Employees	Share of Total
Business	3,088	12.8%
Downtown	1,413	5.9%
Industrial	18,136	75.2%
Mixed Use	230	1.0%
Residential ^a	1,263	5.2%
Total	24,130	100.0%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review.

See Appendix 4, Table 45 for detailed table.

TABLE 17: NUMBER OF PRIMARY EMPLOYEES BY SUBCOMMUNITY

Subcommunity	Primary Employees	Share of Total
Downtown ^a	1,650	6.8%
Central Boulder	791	3.3%
Crossroads	1,474	6.1%
East Boulder	9,771	40.5%
Gunbarrel	9,493	39.3%
North Boulder	64	0.3%
CU-Boulder	353	1.5%
South Boulder	125	0.5%
Southeast Boulder	409	1.7%
Subcommunity Totals	24,130	100.0%

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 45 for detailed table.

BUILDING SPACE FOR PRIMARY EMPLOYERS AND EMPLOYEES

Primary employers occupy more than 7.4 million square feet of space—about 34% of the total amount of commercial space in Boulder. The vast majority of this space is Industrial, with nearly 5.9 million square feet or 79.3% of primary employer space (Table 18). Business represents nearly 700,000 square feet.

Most of the space is located in East Boulder (3 million sq. ft.) and Gunbarrel (2.9 million sq. ft.) (Table 19). Crossroads, Downtown, Central Boulder, and Southeast Boulder represent another 1.5 million square feet of space for primary employers.

TABLE 18: SQUARE FEET OF SPACE LEASED/OWNED BY PRIMARY EMPLOYERS BY ZONING DISTRICT

Zoning District Classification	Subcommunity Average	Share of Total
Business	683,000	9.2%
Downtown	394,096	5.3%
Industrial	5,889,116	79.3%
Mixed Use	79,630	1.1%
Residential ^a	383,127	5.2%
Total	7,428,969	100.0%

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review.
 Note: Square footage grossed up to account for unavailable data on occupied space.
 See Appendix 4, Table 46 for detailed table.

TABLE 19: SQUARE FEET OF SPACE LEASED/OWNED BY PRIMARY EMPLOYERS BY SUBCOMMUNITY

Subcommunity	Square Feet	Share of Total
Downtown ^a	450,760	6.1%
Central Boulder	259,538	3.5%
Crossroads	561,350	7.6%
East Boulder	2,966,375	39.9%
Gunbarrel	2,882,749	38.8%
North Boulder	20,116	0.3%
CU-Boulder	50,732	0.7%
South Boulder	27,447	0.4%
Southeast Boulder	209,903	2.8%
Subcommunity Totals	7,428,969	100.0%

^a Downtown is an area within the Central Boulder subcommunity.
 Note: Square footage grossed up to account for unavailable data on occupied space.
 See Appendix 4, Table 46 for detailed table.

Takeaways:

- Primary employers occupy 538 of the 1,832 buildings, or about 29.4% of the stock of buildings.
- Primary employees occupy about 7.4 million of the 21.7 million square feet of commercial space in the city of Boulder (about 34.1% of the total square feet of space).

On average, a primary employee in the city of Boulder occupies about 308 square feet of space (Table 20). The quantity of square feet of space per employee varies by location and by industry. On average, primary employer users of Mixed Use zoning occupy the most space per employee (346 square feet), while users of Business zoning occupy 221 square feet per employee.

The Southeast Boulder, Crossroads, and Central Boulder subcommunities recorded the highest average space per primary employee, averaging 513.2, 380.8, and 328.1, respectively (Table 21). Primary employees in the Downtown area occupy comparatively less space than average (about 273 square feet of space per employee).

TABLE 20: AVERAGE SQUARE FEET OF SPACE PER EMPLOYEE FOR PRIMARY EMPLOYERS BY ZONING DISTRICT

Zoning District Classification	Square Feet
Business	221.2
Downtown	278.9
Industrial	324.7
Mixed Use	346.2
Residential ^a	303.3
Total	307.9

^a Residential only includes zoning districts for which commercial use may be permitted by Use Review. See Appendix 4, Table 47 for detailed table.

TABLE 21: AVERAGE SQUARE FEET OF SPACE PER EMPLOYEE FOR PRIMARY EMPLOYERS BY SUBCOMMUNITY

Subcommunity	Square Feet
Downtown ^a	273.2
Central Boulder	328.1
Crossroads	380.8
East Boulder	303.6
Gunbarrel	303.7
North Boulder	314.3
CU-Boulder	143.7
South Boulder	219.6
Southeast Boulder	513.2
Subcommunity Totals	307.9

^a Downtown is an area within the Central Boulder subcommunity. See Appendix 4, Table 47 for detailed table.

Takeaway:

- On average (across zoning classifications and across Boulder subcommunities), a primary employee utilizes about 308 square feet of space, more in buildings located on land classified Industrial (about 324 square feet of space per primary employee) and significantly less in buildings on land zoned Business (about 221 square feet of space per primary employee).

AGE OF COMMERCIAL BUILDING STOCK

Based on the perception that Boulder’s commercial building stock is old and outdated, the research team compared the age of the commercial building stock in the city of Boulder to other municipalities in Boulder County. Building age was computed using information from the Boulder County Assessor’s file as the difference between 2012 and the year a building was constructed. The average age for the 1,832

commercial buildings in Boulder is 34.3 years, including residential properties with permissible business uses (Table 22). The zoning district classifications with the oldest buildings include Downtown (with an average age of 46.7 years) and Residential (43.1 years). The Industrial classification has the newest stock of buildings (28.6 years old).

Properties are significantly older, on average, in the Central Boulder subcommunity (52 years old) and in the Downtown area (48.5 years old) (Table 23). Commercial properties are significantly newer in North Boulder (22.9 years old), Southeast Boulder (26.4 year old), East Boulder (28.1 years old), Gunbarrel (29.4 years old), and Crossroads (29.2 years old).

Takeaway:

- The average age for all commercial buildings in the city of Boulder is 34.3 years old. Buildings are significantly older in the Downtown area (with an average age of 46.7 years old) and significantly newer when located on land classified Industrial (with an average age of 28.6 years old).

TABLE 22: AVERAGE AGES OF COMMERCIAL BUILDINGS IN YEARS BY ZONING DISTRICT

Zoning District Classification	Average Age
Business	33.0
Downtown	46.7
Industrial	28.6
Mixed Use	29.6
Residential	43.1
Total	34.3

See Appendix 4, Table 48 for detailed table.

TABLE 23: AVERAGE AGES OF COMMERCIAL BUILDINGS IN YEARS BY SUBCOMMUNITY

Subcommunity	Average Age
Downtown ^a	48.5
Central Boulder	52.0
Crossroads	29.2
East Boulder	28.1
Gunbarrel	29.4
North Boulder	22.9
CU-Boulder	41.0
South Boulder	36.3
Southeast Boulder	26.4
Subcommunity Totals	34.3

^a Downtown is an area within the Central Boulder subcommunity.

See Appendix 4, Table 48 for detailed table.

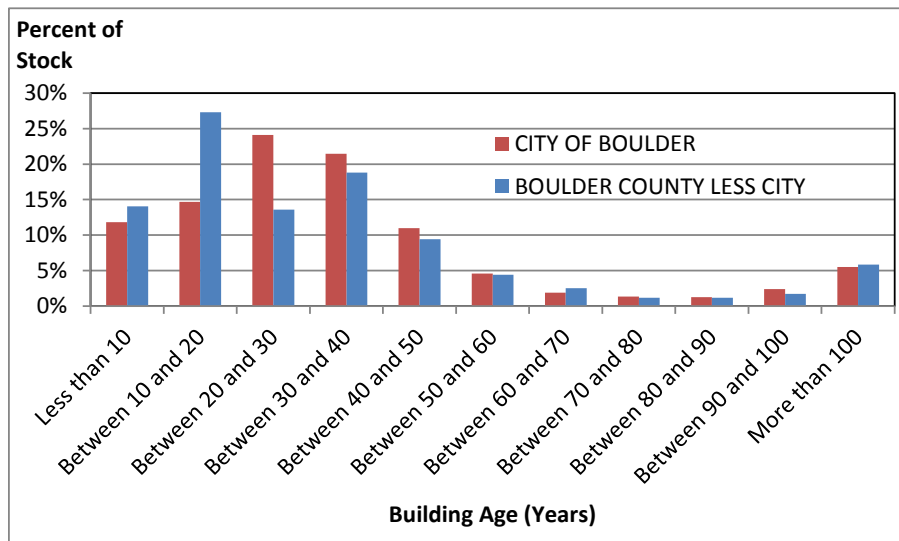
The stock of commercial buildings in the city of Boulder is significantly older than most of the stock of commercial buildings located in Boulder County but outside City boundaries. While the average age for commercial buildings in the city of Boulder is 34.5 years old, the average age for commercial buildings in Lafayette is 27.1 years old, 23.5 years old in Louisville, and 15.3 years old in Superior. The average age of commercial buildings in Longmont is comparable to Boulder (34.6 years old).

Figure 10, Figure 11, and Table 24 show the distribution of building ages for all nonexempt (private) commercial buildings in the city of Boulder and Boulder County, *excluding* residential.⁴ About 27% of all commercial buildings in the city of Boulder are less than 20 years old, compared to 35% for Longmont, 69% for Louisville, and 95% for Superior. Nearly 50% of the total stock of commercial building in the city of Boulder is between 20 and 40 years old. Another 5.4% is more than 100 years old.

Takeaways:

- The average age for a commercial building in Boulder is 34.5 years old, similar to Longmont (34.6 years old) but older than Lafayette (27.1 years old), Louisville (23.5 years old), and Superior (15.3 years old).
- Nearly half of the city of Boulder’s stock of commercial buildings is between 20 and 40 years old. Less than 20% of the stock of commercial buildings in Lafayette and Louisville are between 20 and 40 years old, and about 4.5% are between 20 and 40 years old in Superior.
- About 14% of the stock of commercial buildings in the city of Boulder is more than 50 years old.

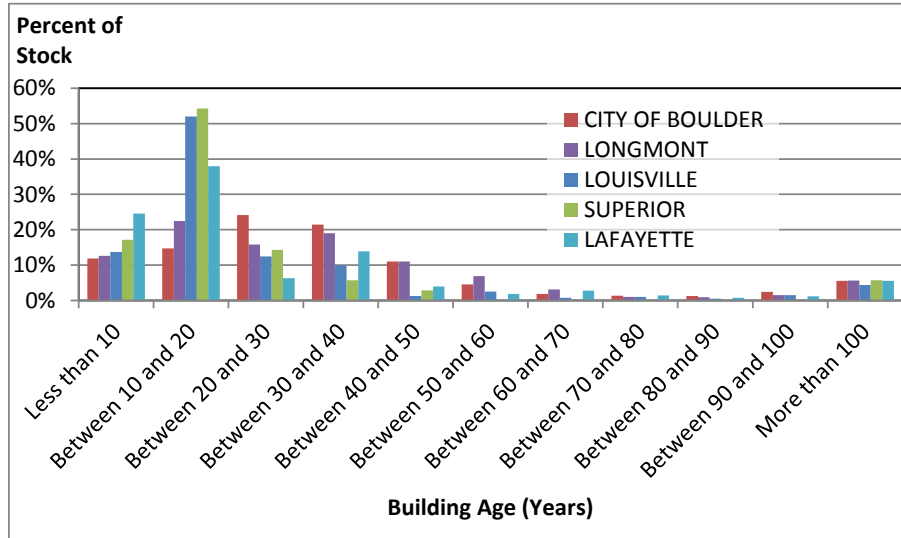
FIGURE 10: PERCENT DISTRIBUTION OF COMMERCIAL BUILDING AGES



Source: Boulder County Assessor’s File. Calculations by BRD.

⁴ In the city of Boulder analysis, some residential was included because of permissible commercial use. The Boulder County Assessor database does not make that distinction for all properties in the county. Therefore, for comparison, these properties were excluded.

FIGURE 11: PERCENT DISTRIBUTION OF COMMERCIAL BUILDING AGES BY CITY



Source: Boulder County Assessor’s File. Calculations by BRD.

TABLE 24: AGES OF NONEXEMPT COMMERCIAL BUILDINGS BY LOCATION

City	Average Age (Years)	Less than 10 Years	Between 10 and 20 Years	Between 20 and 30 Years	Between 30 and 40 Years	Between 40 and 50 Years	Between 50 and 60 Years	Between 60 and 70 Years	Between 70 and 80 Years	More than 80 Years
City of Boulder ^a	34.5	12.0%	15.2%	25.3%	22.6%	10.8%	4.1%	1.4%	1.0%	7.7%
Lafayette	27.1	26.0%	37.8%	5.9%	13.4%	2.8%	2.1%	2.6%	1.5%	8.0%
Longmont	34.6	11.1%	24.3%	16.2%	18.5%	11.6%	6.7%	2.9%	0.8%	7.9%
Louisville	23.5	13.8%	55.6%	12.7%	7.2%	0.8%	2.8%	0.3%	0.8%	6.1%
Superior	15.3	18.2%	77.3%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Boulder County	33.3	12.0%	15.2%	25.3%	22.6%	10.8%	4.1%	1.4%	1.0%	7.7%

^a For comparison to other cities in Boulder County, this table excludes all residential.

Source: Boulder County Assessor’s File. Calculations by BRD.

VACANT PARCELS – DEVELOPABLE LAND

Ideally, this real estate analysis would also include an assessment of the remaining amount of developable land within the city of Boulder. Unfortunately, such an assessment could not be incorporated under the scope of this study. According to City staff, due to complexities of regulations governing land development, development potential is typically assessed on a case by case basis at the parcel scale. Accurate and reliable assessment of developable land for the entire City would therefore require significant investments of labor by development experts within the City staff.

AMENITIES

Access to amenities was evaluated using Walk Score® data. Walk Score® is a commercial data provider that has established an international measure for “walkability.” The “Street Smart” Walk Score® algorithm analyzes the characteristics of the neighborhood surrounding a location to generate an estimate of the walkability of the environment. The algorithm accounts for access to nine categories of amenities (grocery, restaurants and bars, shopping, coffee, banks, parks, schools, books, and entertainment), as well as physical characteristics of the walking network that affect its “pedestrian

friendliness” (e.g., intersection density, block length). Access to amenities is based on distances along known walking paths, with amenities weighted based on their proximity to the location of interest. The cumulative estimated Street Smart Walk Score® is normalized to a range of 0 to 100, with 100 being the most walkable neighborhood possible. Individual scores are also provided for each of the amenity categories on the same normalized range of 0 to 100 (with 100 being the best access to an amenity).

Walk Score® scores were obtained for each primary employer location within the city of Boulder. The scores presented in this study correspond to the amenities identified by the BEC as important to primary employers:

- Restaurants (Restaurants and Bars Walk Score®)
- Public Transportation (Transit Walk Score®)
- Walkable Environment (Street Smart Walk Score®)
- Recreational Facilities (Entertainment Walk Score® and Parks Walk Score®)

Scores were averaged for primary employers for each subcommunity. The average Walk Score® across all subcommunities for all primary employers was 58.8. At 95.4, Downtown recorded the highest Walk Score® among all Boulder subcommunities (Figure 12). This confirms conventional wisdom and focus group discussions about the desirability of the Downtown market and the importance of amenities. In contrast, the East Boulder and Gunbarrel subcommunities, which have the majority of primary employees, recorded the lowest Walk Scores®, 43.7 and 40.3, respectively.

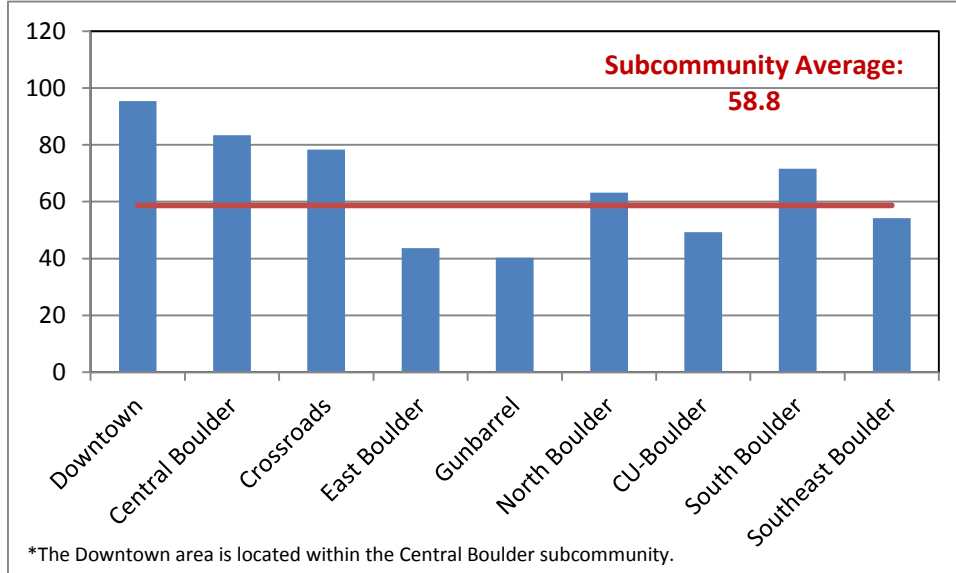
Table 25 contains detailed Walk Scores® by amenity and by subcommunity, averaged for each primary employer. Appendix 6 provides maps that illustrate scores by amenity throughout the City for primary employers.

The walkability was also calculated by weighting the Walk Score® by employment. The average employment-weighted Walk Score® dropped from 58.8 to 49.4 for all subcommunities, indicating a significant decline in accessible amenities to areas of employment concentration across the City (Figure 13). In the employee-weighted score, Downtown remained nearly the same at 95.3. However, the East Boulder and Gunbarrel markets declined to 36.0 and 30.4.

Table 26 contains the average Walk Score®, weighted by employment, for all amenities by subcommunity.

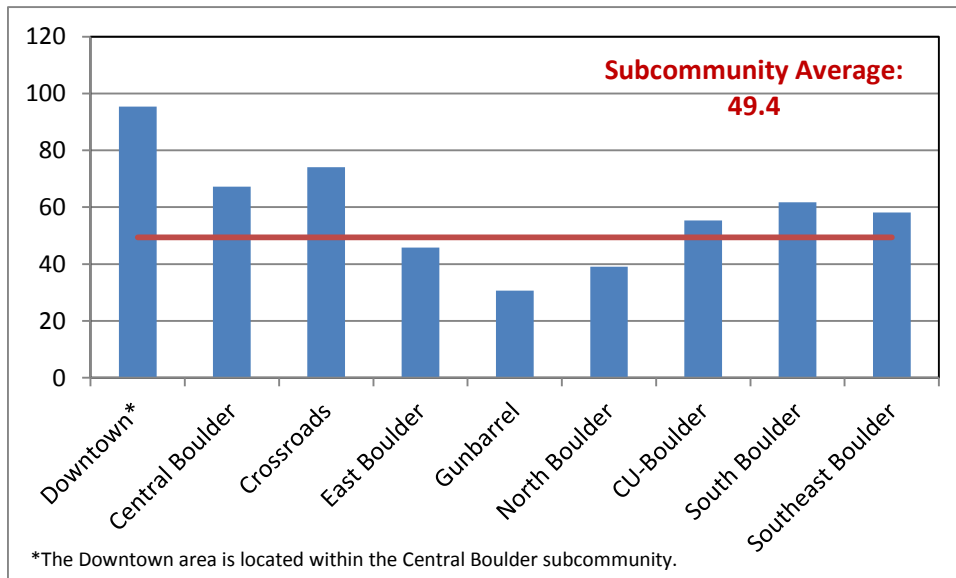
The ranking of access to amenities largely reflects the overall subcommunity averages with the exception of access to parks, which recorded scores above 80 in North Boulder and South Boulder. The Downtown parks score was 46.6. Downtown amenities, including entertainment, bars and restaurants, and transit, recorded the highest individual scores among subcommunities.

FIGURE 12: AVERAGE STREET SMART WALK SCORE® FOR PRIMARY EMPLOYERS BY SUBCOMMUNITY



Source: Walk Score® (www.walkscore.com).

FIGURE 13: AVERAGE STREET SMART WALK SCORE® WEIGHTED BY TOTAL EMPLOYMENT BY SUBCOMMUNITY



Source: Walk Score® (www.walkscore.com).

TABLE 25: AVERAGE STREET SMART WALK SCORE® FOR PRIMARY EMPLOYERS BY SUBCOMMUNITY BY AMENITY

Subcommunity	Street Smart Walk Score®	Transit	Entertainment	Parks	Restaurants and Bars
Downtown	95.4	57.8	95.1	46.9	98.9
Central Boulder	83.4	50.9	63.3	62.6	82.8
Crossroads	78.4	46.4	59.7	26.4	87.2
East Boulder	43.7	36.0	6.0	2.0	46.9
Gunbarrel	40.3	27.7	0.0	0.0	41.5
North Boulder	63.3	34.9	0.0	21.1	65.7
CU-Boulder	49.3	49.0	28.2	54.2	45.9
South Boulder	71.6	50.1	43.9	79.3	67.5
Southeast Boulder	54.3	46.0	3.2	37.4	60.5
Grand Total	58.8	41.0	29.1	18.9	62.0

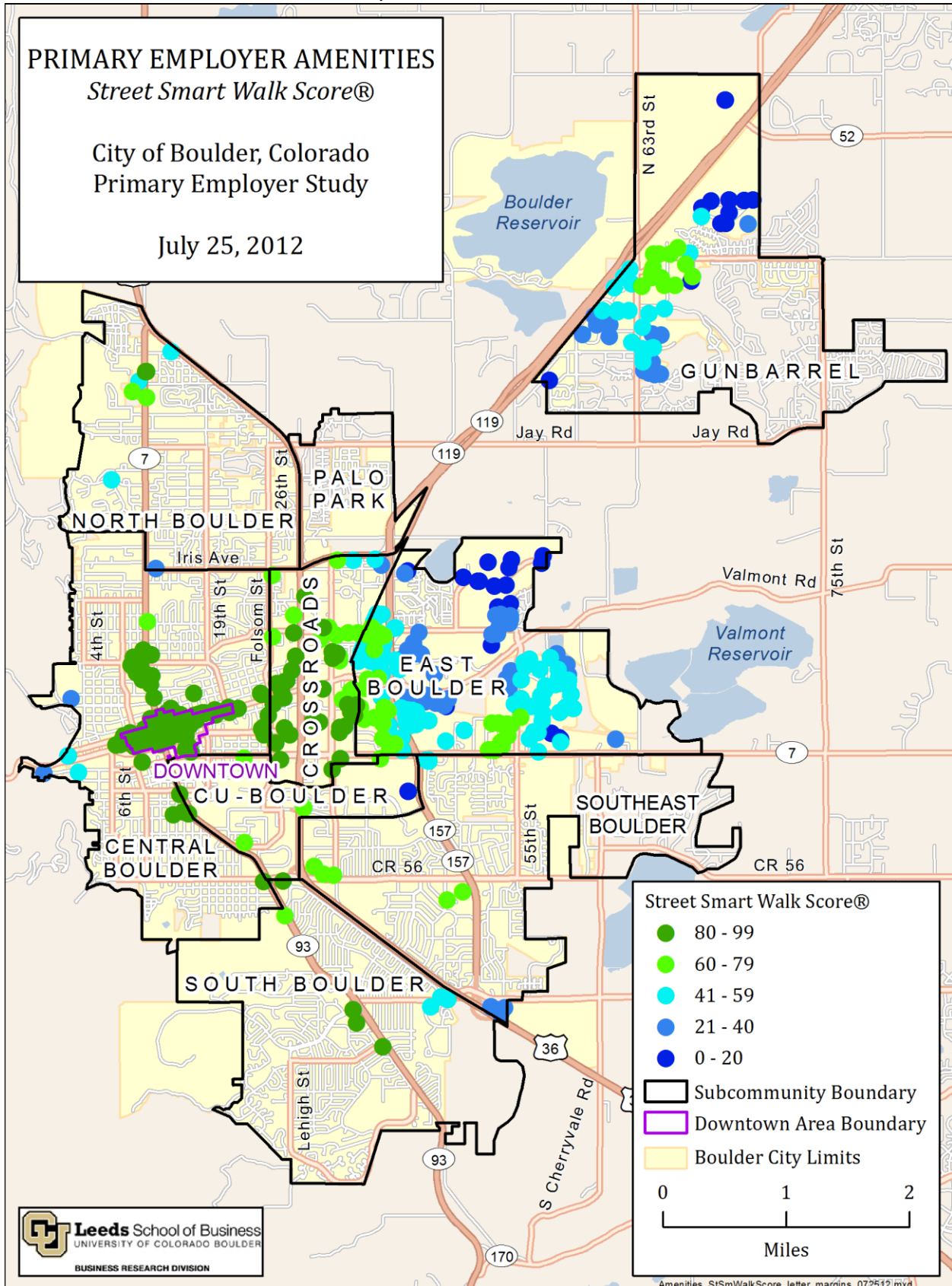
Source: Walk Score® (www.walkscore.com). Calculations by BRD.

TABLE 26: AVERAGE STREET SMART WALK SCORE® WEIGHTED BY PRIMARY EMPLOYEES BY SUBCOMMUNITY BY AMENITY

Subcommunity	Street Smart Walk Score®	Transit	Entertainment	Parks	Restaurants and Bars
Downtown	95.3	57.9	95.8	46.6	99.1
Central Boulder	67.2	44.1	36.6	51.7	65.4
Crossroads	74.1	45.7	58.9	22.2	81.8
East Boulder	45.8	36.0	6.5	2.6	49.0
Gunbarrel	30.7	30.4	1.0	1.6	26.0
North Boulder	39.1	36.7	0.3	88.8	17.8
CU-Boulder	55.4	54.1	34.6	57.6	54.8
South Boulder	61.7	49.9	32.2	80.3	57.8
Southeast Boulder	58.2	42.8	3.0	20.7	58.4
Grand Total	49.4	39.0	16.5	13.6	49.1

Source: Walk Score® (www.walkscore.com). Calculations by BRD.

MAP 3: PRIMARY EMPLOYER AMENITIES, STREET SMART WALK SCORE® MAP



FOCUS GROUPS

The project team held two focus group sessions to discuss primary employers' real estate requirements. One focus group consisted of six Boulder commercial real estate brokers familiar with the City's commercial real estate market. The second focus group consisted of six real estate developers familiar with the challenges associated with developing real estate in the City.

The broker focus group was asked to address the following questions:

1. What is the current status of commercial real estate in Boulder?
2. What building attributes do primary employers seek?
3. What location attributes do primary employers seek?
4. Why do primary employers leave Boulder (i.e., what attributes do other cities offer)?
5. What can the City do to keep primary employers?
6. How have tenant preferences and characteristics of the building stock changed over time?

In addition to the questions posed to the broker focus group, the developer focus group was asked to address:

1. What challenges do developers face?
 - a. In what markets do rents warrant new construction?
 - b. What are the impediments to development?

The summaries for the focus group discussions are provided in Appendix 9. In sum, the focus groups identified a number of reasons why primary employers leave the city of Boulder:

- A lack of available space in the Downtown area market;
- A lack of amenities (e.g., restaurants and services) in the tertiary markets;
- The age of commercial space (competing markets outside Boulder offer newer space with more building amenities at competitive prices);
- Inflexible zoning (e.g., medical uses prohibited on Industrial zoned land);
- The cost of doing business in Boulder;
- Inadequate parking in the Downtown area market;
- The high cost of electricity; and
- Better access to the Denver metropolitan area's labor markets. In addition, the developers mentioned that high land costs drive up the rents necessary to make new construction feasible.

PROJECT TEAM PRELIMINARY RECOMMENDATIONS

The City of Boulder should consider reevaluating its zoning laws. One important result generated by this study is the significant difference between the distribution of zoned land used by primary employers and the distribution of land used by all employers in the city of Boulder. That difference will persist and have detrimental consequences (e.g., limit growth of existing primary employers, cause primary employers will likely leave Boulder, etc.) as long as the zoning code remains inflexible. The City of Boulder should consider rezoning land use to better accommodate the dynamic requirements of business. Business enterprise is a dynamic economic activity. The types of activities that primary employers engage in

change over time. On the other hand, the stock of commercial real estate is long lived. The laws permitting how land and improved space can be utilized by businesses should also be dynamic to facilitate the changes that occur over time. The City of Boulder should begin the process of rezoning by undertaking a comprehensive study of how other places have established more flexible land use regulations. Mission Bay in San Francisco was mentioned in the developer focus group as a place that has adopted flexible zoning regulations. Surely other places have successfully addressed this issue. Likewise, Boulder should analyze commercial real estate for comparative cities nationally (e.g., Madison, Portland), as well as for competitive cities in Colorado outside of Boulder County (e.g., Broomfield, Denver) in order to understand the land utilization in similar communities.

The City of Boulder should consider increasing allowable density in some portions of the city. Increasing density accomplishes two things: (1) it increases the amount of leasable space that land costs can be amortized over, thereby reducing rents and making Boulder more competitive with surrounding markets; and (2) it creates a higher density of residents and employment, making it easier for the market to support the amenity package that people want. Higher densities will support more restaurants, coffee shops, grocery stores, and other services that people look for when searching for places to live and work.

Multiple publications have lauded Boulder for entrepreneurship, startup activity, a highly skilled workforce, and high quality of life. A recent article by Richard Florida (26 June 2012) in *The Daily Beast* recently cited Boulder as the most creative city in the United States. Much of this is attributable to Boulder's Downtown market—a location that provides amenities that lure entrepreneurs and support startup companies. Boulder should consider strategies for increasing the leasable area in the Downtown area.

This study leveraged surveys of primary employers conducted by the BEC and focus groups of brokers and developers conducted by the research team. The City should conduct a narrowly focused survey of investors (e.g., VCs, angel investors, banks, etc.) and entrepreneurs to discover attributes about the city of Boulder that attracts and keeps them here.

The City should compare Boulder's economic incentive program to other comparable cities. This would allow Boulder to have a greater understanding of the competitiveness of incentives, in addition to other attributes offered by the city (e.g., location, brand, etc.).

The City of Boulder should consider providing subsidies to rehabilitate the old stock of commercial real estate. The subsidy could come in the form of rebating fees for permits and inspections tied to incentivizing sustainable retrofits (e.g., modern lighting, solar, etc.), or targeted to providing amenities that employers seek (e.g., athletic facilities, showers, etc.).

Finally, the City of Boulder should reevaluate its procedures for obtaining construction approvals. Decreasing the time required to obtain approvals and reducing uncertainty in the approval process will allow the construction industry to meet the needs of potential primary employers that want to locate in Boulder.

CONCLUSIONS

This study examines primary employment in the city of Boulder. The City defines primary employers as:

A business or organization of any number of employees that generates more than 50% of its revenues from activities outside of Boulder County, and shall include, but is not limited to those facilities of such business and organization devoted to manufacturing, research and development, data processing, telecommunications and publishing, but shall not include hotels, motels, retailers, or food service facilities.

In addition, this study focused on private, not public, employers. Consequently, the University of Colorado Boulder; the federal labs; and all branches of federal, state, and local governments are excluded.

Trade flow data (i.e., the import and export of goods and services) were analyzed to identify exporting industries. Companies were then classified as primary based on their respective industry relationship. Many of the primary employers are in the Manufacturing, Professional and Technical Services, and Information industries, and thus interact with the clean technology, natural/organic foods, information technology, aerospace, and biotechnology clusters. Analysis of trade flow data and companies by industry yielded 554 private primary employers in the city of Boulder, or 8.2% of all employers in the city. Primary employers account for 26,060 employees in Boulder, or about 29% of the 90,300 jobs located in the city of Boulder.

Using company addresses, the locations of all primary employers were identified and merged with the City's zoning file and County's Assessor database. The locations of primary employers for each of the nine subcommunities in Boulder are: Central Boulder (including the Downtown area), Crossroads, East Boulder, Gunbarrel, North Boulder, Palo Park, University of Colorado, South Boulder, and Southeast Boulder. Primary employer data were also tabulated by zoning district. Of the approximately 20 square miles of usable land in Boulder, about half is devoted to commercial uses and about 10% is occupied by primary employers (e.g., 2 square miles). Most of this land is zoned Industrial and located in the East Boulder and Gunbarrel markets.

The distribution of land use for all private employers was compared to private primary employers, and a significant difference was noted for those distributions with primary employers using a significantly greater share of Industrial zoned land.

Primary employers occupy about 7.4 million of the 21.7 million square feet of commercial space used by private employers in Boulder and 538 of the 1,832 commercial buildings in the city. On average, a primary employee uses about 308 square feet of space, less in the Downtown office market (about 280 square feet of space per primary employee) and more in the East Boulder Industrial market (334 square feet of space).

Access to amenities for primary employers was measured using Walk Score®. Walk Score® quantifies access to amenities for a particular location. Amenities examined include nine categories: grocery, restaurants and bars, shopping, coffee, banks, parks, schools, books, and entertainment. Confirming market perceptions about amenities, the Downtown area recorded superior access when compared to other subcommunities, particularly East Boulder and Gunbarrel.

Two focus groups were convened, one of commercial property brokers familiar with the Boulder market and a second of Boulder developers. Participants were asked to identify problems associated with attracting and/or keeping primary employers in the city of Boulder. The real estate brokers indicated the main impediments to attracting/keeping primary employers in Boulder were: (1) a lack of space, particularly in the Downtown office market; (2) the age of the building stock; (3) the cost of doing business in Boulder; (4) inflexible zoning; and (5) access to external labor markets.

Recommendations for addressing these issues include: (1) creating a more flexible system of land use regulation—one that can accommodate the dynamic needs of economic activities now and in the future; (2) increasing allowable density; (3) encouraging new construction in the Downtown market; and (4) reducing the cost and uncertainty in obtaining construction approvals. This study identified a significant difference between the distribution of land used by all commercial employers in the city of Boulder and the distribution of land utilized by primary employers. This difference emphasizes the need to have a system of land use regulation that permits uses to change with the requirements of businesses over time. Relaxing the height restriction for buildings east of 30th Street is an example of how the City could allow greater densities of jobs and people. Greater densities would allow the market to provide more services (e.g., restaurants, coffee shops, hotels, and other amenities sought by all employers). In addition, permitting more square footage of leasable space per square foot of land area would allow developers to amortize the relatively high cost of land in the city of Boulder over more square footage of leasable space, enabling developers/owners to lower rents and stay competitive with other markets.

The city of Boulder was recently recognized as the most creative city in the nation. This achievement is primarily attributable to the Downtown Boulder market, where start-up owners routinely meet with entrepreneurs and venture capitalists. The current stock of commercial space in the Downtown market cannot support the continued expansion of these activities. Both the broker and developer focus groups mentioned that the stock of commercial space in Boulder is old and becoming less competitive. An analysis of Boulder County Assessor's data validated this claim. The Downtown Boulder market needs to provide more commercial space in order to continue to attract start-up companies and maintain Boulder's reputation as the most creative city in the United States.

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APPENDIX 1: DETAILED METHODOLOGIES

PRIMARY EMPLOYER ANALYSIS

In the city of Boulder, a primary employer is currently defined by ordinance as:

A business or organization of any number of employees that generates more than 50% of its revenues from activities outside of Boulder County, and shall include, but is not limited to those facilities of such business and organization devoted to manufacturing, research and development, data processing, telecommunications and publishing, but shall not include hotels, motels, retailers, or food service facilities.

In order to quantify and identify primary employers in the city with certainty would require income statements and sales reports that demonstrate local sales versus domestic and international exports. Without this specific revenue data, the BRD project team set out to identify industries that exhibit exporting characteristics in excess of 50%.

The research team used the input-output model, IMPLAN, which includes social accounting matrices and trade flow data for 440 sectors. These sectors can be converted to NAICS codes using a sector-NAICS crosswalk provided by MIG, the creators of IMPLAN.

Domestic and foreign export data were summed and divided by total output by sector using the 440 sectors in the 2010 IMPLAN dataset specific to Boulder County (the latest available data). Industries that yielded exports greater than 50% were flagged as primary employers. The research team then made adjustments, adding or removing industries on the 50% margin based on the research team's knowledge of the industry and the City's definition of primary employers.

FIGURE 14: PRIMARY EMPLOYER DEFINITION

$$\text{Primary Employer if } \frac{(\text{Domestic Exports} + \text{Foreign Exports})}{\text{Total Output}} > 50\%$$

Next, the research team utilized the Colorado Department of Labor and Employment's QCEW micro data afforded under a licensing agreement that ensures the protection of confidentiality among companies.⁵ For this reason, data that risk violation of the nondisclosure clause are presented in aggregate. Key data extracted from the file included company name, city, employment, and industry classification code.

The file was queried for employers with an average of five or more employees for one full-year period, beginning Q4 2010 and ending Q3 2011 (most current data at the time). Then, the file was queried by primary employer industry as identified by the export filter.

Once a list of companies was established, the research team conducted a search of each company to obtain its most current address in the city of Boulder using company websites and other company databases (e.g., Reference USA, Hoover's, etc.). Web searches posing conflicting information were

⁵ (e) Licensee shall not publish, sell, or disclose the Licensed Information, or any part thereof, to the extent that the information published of any area, industry, Federal Department or Federal Agency level contains fewer than three (3) reporting units (as defined in C.R.S. 8-70-103(9), 1987 Rep. Vol., as amended), or eighty percent (80%) of the total employment of the applicable reporting level is made up by a single reporting unit.

flagged for physical location check by the research team. In most cases, the team chose not to place a verification call to companies in order to minimize confusion with the primary employer phone survey being conducted by the BEC.

In the absence of company revenue data, industry characteristics were used as a proxy to identify companies based on the revenue definition. Ultimately, this study is subject to two types of error:

- 1) The exclusion of companies that should be included as a primary employer, or
- 2) The inclusion of companies that should not be included as a primary employer.

While these errors likely exist, the research team believes they are minor data anomalies, and the primary employers are principally correct.

The IMPLAN trade flow analysis yielded 162 sectors (36.8%) that exhibited exporting characteristics in excess of 50%. Identified sectors came from all or part of the following industries: Agriculture; Utilities; Manufacturing; Transportation; Information; Professional, Scientific, and Technical Services; Educational Services; Health Care and Social Assistance; Arts, Entertainment, and Recreation; Accommodation and Food Services; and Other Services. Wholesale Trade is the one exception due to local demand for goods. The industry exhibits characteristics of an exporter, but the flow of wholesale goods into Boulder naturally outstrips the flow of wholesale goods out of Boulder. Three exclusions from the above list include Agriculture, Accommodation and Food Services, and Utilities. Agricultural exports are mostly tied to family farms, and are not captured in employer statistics. Accommodation and Food Services are excluded from primary employer classification by City ordinance. Utilities operating in the city of Boulder provide service primarily to city and county customers.

Other Methodologies Explored

Other methodologies were explored for the study. The research team conducted the IMPLAN analysis by aggregating the 440 sectors into 3-digit and 2-digit NAICS codes. Using the 3-digit aggregation yielded too many sectors that were deemed not to be primary exporters, while the 2-digit NAICS yielded too few sectors as primary exporters.

The BRD team also reviewed Colorado key industries as defined by PricewaterhouseCoopers and by the Colorado Office of Economic Development and International Trade (OEDIT).

Each key industry will consist of groups of related businesses and organizations whose collective excellence, collaboration and knowledge provide a sustainable competitive advantage and will facilitate job growth within such industry. (PricewaterhouseCoopers 2012)

There are distinctions between the key industries identified using the State of Colorado's definition of primary employers and those using the city of Boulder's definition. The OEDIT definition uses industry employment, wage, and production data, as well as location quotients, growth rates, forecasts, and qualitative measures, to identify key industries. Boulder bases a definition off exports (domestic and international).

OEDIT's identified key industry clusters include:

- Manufacturing
- Technology
- Electronics
- Food & Agriculture
- Bioscience
- Defense & Homeland Security
- Aerospace
- Information
- Health & Wellness
- Creative Industries
- Tourism & Outdoor
- Transportation & Logistics
- Infrastructure Engineering & Construction
- Financial & Business Services
- Energy & Natural Resources

The BRD research team also reviewed the Metro Denver Economic Development Corporation's (MDEDC) definition of key industry clusters in Metro Denver and Northern Colorado. The region examined includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, and Weld counties. Like OEDIT, the MDEDC methodology incorporates such metrics as employment and growth rates, which the BRD methodology does not.

The MDEDC key industry clusters include:

- Aerospace
- Aviation
- Bioscience
- Broadcasting & Telecommunications
- Energy
- Financial Services
- Healthcare and Wellness
- Information Technology-Software

While the industries that were identified by OEDIT, MDEDC, and the BRD using these three disparate definitions yield some industry crossover, other industries are exclusive to any list. The OEDIT and MDEDC lists of key industries and associated NAICS codes were reviewed for consideration, but excluded in order to present consistency with little exception.

Additionally, the city of Boulder project team had a primary employer list of 799 companies from 2006. This list was reviewed and compared to the BRD list of companies to identify omitted companies based on industry characteristics.

REAL ESTATE ANALYSIS

The real estate analysis sought to identify patterns in commercial and industrial real estate within the context of primary employers and across the city as a whole. The analysis included two complementary methods: focus groups with commercial real estate brokers and developers (primary data analysis); and GIS analyses of zoning districts, land area, and building characteristics (secondary data analysis).

Primary Data Analysis

Focus groups were convened with commercial real estate brokers and developers. These focus groups were formed based on recommendations from City staff, as well as the University of Colorado Real Estate Center’s contacts. These groups met following some of the preliminary research on primary employers, land use, and building space, allowing for general statistics to be shared for the group discussions. Focus group participants provided insight on vacancy rates, rents, tenant preferences, and site selection, among other perceptions.

Secondary Data Analysis

The specific objective of the secondary data analysis was to provide a comparative snapshot of current real estate (i.e., land and buildings) use by primary employers and existing real estate stock within the city.

Real estate characteristics were analyzed at two distinct levels: (1) primary employers and (2) the entire city. For both levels, summary statistics were calculated using subcommunities as an aggregated assessment area. Subcommunities were defined using two GIS feature classes provided by the City: subcommunities and the Business Improvement District (BID). The nine subcommunities include: South Boulder, Southeast Boulder, University of Colorado Boulder, Central Boulder (including the Downtown area per the BID), Crossroads, East Boulder, North Boulder, Palo Park, and Gunbarrel. In most cases, summary statistics were calculated as a cross-tabulation between these assessment areas and City zoning districts or zoning district classes.

The evaluation of real estate use by primary employers required integration of various sources of information, including: primary employer locations, Ownership Parcel boundaries (including attributes for zoning districts), primary employer leased space, and number of employees at each primary employer. The origin of each of these sources of information is summarized in Table 27.

TABLE 27: GIS DATA SOURCES

Information	Source
Primary Employer Locations	Geocoded by research team using City-provided address locators
Ownership Parcel Boundaries	Provided by City GIS staff
All Boulder Business Entity Locations	QCEW micro data with primary employer locations
Primary Employer Leased Space	Publications (e.g., <i>Boulder County Business Report</i>); Xceligent and Co-Star databases
Number of Employees	QCEW micro data (average from Q4 2010 to Q3 2011)
Building Age and Square Footage	City GIS staff , Boulder County Assessor’s database
Zoning District Boundaries	City GIS staff

To analyze land use by primary employers, the geocoded primary employer locations were matched to Ownership Parcels using point-in-polygon spatial query, with subsequent manual inspection and correction of potential issues (e.g., primary employers spanning multiple parcels). From this spatial overlay, the total land area used by primary employers was summed across subcommunities and zoning

districts, and the division of primary employers across zoning districts was calculated. For comparison, the distribution of all businesses in Boulder by zoning district was determined using a spatial overlay of all Boulder business entity locations and the Zoning District feature class.

Comparable summary of building use (i.e., occupy space) by primary employers proved less straightforward. Although the City GIS staff provided building-level square footage information from the County Assessor's relational database, in most cases, occupied space of primary employers could not be determined due to building- and parcel-level aggregation of the database records. As an alternative, the research team derived occupied space for primary employers from publications and commercial real estate databases. Using the known locations of the primary employers, occupied space was calculated by summing across subcommunities and zoning districts.

In a similar manner, employment counts were derived for each primary employer from the QCEW micro-data. Employment levels were then aggregated across subcommunities and zoning districts. The employment information was also combined with occupied space to estimate space requirements (i.e., average space per employee) across subcommunities and zoning districts.

The assessment of real estate for the entire city relied on four data files : Ownership Parcel feature class, Zoning District feature class, building information from the Assessor's database, and All Boulder Business Entity Locations. The origin of each of these files is described in Table 27.

Using these data, the research team evaluated broad use patterns across the city. First, the division of zoning districts in the city was determined using the Zoning District feature class provided by the City. This feature class covers the entire extent of the City (25.75 miles of land). Next, the same analysis was conducted to determine the division of zoning within each of the assessment areas (i.e., the nine subcommunities and the Downtown area) using the Parcel Ownership Boundaries file. As defined by the City, the subcommunities do not cover the entire extent of the City, but rather cover only 20.85 square miles of land. Examples of parts of the city that are excluded from subcommunities are: U.S. government-owned land occupied by NCAR and large tracts of City-owned (e.g., Boulder Reservoir, Open Space and Mountain Parks, etc.). Furthermore, the Parcel Boundaries feature class excludes portions of the city occupied by roads, which sum to nearly 4 square miles. Therefore, aggregation of all parcels within both the city and the submarket boundaries results in a total of 16.87 square miles of land.

In subsequent analyses, the research team focused primarily on private, commercial land, which encompasses all Business, Downtown, Flex District, Industrial, Mixed Use, and some Residential zoned land in the city of Boulder. Select Residential zones are included (RH-1, RH-2, RH-4, RH-5, RL-2, RM-1, RM-2, RM-3, and RMX-1) because some commercial uses are permitted in these zones. Public and Agricultural land are excluded from this definition. Based on parcel aggregation, the total amount of land within the city meeting this definition is approximately 8.2 square miles.

