

# JEFFERSON COUNTY

## STATE OF COMMUNITY REPORT



PLAN 613 | SPRING 2015  
Xi Chen, Faisal Aldabahi, Kanghyun Lee



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***PLAN 613 SPRING 2015***  
***PLAN METHOD & TECHNIQUES***  
LAUP Department, Texas A&M University

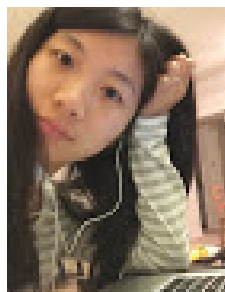
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<http://i.imgur.com/n8dAVYS.jpg>

# ***01. INTRODUCTION***





*The objective of this report is to give an overview of the essential planning elements of Jefferson County. This state of community report will begin with demographic analysis, continue with economic, transportation, and environmental issues, and conclude with SWOT analysis.*

*This report will help the county to set appropriate goals and objectives and to assign all actions associated with these goals.*

## **Jefferson County Overview**

Jefferson County is located in the middle of Colorado State, on the western edge of metropolitan Denver. The county itself covers 774 square miles of total land. With a current overall population of approximately 551,798, it is the fourth populous county in Colorado. Lakewood is the largest city in the county. Motherland of the famous Rocky Mountains, the county boasts rich cultural and geographic diversity.

## **Community Profile for 2012**

Jefferson County 2012 Population Estimate as of 7/1/2012	535,734 people
Unincorporated Jeffco 2012 Population Estimate as of 7/1/2012	188,368 people
County Seat	Golden, Colorado
Form of Government	Board of Commission (3)
Date of Incorporation	1861
Square Miles	773 Square Miles
Unincorporated Jefferson County Area	653 Square Miles
Percentage days of Sunshine	70% sunshine
Hottest Month	July (74 degrees average)
Coldest Month	January (30 degrees average)
Annual Precipitation	15.4 inches (average)
Annual Snowfall	60.3 inches (average)
Average Humidity	40%

The above data is pulled from various sources including the Colorado Climate Center at Colorado State University, 2012 Jefferson County Planning and Zoning Division, 100 Jefferson County Parkway, Suite 3550, Golden CO / <http://planning.jeffco.us>

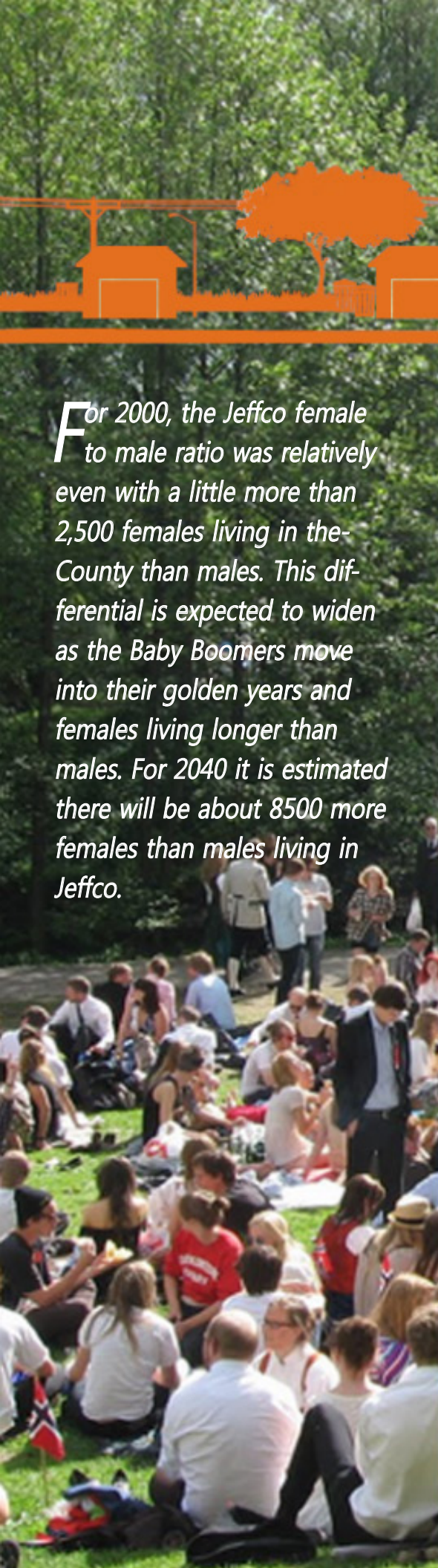




<http://www.ireyhomes.com/images/denver.jpg>

## ***02. DEMOGRAPHICS***





**F**or 2000, the Jeffco female to male ratio was relatively even with a little more than 2,500 females living in the County than males. This differential is expected to widen as the Baby Boomers move into their golden years and females living longer than males. For 2040 it is estimated there will be about 8500 more females than males living in Jeffco.

## Current Population

The table below represent the percentage of population per Ethnic Group according to 2013 U.S Census data. Since 2010 the population of the city has increased by 3.2 %. The percentage of whites increased from 81% in 2000 to 90.97% in 2013. Therefore more than 90% of the people who live in Jefferson County are white which make the county less diverse than the state overall (see table below).

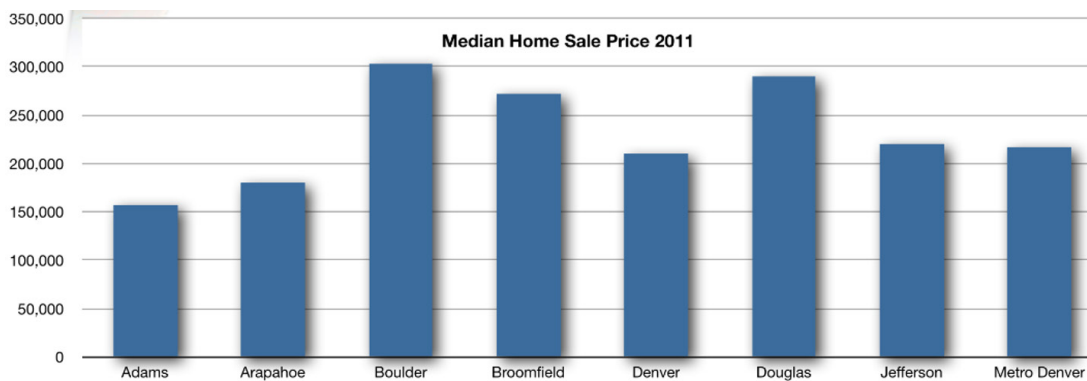
Ethic Group	Population	%
White	502,081	90.97
Black or African American	8,890	1.61
American Indian and Alaska Native	9,240	1.67
Asian	17,673	3.20
Native Hawaiian and Other Pacific Islander	1,236	0.22
Some other race	12,808	2.32
Total	551,928	100

The poverty rate in the county is 8.6%, which is less than the state and national poverty rates, which are 13.2% and 15.4% respectively. American Indians, Alaska Natives, and Black or African American populations comprise more than 50% of the population below poverty level.



## Housing and Home Ownership

The total occupied housing units in Jefferson County are 1,977,591 from a total of 2,222,782 existing housing units. 70% of these houses are owned houses and the remaining 30% are rented houses. However 80% of these houses are more than 15 years old (i.e., they were built before 2000) and the county in the near future needs to either A) replace these houses or B) renovate them. The median sales price of existing houses was \$232,400 in 2010 while in the same years the median sales price for the national was \$168,800. The high median cost is one of the reasons that people leave the county to the surrounding counties and commute to work. The figure below shows data for Median Home Sale Price in Colorado communities.



## Income

The Median Household Income is \$68,984. This is more than the median household income of the state and the country (\$58,433 and \$53,046 respectively). Educational services, health care, and social assistance are the main employment sector in the county, contributing to more than 20% of the labor market. However, more than 78% of the employees are working in the private sector. The Educational Attainment of this county is considered to be one of the highest percentages nationwide, with 93.7% obtaining a high school diploma or higher.



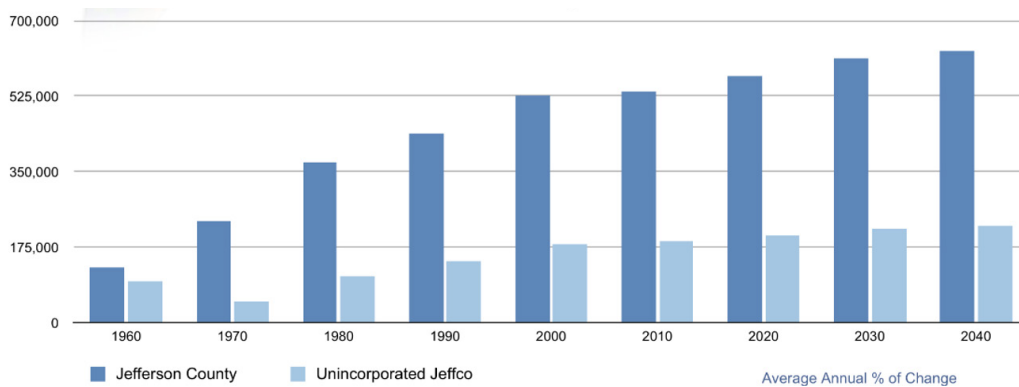
## Population Growth

- The annual growth rate of the county is 0.17 from 2000 to 2011 with only around 9000 people increase in total population. This rate is considered very low to moderate.
- Additionally, the female – male ratio will slightly change over the next 25 years due to higher life expectancy for females.

**Jefferson County Total Population Males & Females 2000 to 2040**



**Jefferson County Total Population Estimate 1960 to 2040**



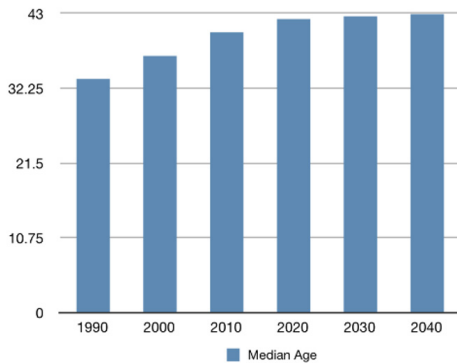


- In 2012, the median age in Jefferson County was 41.3 years. By 2014 this figure changes to approximately 43 years median age.

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**Jefferson County Median Age**

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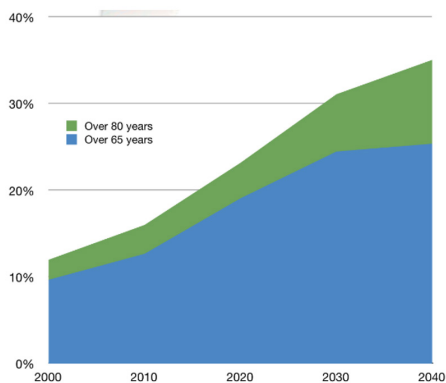


- The county is expecting a growth in the county population in the group over 65 years and 85 years, and the graph number in 2000 shows that this group contributes to around 13% of the total population. However by 2040 the percentage will reach 34%. The county should consider this expected percentage in planning and designing the county public facilities and amenities.

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**Jefferson County Median Age**

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<http://www.oxifresh.com/wp-content/uploads/2014/09/Lakewood-carpet-cleaning.jpg>

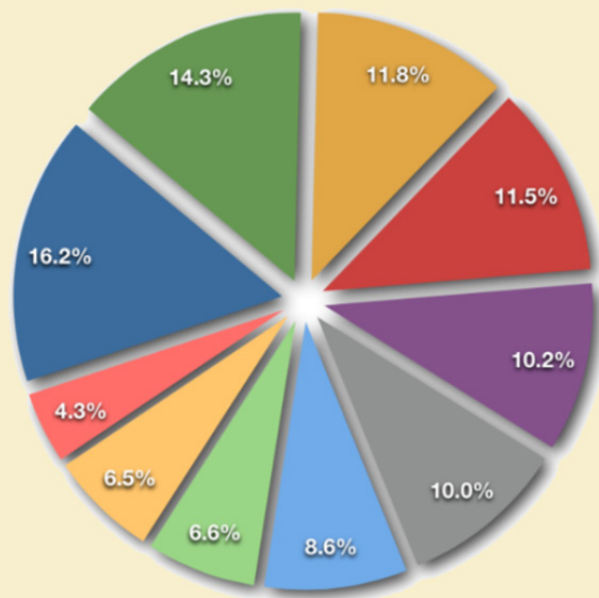
## ***03. ECONOMY***





**F**orbes magazine has ranked Jefferson County of Metro Denver as the 6th fastest growing city in the U.S. The county's main economic goal is to bring in outside revenue by supporting the creation of jobs producing goods and services for customers living outside the county. In Mar. 2012 the cost of living index in Jefferson County was 106.5 (6.5% higher than the U.S. average of 100).

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**Jefferson County Employment Distribution**

- Retail Trade
- Health Care & Social Assistance
- Accommodation & Food Service
- Professional, Scientific
- Public Admin
- Manufacturing
- Education Services
- Admin, Support, Waste Mgmt
- Construction
- Finance % Insurance



## Economy

- There are approximately 22,000 firms in Jefferson County, which is 10% of the total number of firms in Colorado State. According to the US Bureau of Labor Statistics, Jefferson County was one of four Colorado counties to have employment levels exceeding 200,000 employed workers. The 208,500 jobs showed a 1.5% growth over the previous year and ranked 82nd nationally.
- As per Denver Regional Council of Governments (DRCOG), “projects over 110,000 new jobs will be created in Jefferson County between 2005 and 2035. This represents a 44 percent increase”. As of December 2014, the county Unemployment Rate was 3.6 %, relatively low compared to the national unemployment rate of 5.5%. The table below shows that the Native American/ Alaska Native group carries the largest percentage of the unemployment rate with around 30% contribution.
- Jefferson County is one of the highest employment providers in three major employment sectors: aerospace industry, renewable energy, and research and development. Additionally the county is rich with recreation and tourism sites, especially in the foothills, where the plain meets the mountain. Below will we will focus on these 3 sectors that the county is proud of.