Finally, to assess the total commercial and industrial real estate stock within the city, the Ownership Parcels were linked to the building information data table from the Assessor's database. In its raw form, the building information table contains a record for every taxed building within the city. To exclude buildings that would be unsuitable for use by primary employers, the research team linked attributes in the buildings table to a lookup table of assessment rates and removed all buildings with assessment

rates below 29%, as well as tax-exempt properties.⁶ The buildings table was then refined further by excluding building types that were not likely to be suitable for use by primary employers (e.g., “COCKTAIL LOUNGE,” “DECK AREA”). Next, the reduced buildings table was joined to the Ownership Parcels using the database primary key (ASR_ID) to determine the zoning district and submarket of each building. Using the filtered buildings table, the sum of building square footage and the average building age were then calculated by submarket and zoning district. To complement this analysis, a separate assessment of average building age for Boulder County and other towns and cities in the county was also conducted. This assessment utilized the building information table for the entire county.

OTHER AMENITIES ANALYSIS

The BEC conducted a phone survey of primary employers, stratified by subcommunity and firm size. Among the questions asked were a set of inquiries about tenant amenities:

- Access to restaurants
- Access to shopping districts
- Access to trails or bike paths
- Access to recreational facilities
- Access to public transportation
- Access to highways or interstates
- Access to parking
- Access to rail
- Access to Denver International Airport
- Access to meeting space
- Access to hotels
- Convenient for clients/customers
- Convenient for employees
- Close to university

Based on preliminary results, the research team analyzed primary employer access to the amenities identified as the most important by survey respondents, including: restaurants, public transportation, walkable environment, and recreational facilities.

Access to amenities was evaluated within a GIS using Walk Score[®] data. Walk Score[®] is a commercial data provider that has established an international measure for “walkability.” The “Street Smart” Walk Score[®] algorithm analyzes the characteristics of the neighborhood surrounding a location to generate an estimate of the favorability of the walkable environment for pedestrians. The algorithm accounts for access to nine categories of amenities (grocery, restaurants and bars, shopping, coffee, banks, parks, schools, books, and entertainment), as well as physical characteristics of the walking network that affect its “pedestrian friendliness” (e.g., intersection density, block length). Access to amenities is based on

⁶ “The Gallagher Amendment impacts how much Colorado homeowners pay in property taxes. Under the Gallagher Amendment, the portion of residential property that is subject to taxation (called the “assessed value”) drops when residential property values statewide grow faster than nonresidential properties. In other words, when home values grow faster than business values, homeowners pay proportionately less. Since 1982, residential property values in Colorado have grown faster than nonresidential properties, causing the assessment rate on residential properties to drop from 21 percent in 1982 to 7.96% today. The assessment rate on Colorado businesses is 29%.” http://www.colorado.gov/cs/Satellite/Treasury_v2/CBON/1251592160342, retrieved July 5, 2012.

distances along known walking paths (obtained from Open Street Map data), with amenities weighted up or down based on their proximity to the location of interest. The cumulative estimated Street Smart Walk Score® is normalized to a range of 0 to 100, with 100 being the most walkable neighborhood possible. Individual scores are also provided for each of the amenity categories on the same normalized range of 0 to 100 (with 100 being the best access to an amenity).

Walk Score® data were obtained for each primary employer location within the city of Boulder. The scores presented in this study correspond to the amenities identified by the BEC as important to primary employers:

- Restaurants (Restaurants and Bars Walk Score®)
- Public Transportation (Transit Walk Score®)
- Walkable Environment (Street Smart Walk Score®)
- Recreational Facilities (Entertainment Walk Score® and Parks Walk Score®)

These scores are presented in a series of maps, as well as in tables summarizing subcommunity level averages and employee-weighted averages.

REAL ESTATE DATA SOURCES AND COMPUTATIONS

The primary sources of real estate information for this report are the city of Boulder's GIS Ownership Parcel Boundaries file, Zoning District file, the QCEW microdata, and the Boulder County Assessors' file (City and County building information tables). The City's GIS data served an important role in this study, enabling much of the real estate and amenities analyses. The purpose of this appendix is to provide key details about the provenance of the GIS data used in these analyses.

Information on parcel level zoning district classification was obtained from the City of Boulder's parcel level GIS data. Chapter 5, Title 9 (the Modular Zone System of the Land Use Code of the City of Boulder's Land Use Regulations) lists the following codes (see <http://www.colocode.com/boulder2/chapter9-5.htm> for zoning district purposes) (Table 28):

TABLE 28: MODULAR ZONE SYSTEM OF THE LAND USE CODE OF THE CITY OF BOULDER'S LAND USE REGULATIONS

Classification	Zoning District (Abbreviation)	Use Module
Residential	Residential - Rural 1 (RR-1)	R1
	Residential - Rural 2 (RR-2)	R1
	Residential - Estate (RE)	R1
	Residential - Low 1 (RL-1)	R1
	Residential - Low 2 (RL-2)	R2
	Residential - Medium 1 (RM-1)	R3
	Residential - Medium 2 (RM-2)	R2
	Residential - Medium 3 (RM-3)	R3
	Residential - Mixed 1 (RMX-1)	R4
	Residential - Mixed 2 (RMX-2)	R5
	Residential - High 1 (RH-1)	R6
	Residential - High 2 (RH-2)	R6
	Residential - High 3 (RH-3)	R7
	Residential - High 4 (RH-4)	R6
	Residential - High 5 (RH-5)	R6
	Residential - High 6 (RH-6)	R8
	Residential - High 7 (RH-7)	R7
Mobile Home (MH)	MH	
Mixed Use	Mixed Use 1 (MU-1)	M2
	Mixed Use 2 (MU-2)	M3
	Mixed Use 3 (MU-3)	M1
	Mixed Use 4 (MU-4)	B2
Business	Business - Transitional 1 (BT-1)	B1
	Business - Transitional 2 (BT-2)	B1
	Business - Main Street (BMS)	B2
	Business - Community 1 (BC-1)	B3
	Business - Community 2 (BC-2)	B3
	Business - Commercial Services (BCS)	B4
	Business - Regional 1 (BR-1)	B5
	Business - Regional 2 (BR-2)	B5
Downtown	Downtown 1 (DT-1)	D3
	Downtown 2 (DT-2)	D3
	Downtown 3 (DT-3)	D3
	Downtown 4 (DT-4)	D1
	Downtown 5 (DT-5)	D2
Industrial	Industrial - Service 1 (IS-1)	I1
	Industrial - Service 2 (IS-2)	I1
	Industrial - General (IG)	I2
	Industrial - Manufacturing (IM)	I3
	Industrial - Mixed Services (IMS)	I4
Public	Public (P)	P
Agricultural	Agricultural (A)	A
Flex District	Flex (F)	TBD

The summary classifications used in this report correspond to the classifications utilized in the table above. For example, Downtown classification is the sum of Downtown 1, Downtown 2, Downtown 3, Downtown 4, and Downtown 5 Zoning Districts. One exception to this convention is the “Residential” classification. Where specifically noted, the “Residential” classification only includes zoning districts for which commercial use may be permitted by Use Review (RL2, RM1, RM2, RM3, RMX1, RMX2, RH1, RH2, RH4, RH5, and RH3). Where not specifically noted, the “Residential” classification includes all residential zoning districts.

Subcommunity Boundaries

Description: Boundaries defining nine major subcommunities and the Downtown area within the city of Boulder used as assessment areas used in this study.

Source: City of Boulder; BRD Research Team

Feature Creation/Editing:

Subcommunities were defined using two GIS feature classes provided by the City: Subcommunities and the Business Improvement District (BID). The BID boundary was added to the subcommunities boundaries using the Update tool in ArcGIS, establishing a set of 10 areas—Downtown area plus 9 subcommunities: South Boulder, Southeast Boulder, CU-Boulder, Central Boulder, Crossroads, East Boulder, North Boulder, Palo Park, and Gunbarrel. Statistics for area labeled Central Boulder in this report are net of the Downtown area.

Ownership Parcel Boundaries

Description: Boundaries of legal parcels for the city of Boulder.

Source: City of Boulder; BRD Research Team

Feature Creation/Editing:

The BRD research team did not edit the geometry of the Ownership Parcel Boundaries from its original form.

Feature Attribute Enrichment:

The subcommunity for each parcel was attributed through a centroid spatial join with the Subcommunity Boundaries. Zoning district was included within the parcel boundaries as a native attribute. The research team attributed parcels with a binary field indicating whether or not they contained a primary employer. Initially, this attribution was conducted using a point-in-polygon spatial query with the primary employer locations. Subsequent verification revealed two shortcomings of this automated approach: (1) the existence of multi-parcel properties occupied by primary employers; and (2) the existence of “condo box” features within the parcel data (artificially small parcel boundaries used to represent individual parcel within a larger property of commercial or industrial condominiums).

To ensure that these issues did not affect estimates of land occupied by primary employers, manual verification and correction were conducted. Multiparcel properties were assessed by reviewing the primary employer locations geocoded using the Exact Address locator that had a status of “tie” (i.e., matched multiple parcels). All 88 primary employer locations that had a geocoding tie were verified through comparison to an aerial photograph and check of the surrounding parcels for shared address or shared owner. Only 15 of these locations proved to be “multiparcel,” with the smallest parcel added measuring only 0.000001 square mile.

To identify and correct condo boxes, all of the parcels containing primary employer locations and classified as condos, commercial condos, industrial condos, and warehouses were reviewed. In the case

of true condo boxes (which are artificially sized), all parcels associated with the property (i.e., all condo boxes and the surrounding common parcel) were reattributed as containing a primary employer. In the case of warehouses (which are sized accurately), only the surrounding common area parcels were reattributed as containing a primary employer, ignoring neighboring warehouses.

Primary Employer Locations

Description: Point locations for the 554 private-sector firms identified as primary employers by the research team.

Source: BRD Research Team

Feature Creation/Editing:

The list of companies established through the primary employer analysis (refer to Appendix 1 for details) was geocoded using two address locators provided by the City of Boulder: Exact Address and Street Range; both of which convert street addresses to geographic locations (i.e., a latitude and a longitude). The Exact Address locator works by matching input addresses to parcel addresses, placing the geocoded point at the centroid of the matched parcel. Street Range works by placing the geocoded point along a street segment based on the known range of addresses on that block. Due to its greater reliability, the Exact Address locator was used as the primary locator, with Street Range serving as a secondary option in the 6 cases (out of 554) where an exact parcel match could not be established.

Both address locators generated a score indicating the reliability of each geocoded location, on a range of 0 to 100, with 100 representing the most reliable location possible. Using these scores as a guide, all Street Range located points and all points with scores below 100 were manually verified and (if necessary and possible) corrected. Verification/correction was conducted by cross-referencing other GIS feature classes provided by the City (Ownership Parcel Boundaries, Streets), aerial imagery, and Google Maps/Street View. A sample of the remaining points, all of which had scores of 100, revealed that 26 of 30 (approximately 87%) were correctly located. To further improve the results, the remaining unverified locations were queried spatially against parcel boundaries. Seventeen points located outside of parcels were identified and manually corrected.

Feature Attribution Enrichment:

In addition to the descriptive information generated through the primary employer analysis (e.g., address, NAICS code), the primary employer locations were enriched with attributes from other sources. The zoning district and subcommunity for each point was derived through a point-in-polygon spatial join with the Ownership Parcel Boundaries provided by the City. Because a single point may only physically occupy a single parcel, points for firms occupying multiple parcels were flagged as “multiparcel” (see discussion of Ownership Parcel Boundaries below for further details on identification of multiparcel points). To compute land areas, parcels containing multiple primary employers are only counted once. Finally, each firm’s point was attributed with the number of employees, obtained from the QCEW microdata (Q4 2010 to Q3 2011 average), and the size of leased space, obtained from publications (e.g., *Boulder County Business Report*) and commercial real estate databases (Xceligent and Co-Star).

Primary Employer Density

Description: Counts of the number of firms at each unique primary employer location.

Source: BRD Research Team

Feature Creation/Editing:

Due to the granularity of the geocoding and verification process, several primary employer locations were coincident (or collocated). To establish the number of primary employers at each unique location, the Collect Events tool in ArcGIS was used. This tool generates an attribute for the count of coincident points at each location.

Feature Attribution Enrichment:

Separate analyses were run to generate data for primary employer densities by industries, including: Information; Manufacturing; Professional, Scientific, and Technical Services; Health Care and Social Assistance; and All Other Industries.

Primary Employee Density

Description: Raster-based (or grid-based) depiction of the variation in density of primary employees across the city of Boulder.

Source: BRD Research Team

Feature Creation/Editing:

The density estimates were created using the Kernel Density tool in ArcGIS Spatial Analyst. Kernel density estimation effectively spread out the population of employees found at each primary employer location over the surrounding area using a 0.25-mile radius. This method provides a smooth visual effect, obscuring the employment totals at isolated points, which are sensitive information. Kernel density estimation also mimics reality by accounting for the likelihood that employees are not likely to remain at a single location within a building, but rather may be spread out over a small radius centered on the building. The 0.25-mile radius was selected because it represents the average distance a person could walk in five minutes, assuming a walking speed of 3 miles per hour. The resolution and density units of the employee density grid are both in acres.

All Boulder Business Entity Locations

Description: Locations of all business entities within the City of Boulder.

Source: QCEW micro data; BRD Research Team

Feature Creation/Editing:

The QCEW microdata includes geocoded locations for each business entity, as well as attributes describing the quality or reliability of those locations. Based on the metadata provided with the QCEW file, the BRD research team determined an acceptable level of quality and extracted only those points meeting or exceeding that level. Additionally, locations for primary employers established by the research team were substituted for the locations provided by the QCEW data.

Feature Attribute Enrichment:

The zoning district for each business location was derived through a point-in-polygon spatial join with the Zoning District feature class provided by the City of Boulder.

Boulder City Buildings

Description: Table of commercial/industrial buildings within the City of Boulder.

Source: City of Boulder; BRD Research Team

Attribute Enrichment:

The information table of buildings provided by the City of Boulder included all assessed buildings within the city. To subset this table to include only those buildings that would be usable by a primary employer, two steps were taken. First, only nonexempt, commercial buildings were extracted using assessment rate and tax exemption information from the Building Class Code Assessment Rates table. Second, from the remaining buildings, a list of unique “building styles” was extracted. Based on the sectors and industries included in the primary employer analysis, the BRD research team identified building styles that would be suitable for use by primary employers. Using this list, the nonexempt, commercial buildings table was subset to only include building styles of suitable use. The remaining buildings were then attributed with zoning district and subcommunity based on a table join with the Ownership Parcel Boundaries.

Boulder County Buildings

Description: Table of commercial/industrial buildings within Boulder County.

Source: City of Boulder; BRD Research Team

Attribute Enrichment: As with the Boulder city buildings, the county buildings table included all buildings in the Boulder County Assessor’s database. The same process used to classify the city buildings was implemented for the county buildings, producing a table of only non-exempt, commercial buildings of suitable use. These buildings were attributed with the property’s location based on a table join with the county parcel boundaries, which were themselves enriched with the town/city based on a centroid spatial join with the County Cities feature class provided by the City GIS staff.

Walk Score®

Description: Standardized scores describing walkability of a location, as well as access to several amenities (grocery, restaurants and bars, shopping, coffee, banks, parks, schools, books, and entertainment).

Source: Walk Score®

Feature Creation/Editing:

The BRD research team did not edit the geometry of the Walk Score® data from its original form. For a detailed description of the algorithm used to establish Street Smart Walk Score® and associated amenities scores, refer to Walk Score (2011).

APPENDIX 2: DEFINITIONS

Real Gross Domestic Product (GDP): A measure of economic activity, GDP is the total value added by resident producers of final goods and services.

Gross Output (Output): The total value of production is gross output. Unlike GDP, gross output includes intermediate goods and services.

Value Added: The contribution of an industry or region to total GDP, value added equals gross output, net of intermediate input costs.

Foreign Exports: The export of commodities to destinations outside of the United States.

Domestic Export: The export of goods and services from the region to every county.

Metropolitan Statistical Areas:

- Boulder MSA: Boulder County
- Fort Collins-Loveland MSA: Larimer County
- Denver MSA: Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson, and Park counties
- Colorado Springs MSA: El Paso and Teller counties
- Pueblo MSA: Pueblo County
- Grand Junction MSA: Mesa County
- Greeley MSA: Weld County

North American Industry Classification System (NAICS): The standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. (<http://www.census.gov/eos/www/naics/>)

Geographic Information Systems (GIS): A digital, computer-based system or systems for managing, analyzing, and presenting spatial data and information.

APPENDIX 3: ECONOMIC OVERVIEW

In the first half of 2012, the U.S. economy posted modest progress. After a promising start to the year, job growth slowed in Q2. The real estate market is showing some signs of bottoming out; foreclosure rates have been dropping, but prices remain fragile despite extremely low mortgage rates. Retail sales and manufacturing have achieved uneven gains. Current risks that could slow the recovery include the European sovereign debt crisis; U.S. fiscal spending and debt issues, including sequestration; and a risk in the banking industry. Cutbacks in government spending continue to drag on the economy, notably through decreasing Government Sector employment. Banks have exposed trading losses that show some troubled balance sheets. Consumer confidence continues to be positive, but slightly less so than a few months ago. There is little sign of inflationary issues in the marketplace.

The Federal Open Market Committee released a statement late June outlining the Fed's reaction to softening economic conditions, a darkening jobs picture, and enduring low inflation rates. The Fed decided to extend two expansionary policies: "Operation Twist," a plan designed to lower long-term interest rates through the end of the year, and a federal funds rate target at 0 to 0.25% through late 2014.

Colorado and Boulder have more pronounced positive signals than can be seen on the national level. Employment is recovering more quickly than it is for the United States. The 2012 April year-to-date value of construction is strikingly higher than it was a year earlier, with particularly large gains in residential construction in Boulder and nonbuilding construction in Colorado. As well, Colorado and Boulder have disproportionately high levels of innovation and entrepreneurship, which are crucial drivers of economic growth.

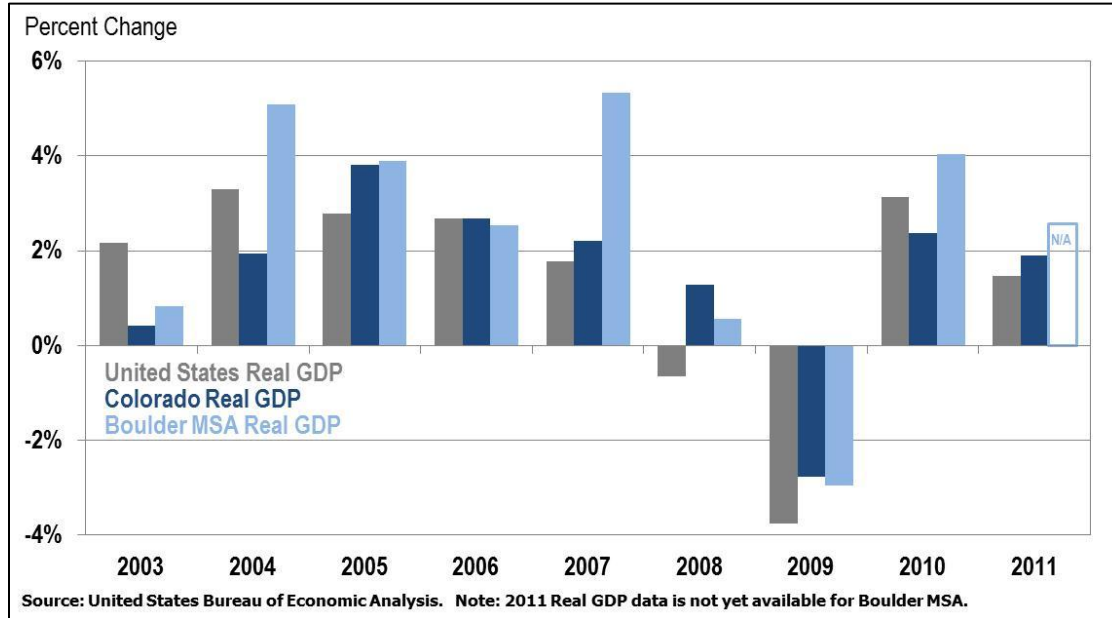
This economic overview presents the current economic context for primary employers in Boulder. Output, industries, firms, employment, wages, real estate, industry clusters, innovation, and entrepreneurship all add to the picture of the area's economic state.

OUTPUT

National real GDP, the output produced by labor and property located in the United States, grew 1.9% in the first quarter of 2012 compared to the fourth quarter of 2011. Recent national gains in real GDP were largely driven by growth in durable goods expenditures and private domestic investment, particularly equipment and software. Real GDP has been improving each year since 2009. In 2011, real GDP reached \$13.1 trillion (chained 2005 dollars), or \$42,070 per capita.

Boulder County and Colorado both have had real GDP growth that outperformed national GDP growth the majority of recent years. Boulder has posted particularly strong gains; in 2010, Boulder's real GDP grew just over 4% year-over-year, to \$17 billion (chained 2005 dollars), or \$57,755 per capita. Colorado real GDP grew 3.1% over the same period, reaching \$230 billion (chained 2005 dollars) in 2010, or \$45,551 per capita. In 2011, the state's real GDP grew 1.9%, to \$234 billion (chained 2005 dollars), or \$45,792 per capita.

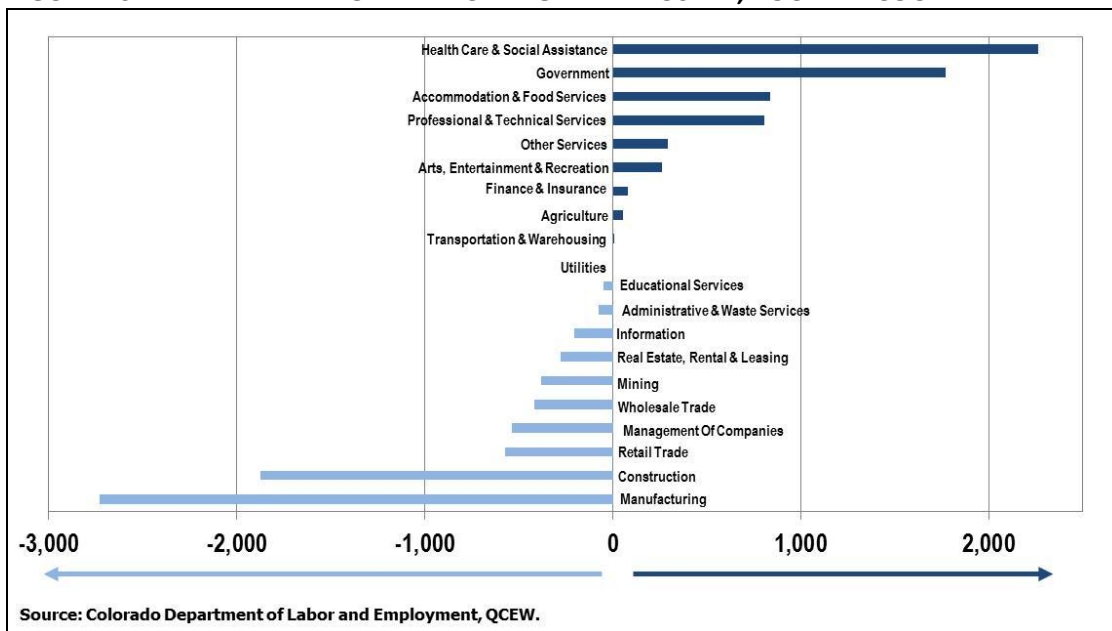
FIGURE 15: UNITED STATES, COLORADO, AND BOULDER COUNTY CHANGES IN REAL GDP



INDUSTRIES

Examining industry data highlights the broad destruction of the recession, with only half of industries posting job gains from 2006 through 2011. Industries with moderate gains over the five-year period were Government; Health Care; and Professional, Scientific, and Technical Services. Those with major job losses included Manufacturing, Construction, and Retail Trade.

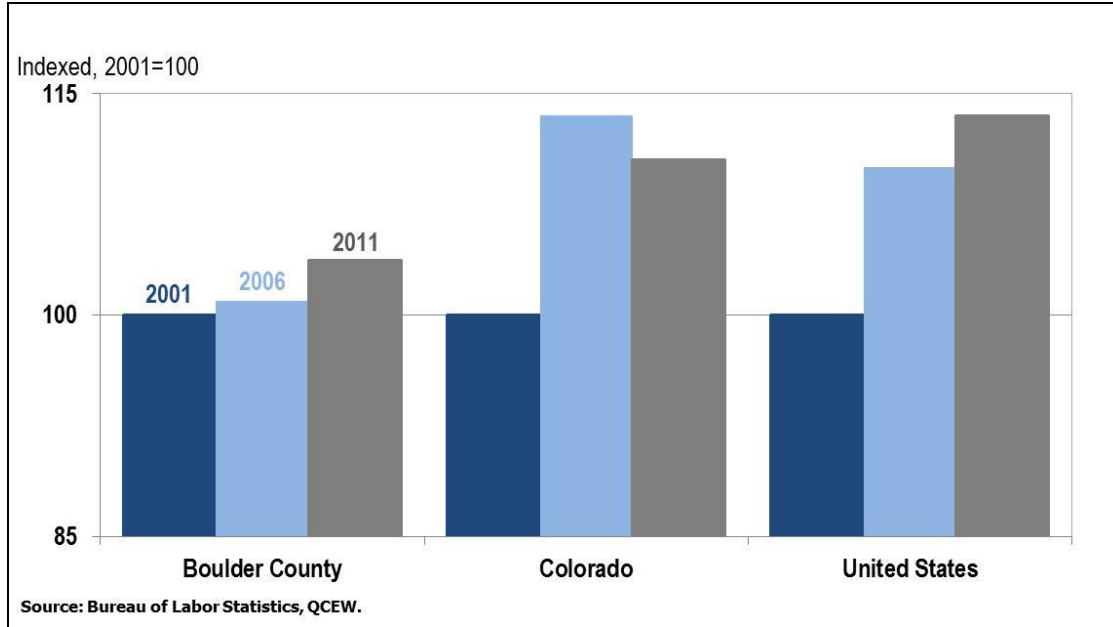
FIGURE 16: FIVE-YEAR EMPLOYMENT CHANGE BY INDUSTRY, BOULDER COUNTY



FIRMS

Compared to the number of firms in Colorado and the nation, the number of firms in Boulder has not grown as much since 2001. However, since 2006, firm growth in Boulder has surpassed that of the state.

FIGURE 17: NUMBER OF UNITED STATES, COLORADO, AND BOULDER COUNTY ESTABLISHMENTS



EMPLOYMENT

An improved labor market is essential to economic recovery. As such, the currently weakening jobs picture nationally threatens business and consumer confidence. Employment levels remain well below the pre-recession peak. While initial jobless claims dropped to a four-year low in February, they have ballooned over the past few months. After robust job growth at the end of 2011 and in the first couple of months of 2012, job growth has weakened.

Boulder and Colorado present a slightly rosier economic picture. While Colorado employment remains below peak, which was some four years ago, it has rebounded more quickly than national employment. Boulder employment has recovered even more quickly than Colorado employment.

FIGURE 18: COLORADO AND BOULDER EMPLOYMENT

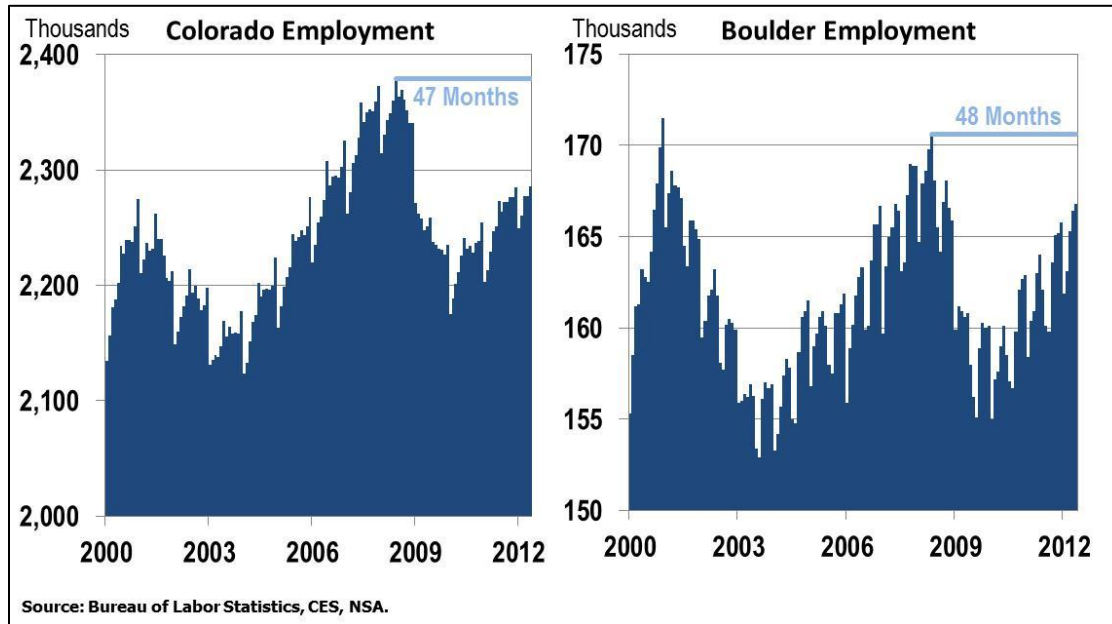
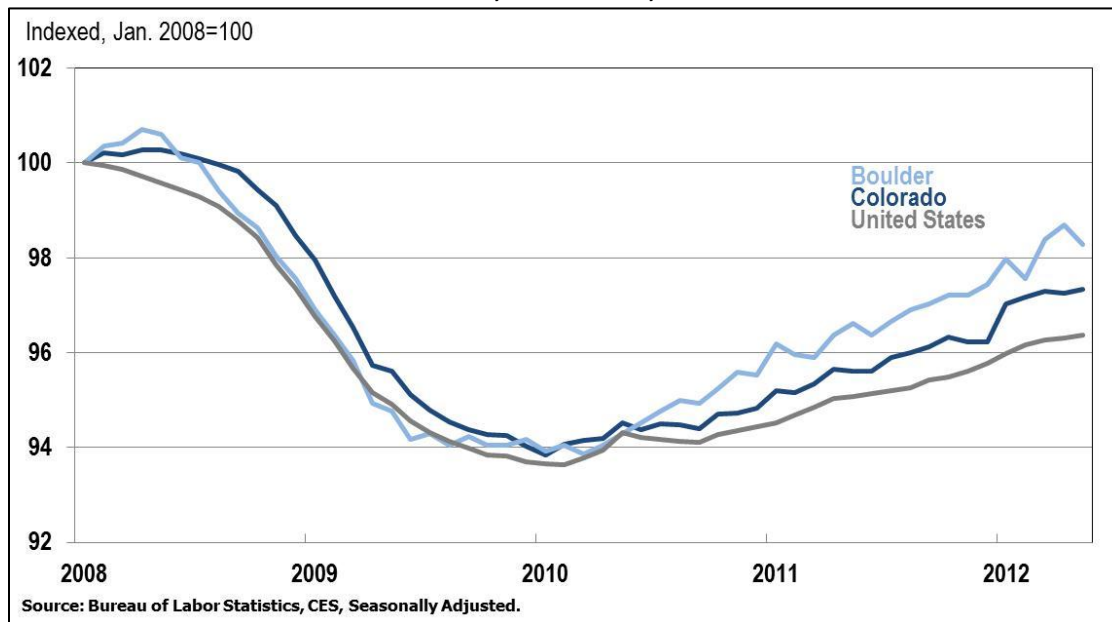


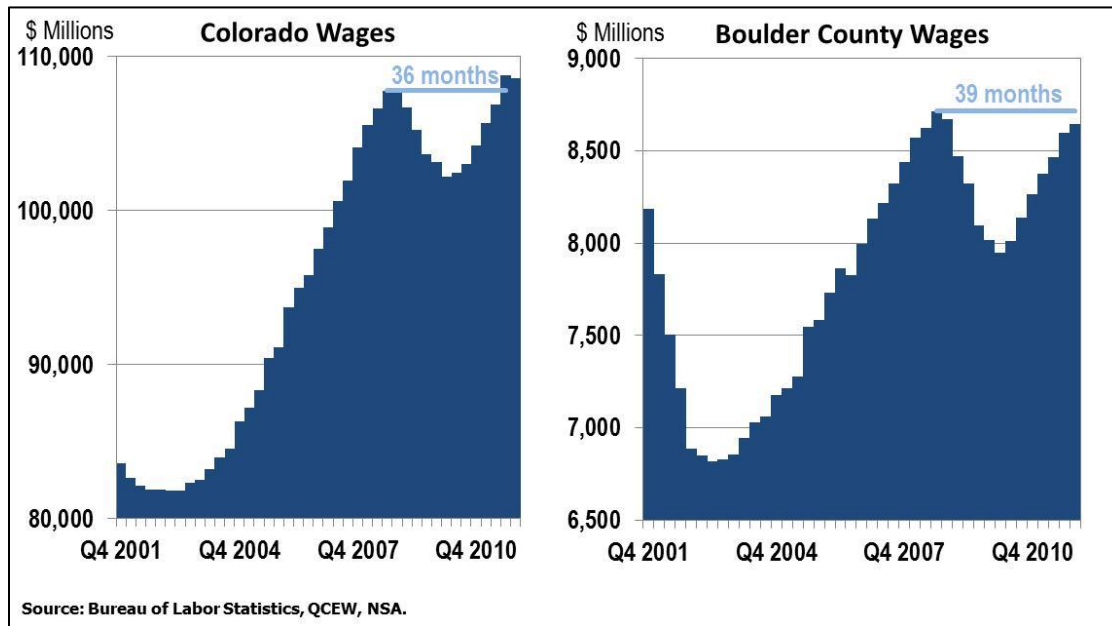
FIGURE 19: CHANGES IN UNITED STATES, COLORADO, AND BOULDER COUNTY EMPLOYMENT



WAGES

In Colorado, wages took some three years to recover to peak levels; in Boulder County, wages are nearly as high as they were at peak.

FIGURE 20: COLORADO AND BOULDER WAGES



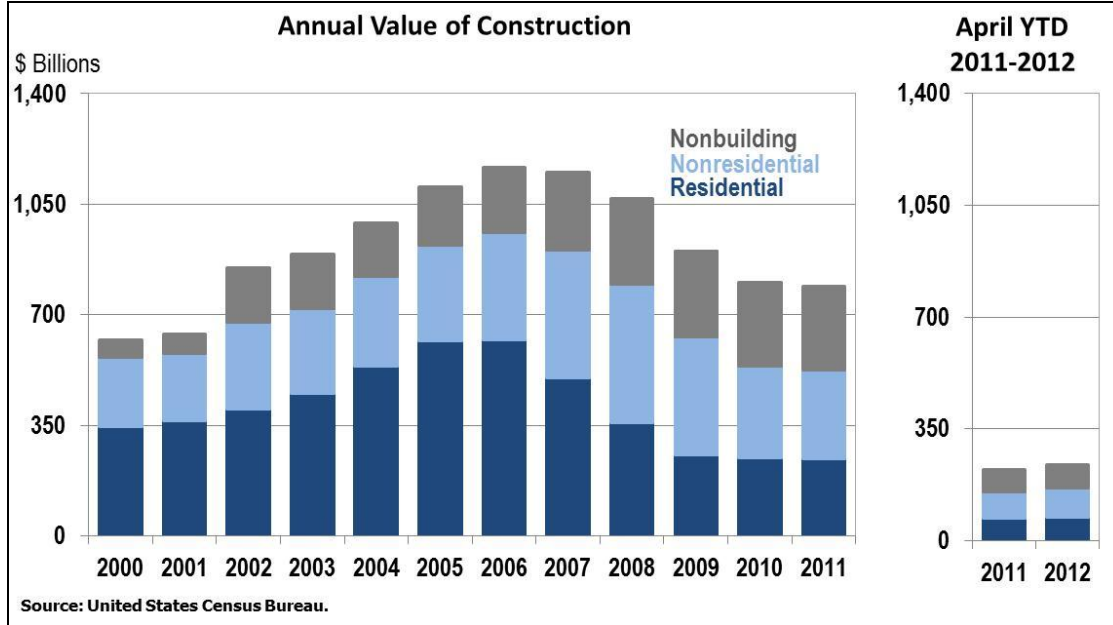
REAL ESTATE

While activity levels remain below those of the recent housing boom, real estate trends of late are more promising, particularly in Colorado. Gains for real estate include increasing construction sector employment, growth in year-to-date April residential building permits, and falling foreclosure rates. However, these numbers remain far below peak. The lack of strong home prices and a meaningful improvement in employment continue to undermine a recovery.

As of April 2012, Construction industry employment in Colorado made larger gains than in the nation. While industry employment increased 6.8% from the June 2011 low point (seasonally adjusted), it is still down 31% from the peak. Employment in the Construction sector is up 4.2% year-over-year, seasonally adjusted, in April. This sector currently employs 117,900, compared to 170,100 in July 2007. U.S. construction industry employment increased 1.6% from the January 2011 low point (seasonally adjusted); it is still down 29% from the peak. Employment in Construction is up 0.9% year-over-year, seasonally adjusted, in April. Nationwide, this sector currently employs 5,544,000, compared to 7,726,000 in April 2006.

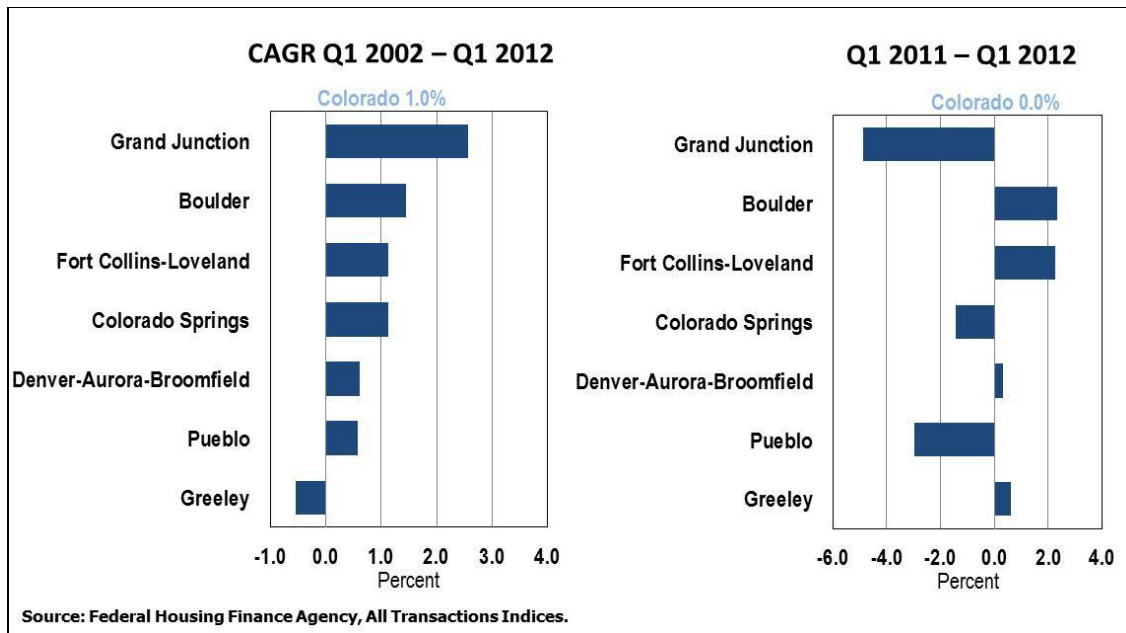
The total value of Construction in Boulder County and the nation slowed its decline in 2011. Mild weather in the first quarter 2012 and clearing inventory of homes both contributed to an encouraging beginning to the year. Nationwide, the year-to-date April 2012 value of Construction was 7% higher than it was in 2011. The strongest gains were in nonresidential, up 10%, led by increases in commercial and health care.

FIGURE 21: VALUE OF CONSTRUCTION, UNITED STATES



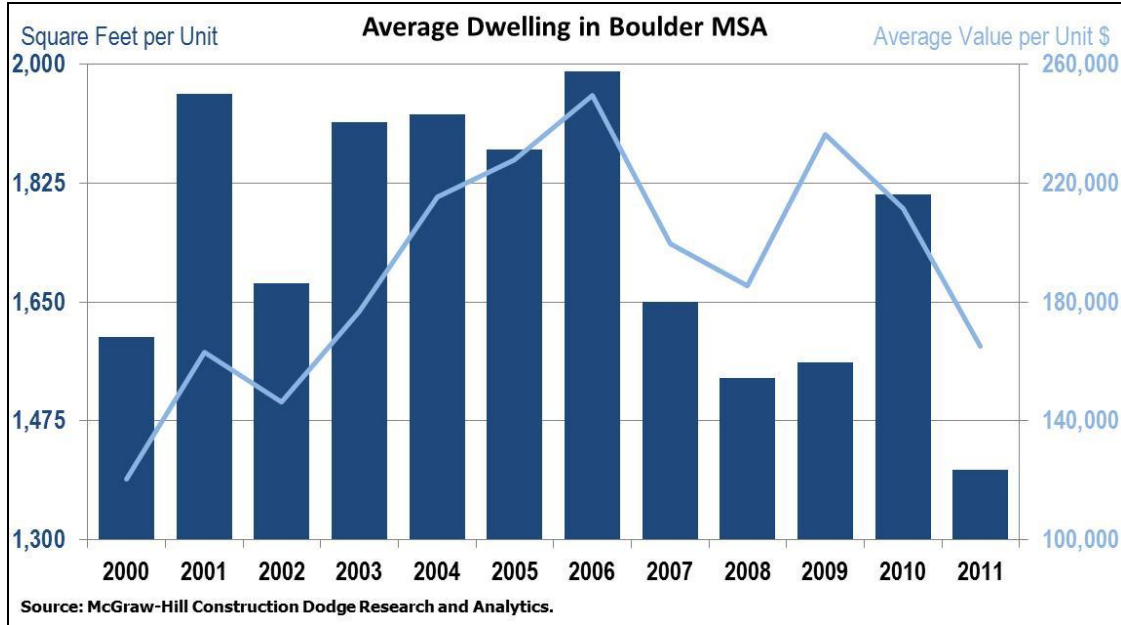
Home prices continue to be fragile. The All-Transactions Index in Q1 2012 in Colorado was flat year-over-year and down 0.5% quarter-over-quarter. The Federal Housing Finance Agency (FHFA) reported that index prices fell 1.4% year-over-year nationally. Colorado metropolitan areas recorded mixed year-over-year changes. Home prices logged gains in Boulder (2.3%), Fort Collins-Loveland (2.3%), Greeley (0.6%), and Denver-Aurora-Broomfield (0.3%). Prices posted year-over-year declines in Grand Junction (-4.9%), Pueblo (-3.0%), and Colorado Springs (-1.4%).

FIGURE 22: CHANGES IN COLORADO HOME PRICES BY MSA



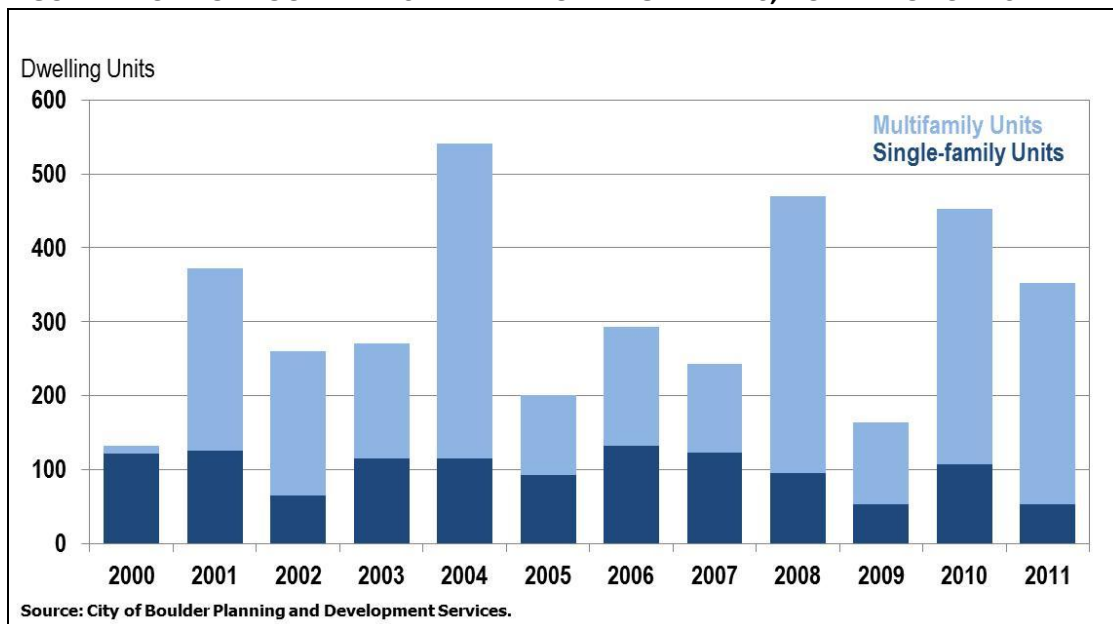
Although Boulder County home prices have increased over the past decade, the size of dwelling units constructed have decreased since their 2006 highs. In 2011, dwelling units constructed in Boulder County had an average square footage of roughly 1,400 square feet, down 29% from the 2006 average, nearly 2,000 square feet.