### *Unemployment Rate by Race and Gender*

	White	Black	Native American/ Alaska Native	Asian	Other Race	Two or More Races	Hispanic Ethnicity
Male	9.8%	17.9%	29.6%	8.8%	12.9%	17.1%	13.8%
Female	7.4%	20.5%	23.5%	8.1%	19.7%	11.6%	14.0%

## ***Aerospace industry***

The state of Colorado is ranked number 1 nationwide in Aerospace industries with more than 170,000 space-related jobs. However Jefferson County has the highest concentration of aerospace employees in metro Denver, with more than 30% of the region's aerospace employment. The aerospace business has grown by 17% in the last 10 years and is expected to continue at the same level the next 10 years as well. To support this valuable growth, the county has established the following programs and centers to promote the business:

- Advanced Industries Accelerator Programs
- Aerospace Sales and Use Tax Exemption
- Procurement Technical Assistance Center
- U.S. Patent and Trademark Office

## ***Renewable energy and research and development***

Colorado is one of the few states with a strong specialization in the renewable energy industry. The state is trying to be the leader of such industries in the near future and to reach this goal the state has promote this business by supporting the Colorado School of Mines research centre and inviting interested companies to invest in this business. Since 2007 the industry has seen 23% growth and the average wage reach to \$84,090. Jefferson County contributes to 28% of metro Denver's energy companies where the Jefferson County houses company is located. This company is considered as the third largest company in the world with emphasis in renewable energy. In addition to that the county is the home of National Renewable Energy Laboratory, the nation's premier energy research facility. The county has established the following programs and centers to promote the business:



- Advanced Industries Accelerator Programs
- State Sales and Use Tax Exemption
- Procurement Technical Assistance Center
- U.S. Patent and Trademark Office

## ***Recreation and Tourism***

The recreation and tourism business surrounding Jefferson County generates around \$10 billion annual income, supporting around 107,000 jobs for the state of Colorado.

The total visitors and tourist number to the county has increased by 17 % between 2011 & 2013. CBCA's latest "Economic Activity Study of Metro Denver" report also shows that these visitors are spending 14 percent more in the region in 2013 compared to what they spent in 2011, the last time CBCA conducted the study.

According to Denver Breaks Tourism Records, 3 local attractions have been recognized in the top 10 popular paid attractions. These are Red Rocks Amphitheatre, Buffalo Bill's Grave and Museum, and the Colorado Railroad Museum.



<http://www.oxifresh.com/wp-content/uploads/2014/09/Lakewood-carpet-cleaning.jpg>

## ***04. TRANSPORTATION***





*In Jefferson County, as well as across the nation, transportation systems are a topic of great concern. As Jefferson County has grown, the transportation system has become more congested and mobility more difficult. The transportation system affects not only the quality of life of the County's and cities' residents, but the economic vitality of its businesses as well.*

## ***Transportation Process***

Preparation of the Countywide Transportation Plan was accomplished in four major steps. Each of the steps involved Policy Committee and Technical Committee leadership and review, and incorporated a public involvement process. The four steps are further described in this document, and are summarized below:

1. A clear vision and associated goals were identified and approved by the Policy Committee to guide plan preparation and aid in prioritizing projects.
2. Based on existing transportation system deficiencies and a congestion target set by the Policy Committee, a multi-modal Needs Based Plan was prepared. This Needs Based Plan established a vision for the future to achieve the goals.
3. Recognizing the need to be realistic in what the County can accomplish, a forecast of revenues based on historical trends was prepared. Projects included in the Needs Based Plan were evaluated based on the goals for the CWTP and funding preferences of the Committees. Priority projects which could be funded within the constraints of the revenue forecast were identified.
4. The implementation section identifies short and long-range actions necessary to implement the Fiscally Constrained Plan, and further explore opportunities to accomplish the Needs Based Plan.



## Countrywide Transportation Plan

The Jefferson County Board of Commissioners completed a collaborative planning process. A goal of the process provided for developing a long term, multi-modal transportation system that reduces air pollution and considers relationships among transportation, land use, and air quality.

In accordance with that policy directive, Jefferson County and the cities of Arvada, Broomfield, Golden, Lakewood, Westminster, and Wheat Ridge began a coordinated transportation planning process for the County.

Phase 1 of the project focused on data compilation.

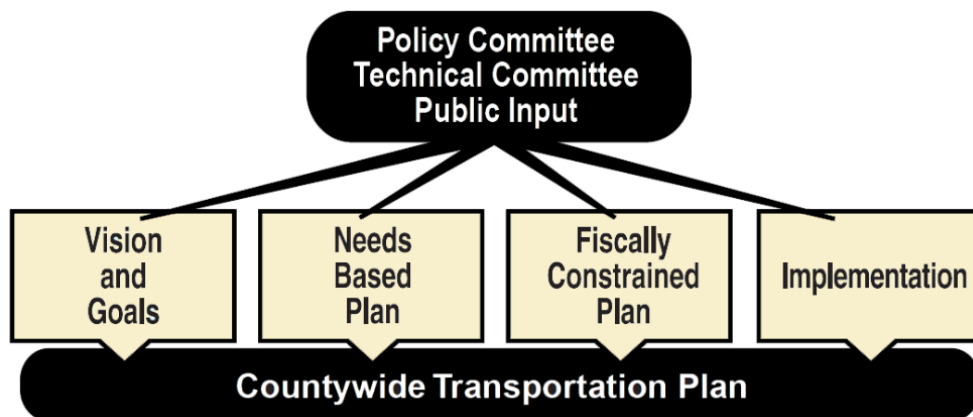
Phase 2, which is addressed in this report, focuses on development of a multi-modal transportation plan for Jefferson County and its communities.

While the plan encompasses the entire County, it is not intended to replace the plans of local jurisdictions. Rather, the CWTP is intended to be a tool for coordination among jurisdictions.

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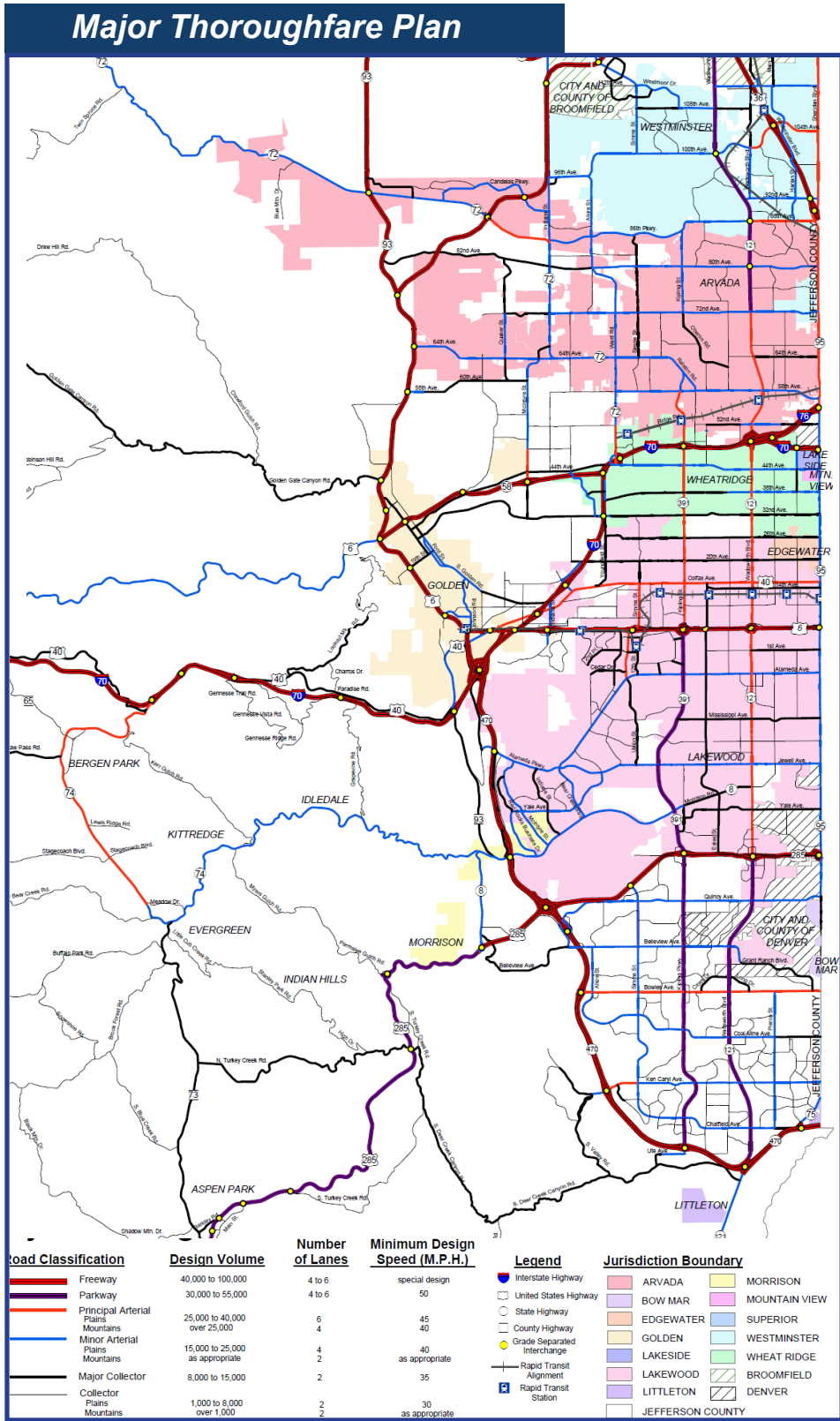
### Countrywide Transportation Plan Concept

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Source: Jefferson County Countrywide Transportation Plan, 2014





Source: Jefferson County Countywide Transportation Plan, 2014

## ***Bicycle and Pedestrian Plan***

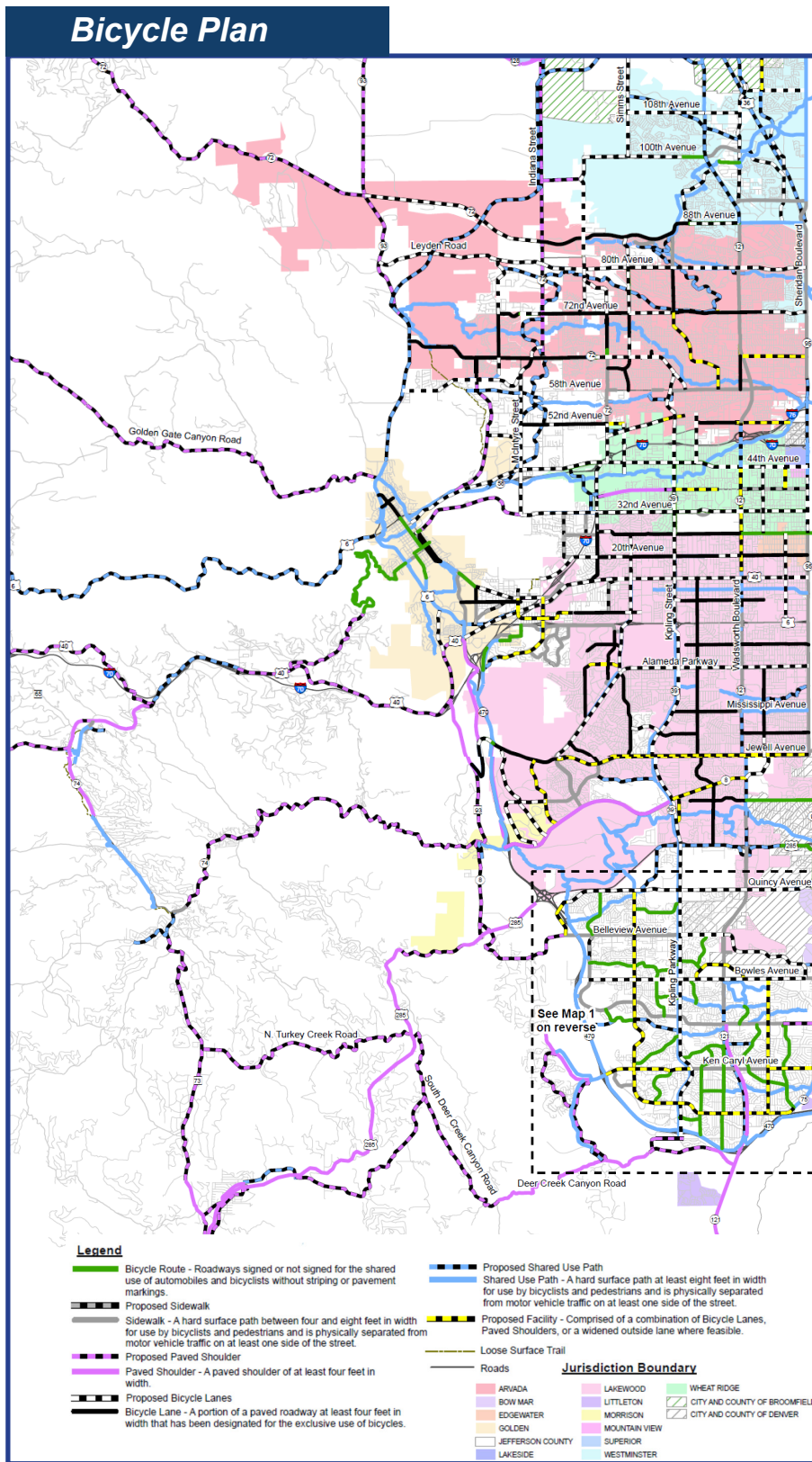
Bicycling and walking are increasingly important means of transportation for Jefferson County residents and are integral components to the regional transportation system. The Bicycle and Pedestrian Plans will help satisfy the growing demand for travel, commuting, and recreational oriented bicycle and pedestrian infrastructure. People walk and bike for a variety of reasons. People may walk and bike because of the health benefits associated with recreation and being active. Other people may choose alternative modes of transportation because of the economic and environmental benefits. For whatever reason, the primary advantages to providing adequate bicycle and pedestrian accommodations are to provide personal mobility options, encourage active lifestyles. Secondary benefits may include a reduction in noise and air pollution, congestion, and motor vehicle travel.