FIGURE 23: NEW DWELLINGS CONSTRUCTED, AVERAGE SIZE IN BOULDER MSA



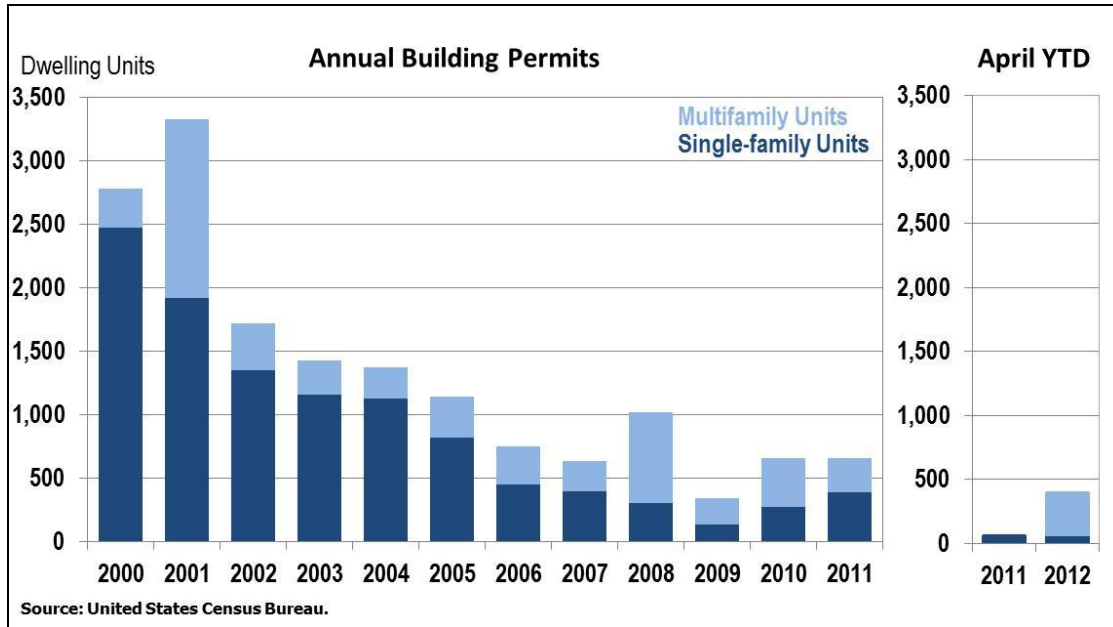
The number of residential building permits illustrates construction activity. In the city of Boulder, the majority of units built over the past dozen years have been in multifamily buildings, such as duplexes and apartment buildings. The long-term trend in the City’s residential building permits demonstrates the volatility in Boulder’s real estate development market.

FIGURE 24: CITY OF BOULDER RESIDENTIAL BUILDING PERMITS, NUMBER OF UNITS



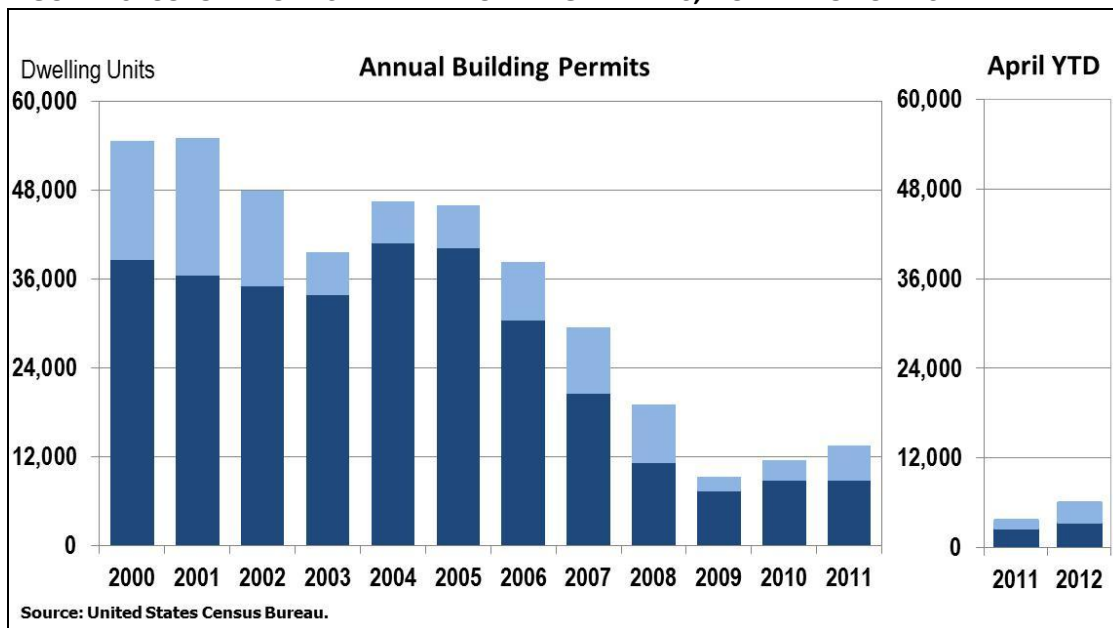
In Boulder County, a larger proportion of residential building permits have been for single-family homes. The number of units has followed a downward trend over 12 years. Cumulative-to-date April 2012 data show permits up 533%, mostly due to multifamily unit construction in the city of Boulder.

FIGURE 25: BOULDER COUNTY RESIDENTIAL BUILDING PERMITS, NUMBER OF UNITS



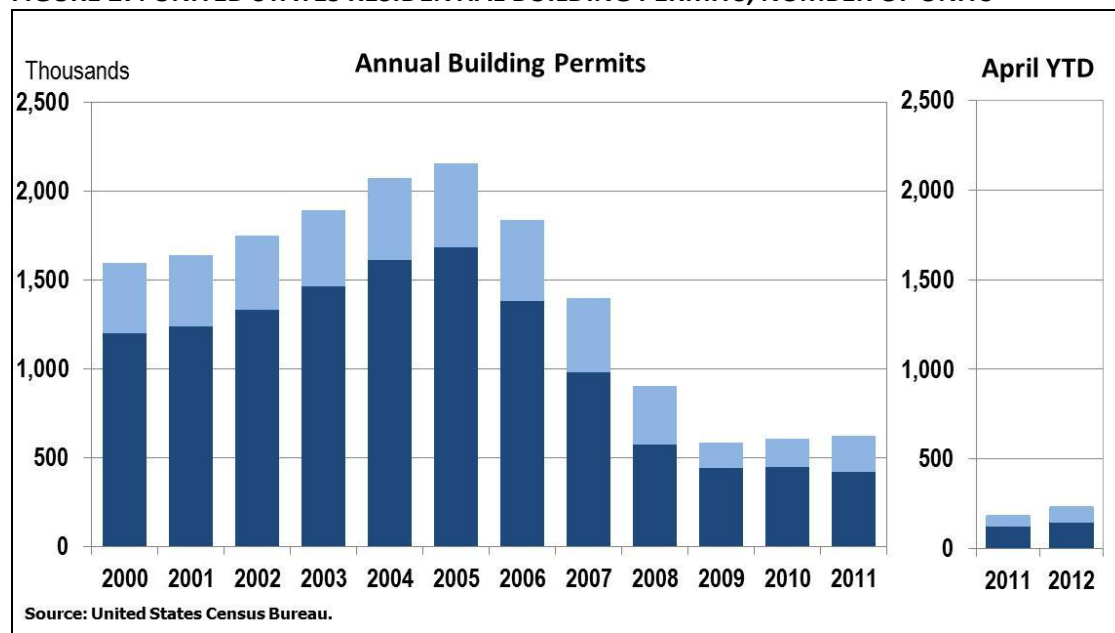
Building permits in Colorado have rebounded, up 20% in 2011, from 2009 lows. Additionally, the number of residential building permits cumulative to-date April 2012 show promise on a statewide level; there were 65% more units year-to-date April 2012 compared to year-to-date April 2011.

FIGURE 26: COLORADO RESIDENTIAL BUILDING PERMITS, NUMBER OF UNITS



Residential building permits in the United States draw a parallel to the buildup and bust in real estate. Slight gains since the low in 2009 have been primarily from an increasing number of multifamily units.

FIGURE 27: UNITED STATES RESIDENTIAL BUILDING PERMITS, NUMBER OF UNITS



According to the Colorado Division of Housing in Q1 2012, the number of foreclosure filings fell year-over-year by 3.7% and completed foreclosures declined year-over-year by 24.7%. Quarter-over-quarter, filings fell 8.9%, but foreclosure sales increased 4%. The number of housing units per completed foreclosure metric stood at 469 in Q1 2012, compared to 488 in Q4 2011 and 347 in Q1 2011. Boulder County recorded the lowest foreclosure rate in the Denver Metro region in Q1, with 1,067 housing units per single foreclosure. Adams County recorded the highest rate in the region, with 323 units per completed foreclosure—both slipping slightly compared to Q4 2011.

The city of Boulder expects to see considerable construction. According to the *Daily Camera*, over 30 building projects are due to hit Boulder over the next two years (Wallace 2012). These developments should add significantly to Boulder’s stock of apartments, hotel rooms, office spaces, and retail spaces. The planned escalation in construction activity is largely in response to pent up demand, a return of financing, and planned changes in such areas as Boulder Junction near 30th and Pearl Street.

A rebound in home prices and the labor market are crucial to a full recovery in real estate. In the meantime, recent trends in Colorado—such as increasing Construction Sector employment, growth in year-to-date April residential permits, falling foreclosure rates, and upcoming building projects—show promise for local real estate. As current figures remain well below heyday levels of the real estate boom, Colorado real estate still has a long way to go.

INDUSTRY CLUSTERS

A *cluster* refers to a geographical agglomeration of industries or companies serving a particular field. Clusters are important to an area because they present opportunities to leverage resources, including information, supply chains, customers, and researchers. Boulder County is home to high-technology

clusters, such as biotechnology, photonics, nanotechnology, and information technology. The clusters initially developed due to the proximity of the University of Colorado and federal research facilities, but at some point, they became self-perpetuating, with more firms locating in the area due to the critical mass of existing firms.

The following cluster analysis is based on 6-digit QCEW data, which are currently available for the nation for 2010.⁷ For consistency and comparison, this methodology uses the Metro Denver Economic Development’s NAICS definition of clusters.⁸ Identifying NAICS that are involved in these clusters provides a comparative methodology to other local regions, to the state, and to the nation. The shortcoming is that not all companies that operate within a particular NAICS industry are also serving the cluster (e.g., iron and steel forging is a necessary activity for the aerospace cluster, but not all iron and steel forging companies are delivering aerospace products). This analysis of NAICS, then, serves to illustrate the industry infrastructure capable of facilitating clusters.

The greatest concentration of cluster employment in the Boulder MSA is in the Bioscience, Information Technology, and Aerospace clusters, each recording concentrations of about five times or more the national average (Table 29). Two clusters pay wages in excess of \$100,000—Aerospace and Information Technology. The Financial Services concentration is 30% below the national average, with many of these firms clustering within the Denver MSA. Energy includes fossil resources, as well as renewable energy and energy research. Boulder County has some fossil fuels, but the majority of the local industry is in renewable energy and energy research. Surprisingly, despite the federal labs and university, Government does not exceed the national concentration.

TABLE 29: BOULDER MSA CLUSTERS

Cluster	Employment	LQ	Average Wages
Aerospace	6,229	4.8	\$106,923
Bioscience	4,174	5.5	\$105,267
Energy	6,310	1.3	\$85,214
Financial Services	4,814	0.7	\$75,186
Information Technology	11,655	5.0	\$108,420
Government	26,156	1.0	\$50,377
Federal Government	2,319	0.7	\$88,693
State Government	8,844	1.6	\$55,099
Local Government	14,993	0.9	\$41,666

Source: Metro Denver Economic Development Corporation, <http://www.metrodenver.org/industries-companies/industries>, as of May 2, 2012.

Innovation/Entrepreneurship

Boulder’s high-tech clusters contribute to the area’s emphasis on innovation and entrepreneurship. Technological progress from innovation and entrepreneurship is a crucial contributor to economic growth. New processes boost productivity, thus encouraging output growth. New products and services create new areas for prosperity. As measured by National Science Foundation awards, Colorado

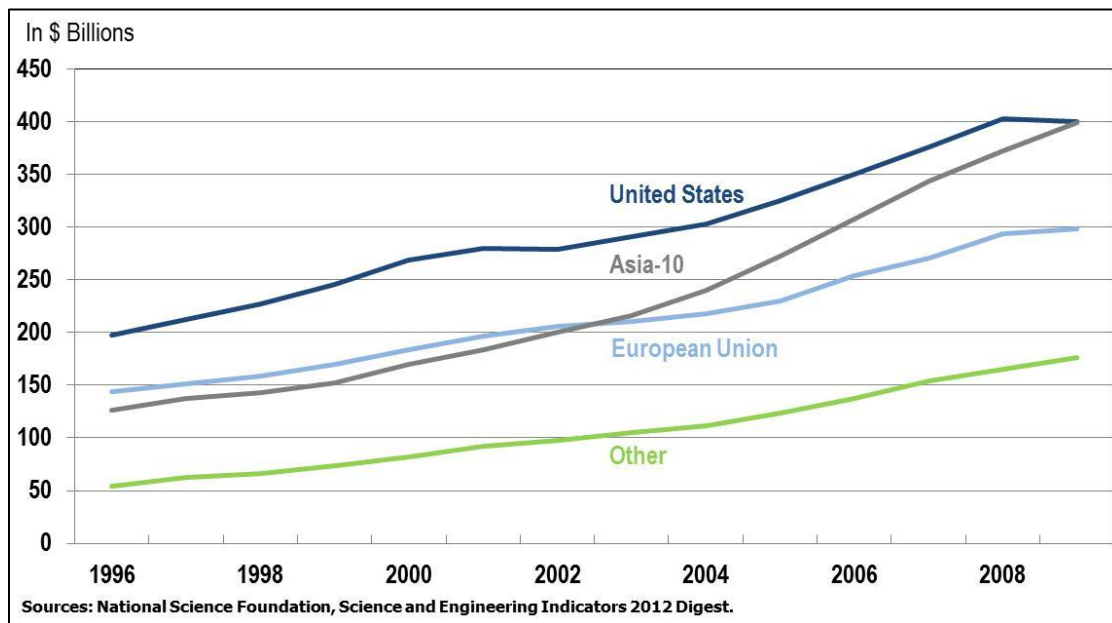
⁷<http://www.bls.gov/data/>, Location Quotient, accessed May 2, 2011.

⁸Metro Denver Economic Development Corporation, <http://www.metrodenver.org/industries-companies/industries>, accessed May 2, 2011.

contributes a disproportionately large share of innovation in the United States. Moreover, the city of Boulder has a particularly high concentration of innovation funding.

The United States is losing ground as the global leader in supporting research and development, a vital driver of innovative activity. For years, the nation has exceeded other major economies in resources devoted to R&D. In 2009, though, the United States maintained its lead by only a thin margin as Asian R&D escalated. That year, R&D remained roughly flat in the United States (-0.6%), while R&D gained 7.1% in the Asia-10 (the combined economies of China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand). R&D expenditures grew especially rapidly in China, outpacing the country's brisk GDP growth.

FIGURE 28: GLOBAL RESEARCH AND DEVELOPMENT



Colorado and Boulder provide strong contributions to innovation in the United States. This is partially due to a high density of technology-intensive industries in recent years. High-tech employment, including jobs in Manufacturing, Professional and Business Services, and Information, make up some 29% of jobs in Boulder. This is 1.72 times as concentrated as high-tech employment in the United States, around 17% of jobs. Colorado has a higher concentration of occupations in computer and mathematical science, architecture and engineering, and life physical and social science than the nation; the concentration of these occupations is particularly high in Boulder.

FIGURE 29: HIGH-TECHNOLOGY EMPLOYMENT

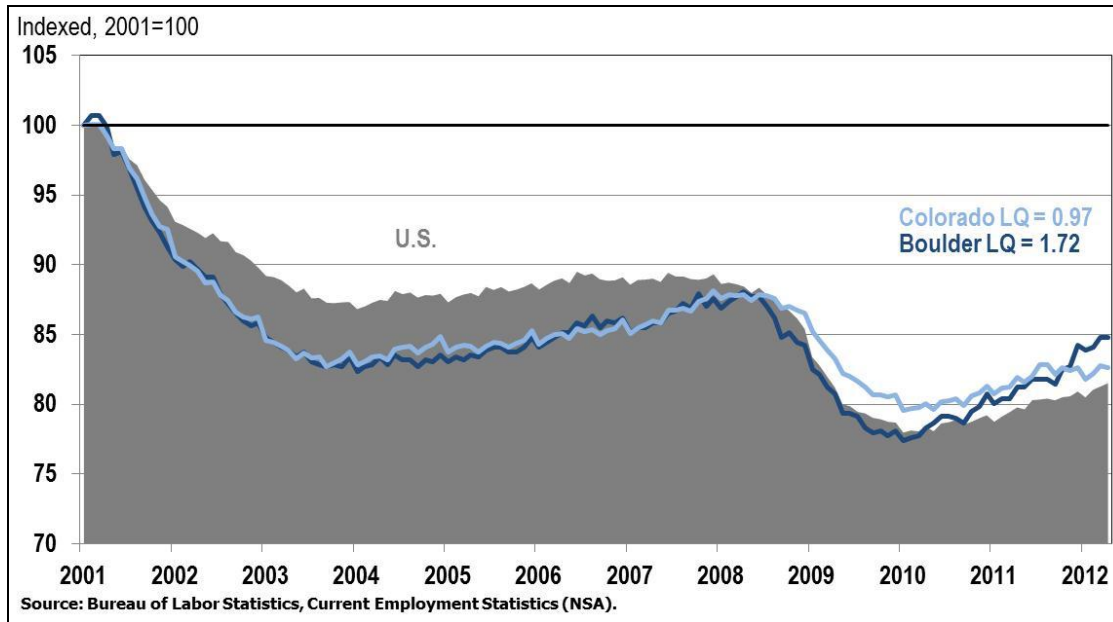
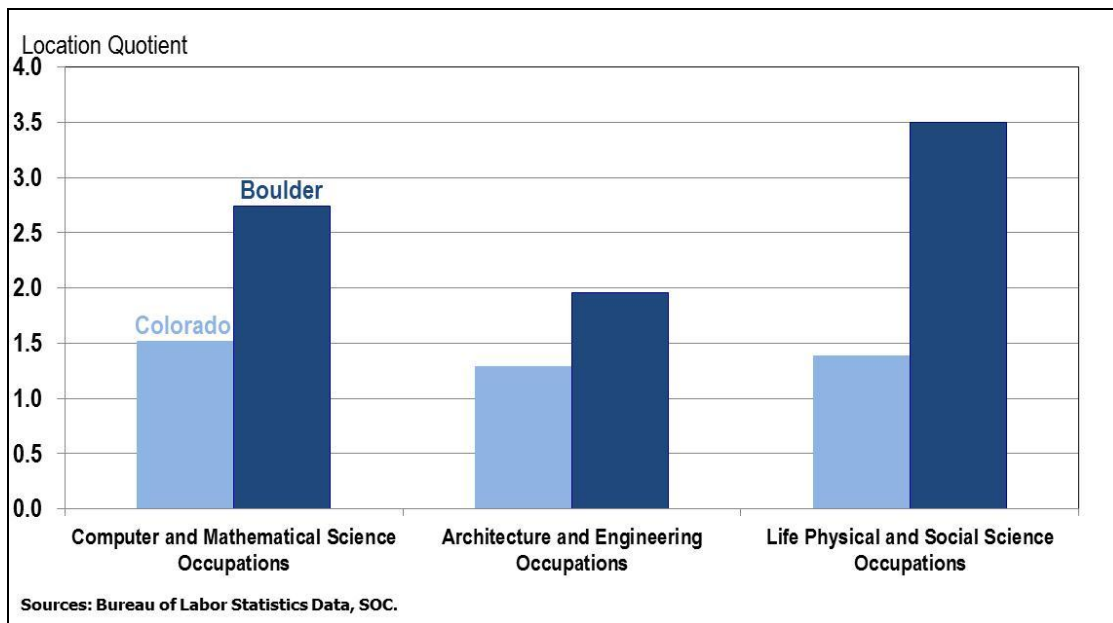
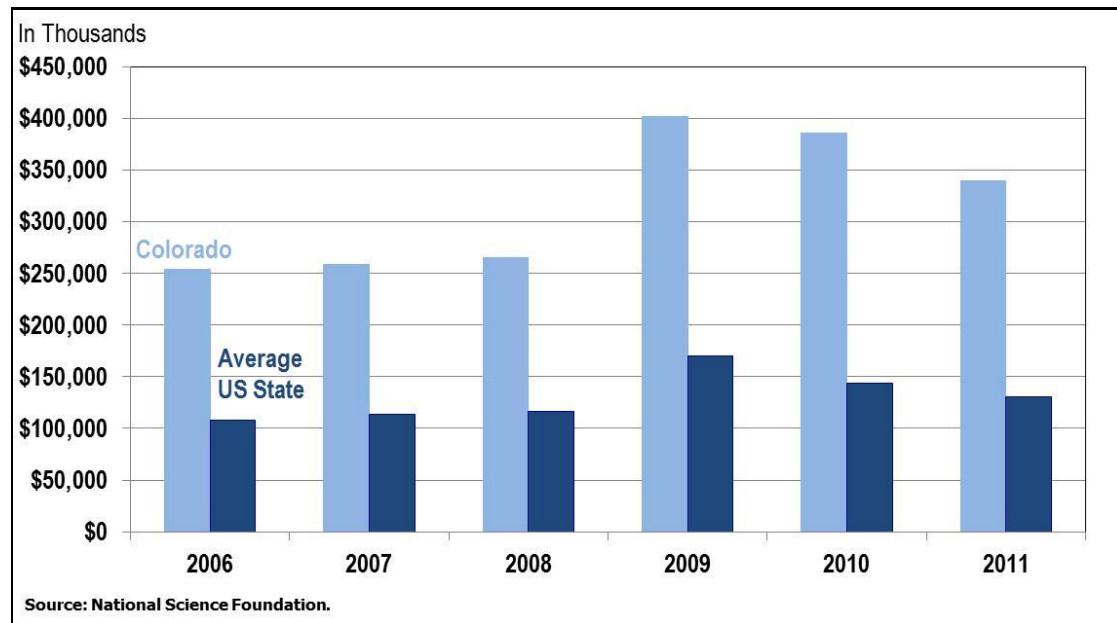


FIGURE 30: CONCENTRATION OF HIGH-TECHNOLOGY OCCUPATIONS



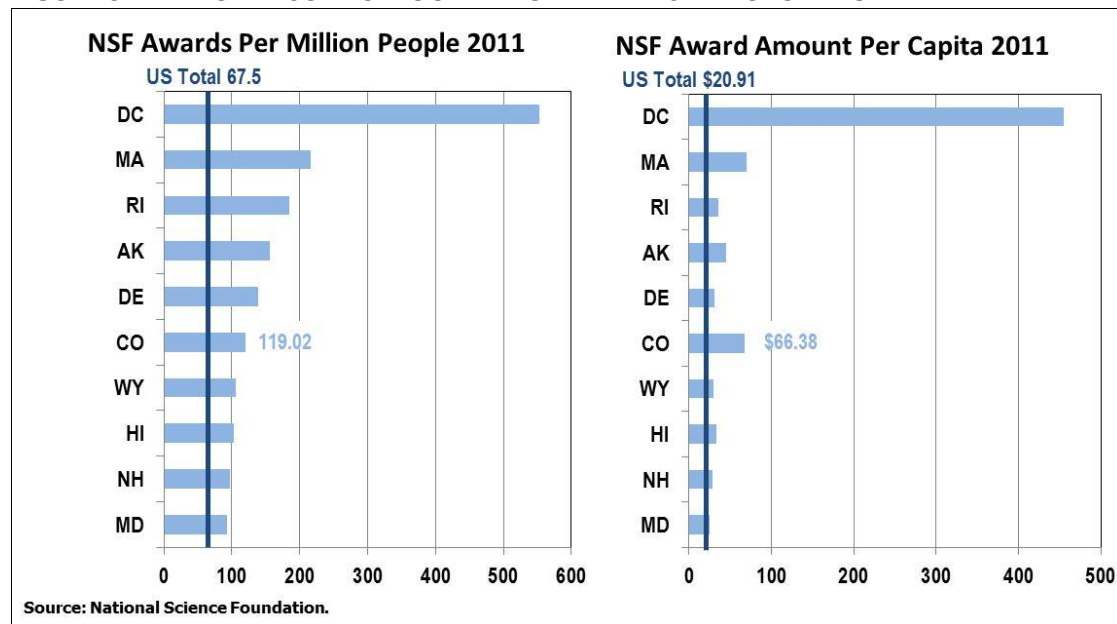
One measure of innovation is the amount of National Science Foundation funding received for research and education in engineering and science. Colorado has consistently obtained more funding from the National Science Foundation than the average for all states. In 2011, Colorado received awards totaling nearly \$340 million, 160% more than the national average.

FIGURE 31: NATIONAL SCIENCE FOUNDATION AWARDS BY STATE



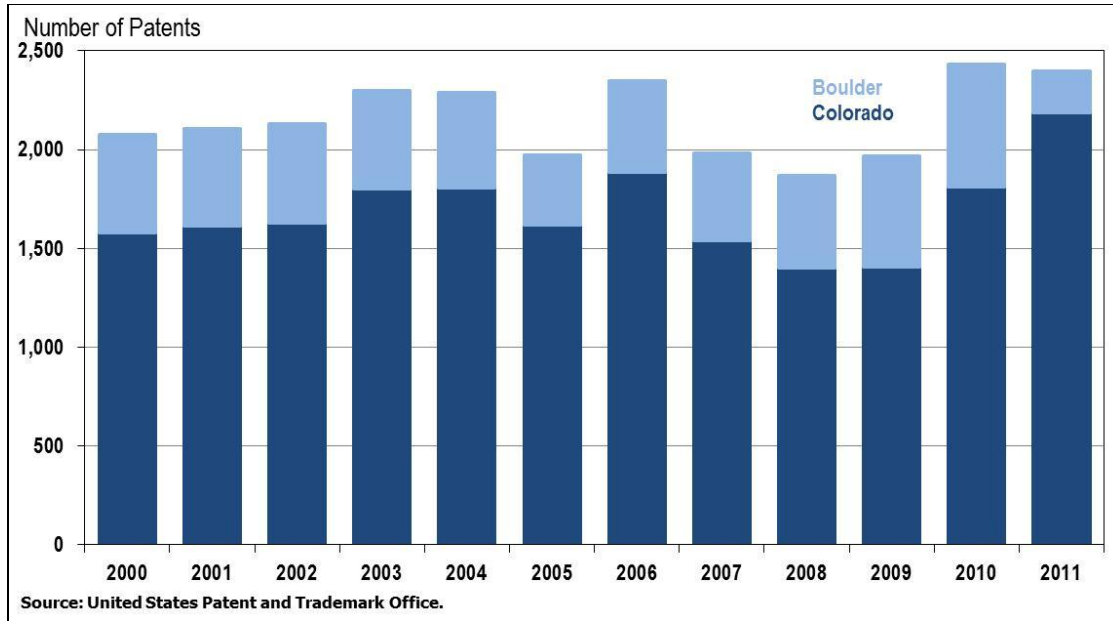
When National Science Foundation funding is normalized by state population, Colorado still stands out as a concentrated region for innovation. In 2011, Colorado ranked sixth in the nation for the number of National Science Foundation awards, with 119 awards per million people. Boulder accounts for 59% of Colorado awards. More remarkable, Colorado ranked third in the nation for the amount of funding received from the National Science Foundation, \$66 per capita in 2011. The city of Boulder received \$2,689 in awards per capita, accounting 77% of Colorado award dollars.

FIGURE 32: NATIONAL SCIENCE FOUNDATION AWARDS BY POPULATION



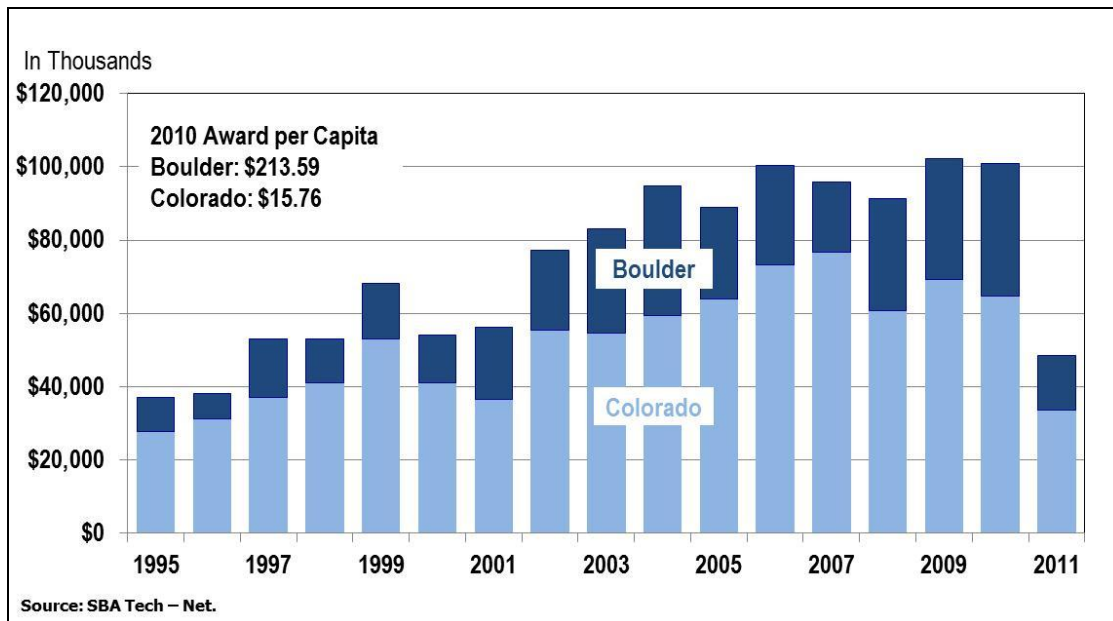
Patents, too, tend to correspond with innovation. Boulder accounts for roughly 20% of patents filed in Colorado.

FIGURE 33: COLORADO AND BOULDER PATENTS



Small business innovation research reached nearly \$16 per capita in Colorado and \$214 per capita in Boulder in 2010.

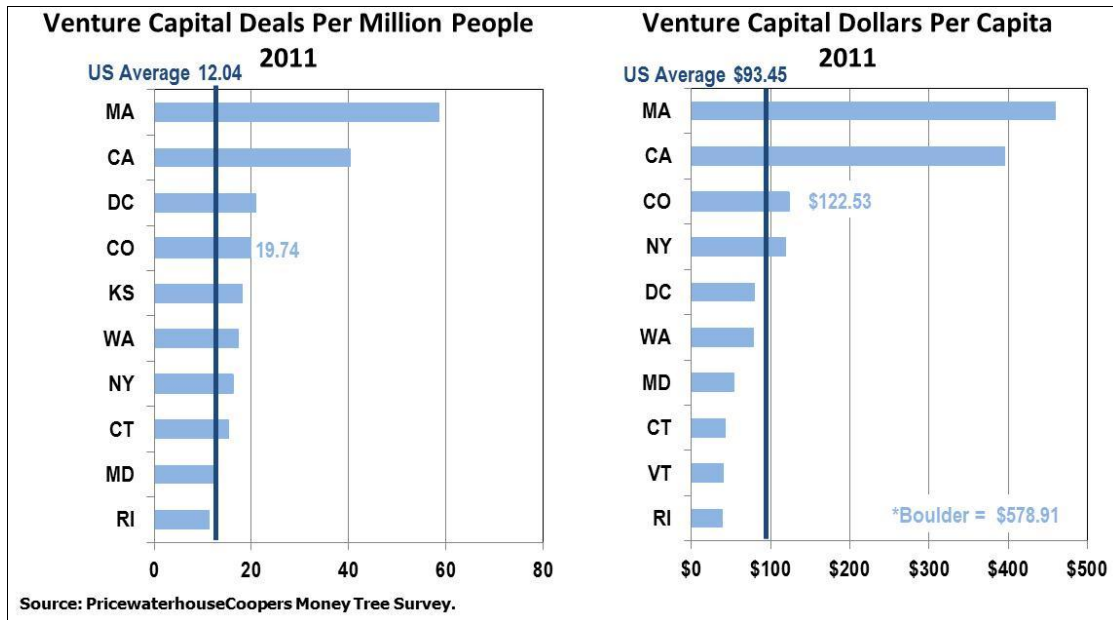
FIGURE 34: SMALL BUSINESS INNOVATION RESEARCH PHASE 1 AND PHASE 2 AWARDS



Colorado and Boulder are also leaders in venture capital funding, an indicator of entrepreneurship. In 2011, venture capital dollars per capita in Colorado were \$122.53, about 31% higher than the national

average. Boulder had \$578.9 in venture capital funding per capita, 519% higher than the U.S. average. In the first quarter of 2012, Colorado had 20 deals totaling \$121.6 million, 2.1% of the national total.

FIGURE 35: VENTURE CAPITAL ACTIVITY



Many indicators augur well for Boulder’s economy. Innovation and entrepreneurship are strong, thanks to Boulder’s high-technology clusters; building permits are showing an incipient revival in real estate; and employment has rebounded more quickly than it has nationally. Even so, economic headwinds are holding back the macro economy.

INDUSTRY ANALYSIS

The following section presents snapshots of the Boulder economy compared to other metropolitan areas and to the state of Colorado. It highlights industries that include Boulder’s primary employers. Employment data are current through Q3 2011, and real GDP data are current through 2010. Compound annual growth rates for employment, wages, and firms are calculated based on four-quarter data ending Q3 2006 compared to four-quarter data ending Q3 2011.

Manufacturing -- The concentration of Manufacturing employment in the city is on par with the nation and slightly more concentrated in the county. One out of ten Boulder jobs are in this industry, which pays significantly higher-than-average wages. Manufacturing products generally serve a broader market, thus bringing outside investment into the community and making the industry a primary employer. Strong Manufacturing subsectors in Boulder include food, textile, and high tech.

TABLE 30: MANUFACTURING (NAICS 31-33)

MANUFACTURING EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Manufacturing employees in area	8,784	15,730	12,634	61,893	10,851	2,592	10,911	4,190	9,404	128,204
Percentage of area employees	9.7%	10.1%	5.2%	5.2%	8.5%	4.5%	13.4%	7.4%	3.2%	5.8%
Percentage of state Manufacturing employees	6.9%	12.3%	9.9%	48.3%	8.5%	2.0%	8.5%	3.3%	7.3%	100.0%
Employment CAGR, 2006-2011	NA	-3.5%	-7.0%	-3.0%	-2.0%	-4.9%	1.7%	0.3%	-3.4%	-3.1%
Location Quotient of employment	1.08	1.13	0.58	0.58	0.94	0.50	1.50	0.83	0.36	0.65
MANUFACTURING FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Manufacturing firms in area	262	541	535	2,440	415	184	297	98	794	5,303
Percentage of total area firms	3.8%	4.2%	3.0%	2.9%	4.2%	3.8%	5.1%	3.0%	2.5%	3.1%
Percentage of state Manufacturing firms	4.9%	10.2%	10.1%	46.0%	7.8%	3.5%	5.6%	1.8%	15.0%	100.0%
Average employees per firm	33.6	29.1	23.6	25.4	26.2	14.1	36.8	42.8	11.8	24.2
Firms CAGR, 2006-2011	NA	-1.6%	-2.1%	-2.6%	-1.0%	-0.9%	-0.7%	-3.9%	-4.6%	-2.5%
Location Quotient of firms	1.00	1.10	0.80	0.76	1.09	1.00	1.34	0.80	0.64	0.81
MANUFACTURING WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Manufacturing wages	\$82,668	\$76,682	\$59,056	\$64,945	\$79,015	\$40,550	\$42,777	\$55,396	\$37,272	\$62,274
Total Manufacturing wages (millions)	\$726.2	\$1,206.2	\$746.1	\$4,019.7	\$857.4	\$105.1	\$466.7	\$232.1	\$350.5	\$7,983.8
Percentage of total area wages	13.9%	14.0%	7.1%	6.2%	15.9%	4.7%	14.1%	11.3%	3.1%	7.3%
Percent of state average annual Manufacturing area wages	132.7%	123.1%	94.8%	104.3%	126.9%	65.1%	68.7%	89.0%	59.9%	100.0%
Total wages CAGR, 2006-2011	NA	-2.7%	-4.4%	0.2%	1.7%	-3.5%	1.4%	4.5%	-0.2%	-0.5%
Average annual wages CAGR, 2006-2011	NA	0.9%	2.7%	3.3%	3.8%	1.5%	-0.3%	4.2%	3.3%	2.6%
Percentage of total state Manufacturing wages	9.1%	15.1%	9.3%	50.3%	10.7%	1.3%	5.8%	2.9%	4.4%	100.0%
Location Quotient of total wages	1.26	1.27	0.64	0.56	1.44	0.42	1.28	1.02	0.28	0.67
MANUFACTURING GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Manufacturing Sector Contribution to GDP, 2010 (millions)	NA	\$2,963	(D)	NA	\$1,889	\$195	\$965	\$444	NA	\$19,210
Manufacturing Sector GDP CAGR, 2006-2010	NA	3.1%	NA	NA	6.0%	-3.7%	3.4%	8.7%	NA	4.4%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	1.40	NA	NA	1.44	0.24	1.19	0.96	NA	0.67

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Wholesale Trade -- Despite a lower employment concentration than the nation, Wholesale Trade employs 2,641 workers in Boulder (2.9%) and pays above-average wages. The Wholesale Trade industry includes three subsectors: merchant wholesalers, durable goods; merchant wholesalers, nondurable goods; and wholesale electronic markets and agents and brokers. While all subsectors have been affected by the recession, consumer confidence has improved since the fall of 2011, a positive signal for the Wholesale Trade industry in Boulder.

TABLE 31: WHOLESALE TRADE (NAICS 42)

WHOLESALE TRADE EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Wholesale Trade employees in area	2,641	5,052	4,835	62,138	2,940	2,236	3,547	1,199	9,832	91,778
Percentage of area employees	2.9%	3.3%	2.0%	5.2%	2.3%	3.9%	4.4%	2.1%	3.4%	4.2%
Percentage of state Wholesale Trade employees	2.9%	5.5%	5.3%	67.7%	3.2%	2.4%	3.9%	1.3%	10.7%	100.0%
Employment CAGR, 2006-2011	NA	-1.4%	-3.9%	-0.6%	-0.8%	1.2%	0.0%	-1.7%	-1.0%	-0.8%
Location Quotient of employment	0.68	0.76	0.47	1.22	0.54	0.91	1.02	0.50	0.78	0.97
WHOLESALE TRADE FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Wholesale Trade firms in area	431	910	805	7,783	583	291	405	134	1,628	12,538
Percentage of total area firms	6.3%	7.1%	4.6%	9.3%	5.8%	6.1%	7.0%	4.2%	5.1%	7.4%
Percentage of state Wholesale Trade firms	3.4%	7.3%	6.4%	62.1%	4.6%	2.3%	3.2%	1.1%	13.0%	100.0%
Average employees per firm	6.1	5.6	6.0	8.0	5.0	7.7	8.8	8.9	6.0	7.3
Firms CAGR, 2006-2011	NA	0.6%	-0.9%	0.5%	0.2%	0.7%	2.5%	-0.7%	-3.4%	-0.1%
Location Quotient of firms	0.92	1.04	0.67	1.36	0.86	0.89	1.03	0.61	0.74	1.08
WHOLESALE TRADE WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Wholesale Trade wages	\$78,620	\$85,024	\$57,978	\$75,653	\$56,156	\$48,311	\$55,841	\$45,427	\$65,114	\$71,657
Total Wholesale Trade wages (millions)	\$207.6	\$429.5	\$280.3	\$4,700.9	\$165.1	\$108.0	\$198.1	\$54.5	\$640.2	\$6,576.5
Percentage of total area wages	4.0%	5.0%	2.7%	7.2%	3.1%	4.8%	6.0%	2.6%	5.6%	6.0%
Percent of state average annual Wholesale Trade area wages	109.7%	118.7%	80.9%	105.6%	78.4%	67.4%	77.9%	63.4%	90.9%	100.0%
Total wages CAGR, 2006-2011	NA	3.6%	-0.6%	2.6%	3.6%	4.5%	2.3%	0.3%	2.8%	2.6%
Average annual wages CAGR, 2006-2011	NA	5.1%	3.5%	3.2%	4.5%	3.3%	2.3%	2.0%	3.8%	3.4%
Percentage of total state Wholesale Trade wages	3.2%	6.5%	4.3%	71.5%	2.5%	1.6%	3.0%	0.8%	9.7%	100.0%
Location Quotient of total wages	0.68	0.86	0.46	1.24	0.53	0.83	1.03	0.46	0.96	1.04
WHOLESALE TRADE GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Wholesale Trade Sector Contribution to GDP, 2010 (millions)	NA	\$900	\$629	NA	\$348	\$230	\$447	\$113	NA	\$11,272
Wholesale Trade Sector GDP CAGR, 2006-2010	NA	4.5%	1.5%	NA	4.8%	5.6%	1.0%	0.7%	NA	-0.9%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	0.97	0.48	NA	0.61	0.65	1.26	0.56	NA	0.90

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Information -- The Information Sector is an eclectic mix of industries that includes motion picture and music producers and distributors; radio and television network programming and broadcasting; and data processing. Telecommunications and publishing are also subsectors. In recent years, the industry has experienced declining employment due to subsector consolidations and contraction. Many Information subsectors support the Boulder advanced technology cluster and pay significantly higher-than-average wages.

TABLE 32: INFORMATION (NAICS 51)

INFORMATION EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Information employees in area	6,428	8,693	7,166	44,929	2,512	852	809	705	6,205	71,871
Percentage of area employees	7.1%	5.6%	3.0%	3.8%	2.0%	1.5%	1.0%	1.2%	2.1%	3.3%
Percentage of state Information employees	8.9%	12.1%	10.0%	62.5%	3.5%	1.2%	1.1%	1.0%	8.6%	100.0%
Employment CAGR, 2006-2011	NA	-0.3%	-3.1%	-1.3%	0.0%	-1.5%	-6.4%	-2.5%	2.0%	-1.1%
Location Quotient of employment	3.34	2.63	1.39	1.77	0.92	0.70	0.47	0.59	0.99	1.53
INFORMATION FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Information firms in area	224	347	315	1,567	173	56	67	31	533	3,088
Percentage of total area firms	3.3%	2.7%	1.8%	1.9%	1.7%	1.2%	1.2%	1.0%	1.7%	1.8%
Percentage of state Information firms	7.2%	11.2%	10.2%	50.7%	5.6%	1.8%	2.2%	1.0%	17.3%	100.0%
Average employees per firm	28.8	25.1	22.8	28.7	14.6	15.4	12.2	22.5	11.6	23.3
Firms CAGR, 2006-2011	NA	-2.4%	-1.8%	-3.2%	-1.7%	-4.3%	-1.0%	-2.0%	-3.3%	-2.8%
Location Quotient of firms	2.04	1.68	1.12	1.17	1.08	0.72	0.72	0.61	1.03	1.13
INFORMATION WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Information wages	\$98,584	\$98,497	\$71,574	\$91,489	\$53,765	\$40,447	\$45,066	\$39,872	\$77,681	\$86,207
Total Information wages (millions)	\$633.7	\$856.2	\$512.9	\$4,110.5	\$135.1	\$34.5	\$36.5	\$28.1	\$482.0	\$6,195.7
Percentage of total area wages	12.1%	10.0%	4.9%	6.3%	2.5%	1.5%	1.1%	1.4%	4.2%	5.7%
Percent of state average annual Information area wages	114.4%	114.3%	83.0%	106.1%	62.4%	46.9%	52.3%	46.3%	90.1%	100.0%
Total wages CAGR, 2006-2011	NA	3.5%	1.2%	1.2%	3.6%	1.0%	-5.3%	-0.8%	7.4%	1.9%
Average annual wages CAGR, 2006-2011	NA	3.7%	4.4%	2.5%	3.5%	2.6%	1.2%	1.7%	5.2%	3.0%
Percentage of total state Information wages	10.2%	13.8%	8.3%	66.3%	2.2%	0.6%	0.6%	0.5%	7.8%	100.0%
Location Quotient of total wages	3.59	2.95	1.44	1.87	0.74	0.45	0.33	0.40	1.24	1.68
INFORMATION GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Information Sector Contribution to GDP, 2010 (millions)	NA	\$2,094	\$1,316	\$19,658	\$361	\$110	\$116	\$89	-\$1,541	\$22,203
Information Sector GDP CAGR, 2006-2010	NA	7.8%	4.6%	NA	6.7%	4.9%	0.7%	4.4%	NA	2.9%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	2.45	1.09	2.71	0.68	0.34	0.35	0.48	-1.85	1.93

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Professional and Technical Services -- Both contributing to and capitalizing on the advanced technology cluster in Boulder, the Professional and Technical Services (PTS) industry is highly concentrated in both the city and county and pays higher-than-average wages. The area has greater concentrations of architectural, engineering, consulting, and scientific research and development services than the state and nation. The PTS Sector continues to play a key role in the growth of the advanced technology cluster in Colorado. Research and development firms, as well as firms that provide cluster support, are included in the industry.