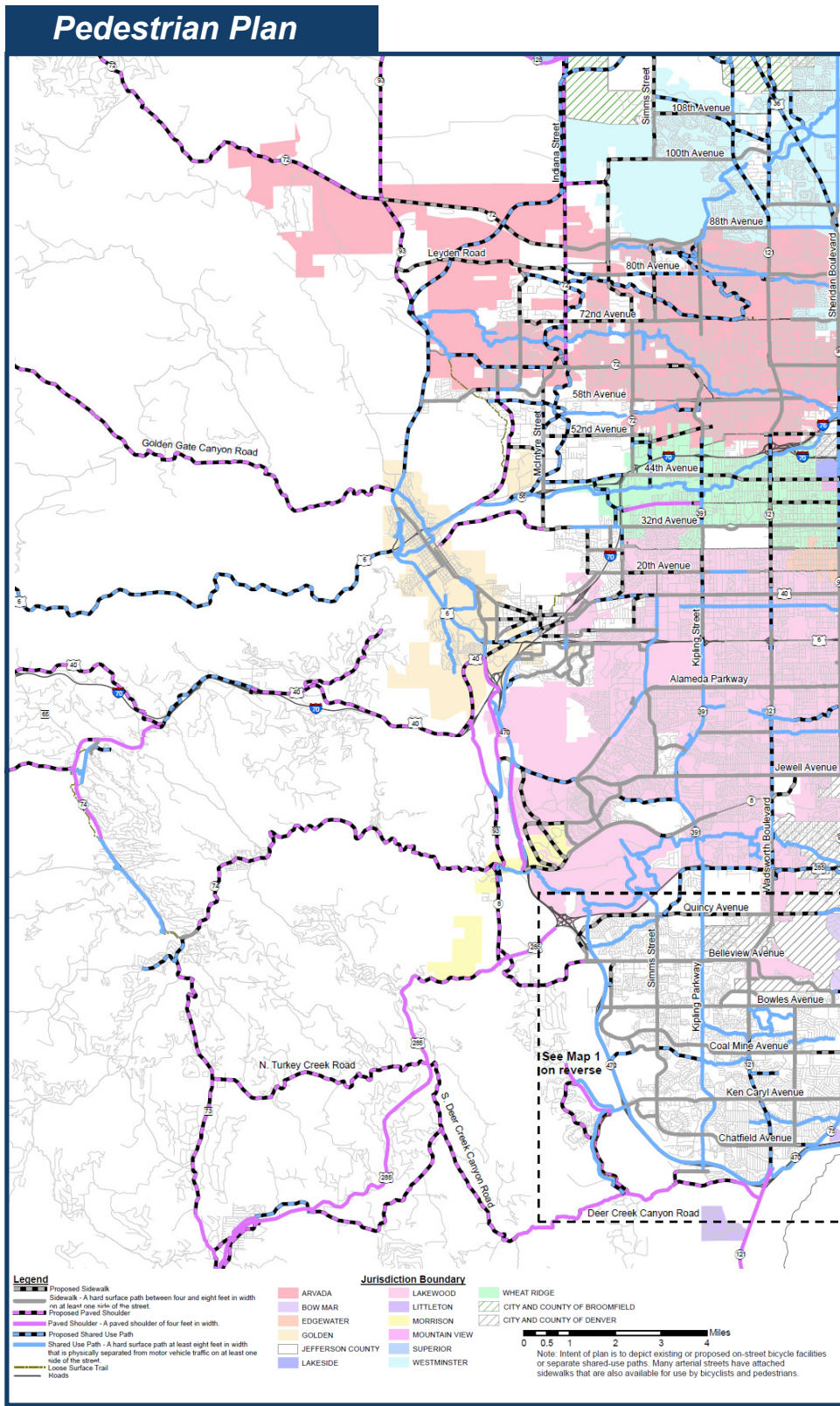
The Bicycle and Pedestrian Plans were adopted by the Jefferson County Planning Commission in June of 2012. These Plans are designed to serve as the blueprint for making improvements to the County's bicycle and pedestrian network. The existing multimodal transportation system will be enhanced through the implementation of safe and convenient on-street and off-street facilities. These planning processes utilized a regional approach that focuses on the implementation of bicycle and pedestrian accommodations that are continuous and consistent throughout the cities, towns, and unincorporated areas of Jefferson County.

### ***Stakeholder and Public Engagement***

Regional partners, such as the Regional Transportation District, Colorado Department of Transportation, and Denver Regional Council of Governments, also participated as did several bicycle advocacy organizations, non-profit organizations, and businesses. Stakeholders provided policy direction, bicycle and pedestrian infrastructure inventory assistance, design guidance, and helped identify gaps, missing links, and other deficiencies in the existing bicycle and pedestrian network.







Source: Jefferson County Countywide Transportation Plan, 2014

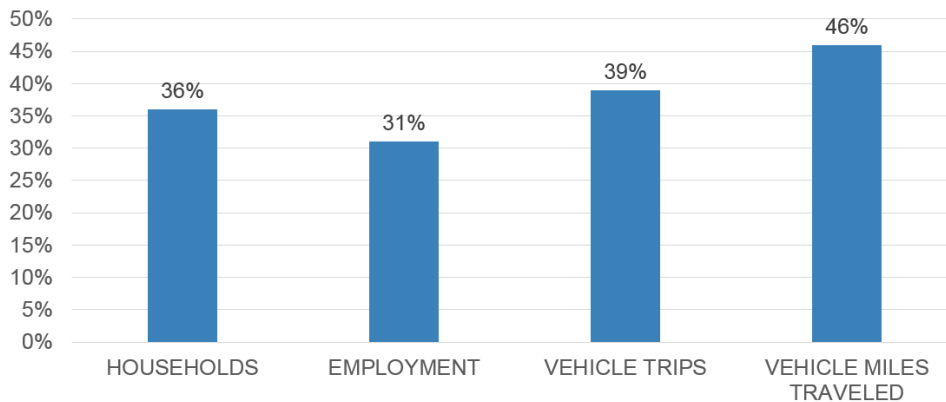


## Countywide Traffic Volume Plan

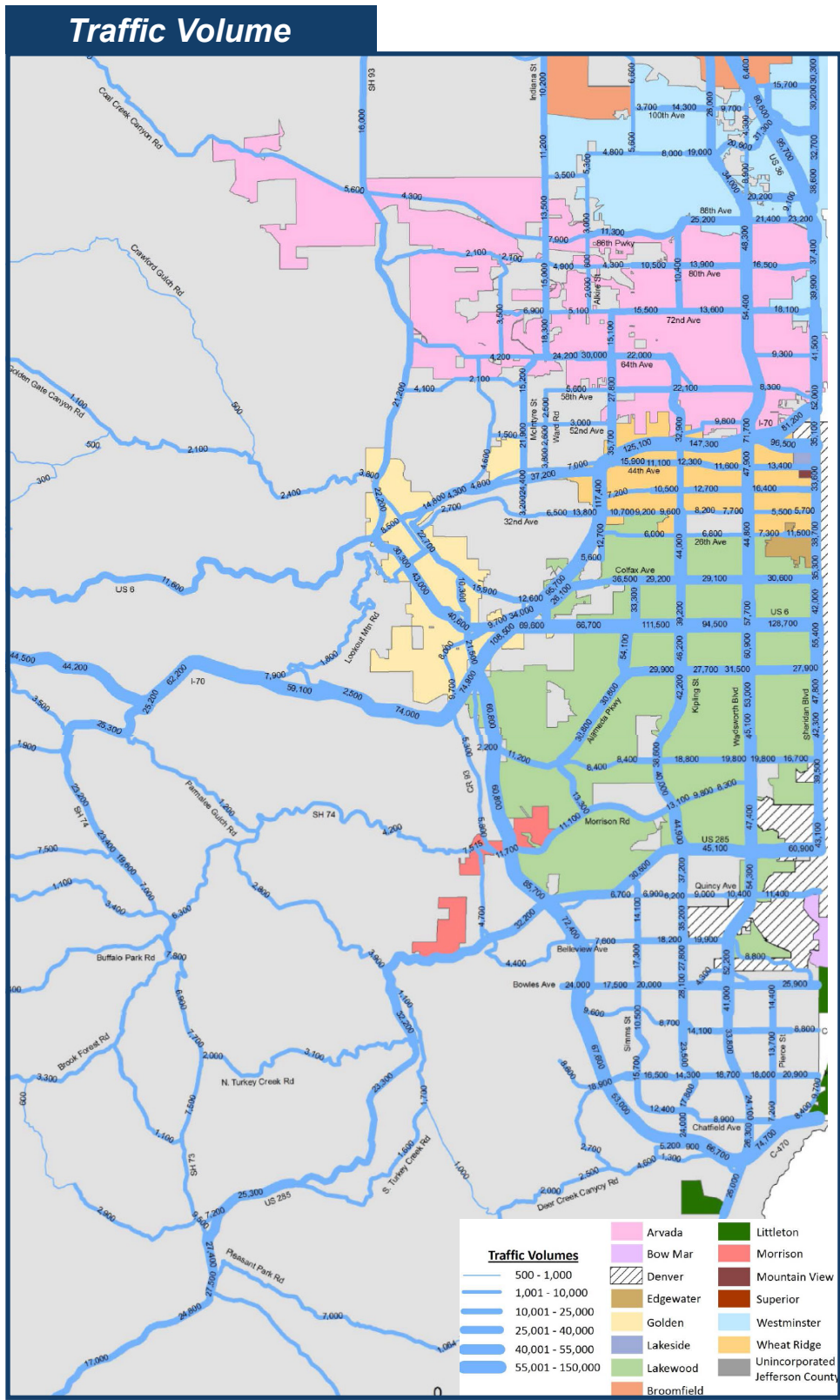
A traffic counting program is conducted annually by the Jefferson County Division of Transportation and Engineering. The program involves the systematic collection of traffic data through the utilization of automatic traffic recorders located on various roadways throughout Jefferson County. Jefferson County conducts traffic counts only on roadways in unincorporated areas. The City’s of Arvada, Golden, Lakewood, Westminster, and Wheat Ridge provided traffic data for roadways within their municipal boundaries. The Colorado Department of Transportation and the Denver Regional Council of Governments also provided traffic count data. The traffic data collected through this program helps Jefferson County monitor changing traffic conditions from a year-to year basis and assists with identifying future Capital Projects.