TABLE 33: PROFESSIONAL AND TECHNICAL SERVICES (NAICS 54)

PROFESSIONAL & TECHNICAL SERVICES EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Prof & Tech Services employees in area	13,204	21,865	20,851	102,134	8,866	2,187	1,995	1,158	11,698	170,753
Percentage of area employees	14.6%	14.1%	8.6%	8.6%	6.9%	3.8%	2.5%	2.1%	4.0%	7.8%
Percentage of state Prof & Tech Services employees	7.7%	12.8%	12.2%	59.8%	5.2%	1.3%	1.2%	0.7%	6.9%	100.0%
Employment CAGR, 2006-2011	NA	0.9%	0.7%	2.1%	-1.2%	1.0%	-0.9%	3.3%	-2.7%	1.2%
Location Quotient of employment	2.51	2.42	1.48	1.48	1.19	0.65	0.42	0.35	0.69	1.33
PROFESSIONAL & TECHNICAL SERVICES FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Prof & Tech Services firms in area	1,890	3,285	3,204	16,082	1,722	603	582	252	3,735	29,463
Percentage of total area firms	27.7%	25.5%	18.3%	19.2%	17.3%	12.6%	10.1%	7.8%	11.6%	17.3%
Percentage of state Prof & Tech Services firms	6.4%	11.2%	10.9%	54.6%	5.8%	2.0%	2.0%	0.9%	12.7%	100.0%
Average employees per firm	7.0	6.7	6.5	6.4	5.1	3.6	3.4	4.6	3.1	5.8
Firms CAGR, 2006-2011	NA	3.3%	2.2%	2.7%	4.5%	3.8%	3.3%	-0.3%	-0.7%	2.3%
Location Quotient of firms	2.45	2.26	1.62	1.70	1.53	1.12	0.89	0.69	1.03	1.54
PROFESSIONAL & TECHNICAL SERVICES WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Prof & Tech Services wages	\$88,431	\$91,118	\$78,363	\$85,269	\$72,204	\$50,203	\$51,738	\$47,721	\$63,221	\$81,891
Total Prof & Tech Services wages (millions)	\$1,167.6	\$1,992.3	\$1,633.9	\$8,708.9	\$640.2	\$109.8	\$103.2	\$55.2	\$739.5	\$13,983.0
Percentage of total area wages	22.3%	23.2%	15.5%	13.4%	11.9%	4.9%	3.1%	2.7%	6.4%	12.8%
Percent of state average annual Prof & Tech Services area wages	108.0%	111.3%	95.7%	104.1%	88.2%	61.3%	63.2%	58.3%	77.2%	100.0%
Total wages CAGR, 2006-2011	NA	2.5%	3.9%	5.5%	1.4%	5.1%	1.9%	4.3%	1.1%	4.4%
Average annual wages CAGR, 2006-2011	NA	1.6%	3.2%	3.3%	2.7%	4.0%	2.9%	1.0%	3.9%	3.2%
Percentage of total state Prof & Tech Services wages	8.4%	14.2%	11.7%	62.3%	4.6%	0.8%	0.7%	0.4%	5.3%	100.0%
Location Quotient of total wages	2.33	2.42	1.62	1.40	1.24	0.51	0.33	0.28	0.67	1.34
PROFESSIONAL & TECHNICAL SERVICES GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Prof & Tech Services Sector Contribution to GDP, 2010 (million)	NA	\$2,984	\$2,548	NA	\$993	\$176	\$189	\$96	NA	\$21,769
Prof & Tech Services Sector GDP CAGR, 2006-2010	NA	0.6%	3.6%	NA	-1.9%	1.0%	-0.3%	0.3%	NA	2.3%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	2.34	1.42	NA	1.26	0.36	0.39	0.35	NA	1.26

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Educational Services -- Generally, Colorado has a lower concentration of private Educational Services than the national average as private schools are not as common as they are in other parts of the country (though the industry is not limited solely to private schools). The Educational Services Sector includes private firms and thus excludes public K-12 schools and universities (captured in Government). Compared to other MSAs examined in this study, Boulder has one of the higher location quotients (0.75, or 1,308 employees), yet it remains below the national average.

TABLE 34: EDUCATIONAL SERVICES (PRIVATE) (NAICS 61)

EDUCATIONAL SERVICES EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Education employees in area	1,308	1,903	4,294	19,618	1,181	255	371	328	1,788	29,738
Percentage of area employees	1.4%	1.2%	1.8%	1.6%	0.9%	0.4%	0.5%	0.6%	0.6%	1.4%
Percentage of state Education employees	4.4%	6.4%	14.4%	66.0%	4.0%	0.9%	1.2%	1.1%	6.0%	100.0%
Employment CAGR, 2006-2011	NA	-0.7%	2.1%	3.6%	3.2%	2.0%	6.7%	15.0%	3.0%	3.2%
Location Quotient of employment	0.75	0.64	0.92	0.86	0.48	0.23	0.24	0.30	0.32	0.70
EDUCATIONAL SERVICES FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Education firms in area	156	251	317	1,245	131	30	50	26	250	2,300
Percentage of total area firms	2.3%	2.0%	1.8%	1.5%	1.3%	0.6%	0.9%	0.8%	0.8%	1.4%
Percentage of state Education firms	6.8%	10.9%	13.8%	54.1%	5.7%	1.3%	2.2%	1.1%	10.9%	100.0%
Average employees per firm	8.4	7.6	13.5	15.8	9.0	8.7	7.4	12.5	7.2	12.9
Firms CAGR, 2006-2011	NA	1.5%	1.8%	2.4%	3.1%	-2.2%	5.4%	9.1%	-0.2%	2.0%
Location Quotient of firms	2.22	1.89	1.75	1.44	1.27	0.60	0.84	0.79	0.75	1.31
EDUCATIONAL SERVICES WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Education wages	\$29,757	\$29,531	\$35,692	\$40,658	\$27,759	\$21,344	\$23,588	\$38,820	\$38,079	\$38,163
Total Education wages (millions)	\$38.9	\$56.2	\$153.3	\$797.6	\$32.8	\$5.4	\$8.8	\$12.7	\$68.1	\$1,134.9
Percentage of total area wages	0.7%	0.7%	1.5%	1.2%	0.6%	0.2%	0.3%	0.6%	0.6%	1.0%
Percent of state average annual Education area wages	78.0%	77.4%	93.5%	106.5%	72.7%	55.9%	61.8%	101.7%	99.8%	100.0%
Total wages CAGR, 2006-2011	NA	4.3%	5.5%	6.4%	8.9%	5.0%	7.8%	30.7%	6.1%	6.4%
Average annual wages CAGR, 2006-2011	NA	4.9%	3.4%	2.6%	5.5%	2.9%	1.0%	13.7%	3.0%	3.1%
Percentage of total state Education wages	3.4%	5.0%	13.5%	70.3%	2.9%	0.5%	0.8%	1.1%	6.0%	100.0%
Location Quotient of total wages	0.42	0.37	0.83	0.69	0.35	0.14	0.15	0.35	0.34	0.59
EDUCATIONAL SERVICES GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Education Sector Contribution to GDP, 2010 (millions)	NA	\$86	\$188	NA	\$41	\$10	\$14	\$15	NA	\$1,509
Education Sector GDP CAGR, 2006-2010	NA	-1.7%	-0.7%	NA	0.6%	-2.4%	3.9%	13.6%	NA	1.0%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	0.51	0.80	NA	0.40	0.16	0.22	0.41	NA	0.67

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Health Care and Social Assistance -- Health Care and Social Assistance generally grew across the state, even during the recession, though the industry has not been immune to the recession's ill effects. Despite a lower employment concentration than the nation, the Health Care and Social Assistance industry accounts for nearly 1 out of 11 jobs in the city of Boulder and 1 out of 9 in Boulder County. By nature, the industry primarily serves the local community. Wages in this industry are below the average for the city and county.

TABLE 35: HEALTH CARE AND SOCIAL ASSISTANCE (NAICS 62)

HEALTH CARE AND SOCIAL ASSISTANCE EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Health Care employees in area	7,963	18,108	25,400	124,675	16,759	8,683	7,986	10,534	25,976	238,120
Percentage of area employees	8.8%	11.7%	10.5%	10.5%	13.1%	15.1%	9.8%	18.7%	8.9%	10.8%
Percentage of state Health Care employees	3.3%	7.6%	10.7%	52.4%	7.0%	3.6%	3.4%	4.4%	10.9%	100.0%
Employment CAGR, 2006-2011	NA	2.6%	3.7%	3.8%	5.3%	2.1%	2.3%	3.3%	2.1%	3.5%
Location Quotient of employment	0.70	0.92	0.83	0.83	1.04	1.20	0.78	1.48	0.70	0.86
HEALTH CARE AND SOCIAL ASSISTANCE FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Health Care firms in area	690	1,264	1,851	6,718	881	421	407	408	1,938	13,886
Percentage of total area firms	10.1%	9.8%	10.5%	8.0%	8.8%	8.8%	7.1%	12.7%	6.0%	8.2%
Percentage of state Health Care firms	5.0%	9.1%	13.3%	48.4%	6.3%	3.0%	2.9%	2.9%	14.0%	100.0%
Average employees per firm	11.5	14.3	13.7	18.6	19.0	20.6	19.6	25.8	13.4	17.1
Firms CAGR, 2006-2011	NA	3.8%	3.6%	2.6%	2.4%	2.0%	3.1%	1.3%	1.2%	2.6%
Location Quotient of firms	1.15	1.12	1.20	0.91	1.01	1.00	0.80	1.44	0.68	0.93
HEALTH CARE AND SOCIAL ASSISTANCE WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Health Care wages	\$44,562	\$46,494	\$42,273	\$47,686	\$43,395	\$42,319	\$40,859	\$39,880	\$39,212	\$45,022
Total Health Care wages (millions)	\$354.8	\$841.9	\$1,073.7	\$5,945.2	\$727.3	\$367.4	\$326.3	\$420.1	\$1,018.6	\$10,720.5
Percentage of total area wages	6.8%	9.8%	10.2%	9.1%	13.5%	16.3%	9.9%	20.4%	8.9%	9.9%
Percent of state average annual Health Care area wages	99.0%	103.3%	93.9%	105.9%	96.4%	94.0%	90.8%	88.6%	87.1%	100.0%
Total wages CAGR, 2006-2011	NA	5.3%	5.6%	6.1%	8.0%	5.0%	4.3%	6.7%	5.6%	6.0%
Average annual wages CAGR, 2006-2011	NA	2.7%	1.9%	2.2%	2.6%	2.8%	1.9%	3.4%	3.4%	2.4%
Percentage of total state Health Care wages	3.3%	7.9%	10.0%	55.5%	6.8%	3.4%	3.0%	3.9%	9.5%	100.0%
Location Quotient of total wages	0.57	0.83	0.86	0.77	1.14	1.37	0.83	1.72	0.75	0.83
HEALTH CARE AND SOCIAL ASSISTANCE GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Health Care Sector Contribution to GDP, 2010 (millions)	NA	\$1,113	\$1,475	NA	\$967	\$479	\$440	\$566	NA	\$13,931
Health Care Sector GDP CAGR, 2006-2010	NA	2.7%	3.9%	NA	5.5%	2.3%	2.0%	4.2%	NA	3.5%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	0.88	0.83	NA	1.24	0.99	0.91	2.05	NA	0.81

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Arts, Entertainment, and Recreation -- Despite average wages that are one-third of the county average for all industries, Arts, Entertainment, and Recreation (AER) employment is concentrated in the city of Boulder and is an integral part of the city's cultural fabric. Both the city of Boulder and Boulder County have higher concentrations of AER employment than the nation, supported by local draws (football games, graduation ceremonies, the Boulder Boulder, the Pearl Street Mall, etc.) and regional pulls (Rocky Mountain National Park, Estes Park, and so forth). Lower wages are partially attributable to the part-time nature of many of these jobs.

TABLE 36: ARTS, ENTERTAINMENT, AND RECREATION (NAICS 71)

ARTS, ENTERTAINMENT, AND RECREATION EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Arts, Ent, and Rec employees in area	1,801	2,766	4,688	20,642	1,949	916	754	801	12,764	45,279
Percentage of area employees	2.0%	1.8%	1.9%	1.7%	1.5%	1.6%	0.9%	1.4%	4.4%	2.1%
Percentage of state Arts, Ent, and Rec employees	4.0%	6.1%	10.4%	45.6%	4.3%	2.0%	1.7%	1.8%	28.2%	100.0%
Employment CAGR, 2006-2011	NA	2.0%	0.0%	3.7%	1.6%	-1.0%	-1.1%	3.4%	-3.4%	0.7%
Location Quotient of employment	1.34	1.20	1.30	1.16	1.02	1.07	0.62	0.95	2.92	1.38
ARTS, ENTERTAINMENT, AND RECREATION FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Arts, Ent, and Rec firms in area	139	214	264	989	173	55	79	49	682	2,504
Percentage of total area firms	2.0%	1.7%	1.5%	1.2%	1.7%	1.1%	1.4%	1.5%	2.1%	1.5%
Percentage of state Arts, Ent, and Rec firms	5.6%	8.5%	10.5%	39.5%	6.9%	2.2%	3.1%	2.0%	27.2%	100.0%
Average employees per firm	12.9	13.0	17.8	20.9	11.2	16.7	9.6	16.3	18.7	18.1
Firms CAGR, 2006-2011	NA	0.5%	-2.0%	0.5%	1.9%	-4.0%	-0.5%	-2.4%	-2.2%	-0.7%
Location Quotient of firms	1.48	1.20	1.09	0.85	1.26	0.83	0.99	1.11	1.53	1.06
ARTS, ENTERTAINMENT, AND RECREATION WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Arts, Ent, and Rec wages	\$19,383	\$18,979	\$19,826	\$39,936	\$17,070	\$12,412	\$15,951	\$19,970	\$27,451	\$30,761
Total Arts, Ent, and Rec wages (millions)	\$34.9	\$52.5	\$92.9	\$824.3	\$33.3	\$11.4	\$12.0	\$16.0	\$350.4	\$1,392.8
Percentage of total area wages	0.7%	0.6%	0.9%	1.3%	0.6%	0.5%	0.4%	0.8%	3.0%	1.3%
Percent of state average annual Arts, Ent, and Rec area wages	63.0%	61.7%	64.5%	129.8%	55.5%	40.4%	51.9%	64.9%	89.2%	100.0%
Total wages CAGR, 2006-2011	NA	4.1%	0.2%	5.8%	4.4%	-0.1%	1.4%	10.5%	-4.9%	1.9%
Average annual wages CAGR, 2006-2011	NA	2.0%	0.2%	2.0%	2.8%	0.9%	2.5%	6.9%	-1.5%	1.3%
Percentage of total state Arts, Ent, and Rec wages	2.5%	3.8%	6.7%	59.2%	2.4%	0.8%	0.9%	1.1%	25.2%	100.0%
Location Quotient of total wages	0.65	0.59	0.86	1.23	0.60	0.49	0.35	0.75	2.96	1.24
ARTS, ENTERTAINMENT, AND RECREATION GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Arts, Ent, and Rec Sector Contribution to GDP, 2010 (millions)	NA	\$115	\$185	\$1,573	\$78	\$27	\$25	\$31	\$614	\$2,648
Arts, Ent, and Rec Sector GDP CAGR, 2006-2010	NA	2.3%	-0.5%	-0.5%	2.4%	0.0%	-1.9%	5.5%	-6.0%	-1.7%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	0.70	0.80	1.13	0.77	0.43	0.40	0.87	3.83	1.19

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

Other Services -- The Other Services industry primarily provides support services to the local population, and thus tends to grow proportionally to population and economic expansion. Examples include barber shops, auto repair, and laundry services, among many others. Boulder's concentration of these jobs is slightly less than the national average, and the industry tends to pay below-average wages compared to other industries.

TABLE 37: OTHER SERVICES (NAICS 81)

OTHER SERVICES EMPLOYMENT	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Other Services employees in area	2,759	4,436	8,915	36,494	3,529	1,664	1,773	1,334	7,734	65,879
Percentage of area employees	3.1%	2.9%	3.7%	3.1%	2.8%	2.9%	2.2%	2.4%	2.6%	3.0%
Percentage of state Other Services employees	4.2%	6.7%	13.5%	55.4%	5.4%	2.5%	2.7%	2.0%	11.7%	100.0%
Employment CAGR, 2006-2011	NA	1.6%	-1.6%	0.7%	1.5%	0.3%	0.0%	-0.5%	-1.6%	0.1%
Location Quotient of employment	0.90	0.84	1.09	0.90	0.81	0.85	0.64	0.70	0.78	0.88
OTHER SERVICES FIRMS	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Number of Other Services firms in area	498	910	1,307	6,656	763	339	372	250	1,942	12,540
Percentage of total area firms	7.3%	7.1%	7.4%	7.9%	7.7%	7.1%	6.5%	7.8%	6.0%	7.4%
Percentage of state Other Services firms	4.0%	7.3%	10.4%	53.1%	6.1%	2.7%	3.0%	2.0%	15.5%	100.0%
Average employees per firm	5.5	4.9	6.8	5.5	4.6	4.9	4.8	5.3	4.0	5.3
Firms CAGR, 2006-2011	NA	0.5%	-0.3%	0.2%	0.7%	1.6%	-0.5%	-0.2%	-1.4%	-0.1%
Location Quotient of firms	0.53	0.51	0.54	0.57	0.55	0.51	0.46	0.56	0.43	0.53
OTHER SERVICES WAGES	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Average annual area wages	\$57,849	\$55,441	\$43,604	\$54,813	\$42,107	\$39,201	\$40,760	\$36,512	\$39,193	\$49,417
Average annual Other Services wages	\$38,570	\$35,067	\$36,775	\$35,036	\$28,758	\$29,600	\$27,290	\$25,120	\$31,465	\$33,971
Total Other Services wages (millions)	\$106.4	\$155.6	\$327.8	\$1,278.6	\$101.5	\$49.3	\$48.4	\$33.5	\$243.3	\$2,238.0
Percentage of total area wages	2.0%	1.8%	3.1%	2.0%	1.9%	2.2%	1.5%	1.6%	2.1%	2.1%
Percent of state average annual Other Services area wages	113.5%	103.2%	108.3%	103.1%	84.7%	87.1%	80.3%	73.9%	92.6%	100.0%
Total wages CAGR, 2006-2011	NA	4.9%	1.6%	3.1%	3.1%	3.4%	2.9%	1.9%	2.0%	2.8%
Average annual wages CAGR, 2006-2011	NA	3.2%	3.2%	2.3%	1.6%	3.0%	2.9%	2.4%	3.6%	2.7%
Percentage of total state Other Services wages	4.8%	7.0%	14.6%	57.1%	4.5%	2.2%	2.2%	1.5%	10.9%	100.0%
Location Quotient of total wages	0.95	0.84	1.45	0.92	0.88	1.02	0.68	0.76	0.99	0.96
OTHER SERVICES GDP	CITY OF BOULDER	BOULDER MSA	COLORADO SPRINGS MSA	DENVER MSA	FORT COLLINS-LOVELAND MSA	GRAND JUNCTION MSA	GREELEY MSA	PUEBLO MSA	RURAL AREAS	STATE OF COLORADO
Other Services Sector Contribution to GDP, 2010 (millions)	NA	\$356	\$593	\$2,905	\$274	\$138	\$197	\$115	\$715	\$5,293
Other Services Sector GDP CAGR, 2006-2010	NA	0.3%	-2.3%	-1.5%	-1.7%	-2.7%	-2.0%	-3.2%	-2.5%	-1.7%
Total area GDP, 2010 (in millions)	NA	\$17,047	\$24,016	\$144,931	\$10,521	\$6,530	\$6,530	\$3,706	\$16,647	\$229,928
Location Quotient of GDP, 2010	NA	0.91	1.08	0.88	1.14	0.92	1.32	1.36	1.88	1.01

Data Sources: Bureau of Labor Statistics and Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW); Bureau of Economic Analysis. Calculations by the BRD.

APPENDIX 4: DETAILED REAL ESTATE ANALYSIS

This appendix provides more detailed information on:

- Land area in the city of Boulder (Table 38);
- Private commercial land area (Table 39);
- Parcels containing primary employers (Table 40);
- Percent of commercial land containing primary employers (Table 41);
- Number of commercial buildings (Table 42);
- Total square feet of commercial/industrial space (Table 43);
- Number of primary employers (Table 44);
- Number of primary employees (Table 45);
- Square feet of space occupied by primary employers (Table 46);
- Average square feet of space per primary employee (Table 47); and
- Average ages of commercial buildings (Table 48).

The information is presented by zoning classification district and by subcommunity.

TABLE 38: CITY OF BOULDER LAND AREA (SQ. MI.), BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification	Subcommunity										
	Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	Palo Park	CU-Boulder	South Boulder	Southeast Boulder	Subcommunity Totals
<i>Square Miles</i>											
Agricultural	0.00	0.05	0.00	0.05	0.00	0.02	0.00	0.00	0.00	0.00	0.12
Business	0.01	0.07	0.60	0.03	0.06	0.02	0.03	0.01	0.06	0.12	1.02
Downtown	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Industrial	0.00	0.00	0.05	1.40	1.59	0.06	0.00	0.00	0.00	0.00	3.10
Mixed Use	0.01	0.02	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.11
Public	0.00	0.24	0.04	0.57	0.04	0.28	0.08	0.77	0.39	0.40	2.81
Residential	0.00	2.58	0.39	0.21	0.28	1.73	0.22	0.17	2.30	1.72	9.61
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02
Total (sq. mi.)	0.12	2.96	1.12	2.26	1.98	2.15	0.35	0.95	2.75	2.24	16.87
<i>Percent of Subcommunity</i>											
Agricultural	0.00%	1.68%	0.00%	2.15%	0.00%	1.09%	0.00%	0.00%	0.00%	0.00%	0.72%
Business	6.08%	2.43%	53.51%	1.47%	2.89%	1.10%	10.04%	1.21%	2.05%	5.50%	6.03%
Downtown	83.09%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.58%
Industrial	0.00%	0.00%	4.43%	61.96%	80.61%	2.82%	0.00%	0.00%	0.00%	0.00%	18.39%
Mixed Use	6.65%	0.55%	3.35%	0.00%	0.00%	2.06%	0.00%	0.00%	0.00%	0.00%	0.63%
Public	0.00%	8.07%	3.71%	25.23%	2.16%	12.87%	23.64%	80.59%	14.13%	17.74%	16.62%
Residential	4.18%	87.20%	35.00%	9.19%	14.34%	80.07%	61.93%	18.20%	83.82%	76.77%	56.94%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.38%	0.00%	0.00%	0.00%	0.09%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<i>Percent of Zoning District Classification</i>											
Agricultural	0.00%	40.87%	0.00%	39.93%	0.00%	19.20%	0.00%	0.00%	0.00%	0.00%	
Business	0.69%	7.08%	58.81%	3.27%	5.61%	2.33%	3.43%	1.13%	5.54%	12.11%	
Downtown	97.98%	2.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Industrial	0.00%	0.00%	1.60%	45.13%	51.31%	1.96%	0.00%	0.00%	0.00%	0.00%	
Mixed Use	7.22%	15.51%	35.40%	0.00%	0.00%	41.87%	0.00%	0.00%	0.00%	0.00%	
Public	0.00%	8.51%	1.48%	20.33%	1.52%	9.88%	2.93%	27.33%	13.84%	14.18%	
Residential	0.05%	26.87%	4.07%	2.16%	2.95%	17.96%	2.24%	1.80%	23.99%	17.91%	
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
Total	0.68%	17.54%	6.63%	13.40%	11.71%	12.77%	2.06%	5.64%	16.29%	13.29%	

^a Downtown is an area within the Central Boulder subcommunity.

TABLE 39: PRIVATE COMMERCIAL LAND USE: CITY OF BOULDER VS PRIMARY EMPLOYERS

Zoning District Classification Zoning District		Parcels Occupied by All Employers		Parcels Occupied by Primary Employers		Comparison	
		Land Area (Sq. Mi.)	Percent of Total	Land Area (Sq. Mi.)	Percent of Total	Difference in Percentages	Ratio of Percentages
Business	Business - Community 1 (BC-1)	0.2053	2.49%	0.0362	1.82%	-0.68%	0.73
Business	Business - Community 2 (BC-2)	0.1566	1.90%	0.0384	1.93%	0.02%	1.01
Business	Business - Commercial Services (BCS)	0.0095	0.12%	0.0032	0.16%	0.05%	1.41
Business	Business - Main Street (BMS)	0.0397	0.48%	0.0049	0.24%	-0.24%	0.51
Business	Business - Regional 1 (BR-1)	0.3217	3.91%	0.0510	2.56%	-1.34%	0.66
Business	Business - Regional 2 (BR-2)	0.0520	0.63%	0.0107	0.54%	-0.09%	0.85
Business	Business - Transitional 1 (BT-1)	0.1566	1.90%	0.0220	1.11%	-0.79%	0.58
Business	Business - Transitional 2 (BT-2)	0.0760	0.92%	0.0143	0.72%	-0.21%	0.78
Downtown	Downtown 1 (DT-1)	0.0103	0.12%	0.0010	0.05%	-0.07%	0.42
Downtown	Downtown 2 (DT-2)	0.0142	0.17%	0.0019	0.09%	-0.08%	0.55
Downtown	Downtown 3 (DT-3)	0.0030	0.04%	0.0021	0.11%	0.07%	2.98
Downtown	Downtown 4 (DT-4)	0.0202	0.25%	0.0046	0.23%	-0.02%	0.94
Downtown	Downtown 5 (DT-5)	0.0499	0.61%	0.0166	0.83%	0.23%	1.38
Flex District	Flex (F)	0.0152	0.18%	0.0000	0.00%	-0.18%	0.00
Industrial	Industrial - General (IG)	1.1964	14.53%	0.5531	27.76%	13.23%	1.91
Industrial	Industrial - Manufacturing (IM)	1.6791	20.39%	1.1270	56.57%	36.18%	2.77
Industrial	Industrial - Mixed Services (IMS)	0.0258	0.31%	0.0106	0.53%	0.22%	1.70
Industrial	Industrial - Service 1 (IS-1)	0.1034	1.26%	0.0368	1.85%	0.59%	1.47
Industrial	Industrial - Service 2 (IS-2)	0.0987	1.20%	0.0042	0.21%	-0.99%	0.18
Mixed Use	Mixed Use 1 (MU-1)	0.0297	0.36%	0.0010	0.05%	-0.31%	0.14
Mixed Use	Mixed Use 3 (MU-3)	0.0241	0.29%	0.0044	0.22%	-0.07%	0.76
Mixed Use	Mixed Use 4 (MU-4)	0.0375	0.46%	0.0090	0.45%	0.00%	0.99
Residential	Residential - High 1 (RH-1)	0.0764	0.93%	0.0069	0.35%	-0.58%	0.37
Residential	Residential - High 2 (RH-2)	0.1870	2.27%	0.0011	0.05%	-2.22%	0.02
Residential	Residential - High 4 (RH-4)	0.3152	3.83%	0.0138	0.69%	-3.14%	0.18
Residential	Residential - High 5 (RH-5)	0.3057	3.71%	0.0038	0.19%	-3.52%	0.05
Residential	Residential - Low 2 (RL-2)	1.6842	20.45%	0.0004	0.02%	-20.44%	0.00
Residential	Residential - Medium 1 (RM-1)	0.7612	9.24%	0.0039	0.20%	-9.05%	0.02
Residential	Residential - Medium 2 (RM-2)	0.2862	3.48%	0.0022	0.11%	-3.36%	0.03
Residential	Residential - Medium 3 (RM-3)	0.0113	0.14%	0.0045	0.23%	0.09%	1.66
Residential	Residential - Mixed 1 (RMX-1)	0.2825	3.43%	0.0024	0.12%	-3.31%	0.03
Total		8.2344	100.00%	1.9921	100.00%		

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 40: LAND AREAS (SQ. MI.) FOR PARCELS CONTAINING PRIMARY EMPLOYERS, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification		Subcommunity									Subcommunity Totals
		Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			0.0077						0.0285	0.0362
Business	Business - Community 2 (BC-2)		0.0037	0.0039					0.0308		0.0384
Business	Business - Commercial Services (BCS)			0.0032							0.0032
Business	Business - Main Street (BMS)	0.0014	0.0015	0.0007			0.0012				0.0049
Business	Business - Regional 1 (BR-1)			0.0510							0.0510
Business	Business - Regional 2 (BR-2)					0.0107					0.0107
Business	Business - Transitional 1 (BT-1)		0.0030	0.0040	0.0058					0.0092	0.0220
Business	Business - Transitional 2 (BT-2)	0.0005	0.0073	0.0052				0.0013			0.0143
Downtown	Downtown 1 (DT-1)	0.0010									0.0010
Downtown	Downtown 2 (DT-2)	0.0019									0.0019
Downtown	Downtown 3 (DT-3)	0.0021									0.0021
Downtown	Downtown 4 (DT-4)	0.0046									0.0046
Downtown	Downtown 5 (DT-5)	0.0166									0.0166
Industrial	Industrial - General (IG)			0.0266	0.4259	0.1005					0.5531
Industrial	Industrial - Manufacturing (IM)				0.1219	1.0051					1.1270
Industrial	Industrial - Mixed Services (IMS)			0.0066			0.0040				0.0106
Industrial	Industrial - Service 1 (IS-1)				0.0310		0.0058				0.0368
Industrial	Industrial - Service 2 (IS-2)				0.0042						0.0042
Mixed Use	Mixed Use 1 (MU-1)						0.0010				0.0010
Mixed Use	Mixed Use 3 (MU-3)	0.0011	0.0033								0.0044
Mixed Use	Mixed Use 4 (MU-4)			0.0090							0.0090
Residential	Residential - High 1 (RH-1)	0.0028						0.0041			0.0069
Residential	Residential - High 2 (RH-2)		0.0008	0.0003							0.0011
Residential	Residential - High 4 (RH-4)			0.0092						0.0046	0.0138
Residential	Residential - High 5 (RH-5)		0.0019					0.0009	0.0011		0.0038
Residential	Residential - Low 2 (RL-2)						0.0004				0.0004
Residential	Residential - Medium 1 (RM-1)		0.0004	0.0031					0.0004		0.0039
Residential	Residential - Medium 2 (RM-2)								0.0022		0.0022
Residential	Residential - Medium 3 (RM-3)		0.0044	0.0001							0.0045
Residential	Residential - Mixed 1 (RMX-1)		0.0024								0.0024
Total		0.0321	0.0287	0.1307	0.5889	1.1163	0.0124	0.0062	0.0345	0.0423	1.9921

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 41: PERCENT OF COMMERCIAL LAND CONTAINING PRIMARY EMPLOYERS, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification	Subcommunity									City
	Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business - Community 1 (BC-1)			7.0%						43.1%	17.6%
Business - Community 2 (BC-2)		24.2%	6.1%					54.6%		24.5%
Business - Commercial Services (BCS)			34.0%							34.0%
Business - Main Street (BMS)	32.7%	13.6%	4.7%			15.0%				12.3%
Business - Regional 1 (BR-1)			15.9%							15.9%
Business - Regional 2 (BR-2)					20.7%					20.7%
Business - Transitional 1 (BT-1)		45.1%	6.1%	67.8%					25.2%	18.1%
Business - Transitional 2 (BT-2)	18.1%	20.3%	45.3%				12.9%			18.8%
Downtown 1 (DT-1)	10.4%									10.2%
Downtown 2 (DT-2)	13.3%									13.3%
Downtown 3 (DT-3)	72.0%									72.0%
Downtown 4 (DT-4)	22.7%									22.7%
Downtown 5 (DT-5)	34.5%									33.3%
Industrial - General (IG)			86.9%	44.5%	48.0%					46.2%
Industrial - Manufacturing (IM)				41.2%	72.7%					67.1%
Industrial - Mixed Services (IMS)			50.3%			31.7%				41.1%
Industrial - Service 1 (IS-1)				60.5%		12.6%				35.6%
Industrial - Service 2 (IS-2)				4.3%						4.2%
Mixed Use 1 (MU-1)						3.3%				3.3%
Mixed Use 3 (MU-3)	14.7%	20.0%								18.3%
Mixed Use 4 (MU-4)			24.1%							24.1%
Residential - High 1 (RH-1)	100.0%						6.6%			9.0%
Residential - High 2 (RH-2)		0.4%	14.6%							0.6%
Residential - High 4 (RH-4)			5.8%						6.7%	4.9%
Residential - High 5 (RH-5)		2.0%					4.1%	4.8%		1.3%
Residential - Low 2 (RL-2)						0.1%				0.0%
Residential - Medium 1 (RM-1)		1.3%	2.5%					0.3%		0.5%
Residential - Medium 2 (RM-2)								3.5%		0.8%
Residential - Medium 3 (RM-3)		100.0%	1.4%							40.1%
Residential - Mixed 1 (RMX-1)		0.9%								0.8%
Total	27.9%	3.6%	12.9%	37.7%	61.1%	1.4%	4.4%	4.7%	4.6%	24.9%

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 42: NUMBER OF NONEXEMPT COMMERCIAL BUILDINGS, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification		Subcommunity									Subcommunity Totals
		Down-town ^a	Central Boulder	Crossroads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			11	4	2	3			13	33
Business	Business - Community 2 (BC-2)		15	40					4	1	60
Business	Business - Commercial Services (BCS)			2							2
Business	Business - Main Street (BMS)	16	10	8			7				41
Business	Business - Regional 1 (BR-1)			50							50
Business	Business - Regional 2 (BR-2)					25					25
Business	Business - Transitional 1 (BT-1)		10	51	1			4		40	106
Business	Business - Transitional 2 (BT-2)	10	59	23	14			2			108
Downtown	Downtown 1 (DT-1)	15									15
Downtown	Downtown 2 (DT-2)	123									123
Downtown	Downtown 3 (DT-3)	13									13
Downtown	Downtown 4 (DT-4)	68									68
Downtown	Downtown 5 (DT-5)	67									67
Industrial	Industrial - General (IG)			18	379	114					511
Industrial	Industrial - Manufacturing (IM)				46	117					163
Industrial	Industrial - Mixed Services (IMS)			17			13				30
Industrial	Industrial - Service 1 (IS-1)			6	16		83				105
Industrial	Industrial - Service 2 (IS-2)				12						12
Mixed Use	Mixed Use 1 (MU-1)						31				31
Mixed Use	Mixed Use 3 (MU-3)	18	12								30
Mixed Use	Mixed Use 4 (MU-4)			4							4
Residential	Residential - High 1 (RH-1)	2									2
Residential	Residential - High 2 (RH-2)		23	2							25
Residential	Residential - High 4 (RH-4)			37						4	41
Residential	Residential - High 5 (RH-5)		11			2		1	1	39	54
Residential	Residential - Low 2 (RL-2)						8		1		9
Residential	Residential - Medium 1 (RM-1)		1	7			11		7	1	27
Residential	Residential - Medium 2 (RM-2)		1				1		26		28
Residential	Residential - Medium 3 (RM-3)		4								4
Residential	Residential - Mixed 1 (RMX-1)	8	37								45
Total		340	183	276	472	260	157	7	39	98	1,832

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 43: TOTAL SQUARE FEET OF NONEXEMPT COMMERCIAL/INDUSTRIAL SPACE, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification Zoning District		Subcommunity									Subcommunity Totals
		Down- town ^a	Central Boulder	Cross- roads	East Boulder	Gun- barrel	North Boulder	CU- Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			133,665	69,305	13,977	16,170			124,375	357,492
Business	Business - Community 2 (BC-2)		39,583	103,687					16,598	163	160,031
Business	Business - Commercial Services (BCS)			33,136							33,136
Business	Business - Main Street (BMS)	38,714	25,315	46,310			10,754				121,093
Business	Business - Regional 1 (BR-1)			605,291							605,291
Business	Business - Regional 2 (BR-2)					138,405					138,405
Business	Business - Transitional 1 (BT-1)		86,449	176,300	33,125			3,602		170,705	470,181
Business	Business - Transitional 2 (BT-2)	22,435	243,889	137,399	76,480			18,796			498,999
Downtown	Downtown 1 (DT-1)	62,562									62,562
Downtown	Downtown 2 (DT-2)	214,720									214,720
Downtown	Downtown 3 (DT-3)	80,183									80,183
Downtown	Downtown 4 (DT-4)	429,881									429,881
Downtown	Downtown 5 (DT-5)	923,700									923,700
Industrial	Industrial - General (IG)			294,418	6,434,555	1,387,984					8,116,957
Industrial	Industrial - Manufacturing (IM)				1,193,886	6,258,972					7,452,858
Industrial	Industrial - Mixed Services (IMS)			69,479			59,845				129,324
Industrial	Industrial - Service 1 (IS-1)			55,389	344,392		258,079				657,860
Industrial	Industrial - Service 2 (IS-2)				165,713						165,713
Mixed Use	Mixed Use 1 (MU-1)						36,500				36,500
Mixed Use	Mixed Use 3 (MU-3)	34,800	56,687								91,487
Mixed Use	Mixed Use 4 (MU-4)			53,140							53,140
Residential	Residential - High 1 (RH-1)	78,108									78,108
Residential	Residential - High 2 (RH-2)		74,329	2,675							77,004
Residential	Residential - High 4 (RH-4)			213,846						50,691	264,537
Residential	Residential - High 5 (RH-5)		12,150			18,763		19,369	14,423	35,948	100,653
Residential	Residential - Low 2 (RL-2)						16,504		4,232		20,736
Residential	Residential - Medium 1 (RM-1)		2,763	61,581			12,195		37,522	20,822	134,883
Residential	Residential - Medium 2 (RM-2)		903				4,372		59,091		64,366
Residential	Residential - Medium 3 (RM-3)		21,097								21,097
Residential	Residential - Mixed 1 (RMX-1)	8,832	114,680								123,512
Total		1,893,935	677,845	1,986,316	8,317,456	7,818,101	414,419	41,767	131,866	402,704	21,684,409

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 44: NUMBER OF PRIMARY EMPLOYERS, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification		Subcommunity									Subcommunity Totals
		Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			2						3	5
Business	Business - Community 2 (BC-2)		4	5					3		12
Business	Business - Commercial Services (BCS)			2							2
Business	Business - Main Street (BMS)	3	4	1			1				9
Business	Business - Regional 1 (BR-1)			19							19
Business	Business - Regional 2 (BR-2)					5					5
Business	Business - Transitional 1 (BT-1)		2	5	1					11	19
Business	Business - Transitional 2 (BT-2)	1	10	8				1			20
Downtown	Downtown 1 (DT-1)	5									5
Downtown	Downtown 2 (DT-2)	8									8
Downtown	Downtown 3 (DT-3)	7									7
Downtown	Downtown 4 (DT-4)	21									21
Downtown	Downtown 5 (DT-5)	26									26
Industrial	Industrial - General (IG)			7	209	41					257
Industrial	Industrial - Manufacturing (IM)				17	36					53
Industrial	Industrial - Mixed Services (IMS)			4			2				6
Industrial	Industrial - Service 1 (IS-1)				8		1				9
Industrial	Industrial - Service 2 (IS-2)				3						3
Mixed Use	Mixed Use 1 (MU-1)						2				2
Mixed Use	Mixed Use 3 (MU-3)	5	3								8
Mixed Use	Mixed Use 4 (MU-4)			2							2
Residential	Residential - High 1 (RH-1)	4						1			5
Residential	Residential - High 2 (RH-2)		4	1							5
Residential	Residential - High 4 (RH-4)			5						6	11
Residential	Residential - High 5 (RH-5)		3					1	2		6
Residential	Residential - Low 2 (RL-2)						1				1
Residential	Residential - Medium 1 (RM-1)		1	2					1		4
Residential	Residential - Medium 2 (RM-2)								1		1
Residential	Residential - Medium 3 (RM-3)		2	1							3
Residential	Residential - Mixed 1 (RMX-1)		4								4
Total		80	37	64	238	82	7	3	7	20	538

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 45: NUMBER OF PRIMARY EMPLOYEES, BY ZONING DISTRICT AND SUBCOMMUNITY

Zoning District Classification		Subcommunity									Subcommunity Totals
		Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			14						109	123
Business	Business - Community 2 (BC-2)		122	103					25		250
Business	Business - Commercial Services (BCS)			20							20
Business	Business - Main Street (BMS)	67	92	8			13				180
Business	Business - Regional 1 (BR-1)			414							414
Business	Business - Regional 2 (BR-2)					36					36
Business	Business - Transitional 1 (BT-1)		42	101	1,468					86	1,697
Business	Business - Transitional 2 (BT-2)	11	236	111				10			368
Downtown	Downtown 1 (DT-1)	37									37
Downtown	Downtown 2 (DT-2)	78									78
Downtown	Downtown 3 (DT-3)	173									173
Downtown	Downtown 4 (DT-4)	433									433
Downtown	Downtown 5 (DT-5)	692									692
Industrial	Industrial - General (IG)			300	6,734	1,421					8,455
Industrial	Industrial - Manufacturing (IM)				1,395	8,036					9,431
Industrial	Industrial - Mixed Services (IMS)			50			15				65
Industrial	Industrial - Service 1 (IS-1)				124		11				135
Industrial	Industrial - Service 2 (IS-2)				50						50
Mixed Use	Mixed Use 1 (MU-1)						17				17
Mixed Use	Mixed Use 3 (MU-3)	44	139								183
Mixed Use	Mixed Use 4 (MU-4)			30							30
Residential	Residential - High 1 (RH-1)	115						331			446
Residential	Residential - High 2 (RH-2)		31	10							41
Residential	Residential - High 4 (RH-4)			293						214	507
Residential	Residential - High 5 (RH-5)		23					12	84		119
Residential	Residential - Low 2 (RL-2)						8				8
Residential	Residential - Medium 1 (RM-1)		7	13					6		26
Residential	Residential - Medium 2 (RM-2)								10		10
Residential	Residential - Medium 3 (RM-3)		45	7							52
Residential	Residential - Mixed 1 (RMX-1)		54								54
Total		1,650	791	1,474	9,771	9,493	64	353	125	409	24,130

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 46: SQUARE FEET OF SPACE LEASED/OWNED BY PRIMARY EMPLOYERS, BY ZONING DISTRICT AND SUBCOMMUNITY

		Subcommunity									
Land Use Classification	Zoning District	Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	Subcommunity Totals
Business	Business - Community 1 (BC-1)			5,000						21,351	26,351
Business	Business - Community 2 (BC-2)		61,908	24,128					7,619		93,655
Business	Business - Commercial Services (BCS)			6,611							6,611
Business	Business - Main Street (BMS)	9,344	18,000	4,000			3,561				34,905
Business	Business - Regional 1 (BR-1)			132,992							132,992
Business	Business - Regional 2 (BR-2)					19,503					19,503
Business	Business - Transitional 1 (BT-1)		7,121	23,731	193,275					25,740	249,867
Business	Business - Transitional 2 (BT-2)	6,000	86,288	26,827							119,115
Downtown	Downtown 1 (DT-1)	10,792									10,792
Downtown	Downtown 2 (DT-2)	28,423									28,423
Downtown	Downtown 3 (DT-3)	71,855									71,855
Downtown	Downtown 4 (DT-4)	106,880									106,880
Downtown	Downtown 5 (DT-5)	176,146									176,146
Industrial	Industrial - General (IG)			234,458	2,210,905	557,088					3,002,450
Industrial	Industrial - Manufacturing (IM)				505,201	2,306,158					2,811,359
Industrial	Industrial - Mixed Services (IMS)			7,542			5,444				12,986
Industrial	Industrial - Service 1 (IS-1)				44,994		5,327				50,321
Industrial	Industrial - Service 2 (IS-2)				12,000						12,000
Mixed Use	Mixed Use 1 (MU-1)						4,510				4,510
Mixed Use	Mixed Use 3 (MU-3)	16,223	32,030								48,253
Mixed Use	Mixed Use 4 (MU-4)			26,867							26,867
Residential	Residential - High 1 (RH-1)	25,098						47,659			72,757
Residential	Residential - High 2 (RH-2)		12,282	7,405							19,687
Residential	Residential - High 4 (RH-4)			48,766						162,812	211,578
Residential	Residential - High 5 (RH-5)		6,887					3,073	16,546		26,506
Residential	Residential - Low 2 (RL-2)						1,274				1,274
Residential	Residential - Medium 1 (RM-1)		3,700	10,248							13,948
Residential	Residential - Medium 2 (RM-2)							3,282			3,282
Residential	Residential - Medium 3 (RM-3)		4,450	2,774							7,224
Residential	Residential - Mixed 1 (RMX-1)		26,872								26,872
Total		450,760	259,538	561,350	2,966,375	2,882,749	20,116	50,732	27,447	209,903	7,428,969

^a Downtown is an area within the Central Boulder subcommunity.

Notes: Square footage grossed up to account for unavailable data on occupied space. Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 47: AVERAGE SQUARE FEET OF SPACE PER EMPLOYEE FOR PRIMARY EMPLOYERS, BY ZONING DISTRICT AND SUBCOMMUNITY

Land Use Classification	Zoning District	Subcommunity									Subcommunity Totals
		Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			357.1						195.9	214.2
Business	Business - Community 2 (BC-2)		507.4	234.3					304.8		374.6
Business	Business - Commercial Services (BCS)			330.6							330.6
Business	Business - Main Street (BMS)	139.5	195.7	500.0			273.9				193.9
Business	Business - Regional 1 (BR-1)			321.2							321.2
Business	Business - Regional 2 (BR-2)					541.8					541.8
Business	Business - Transitional 1 (BT-1)		169.5	235.0	131.7					299.3	147.2
Business	Business - Transitional 2 (BT-2)	545.5	365.6	241.7							323.7
Downtown	Downtown 1 (DT-1)	291.7									291.7
Downtown	Downtown 2 (DT-2)	364.4									364.4
Downtown	Downtown 3 (DT-3)	415.3									415.3
Downtown	Downtown 4 (DT-4)	246.8									246.8
Downtown	Downtown 5 (DT-5)	254.5									254.5
Industrial	Industrial - General (IG)			781.5	328.3	392.0					355.1
Industrial	Industrial - Manufacturing (IM)				362.2	287.0					298.1
Industrial	Industrial - Mixed Services (IMS)			150.8			362.9				199.8
Industrial	Industrial - Service 1 (IS-1)				362.9		484.3				372.8
Industrial	Industrial - Service 2 (IS-2)				240.0						240.0
Mixed Use	Mixed Use 1 (MU-1)						265.3				265.3
Mixed Use	Mixed Use 3 (MU-3)	368.7	230.4								263.7
Mixed Use	Mixed Use 4 (MU-4)			895.6							895.6
Residential	Residential - High 1 (RH-1)	218.2						144.0			163.1
Residential	Residential - High 2 (RH-2)		396.2	740.5							480.2
Residential	Residential - High 4 (RH-4)			166.4						760.8	417.3
Residential	Residential - High 5 (RH-5)		299.4					256.1	197.0		222.7
Residential	Residential - Low 2 (RL-2)						159.3				159.3
Residential	Residential - Medium 1 (RM-1)		528.6	788.3					0.0		536.5
Residential	Residential - Medium 2 (RM-2)								328.2		328.2
Residential	Residential - Medium 3 (RM-3)		98.9	396.3							138.9
Residential	Residential - Mixed 1 (RMX-1)		497.6								497.6
Total		273.2	328.1	380.8	303.6	303.7	314.3	143.7	219.6	513.2	307.9

^a Downtown is an area within the Central Boulder subcommunity.