The traffic volume data collected consists of Average Annual Daily Traffic (AADT), Average Weekday Traffic (AWDT), and 24-Hour counts. Annual Average Daily Traffic (AADT) is the total volume of vehicle traffic on a roadway for a given year divided by 365. AWDT is the total traffic volume for an average weekday. AWDT is a representative weekday traffic volume and is not affected by anomalies such as heavy traffic due to a special event or light traffic due to inclement weather. 24-Hour Weekday traffic data are collected at selected locations along roadway segments for a period of 24 hours.

### Countrywide Transportation Plan Concept



Source: Jefferson County Traffic Volume Program, 2012



Source: Jefferson County Traffic Volume Program, 2012






[http://www.surrey.ca/images/cos-master/pageImages/Land\\_Use\\_Aerial\\_Photo\\_Surey\\_ALR.jpg](http://www.surrey.ca/images/cos-master/pageImages/Land_Use_Aerial_Photo_Surey_ALR.jpg)

## ***05. LAND USE***





*The Jefferson County Planning and Zoning Division provides the general public with a variety of planning services and information based on land development regulation and zoning resolution for the unincorporated portion of Jefferson County. These services include, but are not limited to: interpretation of current and future land use, development and subdivision consultation, and issuance of fence, sign, grading, driveway and building permits.*



## ***Main Topics in Land Use***

### ***Shoveling of sidewalks***

Jefferson County does not have an ordinance requiring citizens to shovel sidewalks, but the county encourages citizens to shovel walks adjacent to their homes as a courtesy to their neighbors and for the safety of pedestrians. Residents of incorporated areas are urged to check with their city governments for any policies regarding snow removal from sidewalks. Residents in unincorporated areas of Jefferson County who live within the boundaries of a homeowners association are urged to check with their HOA for any regulations regarding sidewalk maintenance.

### ***Rebuilding after Flood***

As the recovery phase continues throughout the County, you may need a permit for the work that needs to be done on your property. Permits may be required for any work in the drainage way, grading activities, and structural improvements to buildings.

### ***The Zoning Violation Process***

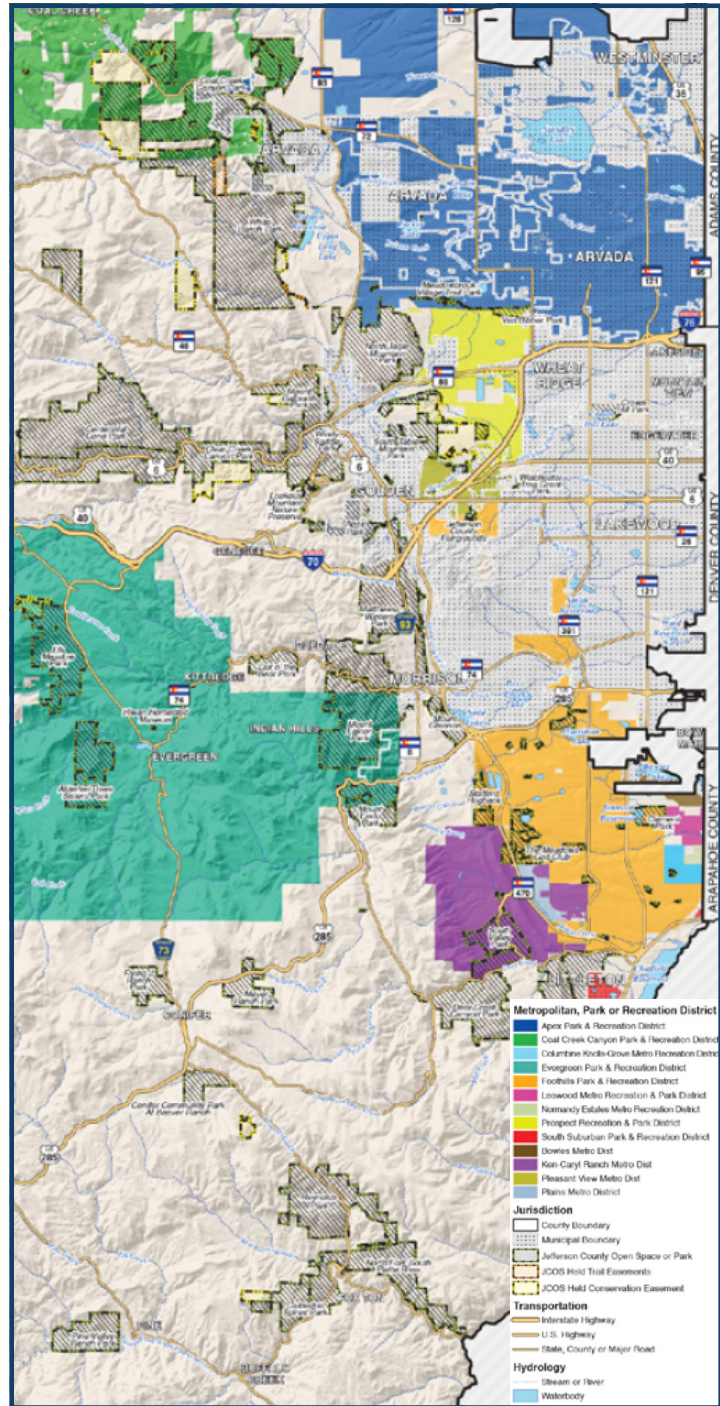
Many people are confused, afraid and upset when they receive a zoning violation, and the penalty language on the violation form can be quite intimidating. If you have received a zoning violation the most important step for you to take is to call or email the inspector whose name, email and telephone number are listed on the form. The inspector will be able to describe the best steps to take to correct the violation, or can refer you to the people within the Jefferson County Planning & Zoning Division that will best be able to assist you.





## Cities, Towns, and Recreation Districts

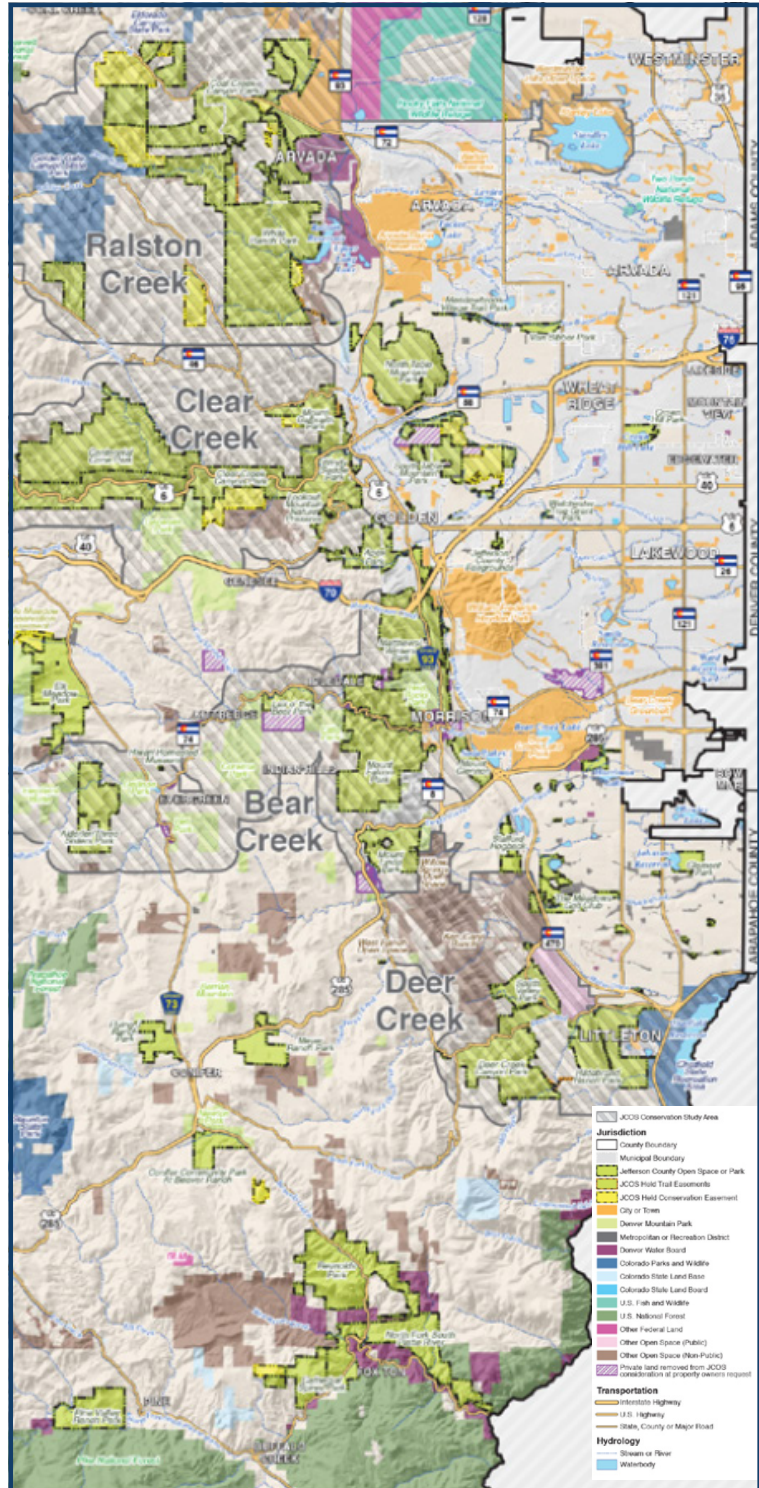
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Source: 2014-2019 Jefferson County Open Space Master Plan

## Conservation Study Areas

This map depicts opportunities for open space land acquisition and project objectives at a landscape level across Jefferson county. The Jeffco Open Space 10-Year Funding Plan identifies significantly less funding available for land acquisition from 2011-2020 as a result of allocations to bond debt repayment. The Plan emphasized several strategies such as partnerships, the use of conservation tools, and alternative funding to make the best use of available dollars. Consequently, Jeffco Open Space is looking at a targeted acquisition strategy that identifies large areas that have significant wildlife, natural resource, scenic and outdoor recreation values. This map depicts Conservation Study Areas (CSAs) containing the majority of priority lands.