Note: Residential only includes zoning districts for which commercial use may be permitted by Use Review.

TABLE 48: AVERAGE AGES OF COMMERCIAL BUILDINGS IN YEARS, BY ZONING DISTRICT AND SUBCOMMUNITY

Land Use Classification	Zoning District	Subcommunity									Subcommunity Averages
		Down-town ^a	Central Boulder	Cross-roads	East Boulder	Gun-barrel	North Boulder	CU-Boulder	South Boulder	Southeast Boulder	
Business	Business - Community 1 (BC-1)			35.1	29.3	35.5	31.0			19.0	27.7
Business	Business - Community 2 (BC-2)		37.1	26.6					31.0	2.0	29.1
Business	Business - Commercial Services (BCS)			34.0							34.0
Business	Business - Main Street (BMS)	28.9	37.1	33.9			11.9				29.0
Business	Business - Regional 1 (BR-1)			29.5							29.5
Business	Business - Regional 2 (BR-2)					19.1					19.1
Business	Business - Transitional 1 (BT-1)		37.9	17.3	13.0			34.0		25.0	22.7
Business	Business - Transitional 2 (BT-2)	80.7	56.6	44.2	30.9			67.0			53.0
Downtown	Downtown 1 (DT-1)	48.5									48.5
Downtown	Downtown 2 (DT-2)	34.4									34.4
Downtown	Downtown 3 (DT-3)	58.2									58.2
Downtown	Downtown 4 (DT-4)	84.1									84.1
Downtown	Downtown 5 (DT-5)	28.6									28.6
Industrial	Industrial - General (IG)			40.2	28.2	27.7					28.5
Industrial	Industrial - Manufacturing (IM)				22.0	33.2					30.0
Industrial	Industrial - Mixed Services (IMS)			13.0			47.3				27.9
Industrial	Industrial - Service 1 (IS-1)			37.2	41.0		23.4				26.9
Industrial	Industrial - Service 2 (IS-2)				30.5						30.5
Mixed Use	Mixed Use 1 (MU-1)						11.4				11.4
Mixed Use	Mixed Use 3 (MU-3)	54.3	34.2								46.3
Mixed Use	Mixed Use 4 (MU-4)			45.3							45.3
Residential	Residential - High 1 (RH-1)	28.0									28.0
Residential	Residential - High 2 (RH-2)		57.8	51.5							57.3
Residential	Residential - High 4 (RH-4)			29.0						17.0	27.8
Residential	Residential - High 5 (RH-5)		31.1			29.0		17.0	28.0	31.7	31.1
Residential	Residential - Low 2 (RL-2)						35.8		29.0		35.0
Residential	Residential - Medium 1 (RM-1)		28.0	51.4			16.6		27.6	39.0	29.7
Residential	Residential - Medium 2 (RM-2)		57.0				40.0		40.0		40.6
Residential	Residential - Medium 3 (RM-3)		30.3								30.3
Residential	Residential - Mixed 1 (RMX-1)	106.6	69.8								76.3
Total		48.5	52.0	29.2	28.1	29.4	22.9	41.0	36.3	26.4	34.3

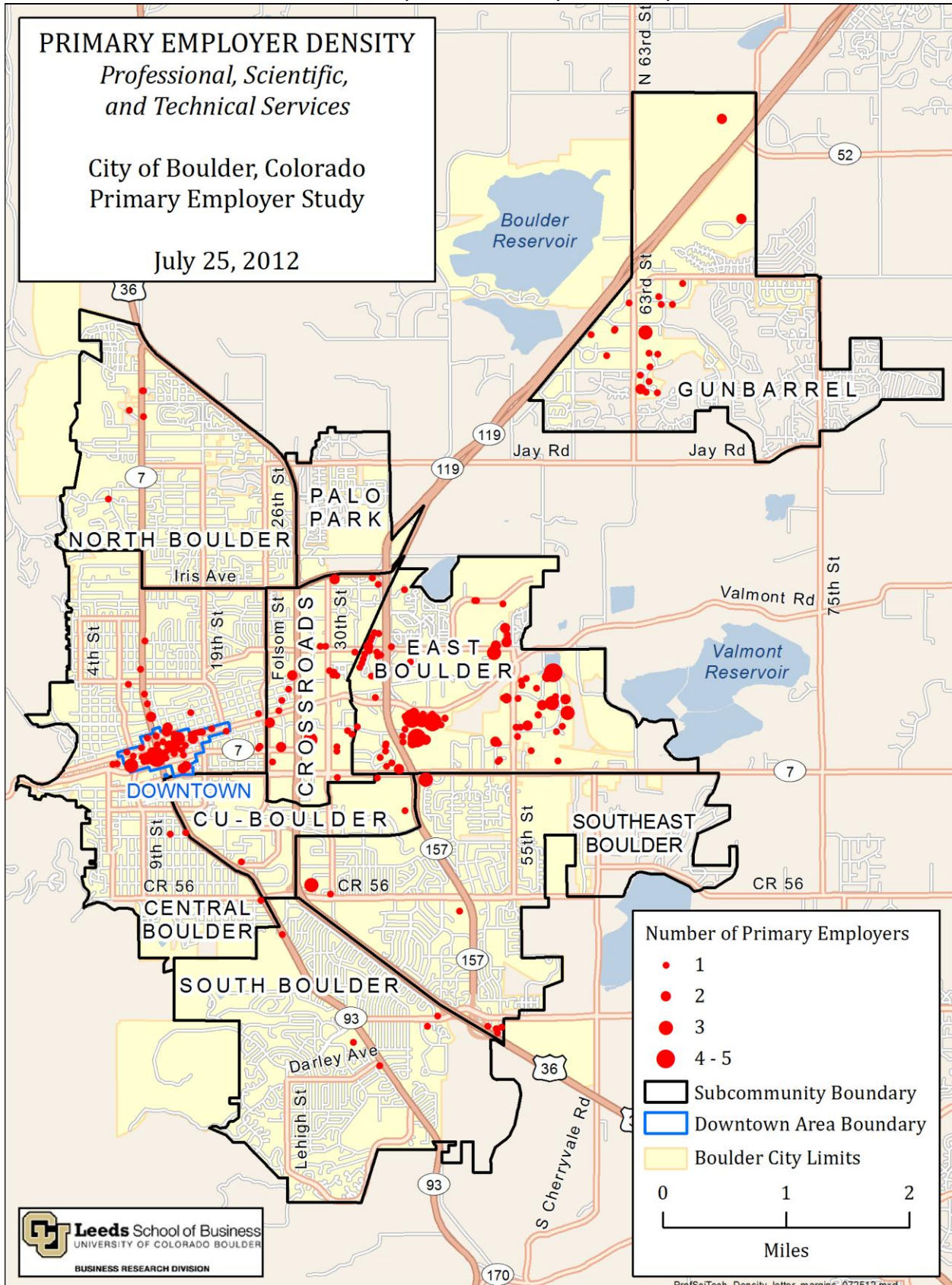
^a Downtown is an area within the Central Boulder subcommunity.

APPENDIX 5: PRIMARY EMPLOYER AND EMPLOYEE MAPS

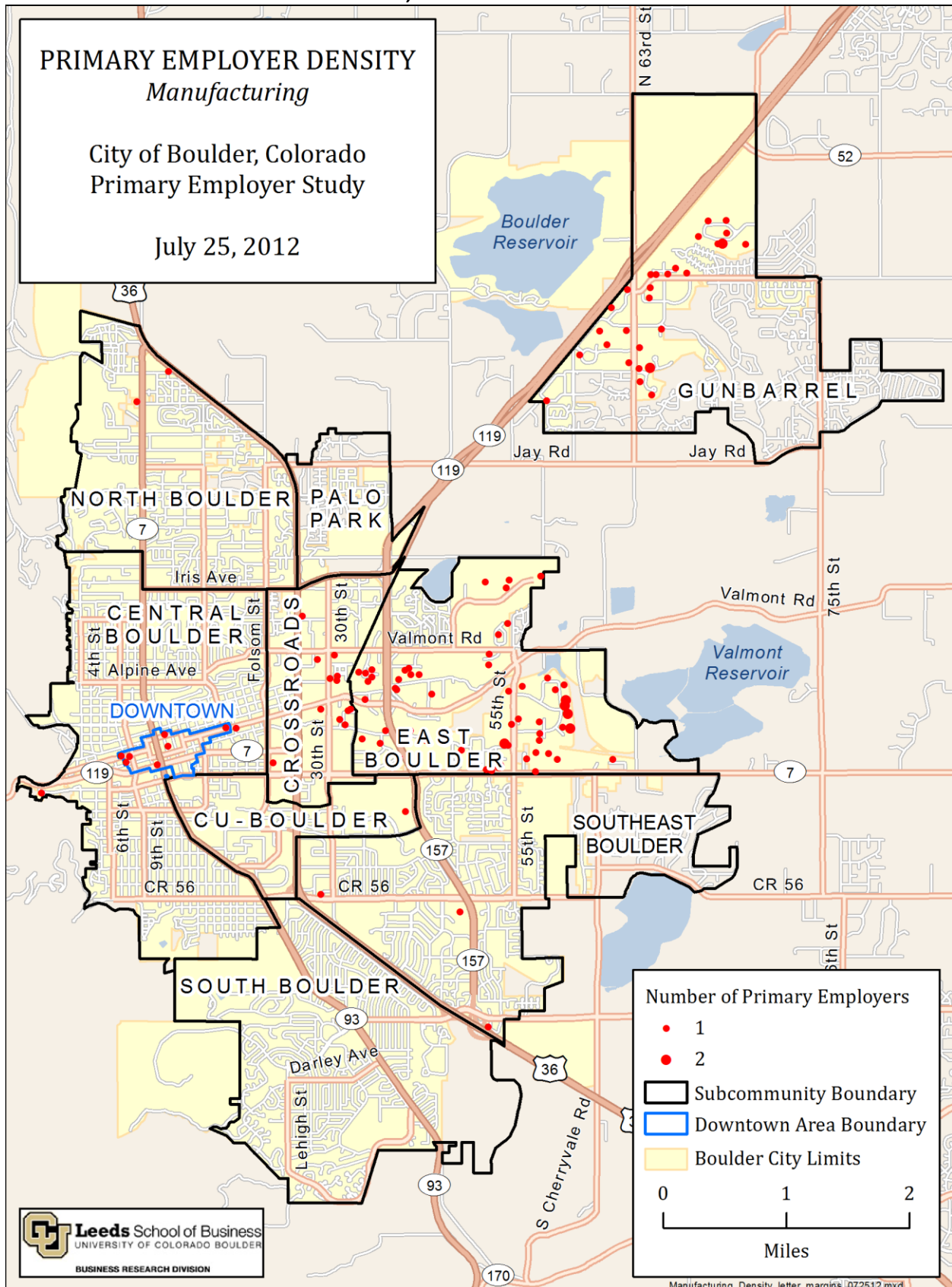
Map 4 through Map 8 show the distribution of primary employers by industry in Boulder:

- Map 4: Primary Employer Density Map, Professional, Scientific, and Technical Services
- Map 5: Primary Employer Density Map, Manufacturing
- Map 6: Primary Employer Density Map, Health Care and Social Assistance
- Map 7: Primary Employer Density Map, Information
- Map 8: Primary Employer Density Map, All Other Industries

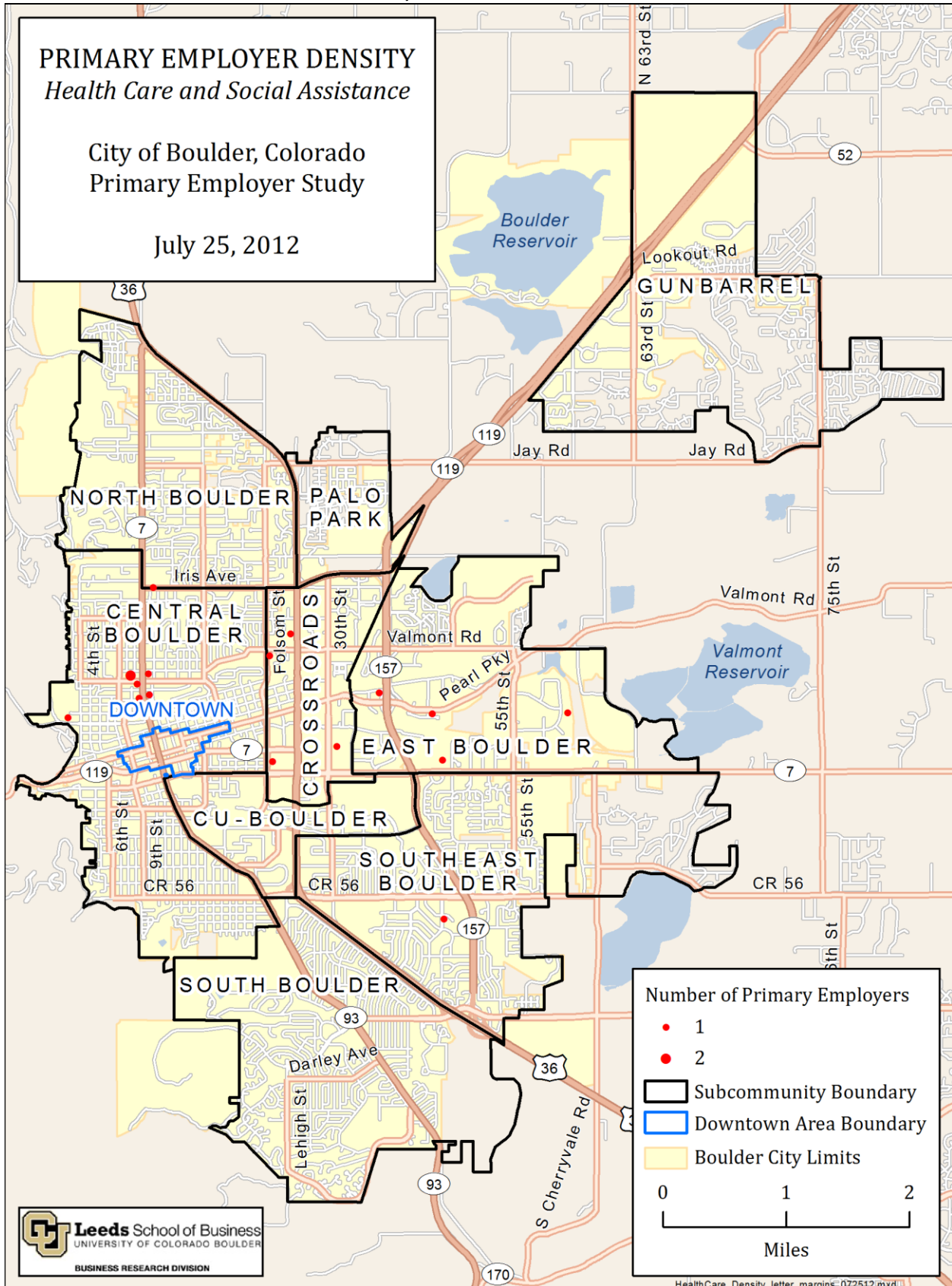
MAP 4: PRIMARY EMPLOYER DENSITY MAP, PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES



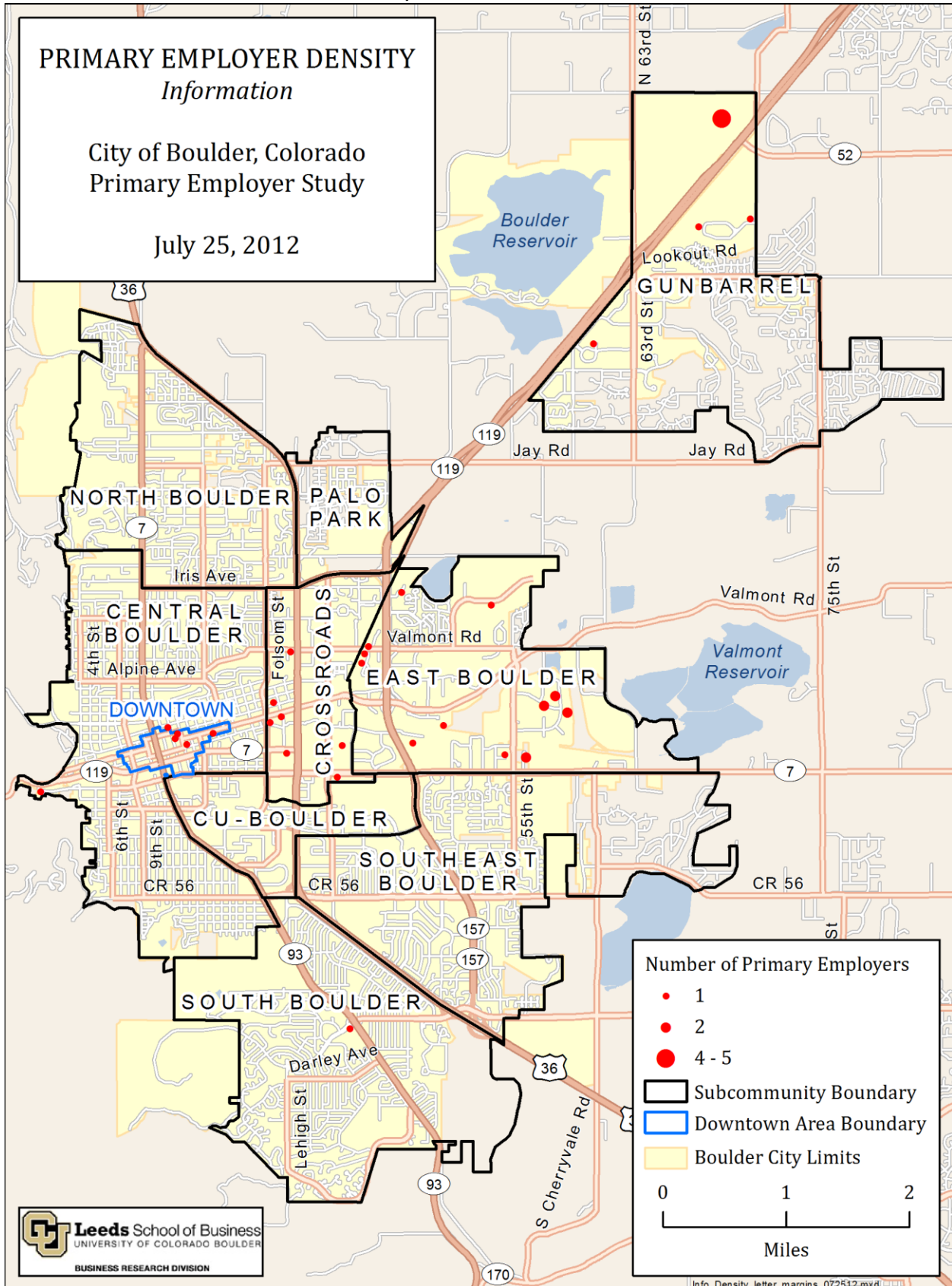
MAP 5: PRIMARY EMPLOYER DENSITY MAP, MANUFACTURING



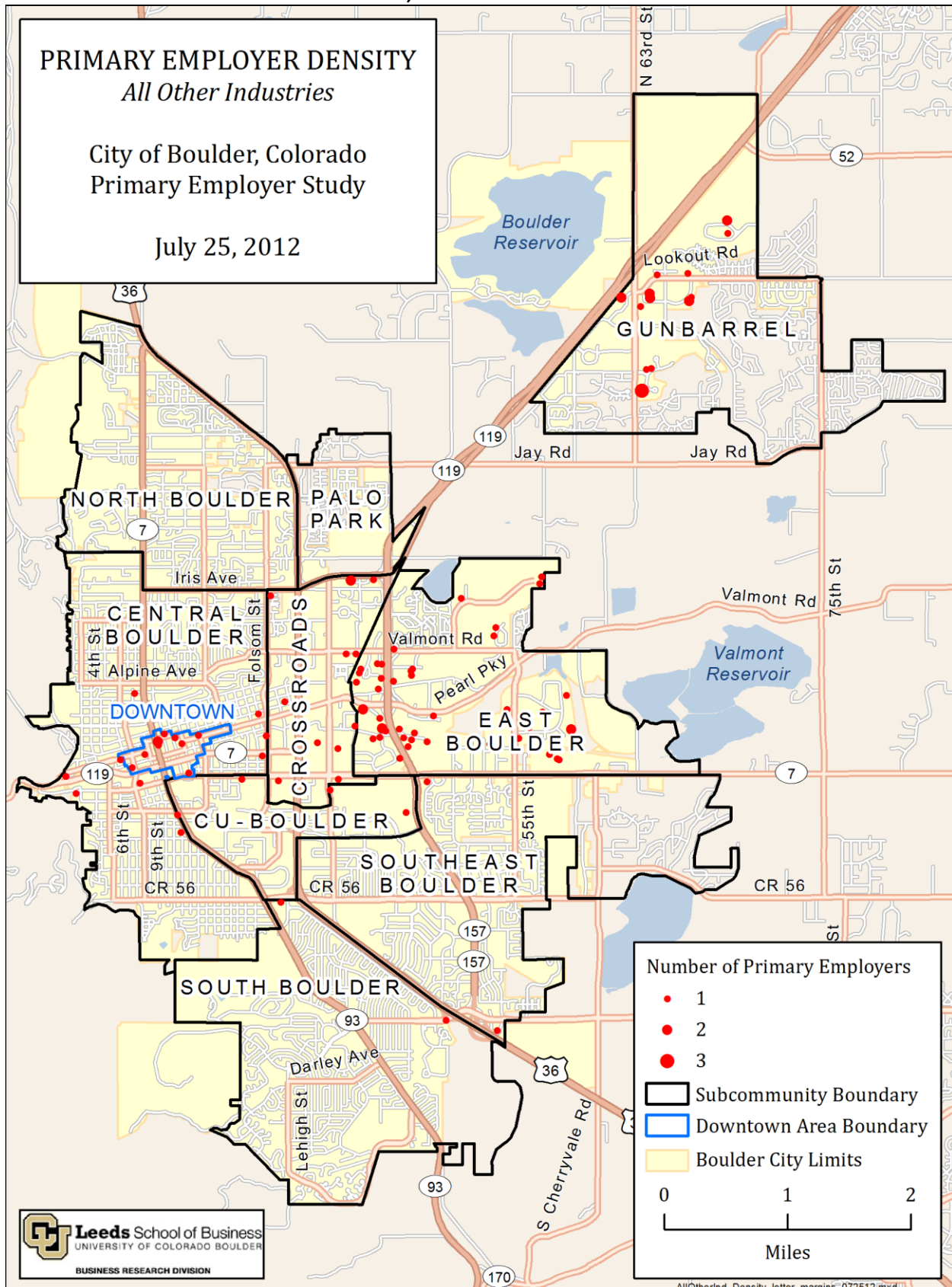
MAP 6: PRIMARY EMPLOYER DENSITY MAP, HEALTH CARE AND SOCIAL ASSISTANCE



MAP 7: PRIMARY EMPLOYER DENSITY MAP, INFORMATION



MAP 8: PRIMARY EMPLOYER DENSITY MAP, ALL OTHER INDUSTRIES



APPENDIX 6: WALK SCORE® AMENITY MAPS

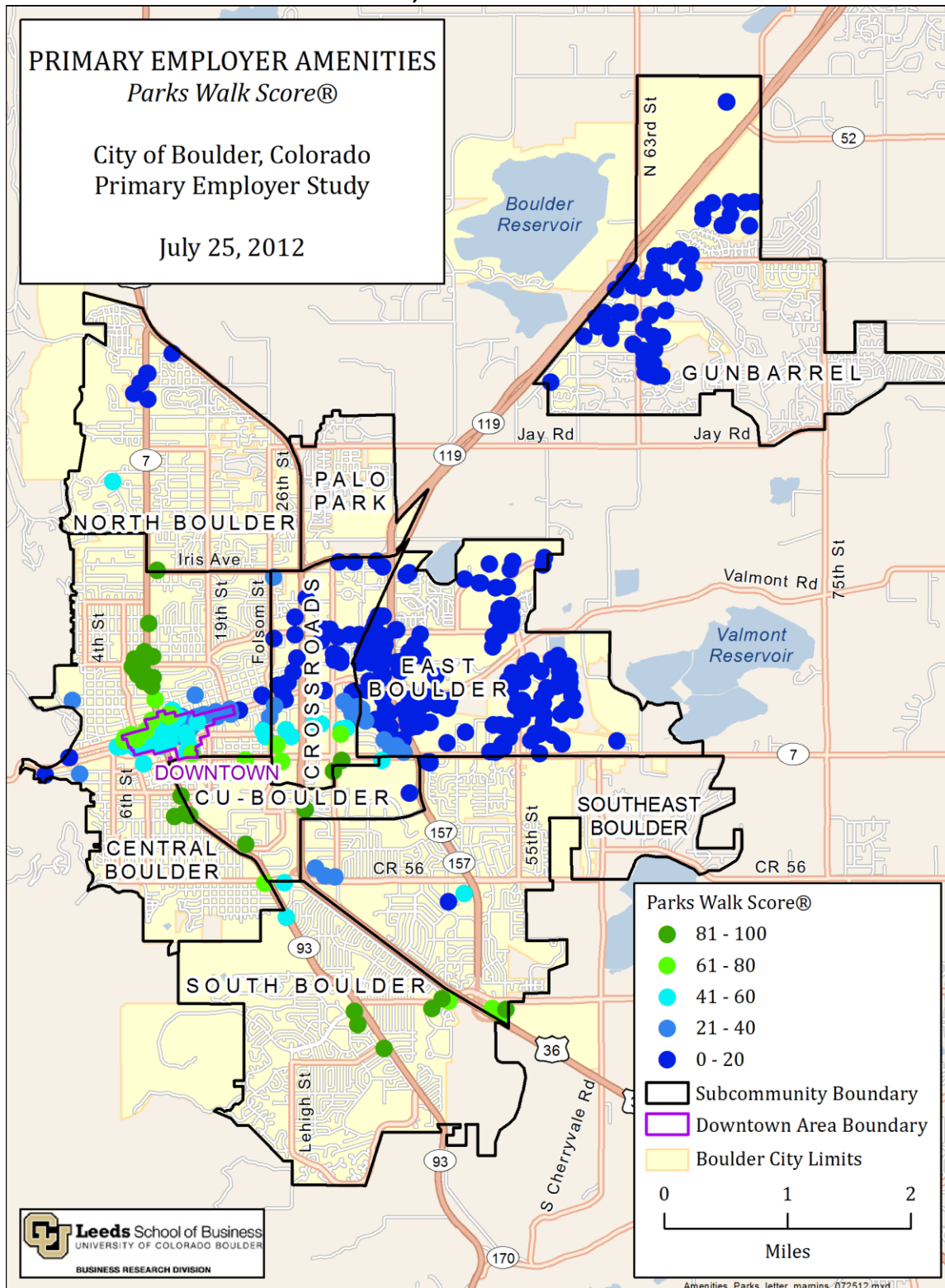
Map 9: Primary Employer Amenities, Parks Walk Score® Map

Map 10: Primary Employer Amenities, Entertainment Walk Score® Map

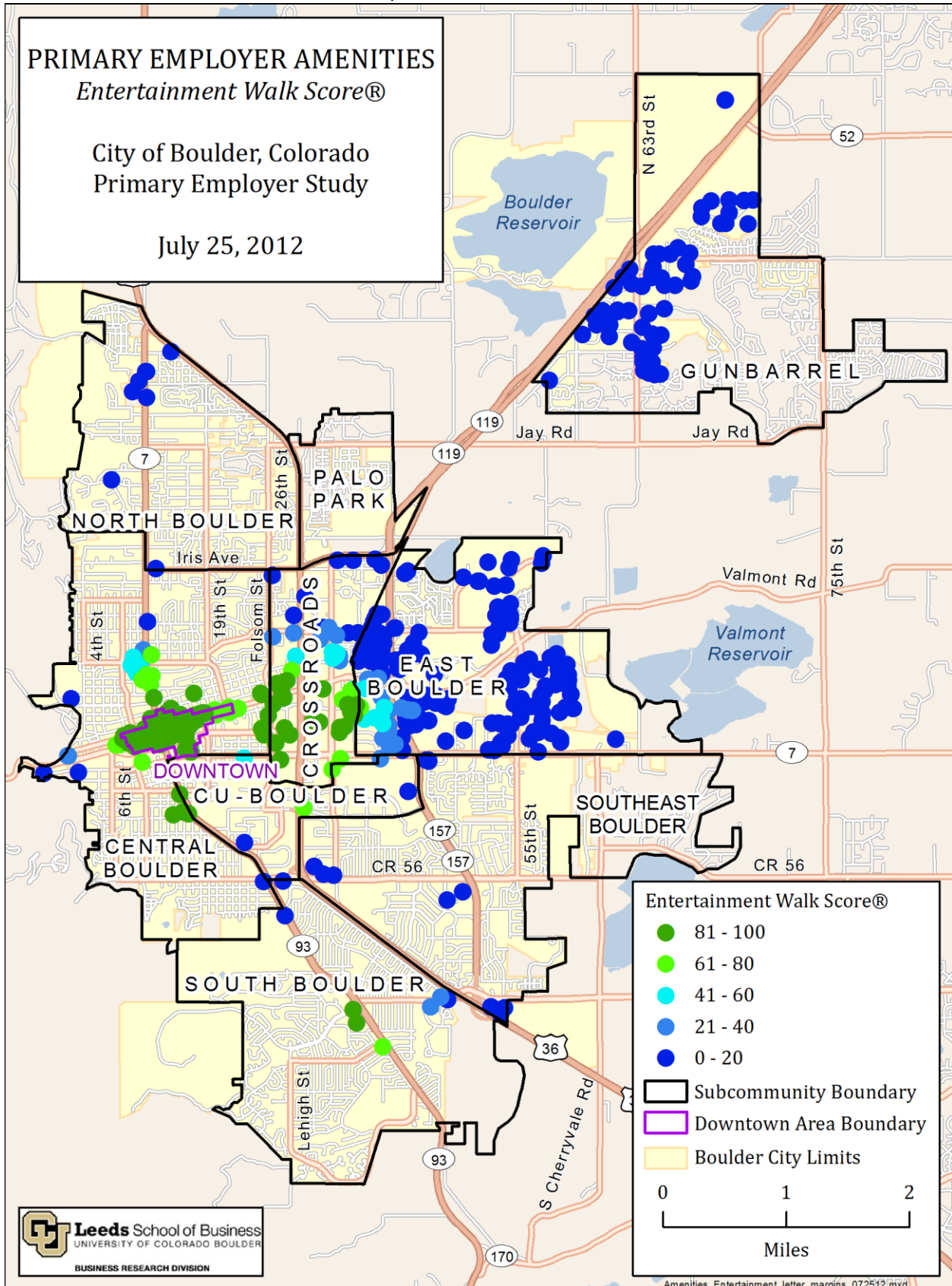
Map 11: Primary Employer Amenities, Restaurants and Bars Walk Score® Map

Map 12: Primary Employer Amenities, Transit Walk Score® Map

MAP 9: PRIMARY EMPLOYER AMENITIES, PARKS WALK SCORE® MAP



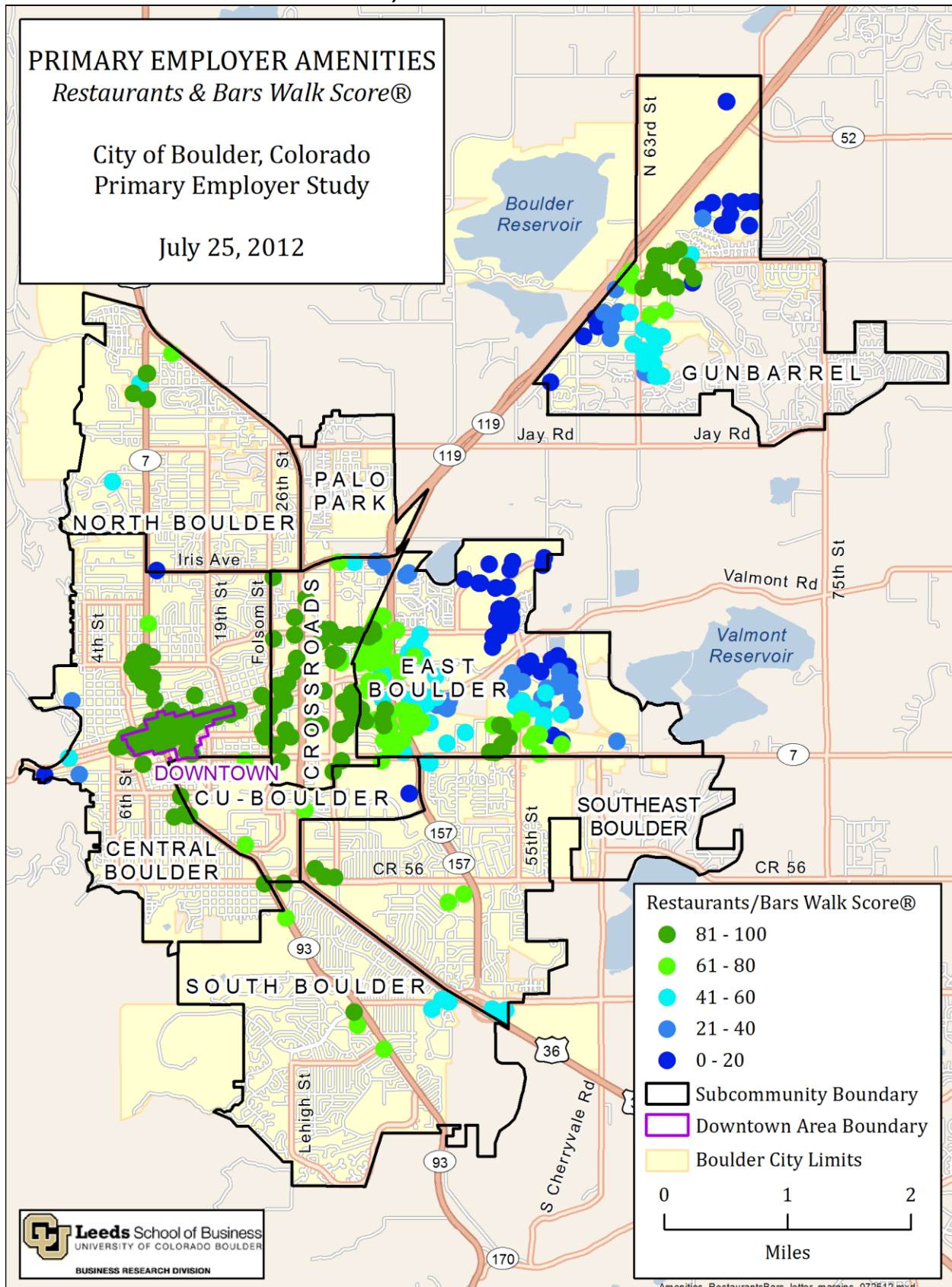
MAP 10: PRIMARY EMPLOYER AMENITIES, ENTERTAINMENT WALK SCORE® MAP



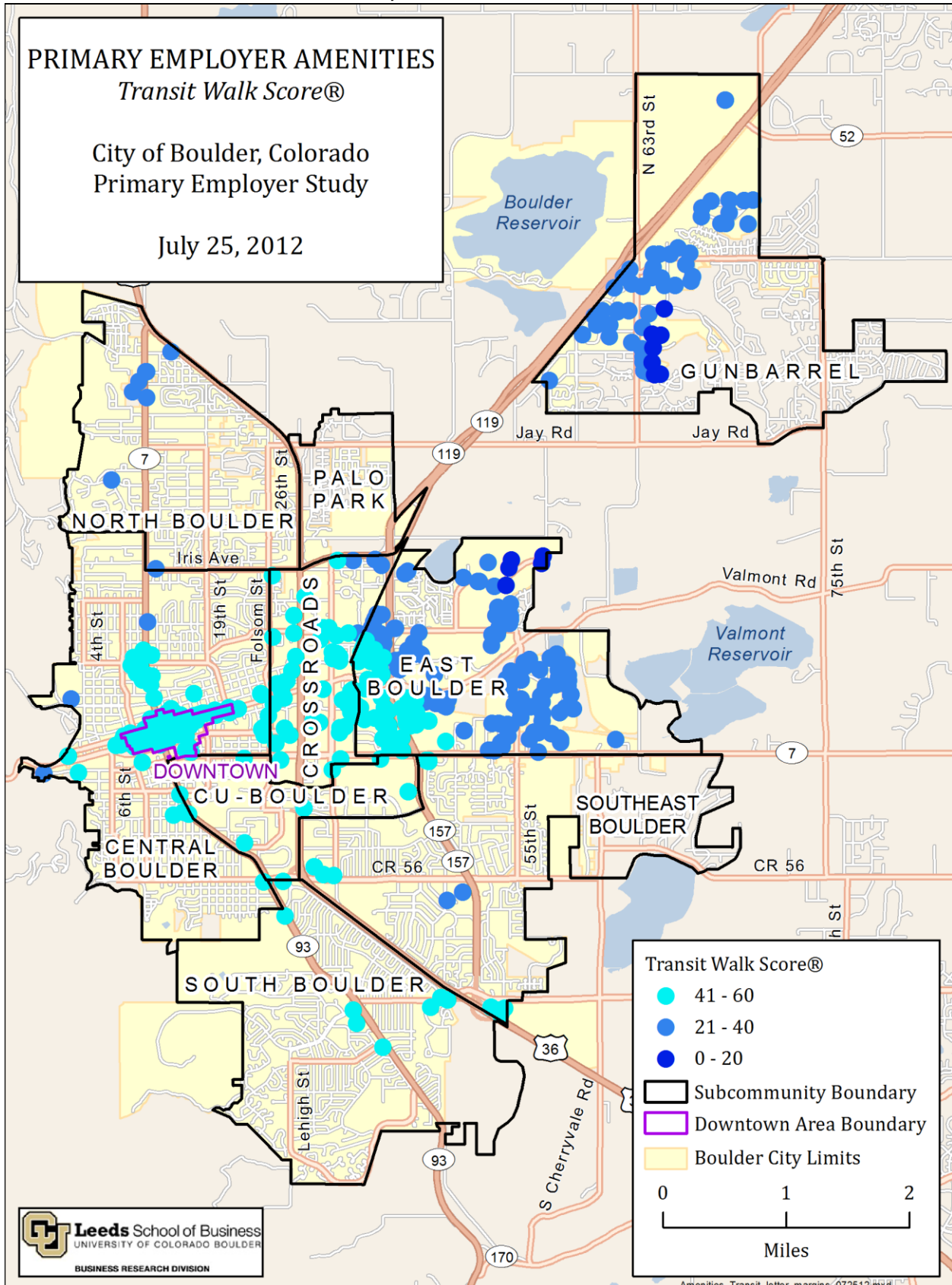
Leeds School of Business
 UNIVERSITY OF COLORADO BOULDER
 BUSINESS RESEARCH DIVISION

Amenities_Entertainment_letter_margins_072512.mxd

MAP 11: PRIMARY EMPLOYER AMENITIES, RESTAURANTS AND BARS WALK SCORE® MAP



MAP 12: PRIMARY EMPLOYER AMENITIES, TRANSIT WALK SCORE® MAP



APPENDIX 7: BROKERS FOCUS GROUP AGENDA



BUSINESS RESEARCH DIVISION

Meeting Agenda

June 12, 2012

12:00-1:30

Meeting Overview: Boulder's boundaries, property values and existing land use regulations result in limited future growth opportunities for the employment base in Boulder; thus, the City's response to employment changes over time must be strategic. Creating a retention strategy that focuses on primary employers, and ensures that Boulder has the appropriate mix of commercial real estate and amenities, is imperative to this end.

The Boulder Primary Employer Study, funded by the city of Boulder, bridges economic and employment analysis with the study of local commercial real estate and zoning. Understanding broker/tenant perceptions and the reality of commercial real estate will inform the project team of the current state of commercial real estate, as well as areas of further research.

Meeting Facilitator: Tom Thibodeau
Global Real Estate Capital Markets Professor
Academic Director of the University of Colorado Real Estate Center

Project Team in

Attendance: Tom Thibodeau, Rich Wobbekind, Brian Lewandowski, Student Research Assistants, and Jennifer Pinsonneault

1. Introductions
2. Project Overview
 - a) Identify Primary Employers
 - b) Describe subcommunities
3. What is the current status of commercial real estate in Boulder?
 - a) Rents
 - b) Vacancy rates
 - c) Lease terms
 - i. Size of space

- ii. Length of lease
 - iii. Concessions
 - d) How do these characteristics vary by subcommunity?
- 4. What building attributes do primary employers seek?
 - a) Price
 - b) Quality
 - c) Size
 - d) Other amenities
- 5. What location attributes do primary employers seek?
 - a) parking
 - b) transportation
 - c) access to retail
 - d) other
- 6. Why do primary employers leave Boulder (i.e., what attributes do other cities offer)?
 - a) Building Attributes
 - i. Price
 - ii. Quality
 - iii. Size
 - iv. Other amenities
 - b) Location Attributes
 - i. Clusters
 - ii. Quality of life
 - iii. Workforce
 - iv. Intangibles
- 7. What can the City do to keep primary employers?
 - a) Zoning
 - b) Permits
 - c) Other
- 8. How have tenant preferences and characteristics of the building stock changed over time?
 - a) How have tenant preferences changed over time?
 - b) How has the building stock in Boulder changed over time?
 - i. Depreciation
 - ii. Upgrading
- 9. Suggestions for Future Research
- 10. Closing

APPENDIX 8: DEVELOPERS FOCUS GROUP AGENDA



Meeting Agenda

June 26, 2012

12:00-1:30

Meeting Overview: Boulder's boundaries, property values and existing land use regulations result in limited future growth opportunities for the employment base in Boulder; thus, the City's response to employment changes over time must be strategic. Creating a retention strategy that focuses on primary employers, and ensures that Boulder has the appropriate mix of commercial real estate and amenities, is imperative to this end.

The Boulder Primary Employer Study, funded by the city of Boulder, bridges economic and employment analysis with the study of local commercial real estate and zoning. Understanding developers' perceptions and the reality of commercial real estate will inform the project team of the current state of commercial real estate, as well as areas of further research.

Meeting Facilitator: Tom Thibodeau
Global Real Estate Capital Markets Professor
Academic Director of the University of Colorado Real Estate Center

Project Team in Attendance: Tom Thibodeau, Rich Wobbekind, Brian Lewandowski, and Student Research Assistants

- 1) Introductions
- 2) Project Overview
 - a) Identify Primary Employers
 - b) Describe subcommunities
- 3) Summarize Broker Focus Group Discussion
 - a) Overall Boulder Market
 - i) Downtown in very high demand/limited supply
 - ii) Boulder address very important to some employers (e.g. organic foods)
 - iii) Boulder loses employers to competing markets

- (1) Age of commercial real estate
 - (2) Other markets easier to attract employees from Denver
- iv) Boulder expensive to do business
 - (1) Permits expensive/time consuming
 - (2) Enforcement of ADA too restrictive
- b) Downtown market
 - i) Positives: hub for start-ups, restaurants, nightlife
 - ii) Negatives: very old buildings, lack of parking, shortage of space (particularly in the 5k-20k range)
- c) Other markets
 - i) Industrial subcommunities (Gunbarrel, East Boulder) need amenities like retail/hotel
 - ii) Lose employers because power cheaper elsewhere
 - iii) Older buildings lack important attributes (e.g. clear height)
 - iv) Other markets offer greater access to I25/Denver
- 4) What challenges do developers face?
 - a) In what markets do rents warrant new construction?
 - b) What are the impediments to development?
 - i) Zoning
 - ii) Land costs
 - iii) Entitlements
 - iv) Other
- 5) How have tenant preferences and characteristics of the building stock changed over time?
 - a) How have tenant preferences changed over time?
 - b) How has the building stock in Boulder changed over time?
 - i) Depreciation
 - ii) Upgrading
- 6) Current challenges/opportunities
 - a) Zoning near Foothills Community Hospital
 - b) Others?
- 7) Suggestions for future research
- 8) Closing

APPENDIX 9: FOCUS GROUP SUMMARIES

SUMMARY OF REAL ESTATE FOCUS GROUP: BROKERS

The project team met with six members of the commercial real estate brokerage industry on June 12, 2012. These brokers are very familiar with the Boulder commercial real estate market and represent most of the major firms that work with owners and tenants in the city of Boulder. The objectives of this meeting were to:

- Describe the current status of the Boulder commercial real estate market,
- Identify building and location attributes desired by primary employers in Boulder,
- Explain why the city of Boulder loses primary employers to competing markets, and
- Identify steps the city of Boulder can take to help keep primary employers in Boulder.

Research team member Brian Lewandowski began the meeting by providing the City's definition of primary employer and describing how the project team identified 554 primary employers located within City limits. These employers provide about 26,000 of the 90,000 jobs located within the City's boundaries (about 29% of all jobs in Boulder). The primary employers exclude the University of Colorado Boulder, the federal labs, and all government employers.

Team member Tom Thibodeau then described how Boulder segments the City into nine subcommunities: Central Boulder, Crossroads, East Boulder, Gunbarrel, North Boulder, Palo Park, the University of Colorado, South Boulder, and Southeast Boulder. The brokers commented that the Downtown market is also segmented, commanding the highest rents and lowest vacancy rates in the City. The brokers defined the boundaries for the Downtown area as: Pine Street on the north, Arapahoe on the south, the foothills on the west, and 19th Street on the east. Some brokers suggested that the eastern boundary be extended to 22nd Street or even Folsom. These boundaries differ slightly from the City's BID boundary used to define the Downtown area within this study.

Current Status of Boulder's Commercial Real Estate Markets

Downtown

Much of the conversation focused on the Downtown market. For Class A office space, triple-net rental rates (rents net of operating expenses paid by tenants) range from \$22 per square foot (psf) to \$27 psf for existing properties and between \$30 psf and \$35 psf for new space. Expenses average between \$11 psf and \$12 psf but reach \$15 psf for properties that pay higher property taxes for garages. The vacancy rate for Downtown Class A office space is very low, below 3%. Rental rates for Class B Downtown space are in the \$18 psf to \$22 psf range with expenses in the \$11.50 psf to \$12 psf range. The vacancy rate for Class B Downtown office space is also low, about 3%. Rental rates for Class C Downtown space are in the \$16 psf to \$18 psf range with a 5% vacancy rate.

Central Boulder

There is no Class A office space in the Central Boulder subcommunity (excluding Downtown). Rental rates for Class B office space in Central Boulder are in the \$14 psf to \$16 psf range for first floor space and slightly higher for upper floors. Operating expenses are in the \$8 psf to \$9 psf range, and the vacancy rate for Class B office space in the Central Boulder market is in the 9% to 12% range.

East Boulder/Gunbarrel

Office rents in the East Boulder market are about \$25 psf, and the vacancy rate is in the 3% to 4% range. Industrial property rents in the Gunbarrel market are in the \$7 psf to \$9 psf range, expenses are in the \$3 psf to \$4 psf range, and the vacancy rate is around 7%.

Other Subcommunities

Other subcommunities were presented to the group, but there was little discussion among the brokers about these subcommunities due to limited time, as well as the small number of primary employers in these areas.

Building and location attributes desired by primary employers in Boulder

The real estate brokers generally agreed that most consumers of office space have a strong preference to locate in the Downtown market. The Downtown market, with its access to restaurants and entertainment, is also a hub for start-ups. Venture capitalists and well-known entrepreneurs are frequently found in Downtown coffee shops. This is a major attraction for local entrepreneurs. Because of relatively high rents and lack of available space, many consumers of office space end up in Boulder's tertiary office markets (e.g., Central Boulder, East Boulder, etc.).

In addition to the Pearl Street Mall, a Boulder address is very important to some industries (e.g., organic foods and outdoor recreation equipment).

Downtown

Office users have a strong preference to locate in the Downtown Boulder market. Property amenities that employers and employees seek are showers, bicycle storage, and convenient/inexpensive parking. Location amenities that employers/employees seek are access to restaurants and entertainment.

Why does Boulder lose primary employers to competing markets?

The brokers identified five primary reasons that primary employers leave the City:

- A lack of space in the most desirable areas (e.g., Downtown), particularly in the 5,000 square foot to 20,000 square foot range
- The age of the building stock
- The cost of doing business in Boulder
- Zoning
- Access to external labor markets (particularly Denver's labor market)

It is difficult to rank these reasons in order of importance, but the lack of space in the Downtown Boulder market was considered one of the most important reasons employers leave the city of Boulder. Some employers are content to find space in Boulder's tertiary office markets, but others chose to locate outside City limits.

Older buildings in the Boulder market lack important features that employers seek, including such features as updated kitchen facilities, modern lighting, indoor showers, climbing walls, etc. Industrial properties lack features such as drains, high ceilings, and large loading docks. Competing properties along the US 36 corridor offer much newer space at competitive rental rates.

Brokers cited the cost of doing business in Boulder as another reason why the City loses employers. The permitting process for repairs/renovations is time consuming and expensive. One broker remarked "getting a permit to paint requires an Act of Congress in Boulder. Companies respond by just moving to Longmont or

Louisville.” The City’s rigid enforcement of ADA requirements was cited as increasing the cost of doing business in Boulder. Spending 20% of tenant improvements on ADA requirements significantly increases the cost of finished space. One broker commented “The retail store Swiss Army spent like \$600,000 on improvements and the City required them to spend an additional \$120,000 on accessibility. There was just no way that they could do that.” The cost of electricity was also cited as a major reason that (industrial) employers leave Boulder. The cost of electricity is between 20% and 40% cheaper in Longmont.

The brokers also stated the City’s zoning laws impede business activity in Boulder. The classification system is complicated and inflexible. As an example, while some attorneys (i.e., patent lawyers) can lease space on land zoned Industrial in East Boulder, other attorneys cannot. Professional services cannot locate in East Boulder because of zoning. Flatirons Park desperately needs to accommodate more retail.

Finally, access to labor markets outside of Boulder was cited as an important reason why employers leave the City. Some employers in the Boulder area rely on workers who live in the greater metropolitan Denver area. It is easier to attract labor to locations along the US 36 corridor than it is to require employees to deal with the traffic congestion associated with commuting to Boulder.

What steps can the City take to help keep primary employers in Boulder?

Brokers identified five things the City can do to keep primary employers in Boulder:

- Increase the amount of office space in the Downtown market
- Subsidize the cost of upgrading older buildings
- Increase the amount of rebates
- Be more flexible enforcing ADA requirements
- Provide more flexible zoning

To be accurate, the brokers were not unanimous in calling for more Downtown office space. Some brokers were content to keep the supply of space fixed and let rents continue to increase. On the other hand, most brokers said the City needs to add commercial space Downtown to continue serving the needs of the growing entrepreneurial community.

To help keep primary employers in Boulder, the City could subsidize the cost of renovation/upgrading. The City could also expedite the approval process and rebate (a portion of) permitting and inspection fees. In addition, the City could be more flexible on its enforcement of ADA requirements.

Additionally, focus group participants lauded the efforts of City employees in relation to support and incentives. However, they noted the amount of incentives the city of Boulder has to offer is much less than competitor communities in the state. The City could increase the pool of incentives to be more competitive.

Zoning laws should be more flexible to accommodate the changing needs of Boulder’s employers. The existing code is very rigid and makes it difficult to adapt to the changing requirements of Boulder’s employers.

SUMMARY OF REAL ESTATE FOCUS GROUP: DEVELOPERS

In June, the project team met with six individuals from the Boulder real estate development community. The purpose of the focus group was to address three questions: (1) why have some primary employers left Boulder?; (2) what are some of the challenges facing real estate developers in Boulder?; and (3) what can the city of Boulder do to mitigate items (1) and (2)? The meeting began with Brian Lewandowski providing an overview of the research objectives, including defining and identifying primary employers in Boulder, delineating the subcommunities used by the City to characterize land use, and describing the survey sent to primary employers. He also summarized the research results to date and the results of the real estate brokers' focus group meeting held two weeks earlier.

Why have primary employers left Boulder?

The real estate developers identified four reasons why primary employers leave Boulder:

- Lack of adequate space in desired locations;
- High cost of electricity;
- Lack of amenities in most subcommunities (excluding Downtown Boulder); and
- Inadequate parking in the Downtown market.

The developers began the conversation by reiterating the real estate brokers' suggestion that some primary employers leave the City because they cannot locate adequate space in the Boulder market, particularly Downtown. The developers also suggested that some employers leave Boulder because electricity is cheaper elsewhere. One developer said "Platte River Power is 30% to 40% cheaper than Xcel and that's a huge advantage (*for energy intensive businesses, like data centers*). Honda built their national data center in Longmont for just that reason." Finally, the developers said that it is difficult to attract/keep primary employers in Boulder because, with the exception of the Downtown Boulder subcommunity, most places lack important amenities that employers seek for their employees. Amenities such as restaurants, coffee shops, athletic facilities, hotels, grocery stores, dentists, chiropractors, and day care facilities, while abundant in the Downtown subcommunity, are inadequate in other Boulder subcommunities. One developer remarked "East Boulder lacks some of those amenities, whether it is restaurants or athletic clubs, or a hotel. That is sometimes challenging as tenants want that more urban feel that they get when they can walk out and have access to a bunch of restaurants." Another developer suggested "I think people would just like to walk out, walk down the street, and sit outside." The group discussed the possibility of providing a shuttle service between the East Boulder market and either the Pearl Street Mall or the Twenty Ninth Street Mall. This would give employees in the East Boulder market better access to a variety of restaurants, retail, and other services. The disadvantage of providing transportation is that as potential customers take the shuttle to services, it would be more difficult for local markets to provide these services.

Finally, the developers also reiterated the brokers' conclusion that some primary employers leave the Downtown Boulder market for locations along US 36 because of the lack of parking.

What are some of the challenges facing Boulder real estate developers?

The developers identified high land costs, entitlement costs, and zoning as the three biggest impediments to building commercial space in Boulder. The growth boundaries established in the 1980s and the conversion of land to public open space have significantly reduced the supply of developable land in the City. As a consequence, land prices in Boulder are high relative to what they are in surrounding communities. Given the high land costs, only rents in the Downtown market make new construction economically feasible in the current market.

The developers said the entitlement process was expensive, time consuming, and uncertain. One developer said “On the energy side, with the permitting alone we’ve run into issues where the standards are so high that you can’t actually meet them with certain build-ups. You’re told don’t worry because once you put it in front of the City, it’ll let you through. That’s not a great process when the published guideline is unattainable. We’ve got to explain to our tenant not to worry. Boulder says that they want this, but they always go for that. Don’t be concerned yet....” Another developer added “That’s a good point, there’s still that uncertainty. And because of the length of the process, if they (*the tenant*) need to make a decision...they will go elsewhere.”

While the Economic Vitality Program is a good liaison between the City, businesses, and real estate, the developers said the existing zoning laws are antiquated, inflexible, and fail to recognize the real boundaries for economic activities in the Boulder area. The existing zoning regulations are decades old. They fail to accommodate the dynamic nature of Boulder’s employment. The existing zoning regulations are too rigid and define permissible uses too narrowly. For example, patent attorneys can occupy space on land zoned Industrial but other attorneys cannot. Medical uses are prohibited on land zoned Industrial, while there is a shortage of medical space near Foothills. The group was asked if the 1997 zoning changes resulted in any substantive changes in land use. The consensus opinion was that it did not. One developer said “Let me tell you what I recall about that. The City was bent on downzoning all commercial areas in order to restrict jobs—that’s what the Integrated Planning Project was aimed at. They had this notion that they had to balance population with employment because they had this tightly defined political boundary.”

The developer went on to say that the existing zoning laws fail to recognize how markets for employment and goods and services production operate in the Boulder area. “The point is trying to do zoning within this artificial political definition of a boundary. It’s always going to lead you to a less than 100% outcome. Here’s what we really want to do when it comes to zoning: get as flexible as possible so that you can have these companies that morph in the way they do their job. We don’t do physical stuff; we don’t build here; we don’t assemble here; we don’t bring raw materials in.” Another developer suggested “the use has to be able to accommodate changes of how this space is being used, and the zoning kind of prevents that from happening.” One developer gave an example of a 40,000 square foot space on land zoned Industrial. The developer had a prospective tenant that was primarily administrative but did some medical testing on site. The City initially prevented the prospective tenant from occupying the space because the City classified the use as medical, a prohibited use in the Industrial zone. While the developer was appealing this decision, the prospective tenant simply found space outside Boulder.

What can Boulder do?

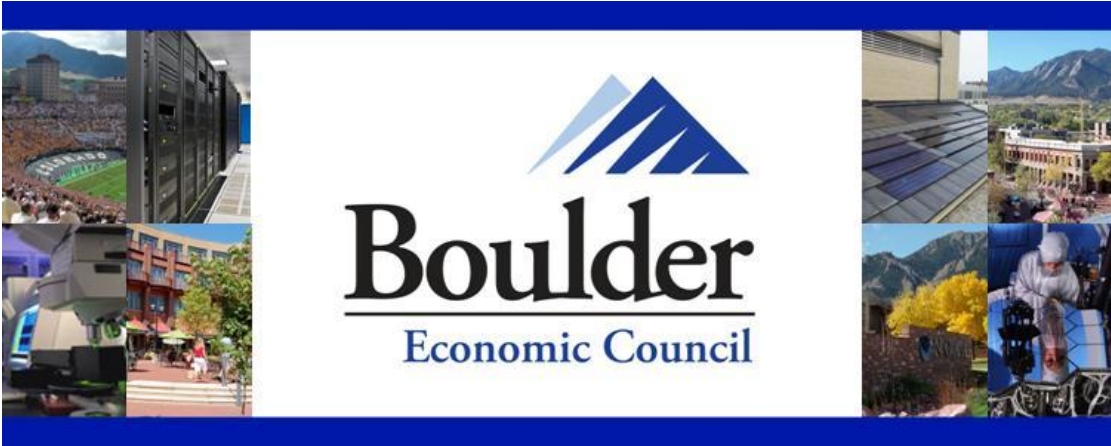
The developers identified three things that the city of Boulder can do to facilitate commercial real estate development in Boulder: (1) relax the building height restriction east of 30th Street, (2) reduce entitlement costs (and associated uncertainty in the entitlement process), and (3) adopt a more flexible system of zoning.

Allowing for higher densities with taller buildings east of 30th will accomplish two things. First, developers will be able to amortize the high cost of land over more square footage of leasable space, reducing the rents that they must charge to make new construction feasible. Second, higher densities mean more people working and living in East Boulder, making it easier for the market to support more amenities (e.g., restaurants, coffee shops, athletic facilities, hotels, grocery stores, dentists, chiropractors, and day care facilities).

The City can facilitate commercial real estate development by streamlining the review process and reducing the uncertainty associated with obtaining permits. The City should also consider establishing an expedited appeal process whereby property owners and tenants can quickly appeal negative decisions.

The City needs to adopt more flexible zoning regulations. One developer said “Retail amenities are a big issue; I’d like to see a hotel off by 55th. We’re working to put in some amenities, but an issue we have with some prospective tenants is you have the industrial zoning which is very unique to Boulder, where we can’t lease to professional services firms or any sort of quasi-retail. We don’t see that anywhere else where there’s a distinction between where you can’t lease to a law firm or a dental office.” Mission Bay in San Francisco was cited as an example of a place that has flexible zoning laws.

Finally, the developers suggested that the City work with the University of Colorado Boulder to facilitate the transition between academic research and goods and services intended for broader markets. Los Angeles/University of Southern California and Gainesville/University of Florida were mentioned as two places that have formed partnerships to promote the transfer of technology/academic research to commercial markets.



Primary Employer Survey

Boulder, Colorado

July 2012

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Executive Summary

To help determine how well Boulder’s industrial and commercial areas are meeting the needs of primary employers, the City of Boulder commissioned a study by the Boulder Economic Council. The following summary highlights key findings of a telephone survey conducted in June/July 2012 with a random sample of 158 primary employers located in Boulder.

Perceptions about doing business in Boulder

- Primary employers are generally positive about Boulder as a business location. Over half (53%) feel Boulder is a better place for businesses like theirs and 25% feel it is the same as other cities in the area. Sixty-one percent believe having a Boulder address helps their business.
- Being located in Boulder is perceived by some primary employers as having a negative effect on their ability to grow. Many (57%) mentioned at least one negative factor, most frequently related to the cost of doing business (i.e., cost of space, land and building costs, taxes).
- Most primary employers (72%) rate the ease of doing business in Boulder as positive (good or better). In contrast, only half rated the availability of suitable space as positive and 49% rated the cost of doing business in the city as positive.

Perceptions about business areas in Boulder

- Primary employers are generally satisfied with the areas where their businesses are located. Eighty-percent said they are completely or mostly satisfied and only four percent are somewhat or very dissatisfied.
- Nearly all (97%) primary employers mentioned at least one positive aspect of their area, including access to restaurants, shopping, public transportation and transportation corridors, the availability of parking, and convenience for employees and customers.
- Two-thirds of primary employers mentioned improvements they feel would make their area better for business including more restaurants, more affordable space, more parking, less traffic congestion, more shopping, and better access to public transportation.

Importance of amenities

- The relative importance of specific amenities varies by industry and other factors. In general, parking, public transportation, restaurants, and a walkable environment are more important to primary employers than the other amenities.

Amenity is very or somewhat important	%
Parking for employees	89
Access to restaurants	85
Access to public transportation	84
Walkable environment	80
Parking for customers or visitors	74
Access to trails/recreational facilities	67
Access to shopping and services	66
Access to hotels for customers or visitors	56
Access to large meeting spaces	39

Space occupied by primary employers

- Primary employers consider the space they occupy to be important; 66% consider it one of the more important factors and 7% consider it the most important factor in running their business. When asked what other factors are important, many mentioned factors related to workforce,

transportation, and city policies and tax rates. Nearly 30% specifically mentioned the availability of qualified workers.

- The type and amount of space occupied by primary employers differs dramatically by a number of factors including industry and company size.
- While 87% reported their current space meets their needs, 48% would make changes if there were no zoning or other restrictions. Of those who would change their space, 20% wanted a larger space and 11% wanted to have the flexibility to use their space differently or to make their space more functional.
- Two-thirds of the city's primary employers have been operating in Boulder for more than ten years, and many have occupied more than location during their time in the city. Most (81%) lease the space their business currently occupies and have been in their current space for an average of 6.5 years.
- 61% of primary employers have leases expiring in the next 3 years, including 26% with leases expiring within a year. Most (73%) primary employers with leases indicated they are likely to renew. Of those with leases expiring in the next year, 31% say they probably or definitely will *not* renew their lease. Many of those who do not expect to renew their lease are looking for less expensive or larger spaces than they currently occupy.

Expansion plans

- Just over half (51%) of primary employers expect to add employees in the next year, and 60% plan to expand their business in the next 2 to 3 years. Most (70%) of the expansions are expected to require additional space and 45% of those are likely to involve moving to a new location.
 - An extrapolation of survey findings indicates 19% of the city's primary employers plan to expand into larger space in the next 2 to 3 years, including 8% that don't expect to find the space they need in Boulder.
- 57% of primary employers planning expansions in the next 2 to 3 years will be looking to add less than 10,000 additional square feet. However, accounting for the space currently occupied, 47% are likely to be looking for spaces 10,000 square feet or larger, including 32% who will need spaces that are 20,000 square feet or larger.

Recent and anticipated relocation

- 25% of primary employers had moved to new space in the past two years, mostly to gain more space.
- 29% of primary employers plan to move to a new space in the next 2 to 3 years, including 20% who plan to move to accommodate an expansion.
- Of the 9% of primary employers that plan to move in the next 2 to 3 years without expanding their business, half indicated their current space was too small and several were looking for better quality space.
- Of the primary employers who anticipate moving to another location as part of an expansion, 59% expect to find the space they need in Boulder. Of those primary employers that anticipate relocating without expanding their business, 44% expect to find a suitable space in the city of Boulder.
- Those who do not expect to find the space they need in Boulder most frequently mentioned the cost of space, inability to find a space that's large enough, and availability of less expensive space outside Boulder.

- Primary employers who expect to relocate are considering space in Boulder or nearby communities including Broomfield and Louisville.

Energy efficiency and waste reduction programs

- Primary employers consider programs to reduce trash and increase energy efficiency to be more important than the availability of energy efficient space or programs to reduce water use.
- Over half (58%) of primary employers currently participate in a waste reduction program, 34% participate in an energy efficiency program, 20% occupy “green” or energy efficient space, and 18% participate in a program to reduce water use.
- Two-thirds (66%) of primary employers are at least somewhat familiar with Boulder’s Energy Smart energy efficiency, zero waste, and water use programs; however, only 18% characterized themselves as very familiar and 34% said they are not at all familiar with the programs.

Background

As part of a study designed to compare the needs of primary employers to commercial space, the City of Boulder hired the Boulder Economic Council to conduct a survey of Boulder’s primary employers. *(For purposes of the study, primary employers were defined as businesses that sell more than half their products or services to customers located outside Boulder County.)* The primary focus of the survey was to explore perceptions about the city as a business location and to help determine the current use of and unmet needs for commercial space.

A telephone survey was conducted in June/July 2012 with a random sample of 158 primary employers with five or more employees. Interviews were conducted by Aspen Media and Market Research, a local marketing research firm. *(More details on methodology and sample size in report appendix.)*

A diverse group of businesses participated in the survey, providing a broad representation of Boulder’s primary employers as the tables below show.

How many employees, including yourself, work for your business in Boulder?	%
5 to 9	22
10 to 19	38
20 to 49	23
50 to 99	9
100 or more	7

What area of Boulder is your business located in?	%
Crossroads or 28 th Street area	9
Central Boulder	9
Downtown Boulder	19
East Boulder	39
Gunbarrel	8
North Boulder	11
Northeast Boulder	2
South Boulder	3
Southeast Boulder	1

What industry is your business in?*	%
Professional services – architecture, consulting, design, engineering, marketing	30
Advanced tech – aerospace, bioscience, clean tech, software, other	25
Manufacturing	23
Non-profit	7
Natural & organic products	6
Wholesale, distribution	6
Healthcare	4
Information	3
Outdoor products	1
Other	4

About how long has your business been operating in the city of Boulder?	%
Less than 1 year	1
1 to 2 years	3
3 to 5 years	10
6 to 10 years	21
More than 10 years	66

*Multiple categories possible

What is the approximate square footage of your space?	%
Less than 2,500	22
2,500 – 4,999	19
5,000 – 9,999	14
10,000 – 24,999	25
25,000 – 49,999	10
50,000 or more	6
(Don’t know)	4

Is your business currently headquartered in Boulder?	%
Yes	91
No	9

Detailed Summary of Findings

Perceptions about doing business in Boulder

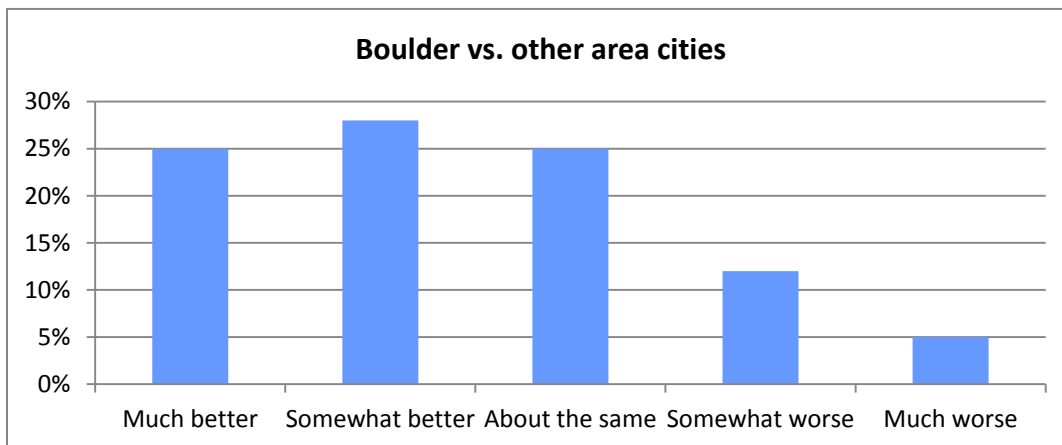
Survey results indicate that primary employers are generally positive about Boulder. Most feel Boulder compares favorably to other area cities as a business location, and many believe that having a Boulder address has a positive effect on their business.

Many of the primary employers surveyed indicated that there are some aspects of being located in Boulder that have a negative effect on their ability to grow. Frequently mentioned factors include the cost of space, high taxes, and cost of living.

While most rated the ease of doing business in the city as positive, many expressed concern with the cost of doing business and availability of suitable space for businesses in Boulder.

How Boulder compares to other cities

Over half the primary employers surveyed (53%) think Boulder is better than other cities in the area as a place for businesses like theirs. One-fourth feel it is about the same and 17% feel it is worse.



Primary employers who are more likely to feel Boulder is a “much better” location for businesses like theirs include those that have been in their current space for a shorter time, those located in Central Boulder and Downtown, and those in the natural & organic industry. *(Note: Industry category is not mutually exclusive; some of the primary employers surveyed are included in more than one category.)*

<i>In general, how do you think Boulder compares to other cities in the area as a place for businesses like yours?</i>	Much Better %	Somewhat Better %	About the Same %	Somewhat Worse %	Much Worse %
All primary employers surveyed	25	28	25	13	4
Years in Boulder					
• 5 years or less	38	29	24	5	5
• 6 to 10 years	27	27	30	9	--
• More than 10 years	22	29	23	15	6
Years at current location					
• 2 years or less	38	20	30	8	5
• 3 to 5 years	22	36	25	11	3
• 6 to 10 years	29	29	23	10	3
• More than 10 years	14	30	22	20	6

Current location					
• East Boulder	15	26	31	16	5
• Downtown Boulder	43	27	20	3	3
• North Boulder	29	53	18	--	--
• Central Boulder	53	13	7	20	--
• Crossroads/28 th Street	7	43	29	14	--
• Gunbarrel	8	23	31	15	23
Industry					
• Manufacturing	22	28	19	17	6
• Professional services	25	32	27	11	5
• Advanced technology	24	32	16	16	8
• Natural & organic	30	40	10	20	--
Number of employees					
• 5 to 19	26	23	37	6	9
• 10 to 19	33	30	15	12	--
• 20 to 49	14	27	30	22	5
• 50 to 99	29	36	21	--	7
• 100 or more	9	36	18	27	9

Primary employers who said that Boulder is better than other cities in the area for businesses like theirs most frequently mentioned factors related to Boulder’s business climate and workforce.

Why do you say that? (open-ended, multiple response)	%
Business Climate <ul style="list-style-type: none"> • Great working environment • Convenience to a lot of amenities that my employees like to use • Community supports local businesses more • Population is very supportive of entrepreneurship; Boulder is good for starting a business • Great location for tech start-up • People like to work in this area. Easier to recruit due to the culture of the city. • There is a lot of entrepreneurial activity for start up businesses • We have kindred and other like-minded organizations in the area to work with • High density of science • Leading location for industry • Boulder community is organically natural and supports our product • Boulder has become a mecca for natural foods • Boulder is next Silicon Valley • There are a lot of similar clean tech companies in Boulder 	46
Workforce <ul style="list-style-type: none"> • Quality of employees • Boulder attracts more of a high caliber of people and more high tech people • Access to talented staff • Good place to recruit people 	10
Physical Surroundings <ul style="list-style-type: none"> • Great scenery • Close to Mountains 	3
Presence of University <ul style="list-style-type: none"> • We are a high tech spin-off and being close to the university is good 	3
Quality of Life <ul style="list-style-type: none"> • Outdoor lifestyle • Easy access to hiking trails and it’s safe 	2

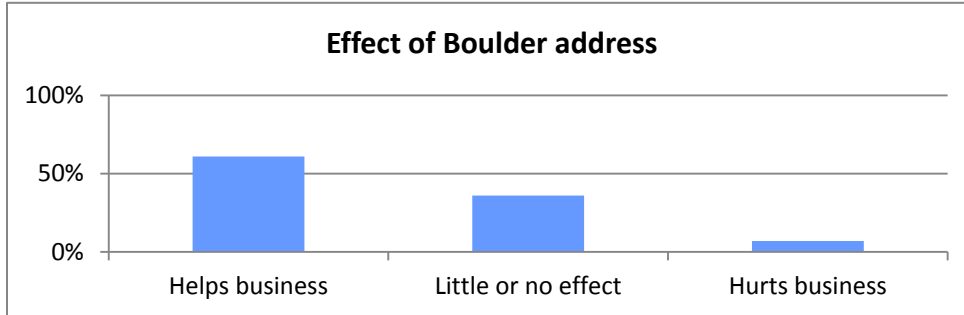
<ul style="list-style-type: none"> • <i>Very good recycling and composting opportunities, as well as public transportation</i> • <i>Very commuter friendly city</i> 	
Reputation <ul style="list-style-type: none"> • <i>Always hear good things about Boulder when you say you work in Boulder</i> • <i>National reputation for being a clean-tech environmentally friendly city which supports our company and gives a little bit of an additional glow</i> • <i>Boulder's image as being more progressive</i> • <i>People like coming to Boulder and like that we are from Boulder</i> 	1

Primary employers who feel Boulder is a worse place than other cities in the area for businesses like theirs mentioned a number of reasons including a less business friendly environment and cost of doing business.

Why do you say that? (open-ended, multiple response)	%
Not business friendly <ul style="list-style-type: none"> • <i>Boulder is not business friendly/general attitude of city anti-business</i> • <i>Lack of support for business community – talk a good game, but don't produce</i> • <i>General attitude toward business is negative</i> • <i>Feels like Boulder's plan does not meet the business community</i> 	13
Cost of doing business <ul style="list-style-type: none"> • <i>It is more expensive doing business here</i> • <i>High taxes</i> • <i>Boulder is a disadvantage [with taxes] on new equipment</i> • <i>Cost of real estate</i> • <i>Concerned about green initiative that will increase cost</i> 	8
Taxes and regulations <ul style="list-style-type: none"> • <i>Difficult taxing and city regulations</i> • <i>A lot of regulations</i> • <i>Regulation of food and manufacturing</i> • <i>Difficulty in permitting</i> • <i>City is hard to work with in regards to permits, etc.</i> • <i>The tax structure doesn't make any sense</i> • <i>Growth restrictions</i> 	4
Availability of space <ul style="list-style-type: none"> • <i>Not a lot of office space</i> 	3
Parking <ul style="list-style-type: none"> • <i>Parking is not very good in Boulder/Parking stinks</i> 	3
Other <ul style="list-style-type: none"> • <i>Not conducive to growing businesses</i> • <i>Difficult transportation in and out of Boulder for commuters</i> 	4

Effect of having a Boulder address

Sixty-one percent of the primary employers reported that having a Boulder address and being associated with Boulder’s image and reputation helps their business; 36% indicated it has little or no effect, and 7% said it hurts their business. A few feel it both helps and hurts their business.



Primary employers who were more likely to report that having a Boulder address has a positive effect on their business include those that have been in Boulder for a shorter time, those located in Downtown, Central Boulder or North Boulder, and those in the natural & organic industry.

<i>What effect, if any, does having a Boulder address and being associated with Boulder's image or reputation have on your business? (multiple response)</i>	Helps Business %	Little or No Effect %	Hurts Business %
All primary employers surveyed	61	36	7
Years in Boulder			
• 5 years or less	81	24	5
• 6 to 10 years	64	36	3
• More than 10 years	57	38	9
Years at current location			
• 2 years or less	68	32	5
• 3 to 5 years	67	31	8
• 6 to 10 years	58	39	7
• More than 10 years	56	40	8
Current location			
• East Boulder	49	46	10
• Downtown Boulder	70	30	3
• North Boulder	76	24	--
• Central Boulder	73	27	13
• Crossroads/28 th Street	64	29	7
• Gunbarrel	62	31	8
Industry			
• Manufacturing	69	31	3
• Professional services	57	45	7
• Advanced technology	49	46	5
• Natural & organic	89	11	--
Number of employees			
• 5 to 19	66	40	6
• 10 to 19	63	33	3
• 20 to 49	54	32	19
• 50 to 99	64	36	--
• 100 or more	55	45	--

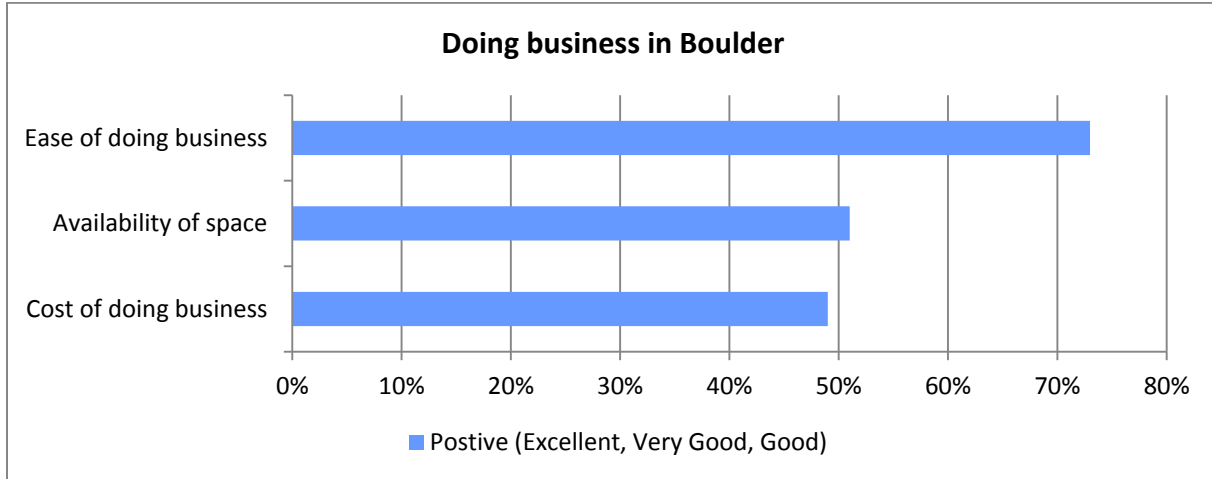
Negative effects of being located in Boulder

When asked whether there is anything about being located in Boulder that has a negative effect on their business or its ability to grow, 56% of primary employers mentioned at least one factor. Many mentioned factors related to the cost of doing business in the city, workforce issues, lack of available space, parking or traffic congestion, and city regulations and policies.

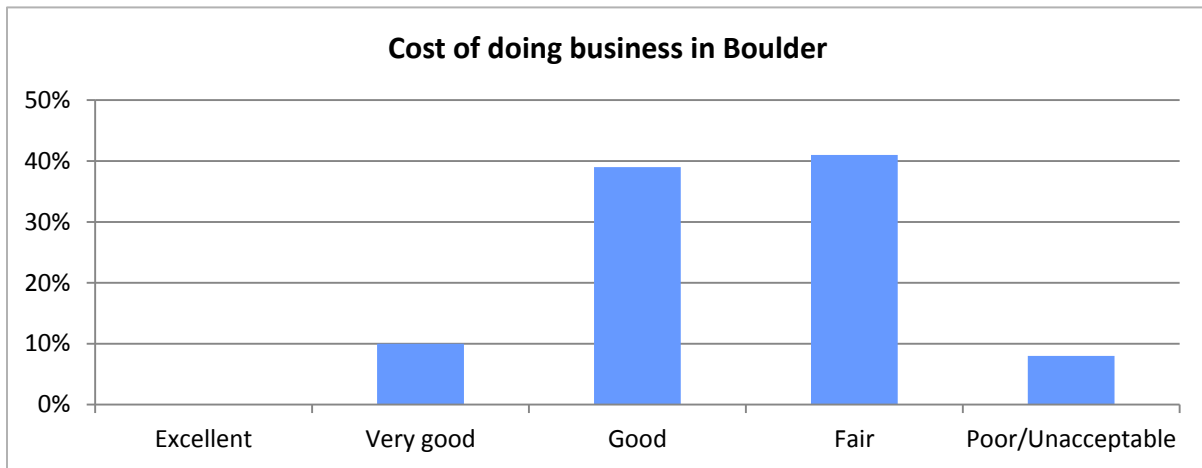
<i>Is there anything about being located in the city of Boulder that has a negative effect on your business or its ability to grow? (multiple response)</i>	<i>%</i>
Cost of business <ul style="list-style-type: none"> • Cost of space • High property taxes • High sales taxes (7%); High use taxes (5%) • Land and building costs 	17 13 12 5
Workforce issues <ul style="list-style-type: none"> • Lack of affordable housing for employees • Commuting time for employees • Difficult to find qualified workers • Labor costs/employee wage rates 	8 4 3 1
Availability of space <ul style="list-style-type: none"> • Can't find enough space • Can't find quality of space desired • Not enough buildings to choose from 	6 2 1
Parking/Traffic congestion <ul style="list-style-type: none"> • Traffic congestion • Parking cost/availability 	4 5
City policies/regulations <ul style="list-style-type: none"> • City has overly restrictive policies • Policies and regulations for land development 	5 3
Other <ul style="list-style-type: none"> • Cost of housing/cost of living • Reputation for being liberal/hippies • Difficulty accessing customers • Other 	4 4 1 6
None/Don't know	44

Doing business in Boulder

Primary employers were asked to rate the cost of doing business, ease of doing business, and the availability of suitable space for businesses in the city of Boulder. The ease of doing business in Boulder was rated more positively than the availability of space or the cost of doing business in the city.



Over half the primary employers surveyed gave the cost of doing business in Boulder a negative rating.

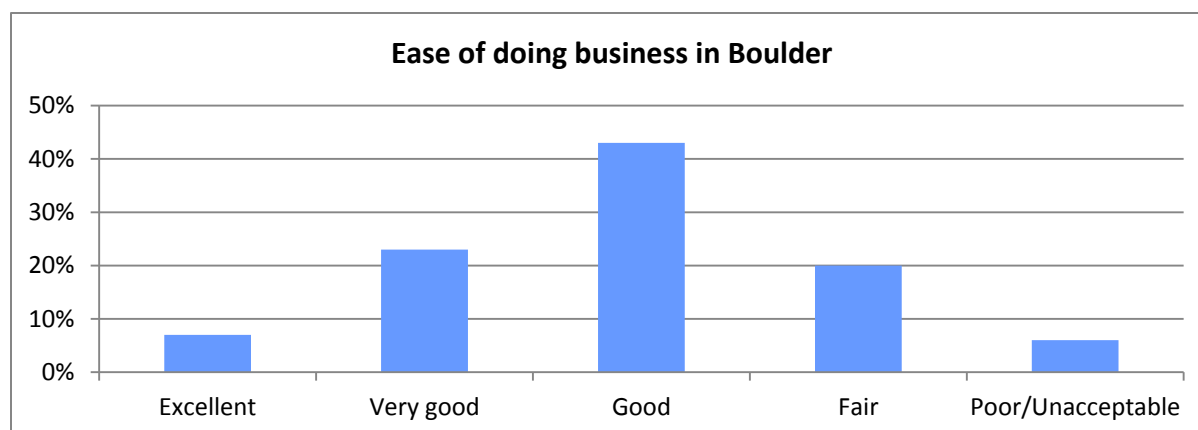


Primary employers most critical of the cost of doing business include those who have been in the city or their locations longer, those with 100 or more employees, located in Gunbarrel, in manufacturing or natural & organic industries, or with leases expiring within the next three years.

How would you rate the <u>cost of doing business</u> in Boulder?	Excellent %	Very Good %	Good %	Fair %	Poor %	Unacceptable %	Don't know %
All primary employers surveyed	--	10	39	42	8	1	2
Years in Boulder							
• 5 years or less	--	10	52	29	5	--	5

<ul style="list-style-type: none"> • 6 to 10 years • More than 10 years 	--	6	39	48	3	--	3
Years at current location <ul style="list-style-type: none"> • 2 years or less • 3 to 5 years • 6 to 10 years • More than 10 years 	--	10	45	35	5	3	3
Current location <ul style="list-style-type: none"> • East Boulder • Downtown Boulder • North Boulder • Central Boulder • Crossroads/28th Street • Gunbarrel 	--	13	36	44	7	--	--
Industry <ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	3	53	30	7	--	7
Number of employees <ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	6	47	47	--	--	--
Current lease expires <ul style="list-style-type: none"> • Within 1 year • 1 to 2 years • 2 to 3 years • More than 3 years 	--	7	60	20	13	--	--
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	21	29	50	--	--	--
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	--	8	67	8	8	8
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	6	31	53	11	--	--
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	16	39	34	9	--	2
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	16	35	41	5	3	--
<ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	--	20	10	60	10	--	--
<ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	17	43	37	3	--	--
<ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	5	40	47	5	--	3
<ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	8	35	43	11	3	--
<ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	14	43	21	14	--	8
<ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	--	9	27	45	18	--	--
<ul style="list-style-type: none"> • Within 1 year • 1 to 2 years • 2 to 3 years • More than 3 years 	--	5	46	44	3	--	3
<ul style="list-style-type: none"> • Within 1 year • 1 to 2 years • 2 to 3 years • More than 3 years 	--	4	38	54	--	4	--
<ul style="list-style-type: none"> • Within 1 year • 1 to 2 years • 2 to 3 years • More than 3 years 	--	10	28	52	10	--	--
<ul style="list-style-type: none"> • Within 1 year • 1 to 2 years • 2 to 3 years • More than 3 years 	--	19	44	26	11	--	--

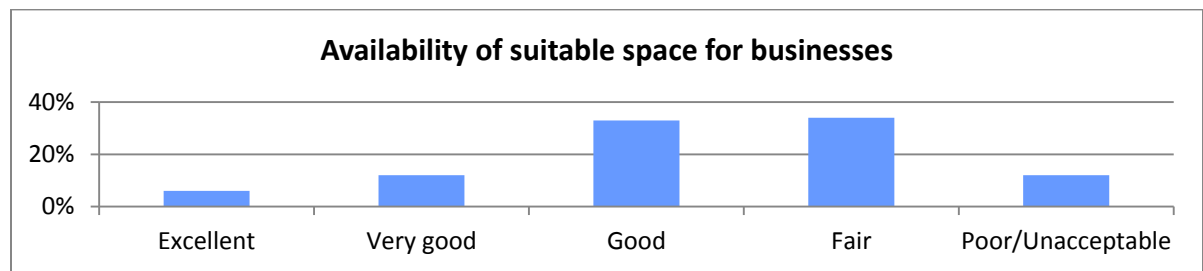
Nearly three-fourths (72%) of primary employers rated the ease of doing business in the city of Boulder as positive, including 30% who rated it as excellent or very good.



Primary employers who were more critical of the ease of doing business include those located in Downtown Boulder or the Crossroads/28th Street area, in the manufacturing or natural & organic products industry, larger employers, and those with leases expiring in the next three years.

How would you rate the <u>ease of doing business</u> in Boulder?	Excellent %	Very Good %	Good %	Fair %	Poor %	Unacceptable %	Don't know %
All primary employers surveyed	7	23	42	21	5	1	1
Years in Boulder							
• 5 years or less	10	33	33	24	--	--	--
• 6 to 10 years	6	21	45	24	3	--	--
• More than 10 years	7	21	43	19	7	1	2
Years at current location							
• 2 years or less	12	22	42	20	--	3	--
• 3 to 5 years	8	31	25	33	3	--	--
• 6 to 10 years	7	23	52	16	3	--	--
• More than 10 years	2	18	50	16	12	--	2
Current location							
• East Boulder	10	26	33	28	3	--	--
• Downtown Boulder	10	13	53	10	10	--	3
• North Boulder	6	18	65	12	--	--	--
• Central Boulder	7	33	47	13	--	--	--
• Crossroads/28 th Street	--	36	50	14	--	--	--
• Gunbarrel	--	8	38	31	8	8	8
Industry							
• Manufacturing	6	22	44	19	8	--	--
• Professional services	9	23	45	20	2	--	--
• Advanced technology	8	24	41	19	5	3	--
• Natural & organic	--	50	20	10	10	--	11
Number of employees							
• 5 to 19	14	29	40	14	3	--	--
• 10 to 19	7	20	47	23	2	--	2
• 20 to 49	5	22	41	24	5	3	--
• 50 to 99	--	29	50	7	14	--	--
• 100 or more	--	18	27	27	18	--	11
Current lease expires							
• Within 1 year	3	26	46	23	3	--	--
• 1 to 2 years	4	17	50	25	--	4	--
• 2 to 3 years	10	21	45	17	7	--	--
• More than 3 years	11	33	30	19	7	--	--

Primary employers were split in their rating of the availability of suitable space for businesses, with half rating it as positive and half negative.



Primary employers most critical of the availability of suitable space include those located in Gunbarrel, Downtown Boulder, and the Crossroads/28th Street area, with 50 to 99 employees, those in the manufacturing and natural & organic industries, and those with leases expiring in the next two years.

<i>How would you rate the <u>availability of suitable space for businesses in Boulder?</u></i>	Excellent %	Very Good %	Good %	Fair %	Poor %	Unacceptable %	Don't know %
All primary employers surveyed	6	12	33	34	11	1	4
Years in Boulder							
• 5 years or less	10	14	24	43	5	--	5
• 6 to 10 years	3	3	33	42	15	3	--
• More than 10 years	6	14	35	29	11	1	5
Years at current location							
• 2 years or less	15	10	30	30	12	--	3
• 3 to 5 years	3	11	29	40	9	6	3
• 6 to 10 years	3	16	32	42	3	--	3
• More than 10 years	2	10	40	27	17	--	4
Current location							
• East Boulder	7	10	33	33	12	--	5
• Downtown Boulder	7	10	17	50	7	3	7
• North Boulder	--	12	56	25	--	6	--
• Central Boulder	--	20	47	13	20	--	--
• Crossroads/28 th Street	--	12	29	36	14	--	--
• Gunbarrel	17	--	17	42	17	--	8
Industry							
• Manufacturing	3	3	32	41	12	--	9
• Professional services	2	23	36	27	5	5	2
• Advanced technology	11	14	36	31	8	--	--
• Natural & organic	--	11	33	22	33	--	--
Number of employees							
• 5 to 19	6	23	37	26	3	3	3
• 10 to 19	5	12	28	37	12	2	5
• 20 to 49	8	--	38	35	19	--	--
• 50 to 99	--	15	23	46	--	--	15
• 100 or more	11	11	33	22	22	--	--
Current lease expires							
• Within 1 year	3	10	31	49	5	--	3
• 1 to 2 years	8	4	29	38	17	--	4
• 2 to 3 years	--	21	41	21	10	7	--
• More than 3 years	19	4	26	37	15	--	--

Perceptions about business areas in Boulder

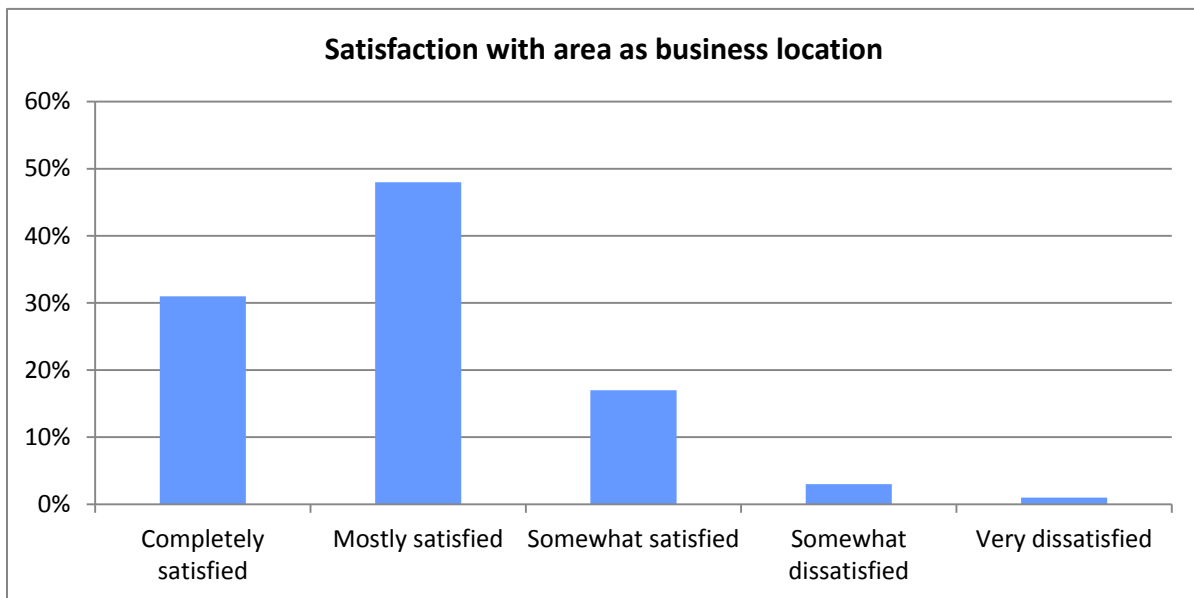
Primary employers who were surveyed are located throughout the city, with the highest concentrations in East Boulder, Downtown Boulder, North Boulder, Central Boulder, Crossroads/28th Street area, and Gunbarrel.

Survey results indicate that most primary employers are satisfied with the area where their business is located, with some differences by location.

Access to restaurants, shopping, public transportation and transportation corridors, the availability of parking, and convenience for employees and customers contribute to satisfaction with an area. Desired improvements include more restaurants, more affordable space, more parking, less traffic congestion, more shopping, and better access to public transportation.

Satisfaction with business area

Eighty percent of primary employers are completely or mostly satisfied with the area where their business is located. Seventeen percent are somewhat satisfied and 3% are dissatisfied.



Primary employers who were most likely to say they were completely satisfied with the area their business is located in included those who had been at their current location for two years or less, and those in professional services or advanced technology industries.

<i>Overall, how satisfied are you with <AREA BUSINESS LOCATED IN> as a business location?</i>	Completely Satisfied %	Mostly Satisfied %	Somewhat Satisfied %	Somewhat Dissatisfied %	Very Dissatisfied %
All primary employers surveyed	32	48	17	3	1
Years in Boulder					
• 5 years or less	38	52	10	--	--
• 6 to 10 years	24	48	27	--	--
• More than 10 years	33	46	15	4	1

Years at current location					
• 2 years or less	42	42	10	3	3
• 3 to 5 years	22	53	25	--	--
• 6 to 10 years	29	52	19	--	--
• More than 10 years	32	46	16	6	--
Current location					
• East Boulder	36	43	15	7	--
• Downtown Boulder	33	43	20	--	3
• North Boulder	35	47	18	--	--
• Central Boulder	27	60	13	--	--
• Crossroads/28 th Street	29	50	21	--	--
• Gunbarrel	15	62	15	--	--
Industry					
• Manufacturing	31	39	25	6	--
• Professional services	39	52	9	--	--
• Advanced technology	38	43	14	3	3
• Natural & organic	40	50	10	--	--
Number of employees					
• 5 to 19	34	51	14	--	--
• 10 to 19	32	45	18	3	--
• 20 to 49	27	49	19	3	3
• 50 to 99	36	57	--	7	--
• 100 or more	36	36	27	--	--

Positive aspects of business area

The majority (97%) of primary employers cited at least one positive aspect of the area their business is located in. A wide variety of factors were mentioned, including access to amenities such as restaurants and shopping, accessibility, and convenience for employees and customers.

<i>What are the positive aspects of having your business located in <AREA>? (open-ended; multiple response)</i>	<i>%</i>
None/don't know	3
Amenities	
• Access to restaurants	27
• Access to shopping districts	13
• Access to parking	12
• Access to trails or bike paths	11
• Beautiful views	4
• Access to recreational facilities	3
• Access to hotels	3
Accessibility	
• Access to highways or interstates	17
• Access to public transportation	11
• Access to downtown Boulder	6
• Access to Denver International Airport	4
• Easy access	5
Convenience	
• Convenient for employees	14
• Convenient for clients/customers	13

<ul style="list-style-type: none"> • Convenient location • Close to university • Convenient for suppliers/vendors 	9 3 2
Other <ul style="list-style-type: none"> • Affordable space • Less traffic/congestion • (Miscellaneous) 	10 6 11

There was some variation in the positive aspects that primary employers mentioned for different business areas. Primary employers in Downtown, Central Boulder and the Crossroads/28th Street area were most likely to mention access to restaurants and shopping. Those located in East Boulder, Crossroads/28th Street, and Gunbarrel areas were most likely to mention access to highways. Parking was mentioned most often by businesses located in North Boulder, East Boulder, and Gunbarrel.

<i>What are the positive aspects of having your business located in <AREA>? (open-ended; multiple response)</i>	Total %	East Boulder %	Downtown %	North Boulder %	Central Boulder %	Crossroads/28 th %	Gunbarrel %
Access to restaurants	27	5	60	18	47	57	23
Access to highways/interstates	17	21	--	12	13	29	38
Convenient for employees	14	15	13	6	7	7	23
Access to shopping	13	3	20	6	33	43	--
Convenient for clients/customers	13	7	23	12	7	--	17
Access to parking	12	16	7	19	7	--	15
Access to public transportation	11	2	13	29	20	7	15
Access to trails or bike paths	11	10	10	6	40	7	--
Affordable space	10	16	--	12	7	--	15

Desired improvements for business area

Many primary employers mentioned improvements they felt would make their area a better location for their businesses. Those that were mentioned most frequently were more restaurants, more affordable space, more parking, less traffic congestion, better access to public transportation, and more shopping.

<i>What improvements, if any, do you feel are needed to make <AREA> a better location for your business? (open-ended; multiple response)</i>	%
None/don't know	33
More amenities	17
<ul style="list-style-type: none"> • More restaurants • More parking • More shopping • Better telecommunications/Improved Internet access • More bike trails • More hotels • More walkable environment • More daycare • More services • More meeting spaces 	11 6 4 3 3 2 1 1 1 1

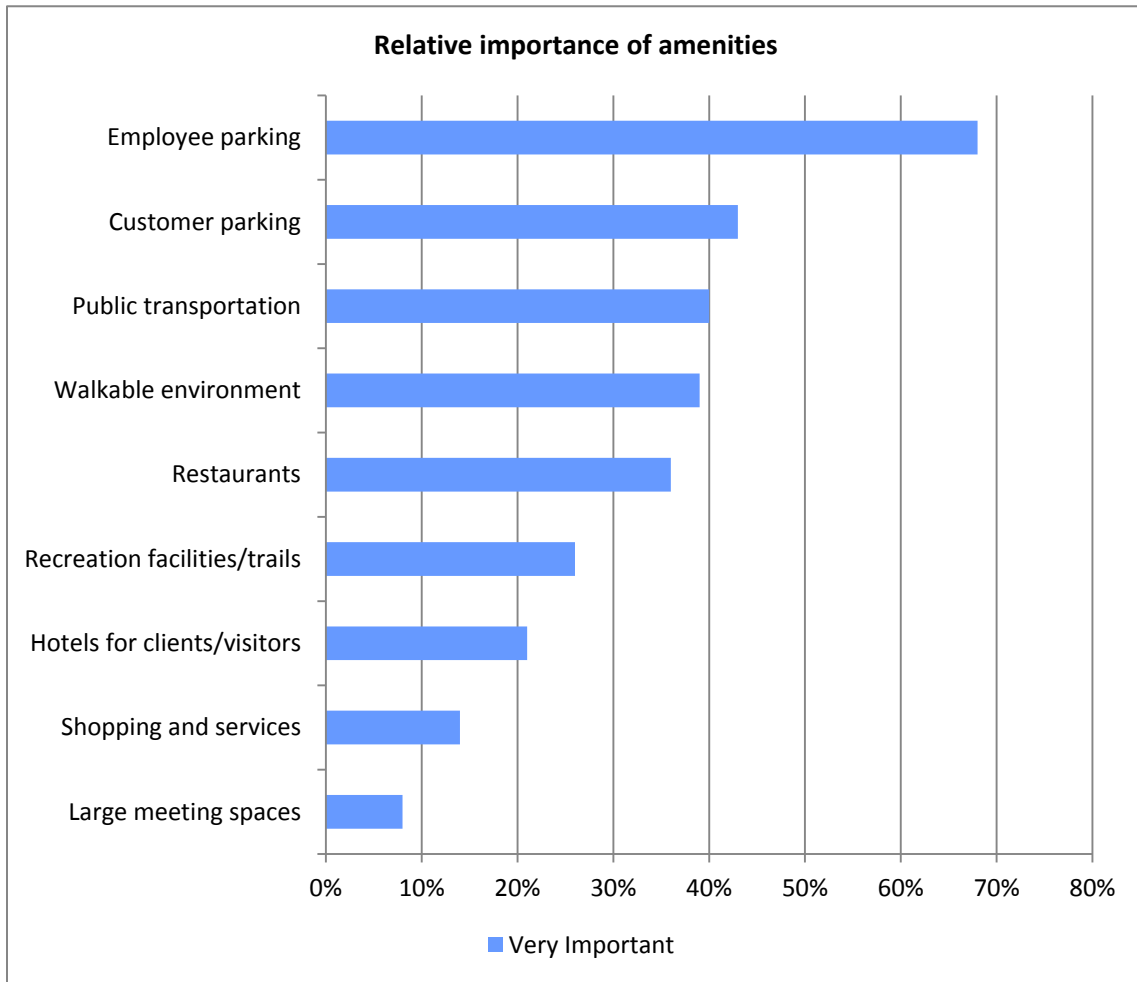
<ul style="list-style-type: none"> • Allow lunch trucks 	
More space options <ul style="list-style-type: none"> • More affordable space • Increased availability of space with more square footage 	13 4
Improved accessibility <ul style="list-style-type: none"> • Less traffic congestion • Better access to public transportation • Better roads 	8 8 3
Other <ul style="list-style-type: none"> • Fewer transients • Lower taxes • Completion of transit village • (Miscellaneous) 	2 1 1 6

Primary employers located in Gunbarrel were significantly more likely to mention the need for more restaurants than those located in other areas. Downtown businesses were most likely to mention a need for more parking.

<i>What improvements, if any, do you feel are needed to make <AREA> a better location for your business? (open-ended; multiple response)</i>	Total %	East Boulder %	Downtown %	North Boulder %	Central Boulder %	Crossroads/28 th %	Gunbarrel %
None/don't know	33	30	17	53	53	43	23
More restaurants	17	26	--	18	--	--	46
More affordable space	13	13	20	12	20	--	--
More parking	11	--	37	12	7	7	15
Less traffic congestion	8	8	3	6	--	29	--
Better access to public transportation	8	10	7	6	7	7	15
More shopping	6	10	--	12	--	--	8

Importance of amenities

When asked about specific amenities, primary employers indicated they considered parking, access to public transportation, a walkable environment, and access to restaurants to be most important.



<i>How important [are following amenities] to your business and employees?</i>	Very Important %	Somewhat Important %	Not Important %
Parking for employees	68	21	11
Parking for customers or visitors	42	32	25
Access to public transportation	39	45	15
Walkable environment	39	41	20
Access to restaurants	35	50	15
Access to trails or recreation facilities	26	41	33
Access to hotels for customers or visitors	21	36	44
Access to shopping and services	14	52	32
Access to large meeting spaces	8	31	61

There were notable differences in the importance of different amenities by various groups of primary employers, as the following table shows.

Employee parking was considered most important by those located in Central Boulder, Gunbarrel, and North Boulder and large employers. Customer parking was most important to primary employers located in Gunbarrel, Downtown Boulder, and North Boulder, and large employers. Public transportation was more important to primary employers located in Downtown Boulder, North Boulder, Gunbarrel, and Central Boulder, and larger employers.

Walkability was most important to those in Downtown Boulder, Central Boulder, and North Boulder and larger employers. Restaurants were most important to primary employers who had been in Boulder or their locations for a shorter time, and those in Downtown Boulder, Central Boulder, and Gunbarrel and businesses with 50-99 employees.

<i>How important [are following amenities] to your business and employees? (Considered to be "very important")</i>	Employee Parking %	Customer Parking %	Public Transportation %	Walkable %	Restaurants %	Recreation/Trails %	Hotels %	Shopping/Services %	Large Meeting Space %
All primary employers surveyed	68	42	39	39	35	26	21	14	8
Years in Boulder									
• 5 years or less	76	62	38	48	52	19	29	29	14
• 6 to 10 years	70	42	39	42	27	30	27	12	15
• More than 10 years	65	38	39	37	34	26	17	12	4
Years at current location									
• 2 years or less	75	45	38	40	55	22	28	20	10
• 3 to 5 years	69	53	42	44	39	28	22	14	8
• 6 to 10 years	52	32	26	35	19	29	13	13	10
• More than 10 years	73	40	48	38	26	26	20	10	4
Current location									
• East Boulder	64	36	34	28	23	31	11	13	2
• Downtown Boulder	67	57	50	70	53	23	43	17	17
• North Boulder	71	53	47	53	35	24	6	18	6
• Central Boulder	87	20	47	60	47	47	33	20	13
• Crossroads/28 th Street	50	29	29	29	36	21	21	21	7
• Gunbarrel	85	62	46	8	38	--	15	--	8
Industry									
• Manufacturing	61	36	39	19	17	22	17	3	--
• Professional services	73	50	48	50	43	25	25	14	5
• Advanced technology	65	38	32	41	43	24	35	19	14
• Natural & organic	60	50	40	30	10	10	--	6	--
Number of employees									
• 5 to 19	69	40	43	37	26	23	6	9	3
• 10 to 19	70	42	38	42	38	23	17	17	7
• 20 to 49	59	35	24	30	41	30	24	16	11
• 50 to 99	71	57	64	57	50	36	57	21	21
• 100 or more	82	64	55	45	9	27	36	--	--

When asked what other amenities were important to their businesses or employees, primary employers gave a wide variety of responses. The most frequently mentioned were related to alternative transportation and infrastructure.

<i>What other amenities are important to your business or employees? (open-ended; multiple response)</i>	%
None/Don't know	61
Alternative transportation <ul style="list-style-type: none"> • Bike friendly environment/bike paths • More public transportation/Eco-Pass 	6 6
Infrastructure <ul style="list-style-type: none"> • High speed Internet/ Ability to telecommute • Shipping • Access to highways/ Access to airport • Better roads/less traffic • Alternative energy • Affordable housing • Law enforcement • Better infrastructure 	4 3 3 3 2 1 1 1
Amenities <ul style="list-style-type: none"> • Quality work space • Access to health clubs • More restaurants • Parking • Coffee shops • Parks 	3 3 2 1 1 1
Other <ul style="list-style-type: none"> • Cost of living • Access to university • (Miscellaneous) 	1 1 7

Space occupied by primary employers

Survey results indicate the space primary employers occupy is an important factor in running their businesses.

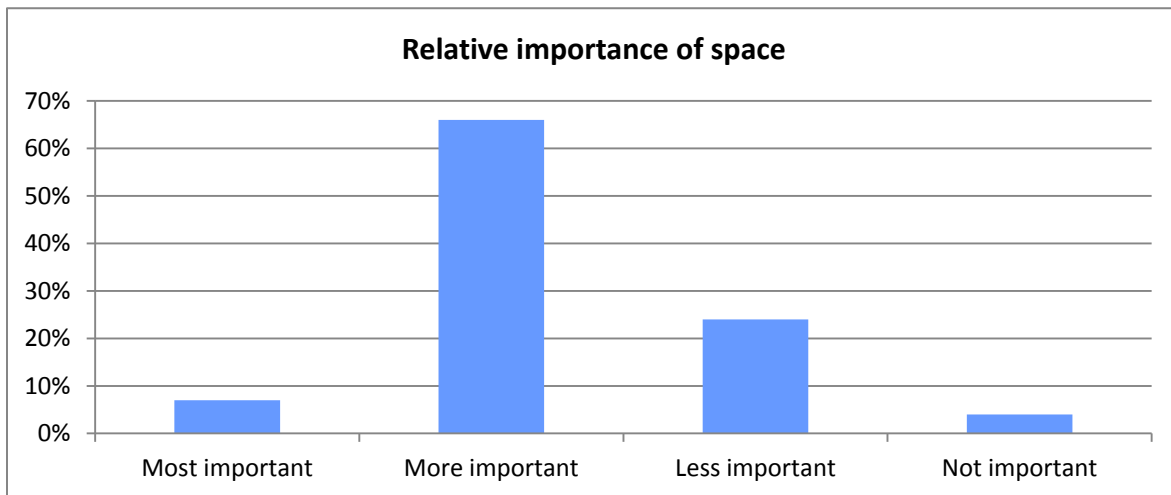
The majority of primary employers reported their current space generally meets most of their business' needs. While many would not change anything about their space, several indicated they would increase the size or make changes to increase functionality.

The majority of primary employers have been in their current location for more than two years, and most lease the space their business occupies in Boulder. Many have leases expiring within the next three years. While most said they are likely to renew their lease, over one-fourth indicated they are uncertain or anticipate looking for alternative space when their lease is up.

As would be expected, the amount and type of space occupied by primary employers varies widely by size of business and industry. Square footage occupied by the businesses surveyed ranges from less than 1,000 sq. ft. to more than 150,000 sq. ft. Nearly all occupy space that includes offices and many occupy buildings with manufacturing/assembly, research and development, or warehousing/distribution space. Many said their buildings include special features such as high ceilings, energy efficiency features, or special wiring.

Relative importance of commercial space

Two-thirds (66%) of primary employers indicate the space their business occupies is one of the more important factors involved in running their business, and seven percent consider it the most important.



As a group, primary employers located in the Crossroads/28th Street, Central Boulder, and East Boulder areas consider space to be less important than those located in other areas. Manufacturers and advanced technology companies are more likely to consider space to be one of the most important factors in running their business than primary employers in other industries. Larger employers generally consider space to be more important than smaller employers.

<i>Given all the factors involved in running a business, would you say that the space your business occupies is ...</i>	Most important factor %	One of more important factors %	Less important than other factors %	Of little importance %
All primary employers surveyed	7	66	23	4
Years in Boulder				
• 5 years or less	10	57	19	14
• 6 to 10 years	15	64	21	--
• More than 10 years	4	68	25	3
Years at current location				
• 2 years or less	--	65	32	3
• 3 to 5 years	11	67	14	8
• 6 to 10 years	10	61	26	3
• More than 10 years	8	68	23	2
Current location				
• East Boulder	15	57	30	5
• Downtown Boulder	--	77	13	10
• North Boulder	-6	82	12	--
• Central Boulder	7	60	33	--
• Crossroads/28 th Street	--	57	43	--
• Gunbarrel	--	92	8	--
Industry				
• Manufacturing	14	61	22	3
• Professional services	--	68	25	7
• Advanced technology	6	78	14	3
• Natural & organic	10	60	30	--
Number of employees				
• 5 to 19	11	57	31	--
• 10 to 19	5	60	28	7
• 20 to 49	3	76	19	3
• 50 to 99	14	79	7	--
• 100 or more	9	82	--	10

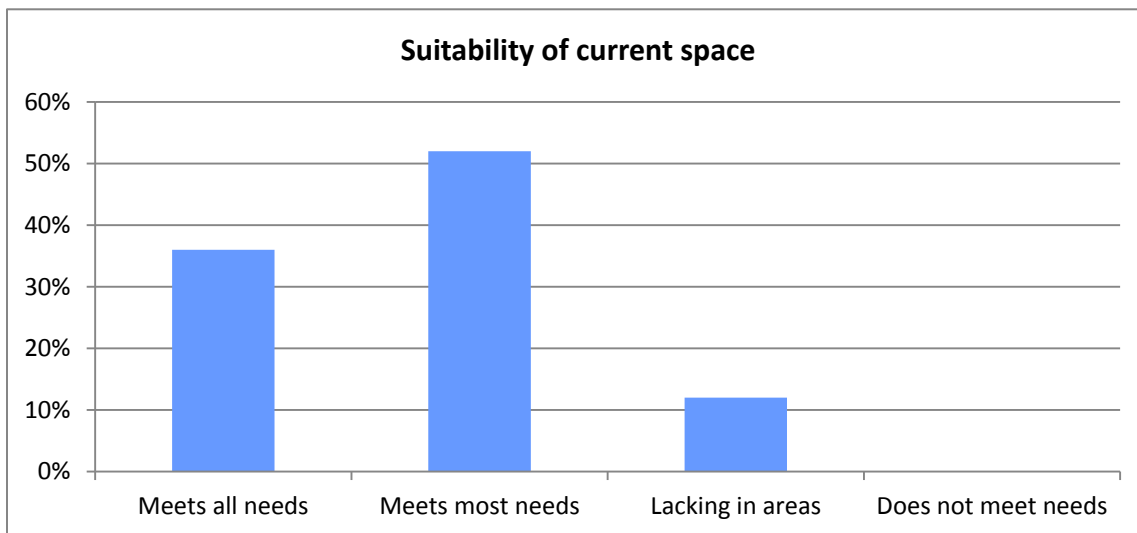
Other factors that primary employers cited as important to running their businesses include workforce, transportation and accessibility, and city policies and tax rates.

<i>What other factors are important to your business? (open-ended, multiple response)</i>	%
Workforce	
• Availability of qualified workers	29
• Labor costs	7
• Affordable housing for employees	7
• Local tech community	2
• Retaining employees	1
Transportation and accessibility	
• Access to public transportation	10
• Parking for employees	8
• Central location	7
• Access to clients	5
• Parking for customers and visitors	4
• Access to airport	3
• Access to materials/supplies/shipping	3

• Access to other businesses	3
City policies and tax rates	
• Tax rates	6
• Ability to upgrade/expand business space	4
• City policies and regulations	5
• Availability of business incentives	3
Access to high speed communication, Communication with other businesses	7
Amenities	
• Access to restaurants	3
• Access to bike paths/trails	1
Other	
• Economy	4
• Cost of living	1
• (Miscellaneous)	8
None/Don't know	22

Suitability of current space

Most of the primary employers surveyed indicated their current space meets most (52%) or virtually all (36%) of their business' needs. While 12% said their space is lacking in several areas, no one indicated their space does not meet their business' needs.



Primary employers more likely to report their space meets virtually all their business' needs include those who have been at their current location for two years or less and those who have been in Boulder more than ten years, those located in the Gunbarrel or Crossroads/28th Street area, larger employers, and those who own the space their business occupies.

Manufacturers and companies in the natural & organic industry were more likely than those in other industries to report that their current space fails to meet most of their business' needs.

One-fourth of the primary employers who indicated they are not likely to renew their lease reported the space they currently occupy is lacking in several areas.

<i>In general, how well does your space meet the needs of your business?</i>	Meets virtually all your business' needs	Meets most of your needs	Is lacking in several areas	Does not meet your business' needs
	%	%	%	%
All primary employers surveyed	36	51	13	--
Years in Boulder				
• 5 years or less	33	52	14	--
• 6 to 10 years	18	61	21	--
• More than 10 years	42	48	10	--
Years at current location				
• 2 years or less	45	45	10	--
• 3 to 5 years	28	66	9	--
• 6 to 10 years	32	48	19	--
• More than 10 years	38	50	12	--
Current location				
• East Boulder	36	56	8	--
• Downtown Boulder	27	57	17	--
• North Boulder	24	62	12	--
• Central Boulder	40	47	13	--
• Crossroads/28 th Street	50	43	7	--
• Gunbarrel	62	25	17	--
Industry				
• Manufacturing	44	36	18	--
• Professional services	32	64	5	--
• Advanced technology	38	51	11	--
• Natural & organic	40	30	22	--
Number of employees				
• 5 to 19	40	43	17	--
• 10 to 19	25	62	13	--
• 20 to 49	38	54	8	--
• 50 to 99	43	36	21	--
• 100 or more	73	27	--	--
Occupancy Status				
• Owns space	57	32	11	--
• Leases space	31	56	12	--
Likelihood of Renewing Lease				
• Definitely/Probably will	34	56	10	--
• Definitely/Probably will not	21	54	25	--

Those who reported their space is lacking in several areas most frequently mentioned size and configuration as areas that needed improvement.

<i>(If lacking in several areas) What is it about your space that does not meet your needs? (open-ended; multiple response)</i>	%
Too small	58
Poorly configured	32
Too expensive	16
Needs more bathrooms	11
Needs better phone/Internet	11
Other- Old or outdated (5%), Not energy efficient (5%), Location (5%), Misc (11%)	26

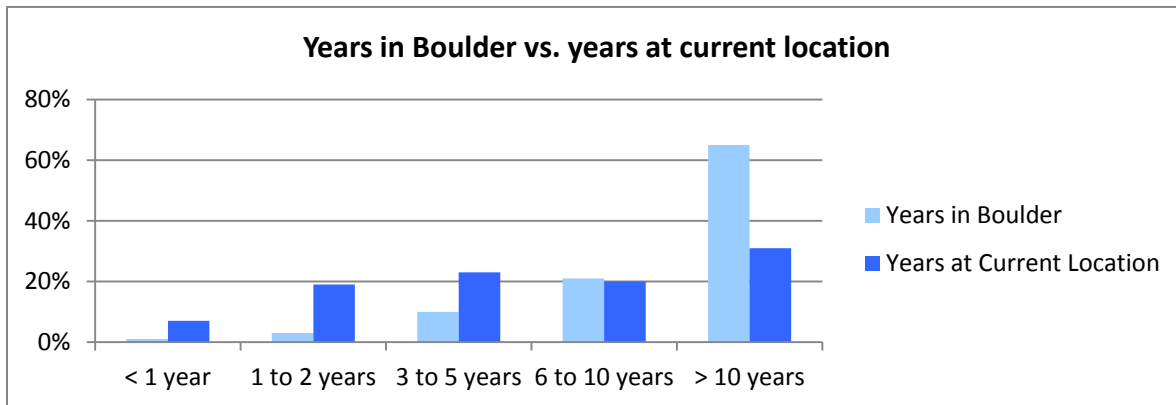
Desired improvements for current space

Nearly half of primary employers (48%) either said they would not change anything or did not know what they would change about their space, even if there were no zoning or other restrictions. Twenty percent would increase the size of their space and 11% would like the flexibility to use their space differently or improve its functionality. Several primary employers said they would improve energy efficiency, add more parking, or add more windows.

Let's say for a moment that there were no zoning or other restrictions. What, if anything, would you change about your space? (open-ended; multiple response)	%
Nothing/Don't know	48
Increase size of space	20
Flexibility to use space differently/ Make space more usable	11
Improve energy efficiency	5
Add more parking	5
More/new windows	4
More/improved outdoor space	3
Improve access	3
Make space look newer	1
Building layout	1
Location	1
Higher ceilings	1
Covered parking	1
Decrease cost of space	1
Other	8

Occupancy status of current space

Nearly two-thirds (66%) of the primary employers have been operating in Boulder for more than ten years. In contrast, 32% of primary employers have been at their current locations more than ten years, confirming movement between different locations within the city.



About how long has your business been operating in the city of Boulder? How long has your business been operating in its current location?	Operating in Boulder	Current Location
Less than 1 year	1%	6%
1 to 2 years	3%	19%
3 to 5 years	9%	23%
6 to 10 years	21%	20%
More than 10 years	66%	32%

Leasing activity

The majority (81%) of primary employers indicated they currently lease the space their business currently occupies in Boulder.

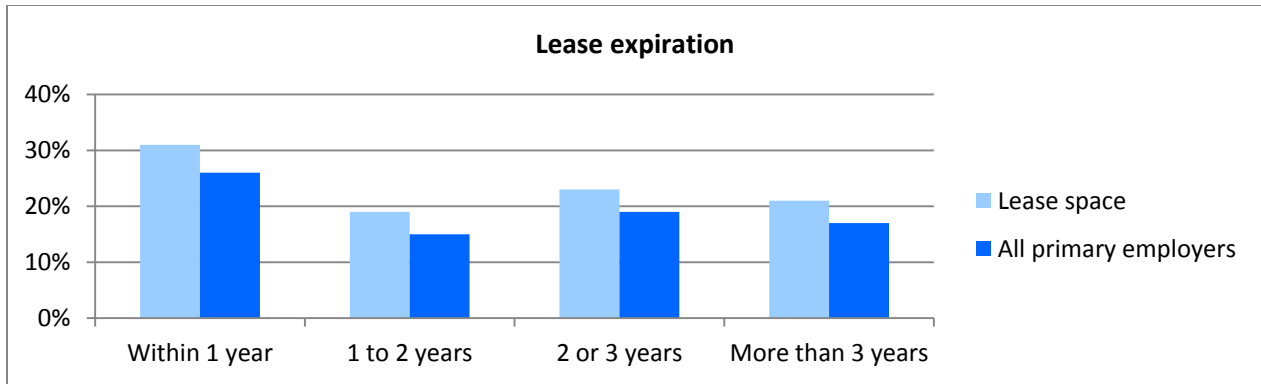
Primary employers more likely to lease space include those who have been in Boulder for five years or less, those located in Downtown Boulder or the Crossroads/28th Street area, and those in professional services and advanced technology industries.

Those more likely to own the space their business occupies include primary employers who have been in Boulder more than ten years; those located in Gunbarrel, East Boulder, Central Boulder, or North Boulder; those in the manufacturing and natural & organic industries; and larger employers.

<i>Does your business currently own or lease your space [in Boulder]?</i>	Leases space %	Owns space %	Both %
All primary employers surveyed	81	18	1
Years in Boulder			
• 5 years or less	100	--	--
• 6 to 10 years	88	12	--
• More than 10 years	75	23	2
Years at current location			
• 2 years or less	90	10	--
• 3 to 5 years	92	8	--
• 6 to 10 years	84	16	--
• More than 10 years	64	32	4
Current location			
• East Boulder	75	23	2
• Downtown Boulder	97	3	--
• North Boulder	82	18	--
• Central Boulder	80	20	--
• Crossroads/28 th Street	93	7	--
• Gunbarrel	62	31	8
Industry			
• Manufacturing	72	22	6
• Professional services	86	14	--
• Advanced technology	84	16	--
• Natural & organic	80	20	--
Number of employees			
• 5 to 19	80	20	--
• 10 to 19	88	12	--
• 20 to 49	71	19	--
• 50 to 99	79	7	14
• 100 or more	45	55	--

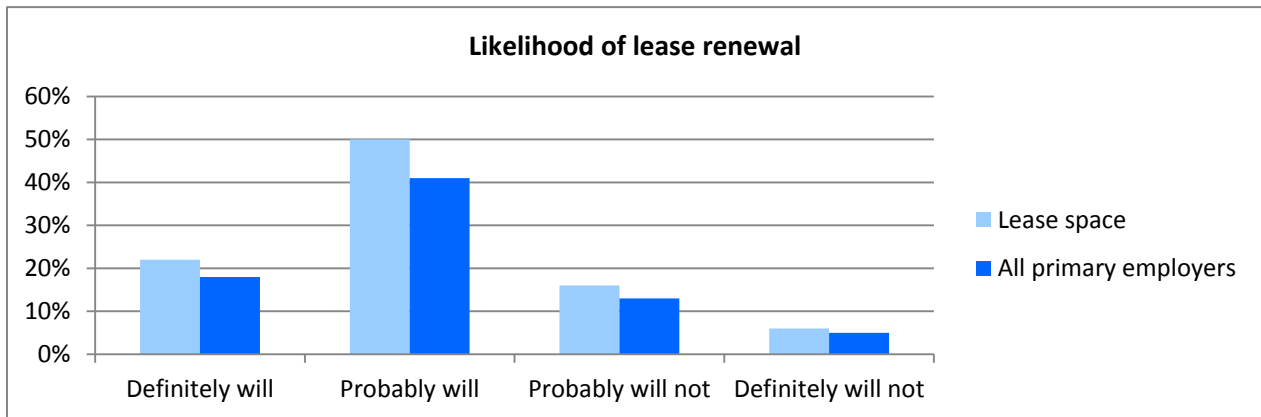
Survey results indicate a significant number of primary employers in Boulder have leases expiring in the near future.

Of those who lease their space, 76% reported their leases will expire within the next three years. This represents 61% of all primary employers. Forty-two percent of all primary employers in the city have leases expiring within the next 2 years and 26% have leases expiring within a year.



<i>(If leases space) Approximately when will your lease expire?</i>	Lease Space %	All Primary Employers %
Within next 6 months	15	12
6 to 12 months	17	14
13 to 18 months	11	9
19 to 24 months	9	7
2 to 3 years	24	19
More than 3 years	22	18

While most (73%) of the primary employers who currently lease their space indicated that they probably or definitely will renew their leases, over one-fourth (28%) indicated they are unlikely to renew or are unsure. This represents 23% of all primary employers surveyed.



<i>(If leases space) How likely are you to renew that lease?</i>	Lease Space %	All Primary Employers %
Definitely will	23	19
Probably will	50	41
Probably will not	16	13
Definitely will not	6	5
(Don't know)	6	5

Primary employers who indicated they were least likely to renew their leases included those who have been in Boulder for a shorter time, those in Gunbarrel, North Boulder, or the Crossroads/28th Street areas, those in the natural & organic industry, those with fewer employees, those with leases expiring in less than three years, those whose space is lacking in several areas, and those who do feel Boulder is worse than other cities in the area for businesses like theirs.

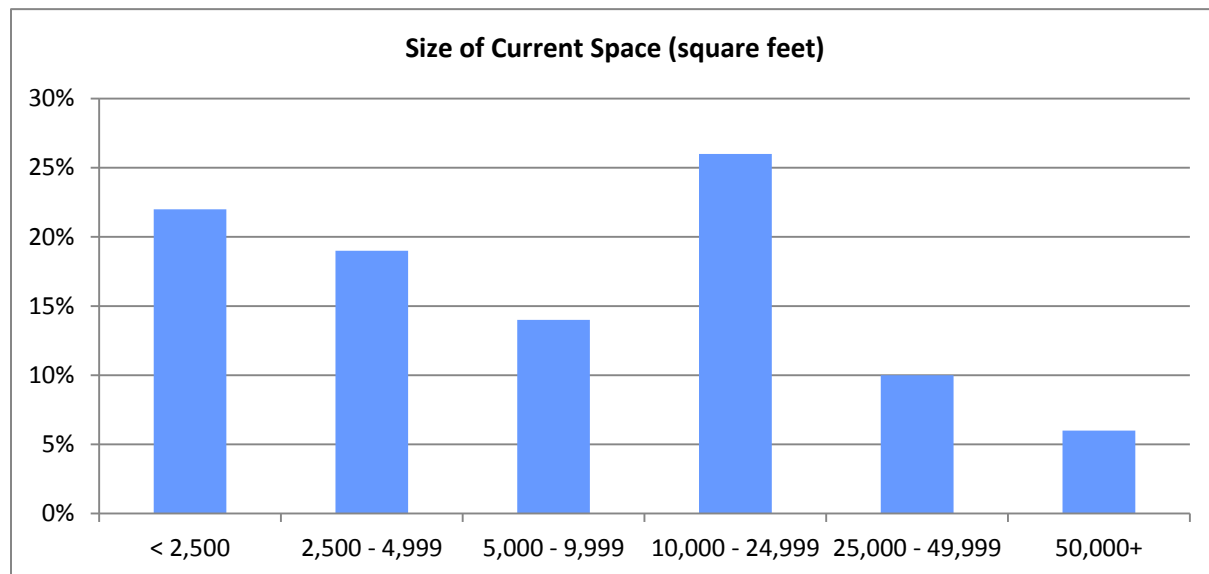
<i>(If leases space) How likely are you to renew that lease?</i>	Definitely or probably will %	Definitely or probably will not %	Don't know %
All primary employers surveyed	73	22	6
Years in Boulder			
• 5 years or less	62	38	--
• 6 to 10 years	79	17	4
• More than 10 years	73	19	8
Years at current location			
• 2 years or less	67	27	6
• 3 to 5 years	67	27	6
• 6 to 10 years	89	8	4
• More than 10 years	75	22	3
Current location			
• East Boulder	83	13	4
• Downtown Boulder	82	14	7
• North Boulder	57	35	8
• Central Boulder	66	25	8
• Crossroads/28 th Street	69	31	--
• Gunbarrel	50	50	--
Industry			
• Manufacturing	70	28	4
• Professional services	71	23	5
• Advanced technology	78	20	3
• Natural & organic	62	43	--
Number of employees			
• 5 to 19	71	22	7
• 10 to 19	62	28	9
• 20 to 49	80	20	--
• 50 to 99	91	9	--
• 100 or more	100	--	--
Lease expiration			
• Less than 1 year	65	31	5
• 1 to 2 years	79	16	4
• 2 to 3 years	66	27	7
• More than 3 years	85	11	4
Suitability of current space			
• Meets all business' needs	80	15	5
• Meets most needs	72	21	7
• Lacking in several areas	57	44	--
Boulder vs. other cities in area for businesses			
• Better	79	16	6
• Same	81	19	--
• Worse	50	45	5

The most frequently mentioned reasons for not renewing a lease were a need for less expensive or larger space.

Why are you unlikely to renew your lease? (open-ended; multiple response)	%
Looking for less expensive space/Too expensive	36
Need larger space	32
Consolidating business in another location/business being sold	21
Problems with property owner	11
Building being torn down	7
Current space old or outdated	4
Other	4

Size and features of current space

The space occupied by the primary employers surveyed ranged from less than 1,000 to over 150,000 square feet. Over half (55%) reported their primary location in Boulder occupies less than 10,000 square feet. Relatively few (6%) occupy spaces that are 50,000 square feet or larger. The size of space occupied varied widely by a number of factors, including company size, years in business, and industry.

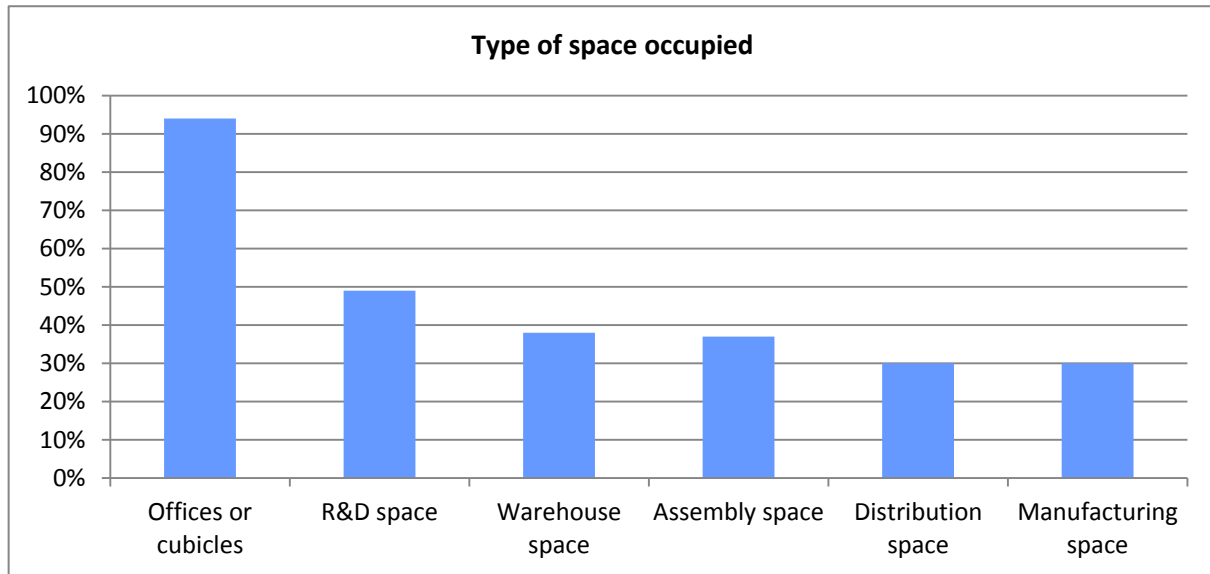


What is the approximate square footage of your space?	%
Less than 1,000	3
1,000 – 2,499	19
2,500 – 4,999	19
5,000 – 9,999	13
10,000 – 14,999	11
15,000 – 24,999	14
25,000 – 49,999	10
50,000 – 149,999	3
150,000 or more	3
(Don't know)	4

The total square footage of space currently occupied by the primary employers surveyed varies widely, as the table below shows. As would be expected, larger employers generally occupy more space than those with fewer employees. Other primary employers more likely to occupy larger spaces include those located in Gunbarrel and businesses in manufacturing and natural & organic industries.

<i>What is the approximate total square footage of your space?</i>	<2,500	2,500 – 4,999	5,000 – 9,999	10,000 – 19,999	20,000 – 49,999	50,000 or more
	%	%	%	%	%	%
All primary employers surveyed	22	19	14	18	17	6
Years in Boulder						
• 5 years or less	24	24	29	19	--	--
• 6 to 10 years	24	27	9	18	18	--
• More than 10 years	21	15	12	19	19	10
Years at current location						
• 2 years or less	38	25	15	8	5	3
• 3 to 5 years	17	19	17	20	19	9
• 6 to 10 years	26	29	7	20	12	3
• More than 10 years	12	8	14	27	26	10
Current location						
• East Boulder	17	20	20	20	17	5
• Downtown Boulder	23	27	14	16	7	7
• North Boulder	41	25	--	6	30	--
• Central Boulder	34	7	14	20	13	7
• Crossroads/28 th Street	7	29	21	28	14	--
• Gunbarrel	8	--	8	31	23	30
Industry						
• Manufacturing	8	15	6	34	27	9
• Professional services	32	20	18	12	11	3
• Advanced technology	19	22	22	16	11	8
• Natural & organic	30	--	22	10	30	10
Number of employees						
• 5 to 19	55	26	9	6	6	--
• 10 to 19	21	28	18	14	5	5
• 20 to 49	8	8	14	38	27	5
• 50 to 99	--	7	7	28	50	--
• 100 or more	--	--	9	9	36	45
Lease expiration						
• Less than 1 year	24	21	10	28	10	--
• 1 to 2 years	33	29	8	12	18	--
• 2 to 3 years	38	14	17	10	22	3
• More than 3 years	--	22	22	18	18	15
Suitability of current space						
• Meets all business' needs	21	12	13	20	17	12
• Meets most needs	20	23	15	18	15	4
• Lacking in several areas	35	20	10	15	20	--
Likelihood of renewing lease						
• Definitely or probably will	19	22	13	21	13	4
• Definitely or probably will not	40	14	22	11	8	--

Nearly all (94%) of the primary employers surveyed indicated their space included offices or cubicles. Nearly half indicated their location had space for research and development activities, and over one-third said their location included warehouse and assembly space. The type of space occupied by the primary employers surveyed varied by industry and other factors.



Which of the following does your space include? (multiple response)	%
Offices or cubicles	94
R&D space	49
Warehouse space	38
Assembly space	37
Distribution space	30
Manufacturing	30

The most common special features for the spaces occupied by primary employers were high ceilings, energy efficiency features, and special wiring.

What, if any, special features such as high ceilings, lab space, energy efficiency features, special wiring, etc. does your space have? (open-ended, multiple response)	%
None	34
High ceilings	30
Energy efficiency features	21
Special wiring	15
Special lighting	8
Loading dock	6
Wet lab/Lab	5
Special telecom or Internet connections	5
Special cooling	3
Clean room	1
Other	10

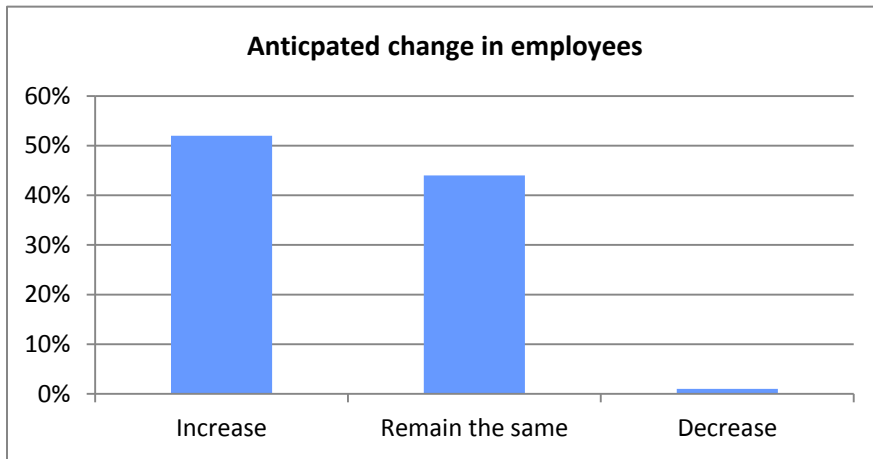
Expansion plans

Survey results indicate that many of Boulder’s primary employers plan to expand their business in the next two to three years. Most of the expansions are expected to require an increase in space, and many will require moving to a new location. Over half of those who anticipate moving to another location expect to find the space they need in Boulder.

An estimated one-third of primary employers with expansion plans will need spaces that are 20,000 square feet or larger. Much of the expanded space is expected to include a similar distribution of office, R&D, manufacturing and warehouse space as the space that is currently occupied. Special wiring, high ceilings, and energy efficiency features are the most frequently mentioned special features that expanding companies plan to include in their new space.

Likelihood of expansion

Over half (51%) of the primary employers surveyed expect the number of employees who work for their business in Boulder will increase in the next year.



<i>Over the next 12 months, do you expect the number of employees who work for your business in Boulder will:</i>	<i>%</i>
Increase	51
Remain the same	44
Decrease	1
(Don't know)	3

Of the primary employers surveyed, 60% plan to expand their business in the next two to three years. Primary employers with fewer than 50 employees were more likely than larger employers to indicate they plan to expand.

<i>Do you plan to expand your Boulder business in the next 2 to 3 years?</i>	<i>All Surveyed %</i>	<i><20 employees %</i>	<i>20 – 49 employees %</i>	<i>50 or more employees %</i>
Yes	60	59	70	48
No	30	30	19	44
(Don't know)	10	10	11	8

Seventy percent of those who plan to expand their business in the next 2 to 3 years (42% of all primary employers) anticipate needing additional space. Nearly half (45%) of those needing more space (19% of all primary employers) anticipate moving. Of those planning expansions that will require a move, 59% (11% of all primary employers) expect to find the space they need in Boulder and 41% (8% of all primary employers) do not expect to find space in the city or are unsure.

	Yes %	No %	Don't know %
<i>Do you plan to expand your Boulder business in the next 2 to 3 years?</i>	60	30	10
<i>(If plans to expand) Will the expansion require an increase in the space your business currently occupies?</i>	70	27	3
<i>(If expansion will require more space) Do you anticipate your expansion will require a move to a different location?</i>	45	47	9
<i>(If expansion will require a move) Do you anticipate being able to find the space you need in the city of Boulder?</i>	59	22	19

Additional space needs

Of the primary employers who anticipate their expansion will require additional space, 57% expect to need less than 10,000 *additional* square feet including 44% who anticipate adding up to 5,000 square feet and 38% who expect to add up to 2,500 square feet.

Based on an analysis of the amount of space primary employers reported they currently occupy and the additional space they expect to add for expansion, a rough estimate can be made of the total space expanding primary employers will be looking for in the next two to three years. This analysis suggests that nearly half of primary employers planning expansions will be looking for spaces 10,000 square feet or larger, including nearly one-third that will need spaces 20,000 square feet or larger.

The table below compares the square footage that expanding businesses expect to add with the current space occupied by all primary employers surveyed.

Approximately how much additional square footage do you anticipate your expansion will require?	Additional Expanded Space (Plan to Expand) %	Current Space (All Primary Employers) %
Less than 1,000 SF	--	3
1,000 – 2,499 SF	38	19
2,500 – 4,999 SF	6	19
5,000 – 7,499 SF	13	8
7,500 – 9,999 SF	--	6
10,000 – 14,999 SF	6	11
15,000 – 19,999 SF	--	7
20,000 – 24,999 SF	6	7
25,000 – 49,999 SF	6	10
50,000 – 99,999 SF	6	1
100,000 SF or more	--	5
(Don't know)	6	4

The table following table compares the square footage of space currently occupied by all primary employers surveyed with the estimated total space needed by primary employers planning to expand in the next two to three years, after their expansions.

Comparison of current space and total space to be occupied after expansion	Current Space (All Primary Employers) %	Estimated Total Expanded Space (Plan to Expand) %
Less than 5,000 SF	43	46
5,000 to 9,999 SF	14	8
10,000 to 19,999 SF	19	15
20,000 SF or more	24	32

Ninety percent of the primary employers who plan to expand indicated they expect their expansions will include office space. Forty-four percent of the anticipated expansions are expected to include R&D space. A number of expansions are expected to include manufacturing, assembly, warehouse, or distribution space.

The table below compares the type of space that expanding businesses expect to add with the types of space currently occupied by all primary employers surveyed.

Will the expansion include any the following? (multiple response)	Expanded Space (Plan to Expand) %	Current Space (All Primary Employers) %
Offices or cubicles	90	94
R&D space	44	49
Manufacturing	19	30
Assembly space	25	37
Warehouse space	31	38
Distribution space	25	30
(Don't know)	1	--

Special features most frequently mentioned for expanded space were high ceilings, special wiring, and energy efficiency features.

The table below compares special features of space that expanding businesses expect to add with the special features of space currently occupied by all primary employers surveyed.

What, if any, special features such as high ceilings, lab space, energy efficiency features, special wiring, etc. will the expansion include? (open-ended, multiple response)	Expanded Space (Plan to Expand) %	Current Space (All Primary Employers) %
None	25	34
Special wiring	19	15
High ceilings	19	30
Energy efficiency features	31	21
Clean room	--	1
Wet lab	9	5
Special telecom or Internet connections	6	5
Loading dock	7	6
Special lighting	4	8
Other	6	13

Recent and anticipated relocation

Over half of the primary employers surveyed indicated they had either moved to new space within the past two years or anticipate moving into new space in the next two to three years. Most of the recent and planned moves are made to accommodate a need for additional space.

Fewer than half the primary employers who anticipate a move to a new location in the next few years expect to be able to find a suitable space in the city of Boulder. Those who do not expect to find the space they will need within Boulder cited the cost and availability of space in the city.

All of the primary employers surveyed who anticipate moving to a new location said they are considering space in Boulder or nearby. Specific cities outside Boulder that were mentioned include Broomfield, Louisville, Longmont, Erie, Lafayette, and Westminster.

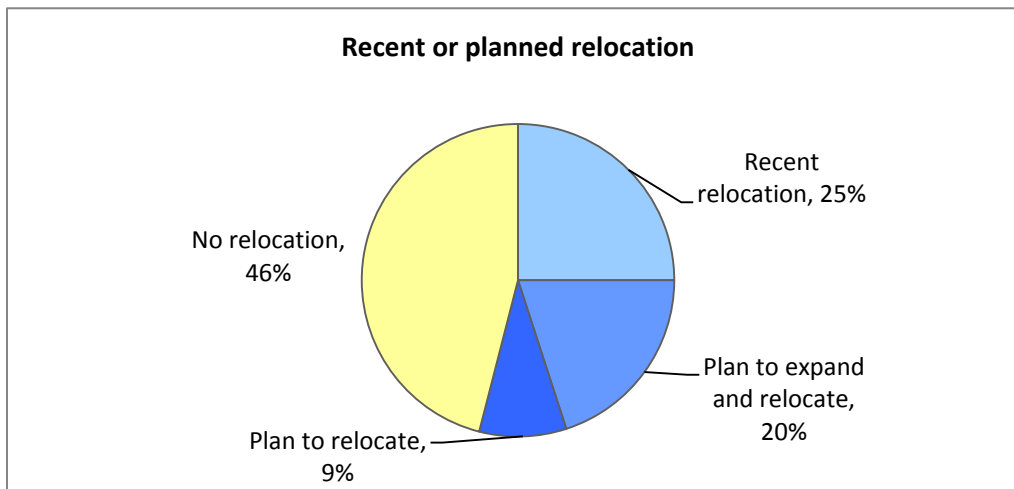
Incidence of recent or planned relocation

Survey results indicate over half (54%) of the primary employers surveyed either recently moved or plan to relocate in the next two or three years.

Of the primary employers who have been in their locations for two years or less, 98% said they moved from a different location (rather than started a new business). This represents 25% of all primary employers surveyed.

Forty-five percent of primary employers who plan to expand and add space within the next 2 or 3 years (20% of all primary employers) anticipate moving to a new space.

Of those primary employers who do not have expansion plans, 20% (9% of all primary employers) plan to move to a new location.



Recent or planned relocation	Subgroup %	All Surveyed %
<i>(Current location <2 years) Did you move from a different location?</i>	98	25
<i>(Plan to expand and add space in 2-3 years) Do you anticipate the expansion will require a move to a different location?</i>	45	20
<i>(No expansion plans) How likely is your business to move to a new location in the next 2-3 years? (Definitely will – 7%; Probably will – 13%)</i>	20	9

Reasons for moving to new space

Of the primary employers who had recently moved to a new location, over half (51%) said their former space was too small. Other frequently mentioned reasons related to finding a better space or location, or finding less expensive space.

What are the reasons your business moved from your previous location? (open-ended, multiple response)	%
Former space too small	51
Looking for better space or location <ul style="list-style-type: none"> • Looking for better space • Needed more professional presence/space • Wanted to own space/needed permanent space • Former space old or outdated • Be near other companies in industry • More convenient location 	10 10 10 8 5 3
Former space too expensive	13
Other <ul style="list-style-type: none"> • Consolidated space • Problems with property owner • Needed more parking • (Miscellaneous) 	3 3 3 3

Primary employers (not planning to expand) who indicated their business is likely to move to a new location within the next two to three years are generally looking for larger or less expensive space.

(Businesses not planning to expand that said they definitely or probably will move in next 2 to 3 years) Why do you think your business might move? (open-ended, multiple response)	%
Need larger space	44
Looking for less expensive space	25
Looking for better space or location <ul style="list-style-type: none"> • Too far from restaurants or shopping • Need better Internet • Traffic problems 	6 6 6
Other <ul style="list-style-type: none"> • Sale of building/building being razed • Consolidating space in other location • (Miscellaneous) 	13 6 6

Likelihood of relocation within Boulder

Of the primary employers not planning to expand who said they are likely to move to a new location in 2 to 3 years, 44% anticipate remaining in Boulder. Nearly one-third (31%) do not expect to find the space they need in the city and one-fourth are unsure. By comparison, 59% of primary employers who plan an expansion requiring a move anticipate finding the space they need in Boulder.

Do you anticipate being able to find the space you need in the city of Boulder?	Planning to move without expanding	Planning a move related to expansion	Total primary employers planning to move
Yes	44%	59%	54%
No	31%	22%	25%
Don't know	25%	19%	21%

Most of the primary employers who anticipate moving in the near future and don't expect to find the space they need in Boulder mentioned the cost of space. Other barriers to relocating within Boulder include a shortage of large spaces, ability to find less expensive space outside Boulder and availability of incentives to move elsewhere, inability to find the quality of space desired, traffic congestion, commuting distances, and lack of affordable housing for employees.

<i>(If don't expect to find space in Boulder) Why do you say that? (open-ended, multiple response)</i>	Planning to move without expanding %	Planning a move related to expansion %
Cost of space in Boulder too high	100	57
Unable to find space in Boulder large enough to meet needs	40	57
Can find less expensive space outside Boulder	40	14
Offer of incentives to move to another location	20	--
Unable to find the quality of space desired in Boulder	20	14
Traffic congestion	20	--
Commuting distance for employees	20	--
Lack of affordable housing for employees	20	--
Plan to consolidate business in another location	--	14
Other	20	--

Areas considered for relocation

Primary employers who anticipate moving to a new location said they are considering space in Boulder or nearby communities including Broomfield, Louisville, Longmont, Erie, Lafayette, and Westminster.

<i>(Planning to move to a new location in 2-3 years) What areas are you considering for your new location? (open-ended, multiple response)</i>	%
Boulder	
• Downtown Boulder/Pearl Street Mall	25
• East Boulder	25
• South Boulder	19
• North Boulder	13
• Gunbarrel	13
Other communities	
• Broomfield	13
• Louisville	13
• Longmont	6
• Lafayette	6
• Erie	6
• Westminster	6
Not sure	13

Energy efficiency and waste reduction programs

To provide guidance for the City of Boulder’s LEAD (Local Environmental Action Division) group, several questions about energy efficiency and waste reduction programs were included in the survey.

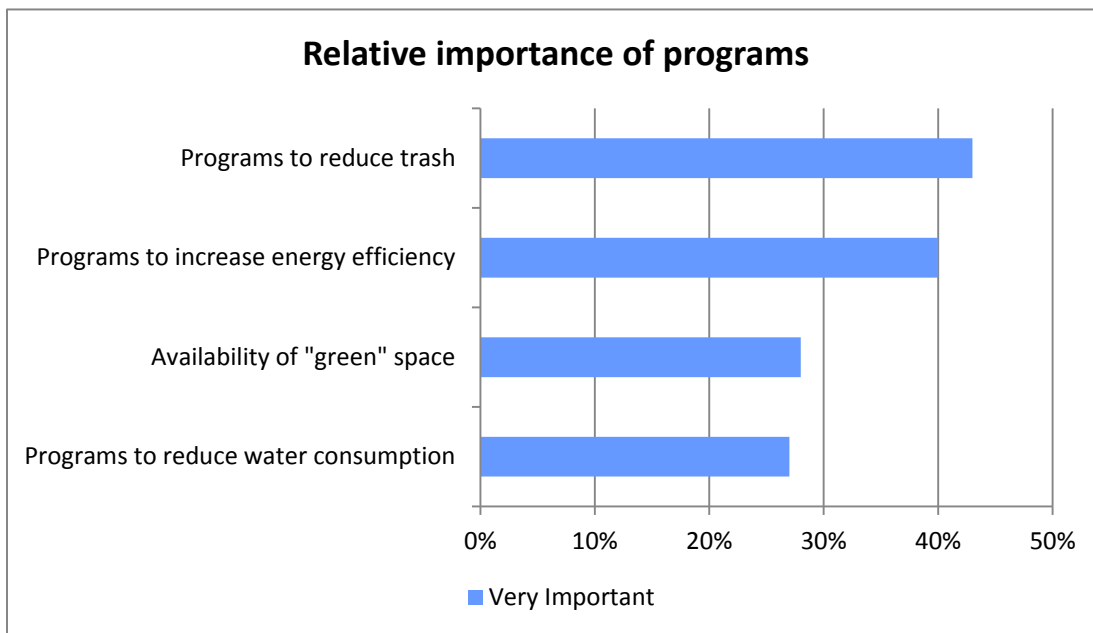
The primary employers surveyed rated programs to reduce trash and increase energy efficiency as more important than the availability of energy efficient space or programs to reduce water consumption.

Most of those surveyed currently participate or have at least some interest in one or more energy efficiency and waste reduction programs.

While many primary employers have some familiarity with Boulder’s Energy Smart energy efficiency, zero waste, and water use programs, a significant number are not familiar with the programs.

Perceived importance of programs

Forty-three percent of the primary employers surveyed rated programs to reduce trash as very important and 39% rated programs to increase energy efficiency as very important. Fewer than one-third of those surveyed consider the availability of energy efficient space or programs to reduce water consumption as very important.



How important are the following to your business?	Very Important %	Somewhat Important %	Not Important %
Programs to reduce trash	43	35	20
Programs to increase energy efficiency	39	42	17
Availability of "green" or energy efficient space	28	46	25
Programs to reduce water consumption	27	30	40

As the table below shows, there were some differences in the importance of programs among different groups of primary employers.

<i>How important are the following to your business? (Considered to be “very important”)</i> <i>Programs to ...</i>	Reduce trash %	Increase energy efficiency %	Energy efficient space %	Reduce water use %
All primary employers surveyed	43	39	28	27
Years in Boulder				
• 5 years or less	43	52	33	29
• 6 to 10 years	27	33	18	21
• More than 10 years	48	38	30	29
Years at current location				
• 2 years or less	35	38	28	18
• 3 to 5 years	36	42	36	36
• 6 to 10 years	29	32	16	23
• More than 10 years	62	42	28	30
Current location				
• East Boulder	44	34	25	25
• Downtown Boulder	43	53	40	20
• North Boulder	65	41	41	53
• Central Boulder	33	47	27	27
• Crossroads/28 th Street	29	43	29	36
• Gunbarrel	38	31	8	23
Industry				
• Manufacturing	44	44	31	44
• Professional services	39	39	30	30
• Advanced technology	35	30	24	16
• Natural & organic	60	40	40	20
Number of employees				
• 5 to 19	43	37	31	29
• 10 to 19	43	45	28	25
• 20 to 49	27	19	19	16
• 50 to 99	57	71	21	57
• 100 or more	73	36	45	27

Current use of programs

Seventy-one percent of the primary employers surveyed currently participate in one or more energy efficiency or waste reduction programs. Over half (58%) participate in a waste reduction program, and 29% are at least somewhat interested. One-third participate and 43% are interested in energy efficiency programs. Twenty percent currently occupy and 46% have interest in occupying energy efficient space, and 18% participate and 43% are interested in programs to reduce water use.

<i>Does your business currently [participate in program]. (If not) How interested is your business in the following?</i>	Current Participant %	Very Interested %	Somewhat Interested %	Not Interested %
Participate in a waste reduction program	58	7	21	13
Participate in an energy efficiency program	34	13	30	22
Occupy “green” or energy efficient space	20	12	34	33
Participate in a program to reduce water use	18	9	34	39
None	29	n/a	n/a	n/a

There were some differences in the program participation among different types of primary employers, as the table below shows.

<i>Does your business currently [participate in]:</i>	Waste reduction Programs %	Energy efficiency programs %	Occupy “green” space %	Programs to reduce water use %
All primary employers surveyed	58	34	20	18
Years in Boulder <ul style="list-style-type: none"> • 5 years or less • 6 to 10 years • More than 10 years 	43 39 66	29 21 39	24 12 21	10 3 25
Years at current location <ul style="list-style-type: none"> • 2 years or less • 3 to 5 years • 6 to 10 years • More than 10 years 	50 69 39 68	22 39 23 48	20 28 13 18	8 17 13 30
Current location <ul style="list-style-type: none"> • East Boulder • Downtown Boulder • North Boulder • Central Boulder • Crossroads/28th Street • Gunbarrel 	56 47 71 53 64 69	34 33 47 33 21 46	16 30 24 27 21 8	21 13 24 13 21 15
Industry <ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	64 66 43 80	47 34 32 60	28 20 24 20	36 18 8 40
Number of employees <ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	66 48 70 36 64	26 27 35 71 45	20 17 19 29 18	17 12 19 43 18

Familiarity with City of Boulder’s programs

While nearly two-thirds of the primary employers surveyed indicated some familiarity with the City of Boulder’s Energy Smart programs, only 18% were very familiar with the programs and 34% were not familiar.

<i>How familiar are you with the City of Boulder’s Energy Smart energy efficiency, zero waste, and water use programs?</i>	%
Very familiar	18
Somewhat familiar	49
Not at all familiar	34

As the table below shows, there were some differences in familiarity with the city’s Energy Smart program among different types of primary employers.

<i>How familiar are you with the City of Boulder’s Energy Smart energy efficiency, zero waste, and water use programs?</i>	Very Familiar %	Somewhat Familiar %	Not at all Familiar %
All primary employers surveyed	17	49	34
Years in Boulder <ul style="list-style-type: none"> • 5 years or less • 6 to 10 years • More than 10 years 	14 12 20	48 45 50	38 42 30
Years at current location <ul style="list-style-type: none"> • 2 years or less • 3 to 5 years • 6 to 10 years • More than 10 years 	10 17 16 26	45 50 52 50	45 33 32 20
Current location <ul style="list-style-type: none"> • East Boulder • Downtown Boulder • North Boulder • Central Boulder • Crossroads/28th Street • Gunbarrel 	20 13 29 7 21 8	49 53 47 47 36 62	31 33 24 47 43 31
Industry <ul style="list-style-type: none"> • Manufacturing • Professional services • Advanced technology • Natural & organic 	14 20 16 50	69 45 35 30	17 34 49 20
Number of employees <ul style="list-style-type: none"> • 5 to 19 • 10 to 19 • 20 to 49 • 50 to 99 • 100 or more 	23 13 16 29 18	57 43 51 43 45	20 43 32 29 36

Conclusions

Results of the survey of primary employers indicate the following:

- Commercial space is important to primary employers. While not necessarily the most important factor in running a business, the space they occupy is considered one of the more important factors to the majority of primary employers in Boulder.
- Primary employers are generally satisfied with the areas their businesses are located; however, some areas in the city are stronger than others. Improvements primary employers suggest for making areas better for business include more restaurants, more affordable space, more parking, less traffic congestion, more shopping, and better access to public transportation.
- Boulder's primary employers are a diverse group, varying by size, industry, and a number of other factors. There is also wide variation in the size, type, and special features of the space the city's primary employers occupy.
- Despite the generally positive attitude primary employers have about doing business in Boulder and the space they currently occupy, Boulder remains vulnerable to losing primary employers to other nearby cities.
 - Most primary employers lease their space and many have leases expiring in the next few years. Many expect to add employees or expand their businesses in the near future.
 - Most primary employers report their current space meets their needs, but many have issues with the cost, size, and functionality of their space.
 - A significant number of primary employers plan to move to a new location in the near future. While some believe they will find the space they need in Boulder and are looking for space within the city, many have concerns about the cost and availability of space.
 - Nearly a third of the primary employers who expect to expand in the near future are likely to be looking for spaces that are 20,000 square feet or larger, and nearly half will need spaces that are at least 10,000 square feet.
- Many primary employers are aware of Boulder's Energy Smart energy efficiency, zero waste, and water use programs; however, a significant number are not familiar with the specifics indicating there is opportunity to increase the knowledge and understanding of the programs. In general, programs to reduce trash and increase energy efficiency are considered more important and have higher rates of participation among primary employers than occupying "green" or energy efficient space or programs to reduce water use.
- While the space they occupy is important to primary employers, there are other factors they consider to be equally or more important. While Boulder continues to be a desirable business location for many primary employers, the cost of doing business in the city is a common concern. There are a number of other issues that are also of concern to primary employers including the availability of qualified workers, parking, traffic congestion, ease of doing business, and lack of affordable housing for employees.

Appendix: Survey methodology notes

Of the approximate 554 businesses identified as primary employers in Boulder with five or more employees, 158 or 29% were interviewed for this study. The original research design called for 150 completed interviews; however, additional interviews were conducted to help increase the number of large employers included in the study.

Every attempt was made to get as many primary employers to participate in the study and to include a representative sample of the city's primary employers. Numerous attempts were made to contact each primary employer until the research sample was exhausted.

Some subgroups (listed below) that represent a key sector of Boulder's economy are highlighted in the report despite a smaller than optimal number of respondents. It is important to note responses of the relatively small number of respondents in these subgroups may not be representative.

Respondent Characteristic	Subgroup	Number of Respondents
Number of employees	50 to 99	14
	100 or more	11
Industry	Natural & organic products	10
Location	Central Boulder	15
	Crossroads/28 th Street	14
	Gunbarrel	13
	North Boulder	17

ATTACHMENT F

OVERVIEW OF APPROVED & PROPOSED PROJECTS

August 9, 2012

Potential primary employer space and Potential housing/amenity space to support primary employers

Potential primary employer space

eleventh and pearl: 1048 Pearl to 1037 Walnut

- **Zoning:** DT-5
- **Use:**
 - *Redevelopment of former Daily Camera site spanning from Pearl to Walnut St.*
 - *160,000 square feet of development in a four story, 55-foot building that includes ground floor retail, below grade movie theaters, automated underground parking system, and offices within the upper stories.*
- **Amenities/Features:**
The project plans call for a public plaza space adjacent to the 10th street pedestrian alley; as well as roof top gardens and dining opportunities atop the Walnut building.
- **Review Status:**
The Site Review was heard by Planning Board on July 26th and was continued to August 2nd and again to September 13th. The proposal will also be required to go before the Landmarks Board (hearing date T.B.D.) due to the site's location within the historic district.



1301 Walnut Street

- **Zoning:** DT-5
- **Use:**
 - *Redevelopment of the surface parking lot immediately to the west of the Colorado Building as well as the parcel at the north east corner of 13th and Walnut.*
 - *55,500 square feet of development in a four story, 55-foot building that includes ground floor retail and offices within the upper stories.*

- **Amenities/Features:**
Preservation and historic designation of an existing historic building on the site as well as the Colorado Building.
- **Review Status:**
The proposed Concept Plan has been reviewed by staff and is scheduled for Planning Board on September 6.



1600 Pearl Street

- **Zoning:** *DT-5*
- **Use:**
 - *The request under consideration is for an 18,309-square-foot, third story addition to an existing 45,626-square-foot building for a total of 63,935-square-feet, and a 2.03 FAR.*
 - *The addition is planned over the existing two-story building and would utilize the same exterior materials as currently used on the existing building.*
 - *The intent in the floor area addition is to provide Class A office space within the building with approximately 100 additional employees.*
- **Amenities/Features:**
The proposed project is the first to utilize a new code provision that was adopted by council to permit a 0.5 FAR addition for non-residential uses in conjunction with payment of a housing linkage fee for the additional FAR.
- **Review Status:**
The Site Review was approved by City Council on February 21, 2012 and is currently in the Technical Document Review process.

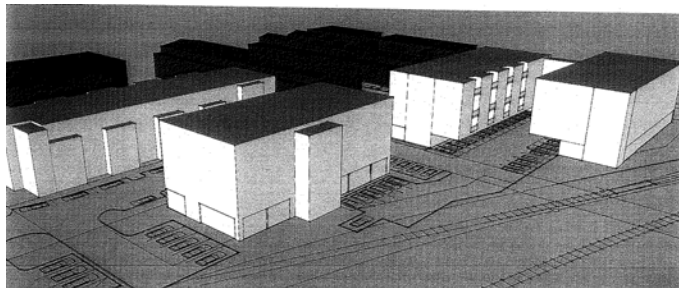


Steelyards Expansion: 2440, 2445, 2490 33rd Street

- **Zoning:** MU-4
- **Use:**
 - *Proposed development of three new buildings on undeveloped lots of the Steelyards development with intent to build two mixed use buildings and one office building with a total of 129,295 square feet of development.*
- **Amenities/Features:**

The applicant desires a means to permit small scale “cottage industry” manufacturing within the mix of uses.
- **Review Status:**

The proposal is in the Pre-Application stage.



Avery Brewing: 4910 N. Nautilus Court

- **Zoning:** IG
- **Use:**
 - *Proposed to be built in two phases:*
 - *the project at build out would be a 95,922 square foot building to house the Avery Brewing Co. production facility*
 - *their corporate offices, a tasting room and a 249 seat restaurant, with outdoor seating of approximately 100 seats open from 10 a.m. to 2 a.m., seven days per week for both indoor and outdoor seating.*
- **Amenities/Features:**

The design intent was to reference the stately structures of historic breweries, but with a design of “our time.” At build out, the brewery will have 32 fermentation tanks, which the Planning Board noted would become “iconic” for the area.
- **Review Status:**

The Site and Use Review applications were approved in May 2012, the applicant is planning to submit for TEC doc review in next 30 days.



Potential housing/amenity space to support primary employers

Boulder Junction (part 1): 3100 Pearl Parkway

- **Zoning:** *MU-4*
- **Use:**
 - *A mixed use development consisting of 319-unit apartment units within four separate buildings along with a 3,000 square foot retail space; on-site two-level, partially below grade wrapped parking structure for 363 vehicles; on-site recreation center; multi-use paths; a variety of interior courtyard spaces.*
- **Amenities/Features:**

A public-private partnership was established in conjunction with the Depot Square project to the north to develop the first multi-way boulevard for Pearl adjacent to the project. This will feature two shared streets adjacent to each project to allow bike, pedestrian and auto access as well as parking. This will also allow for through traffic on Pearl Parkway to continue at the same level of service as today.
- **Review Status:**

Project recently broke ground with completion anticipated for summer 2013.



Boulder Junction (part 2): 3151 Pearl Parkway

- **Zoning:** *MU-4*
- **Use:**
 - *Mixed Use development including:*
 - *a Regional Transportation District (RTD) bus rapid transit (BRT) station*
 - *a 140 room hotel*
 - *71 permanently affordable housing units*
 - *390 space parking structure*
 - *the renovation and repurposing of the historic depot building as a restaurant or brewpub*
 - *provision of plaza space with public art displays.*
- **Amenities/Features:**

New plaza space will be created to provide opportunities for public gathering space, that will include permanent public art installations. In addition, a public-private partnership was established in conjunction with the Depot Square project to the north to develop the first multi-way boulevard for Pearl adjacent to the project. This will feature two shared streets adjacent to each project to allow bike, pedestrian and auto access as well as parking. This will also allow for through traffic on Pearl Parkway to continue at the same level of service as today.

- **Review Status:**
The application for TEC doc review is nearing completion; the applicant anticipates breaking ground within the next quarter.



Gunbarrel Center: 6685 Gunpark Drive and 6580 Lookout Road

- **Zoning:** *BR-2 (Business Regional – 2)*
- **Use:**
 - *251 attached residential units*
 - *22,000 square feet of new commercial/retail space.*
 - *Existing 28,000 square feet of commercial/office to remain on the site.*
- **Amenities/Features:**
Creates new public streets consistent with the Gunbarrel Community Center Plan. Also includes a new central greenspace.
- **Review Status:**
The Site Review was approved in February 2012. Applicant is working out the details of the Development Agreement and wetland mitigation before moving forward with construction drawings



Gunbarrel Gateway: 6333 Lookout Road

- **Zoning:** *BC-2*
- **Use:**
 - *The 5.86-acre commercial development includes a primary anchor of a 100-room Hampton Inn Hotel along with three separate retail/office buildings, two of which are*

planned to be 6,085 and 6,508 square feet, respectively; and a third retail/office building proposed at approximately 12,500 square feet.

- **Amenities/Features:**
There is an outdoor plaza space planned to interconnect two of the buildings on the corner of Lookout and 63rd that was recommended by Planning Board at Concept Plan review.
- **Review Status:**
The application is in for building permit. They hope to break ground in the next 30 to 60 days.



The Alexan at Gunbarrel Flats: 5460 to 5490 Spine Road

- **Zoning:** RH-5.
- **Use:**
 - Multifamily development consisting of 13 detached structures.
 - A mixture of studio, 1- and 2-bedroom units make up 11 of the structures providing a total of 232 units with tuck-under, on-street and surface parking areas.
 - A detached 2,500 square foot clubhouse and a 1,500 square foot retail structure are also proposed.
- **Amenities/Features:**
The project plans call for a 25-meter lap pool as well as a 12-foot multi-use path that is the ‘spine’ of the project site.



- **Review Status:**
The initial review comments for the Site Review will be released June 22, 2012. Plan set revisions are required, so an additional review is required.

Waterview: 5801-5847 Arapahoe Ave

- **Zoning:** RH-4 and IG.
- **Use:**
 - Development the 14.87-acre site with 263 apartment units in 14 multi-family buildings
 - Associated amenity buildings and uses

- 8,700 square feet of retail

- **Amenities/Features:**

The site is comprised of two properties across South Boulder Creek. The two parcels will be connected by a bridge. The site is also comprised of several open space amenities, including a pond, South Boulder Creek and multi-use path.

- **Review Status:**

An application for Concept Plan was just submitted Monday, June 18. The item is currently on hold while floodplain issues are studied further.



Potential primary employer space & potential housing/amenity space to support primary employers

Pearl Parkway Centre: 4700 Pearl Parkway

- **Zoning:** IG

- **Use:**

- A three story, 56,920 square foot building with two different options for buildout: entirely office or with the first and a portion of the second floor as an Industrial Service Center (ISC), and the remainder as office.
- The intent of ISC is to provide services including retail, restaurant, banking, convenience retail, personal services, medical and dental to specifically serve industrial business areas where such uses are limited or prohibited.

- **Amenities/Features:**

Planning Board affirmed a staff-level approval for the two buildout options based on the uncertainty of the state of the economy. The Planning Board noted that both options would have a similar mass, scale and finish but would differ only in use.

- **Review Status:** *The Site Review application was approved in May 2012, the applicant is planning to submit for TEC doc review in next several months.*



LAND USE OPTION A: ISC option as seen



LAND USE OPTION B: all-office option as

Additional Projects

- Kalmia Estates
- The Armory South
- Boulder Creek Commons
- Boulder Jewish Commons
- Junior Academy
- Violet Crossing
- Yarmouth and Broadway Affordable Housing
- Yarmouth Affordable Housing
- Former People's Clinic Site

ATTACHMENT G

Primary Employer Study Focus Group Summary

The Boulder Economic Council (BEC) and City of Boulder held focus groups with 15 individuals representing Boulder's real estate, architecture, and primary employer communities on July 30 and 31, 2012. The objective of the discussions was to review high level findings from the Economic Sustainability Study and get additional input related to those issues. The discussions were moderated by Jennifer Pinsonneault, the BEC's Director of Research and Marketing.

Cost of Space

Among the chief points of discussion was the cost of space in Boulder and the effects it has on the business community. It was acknowledged that while Boulder is a high rent district and often times the cost of space is high, Boulder remains such a desirable business location that availability is a bigger concern for many.

- **Overview:** Most participants agreed that there is a perception that Boulder is significantly more expensive, and that the perception is based in reality. Several people noted that base rates are generally consistent and competitive. Participants said that costs vary significantly from downtown to other areas of the city; however, the high tax rates and city fees are passed along to the tenants, negating the flexible base rates. Several attendees also mentioned that with the limited amount of space available, there is little choice but to have high prices.
 - One participant said that properties on 55th Street are competing with properties in Interlocken, and Longmont. Another said that Boulder isn't being compared to Denver; it's instead being compared to Madison and Portland.
- **Cost of Compliance:** Focus group participants expressed significant concern about "*hidden costs in the regulatory environment*" in which the high city fees are passed along to the tenants. Property owners who look to upgrade their "tired buildings" trigger upgrades, such as water, mechanical and lighting systems that are not visible to the tenants and often come as a surprise. Compliance with energy codes can add up, one participant noted, and catch clients unaware. Tenants don't understand why they have to pay for improvements that seemingly have nothing to do with producing their product.
- **City Fees:** Several attendees said that tenants tolerate the high city fees and space costs because of Boulder's location and desirability. One participant said that "*new tenants to Boulder are shocked by rates, those who have been here accept it*".
 - It was noted by one participant that the situation is similar between different areas within the city, because so many businesses are willing to pay more for a downtown location. However, another commented that

“perception that it is difficult to do business in Boulder can drive people elsewhere”. Participants questioned how long the current trend will last. Several said that right now having a Boulder address is so important that companies are willing to be in an older building, but that may change in the future.

- **Cost of New Buildings:** When participants brought up constructing new buildings, several emphasized that the cost of construction is *“shockingly high”*. While potential tenants will want that new space, they would be forced to pay a price above market rates. In addition to the limited amount of land, *“the costs and fees by city and county make it difficult to get through, [combined] with cost of materials, it’s so expensive to build something nice”*. Several participants noted that the cost of ground plus the cost of construction make it more practical to build up, yet the city has very strict height limitations. However, one participant noted that construction costs are not necessarily higher in Boulder than other Front Range locations, particularly Denver.
- **Payment in Lieu of Affordable Housing:** Many attendees expressed concern about the payment in lieu of affordable housing, and one participant said that if *“the community thinks affordable housing is important, then everyone should pay for it and not just real estate developers”*.
 - One participant said that affordable housing fees ended up costing tenants as much as \$280 more per month.
- **Importance of Doing Business in Boulder:** Several participants emphasized that people and businesses want to live and work in Boulder, so they are willing to pay the higher rates, but expressed concerns that Boulder could become a *“resort town”*, with only the highest end businesses and could become so expensive that being in Boulder is no longer worth it to businesses. Business leaders who were fortunate enough to buy buildings when the market was low, however, indicated they were less concerned about the price of space as they were about the high taxes and fees.

Availability of Space

Overall, real estate participants noted that the vacancy rate in Boulder is low and remains stable; however, from a business perspective, there are few opportunities for businesses to grow in Boulder, especially if they want to be in one space downtown. One participant mentioned that Boulder doesn’t suffer as much as surrounding submarkets do, and *“when Boulder’s vacancy rates are in the mid-high teens, they’re considered really high”*. The availability of large, high quality, continuous square footage was a major concern to all the participants. Attendees from local businesses noted that their ability to find and afford larger space was a matter of lucky timing, while participants in real estate discussed the increase in large companies looking for large spaces. One person noted that *“even if they [companies] find a 20,000 square-foot space, they won’t take it because they won’t be able to expand beyond that, and won’t be able to find 30,000.”* The space to grow exists

outside Boulder, and large companies are forced to move out of Boulder. One participant cited Webroot as an example of this.

- **Creative Solutions:** Several participants said that companies are looking at their long-term growth and debating whether “putting down roots” in Boulder or moving to a new space will allow them to continue on the right trajectory.
 - One participant said that a trend has emerged where, instead of opening a larger office in Boulder, companies have opened an additional office in Denver, so as to be near their employees and not lose that Boulder address.
 - One participant said that some businesses find what opportunities are here, and then see if they can match their business plan to those opportunities, as they realize limitations and look for creative solutions.

- **Effect on Attraction & Retention:**
 - One participant discussed that Denver and Boulder attract similar companies, but the demand for space in Boulder exceeds the amount of available space.
 - One participant said that *“once they [companies] look at Boulder and can’t find the space, and leave, they’re reluctant to ever come back.”*

Size of Space

A big concern for all the participants was that the demand for larger spaces has increased, but there just isn’t enough continuous square footage available in Boulder. One participant said that while in Denver a twenty story building could be built, it just isn’t an option here. The opportunity and space to grow exists in spaces such as Interlocken. Several participants mentioned the lack of class A office space downtown as a specific concern, including mention of specific clients that moved elsewhere because they weren’t able to find high quality space in the right size and location. A participant mentioned that new downtown projects will take large users currently in other spaces downtown and open up space that could be used for smaller and mid-size tenants.

Some participants said that they hear more about companies looking for larger space and concern about the lack of flexibility within a certain space. A business owner indicated that finding real estate to build in Boulder is extremely constrained, and the spaces that are available have significant issues.

Age of Buildings

Participants generally agreed that while Boulder’s buildings are old, it is not a significant concern, as businesses are willing to be in those older buildings to stay in Boulder. Many of these buildings are old, but *“they’re not old enough”* to be historic. Participants described the buildings as without character and as just useful buildings, but indicated the potential for upgrades in areas with these non-descript buildings.

- A primary employer stated that he “*couldn’t care less about the age of the building – if you can bring it up to a nice space, then who cares.*”

Challenge of Upgrading Boulder’s Building Stock

In discussing why much of Boulder’s building stock hasn’t been upgraded, participants said there were financial and market challenges to improving Boulder’s “*tired buildings,*” as well as a fear that upgrading buildings will trigger costly upgrades.

- Many emphasized that landlords have little incentive to pursue upgrades. Tenants will tolerate the older buildings because of the location and importance of having a Boulder address, and thus it’s not necessary for the landlords to overhaul the building.
 - Participants said that owners don’t have to make upgrades because space is so limited, and as one participant noted, in order for landlords to improve their space, there has to be somewhere for current tenants to go while buildings are upgraded.
- Several participants also expressed that if they were to make changes to their buildings, they would trigger costly upgrades and a process that property owners don’t want to deal with, especially, as one participant noted, in the case of older buildings.
- One participant noted that people new to Boulder are shocked by lack of upkeep and innovation in buildings in a place as creative as Boulder. The need for “*better quality, more creative space*” was also mentioned in that it would help attract and keep companies here.
- One participant said that, while some of these old buildings don’t meet code and likely need insulation, duct and wiring work, the tenants don’t want to spend a majority of their budget on upgrades to the building’s infrastructure.
 - Business executives who attended emphasized how important being in Boulder was to them, but echoed the concerns of the other participants, in that complying with code, while maintaining their construction budget, was a huge challenge and forced them to balance building R&D space with the need to improve lighting.
 - It is a “*tough sell*” to justify staying in Boulder when it is difficult to find suitable new or existing space.

Zoning & Building Codes

Participants expressed significant concern with the city’s zoning limitations, which they saw as too restrictive, and the zoning descriptions, which are fifteen years old. In particular, it was said that I-G (Industrial-General) zoning is not adequate to serve the companies that would thrive in Boulder. One participant said that many of Boulder’s companies are not “*production*” companies, so they struggle to find space in industrial

areas. Consulting firms, technical offices, and service providers were example of types that should be accommodated under industrial zoning. Another participant noted situations where uncontroversial, small impact issues become more complicated than they need to be, while one participant asked “*if tenants can use the space, and there is no safety hazard – why does the city have to be so involved?*”

Participants noted areas that have development potential:

- East of 28th Street, where, if significant barriers were removed, there could be much more space.
- The Hill, where there is potential that could be achieved with a change in zoning modifications and parking requirements.

It was discussed that these challenges with zoning cause some to go to a different municipality where zoning is more flexible. It was mentioned that in other cities, buildings could have six stories, and that density is associated with affordability, making larger projects more cost efficient. Developers currently can’t expect new projects to be paid off, thus making it easier to let buildings sit there than to renovate.

- One participant noted that as a result of the zoning restrictions, you don’t get as many “*innovative spaces*”, something that often surprises people who are new to Boulder.
- The Randolph Center downtown was cited as an example of a building that is outdated, yet it is not feasible to upgrade or redevelop it. Another example was given of a company located in downtown that is popular with the neighboring restaurants and stores because of the people it draws, yet their building isn’t zoned correctly for the use.
- Several participants suggested increasing the zoning flexibility.
- Another suggested the city should focus on large issues such as where to put large space users and “*should not get hung up with ‘is this a protected design zone?’*” and questioned “*what are we trying to accomplish here?*”

City Development Review Process

As discussed above, participants had significant concerns about the high taxes and fees in the city, which are passed on to the tenants. They indicated these fees not only hinder redevelopment and upgrade potential; they also make it more expensive to build a new building. One participant said, “*development fees are outrageous here*”.

Participants emphasized that the unpredictability and uncertainty of the development review process is a significant barrier to achieving Boulder’s development potential. Those who have experience working in Boulder said they understand both the efficiencies and complications of the process, but for companies coming into Boulder, questions raised about the process can be so unpredictable at times, including tasks late in

the process that were challenging to meet. People expressed concern that the process was expensive, hard to plan around, and resulted in a wide range of outcomes, setting back the landlords who incur extra costs and lose rent.

- Several said that the low threshold for triggering site/concept review in the land use code was a significant challenge, and that issues often were identified late in the process. One participant noted that *“taking one step forward triggers new requirements – property owners of older buildings don’t want to deal with that.”*
- One participant expressed the necessity of having someone who has been through the process to assist tenants. It was said that the combination of high fees and an unpredictable process deters some from pursuing upgrades at all, therefore limiting development potential because developers often take the path of least resistance.

Many participants noted that it was a pleasure to work with city staff, while others raised concerns about the number of people that their application went through and the consistency between those people. Several participants noted the steps the city has taken to improve the process, but cautioned against adding additional steps to the process that would further complicate or delay it. Laying out the issues up front would help clarify the process.

Several participants noted the need for further interdepartmental cooperation throughout the development review process. One participant noted *“a shift in power”* over the years between different departments involved in the process, and another encouraged the city to further align the goals of different departments.

A few participants said that Boulder attracts tech-based and venture-funded companies that usually have a short timetable to make decisions. These companies often can’t afford to wait six months to get something approved when suburban space elsewhere is ready to go. Those same participants noted that it speaks to the desire of companies to be in Boulder when they’re willing to go through the process.

- One participant suggested expediting the review process for certain projects and the creation of some special review teams.
- Another suggested that the city use tax incremental financing for redevelopment, which has been successful in Fort Collins.
- Participants said that the greatest demand is in the downtown area and that the new potential space will only help a little bit.
- One participant mentioned an arts studio (with classes) that was interested in the Holiday Neighborhood; after learning that the required city review process would take three months, the company decided that it didn’t want to take the risk and looked for another site

Amenities

When asked about amenities in Boulder, few participants said that they had an especially strong impact on tenants, and that those who feel strongly about amenities are generally willing to pay for them. It was noted that there is limited variety in product type, with lots of amenities and little parking downtown, while East Boulder has more parking and fewer amenities. The example was given that businesses downtown have accepted that parking isn't plentiful.

Members of the business community expressed the importance of Boulder's amenities, lifestyle, and values, even going so far as to say they would lose employees if they moved outside the city.

- **Gunbarrel:** It was expressed by one participant that, although there was no push back from employees when they moved to Gunbarrel, they would like more amenities there and are hopeful about the redevelopment efforts there.
 - Several participants said that the Gunbarrel Town Center has addressed some of the amenity concerns
 - One primary employer noted that when the company moved to Gunbarrel, they had to make space for a cafeteria because of the lack of restaurants. However, the increased amenities with the town center and the Hampton Inn will be extremely helpful to them. He noted that the transportation in Gunbarrel has been great.
- **Pearl East and 55th Street:** One participant said that the zoning restricted the potential for amenities in that area. However, one attendee mentioned that in their experience, *“it is common in most municipalities that business parks and industrial and flex/tech areas tend to be industrial flex/tech zoned and don't support restaurant use”*.
 - One participant suggested a regular shuttle service from 55th to Twenty Ninth Street along Pearl Parkway
- **Housing:** In terms of amenities, one participant said that the *“greatest gift for primary employers is housing near their offices”*.
 - One participant said that relocation decisions are sometimes based on proximity to their workforce, while other attendees disagreed, saying that often CEOs will make a decision based on what they want, not based on their workforce.
 - It was mentioned that while new housing projects set a good standard for high quality space, they are just *“a drop in the bucket”* in terms of meeting the demand

One developer noted that more amenities would be helpful for businesses, but that he wouldn't invest in it due to the fact that it would be built on speculation and would lack

consistent business. Any restaurant there would have limited business hours, without significant weekend business, and any potential successful space would have to be no smaller than 3,000 square feet.

Overall Trends

Several participants noted that it is important to realize that Boulder is known for – growing start-ups until we can no longer accommodate them. Boulder has evolved from a city where a large user occupied 15,000 square feet 15 to 20 years ago, and now that is average. To quote one participant, the “*hallmark of Boulder space was its flexibility*”. The increasing age of space and the addition of competing areas along US 36 have forced companies that grew in Boulder reached a point where they moved elsewhere to continue their growth.

- One participant acknowledged that Boulder has focused on start-ups “*graduating*” from Boulder, but emphasized that we need to be smart about how to grow Boulder and asked whether there is a 20 year plan. It was also mentioned several times that eventually Boulder will have increasing competition from other communities.
- One person commented that the presence of flagship companies in Boulder allows startups to stay here, so it’s important not to lose sight of that, while another commented that there is more to it than just not having space – amenities, transportation, etc. are also important factors for companies.
- Participants described the software engineering talent in Boulder as the best in the country, a crucial component of their businesses and a big reason why some companies have stayed.

In a discussion of Boulder’s community goals, participants expressed concern that goals, such as municipalization and affordable housing, are driven by a vocal minority. Boulder’s energy future remains a “*scary*” issue for some participants; another said that reliable, cheap energy is a big concern for businesses and can affect relocation and expansion decisions.

However, most participants echoed the feeling that overall Boulder is doing well. It would be nice to keep getting big name companies, but the open space, amenities, and lifestyle will keep bringing people here. Participants felt that Boulder still has opportunities, it’s just a matter of finding the right tenants, and overall, the market will take care of Boulder.