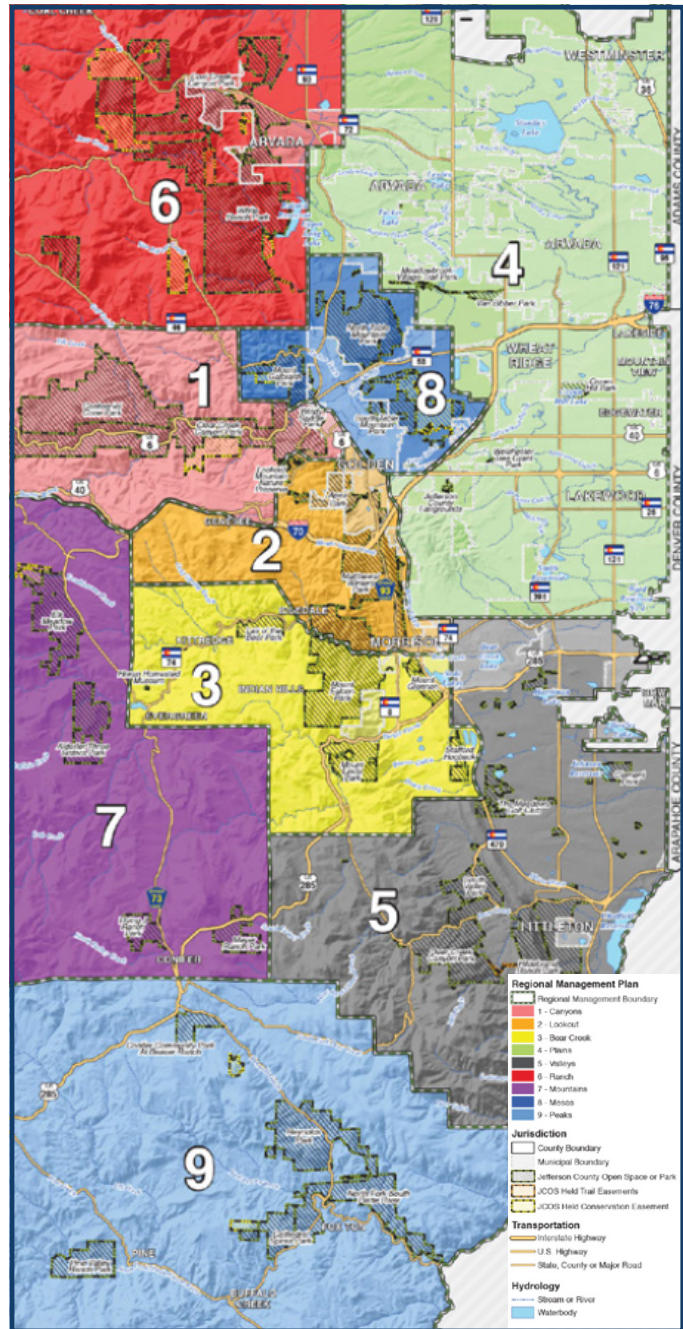


Source: 2014-2019 Jefferson County Open Space Master Plan



## Management Regions

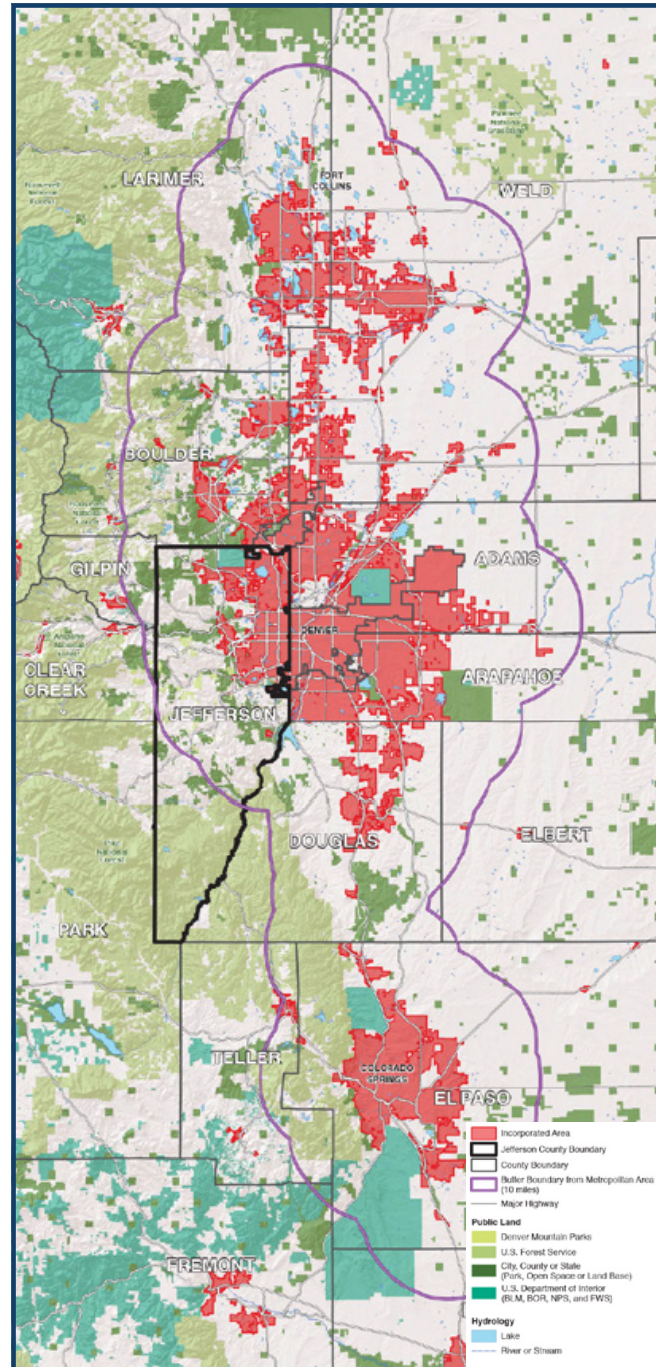
The Management Regions depicted tie to Jefferson County Open Space Regional Management Plans earlier discussed in the document. They are part of the strategy to efficiently care for the 28 Jefferson County Open Space Parks in the system. These nine regions, each with a designated supervisor, have been created as a way to more seamlessly oversee the activities of the region. This includes, but is not limited to, the management of regional trails, Jefferson County Open Space lands, public land agency partnerships, and effective review of potential properties for acquisition. An important aspect of these regions is maintaining and improving lines of communication with stakeholders and the public. Please reference Resources for the most current and updated Jefferson County Open Space Regional Management Plans.



Source: 2014-2019 Jefferson County Open Space Master Plan

## Management Regions

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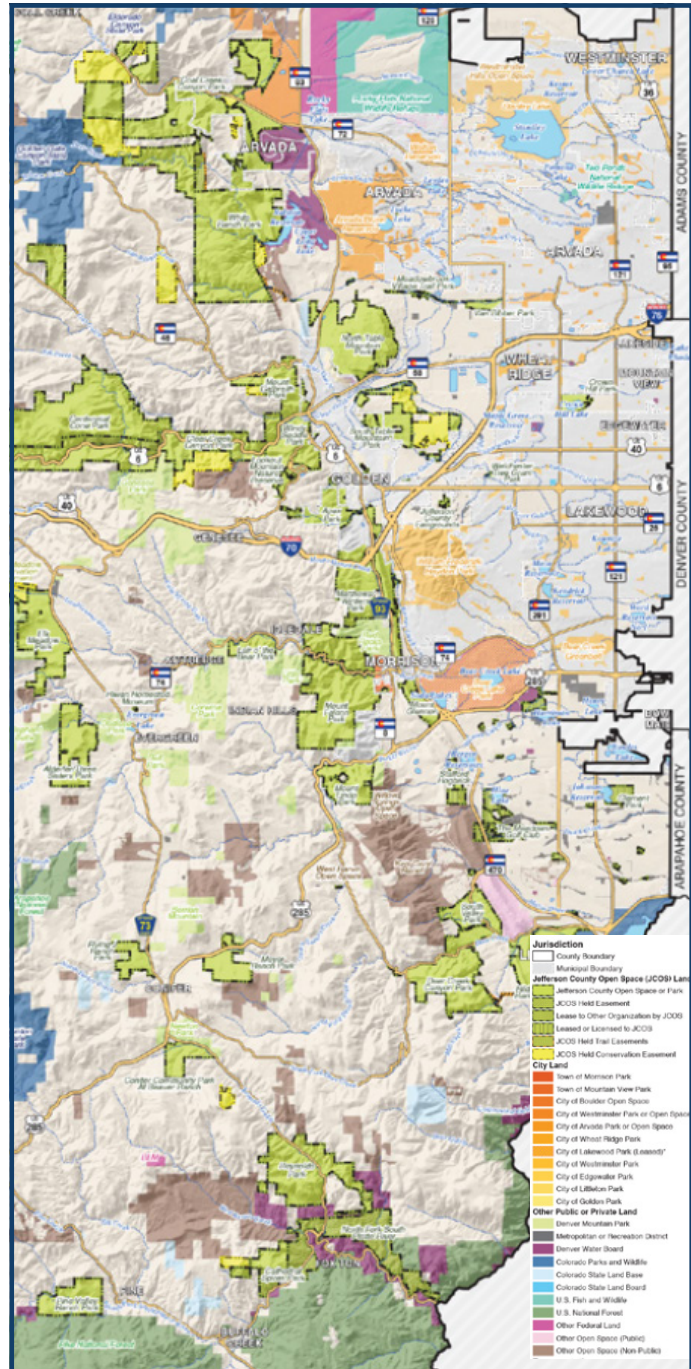


Source: Jefferson County Comprehensive Master Plan



## Open Spaces and Parks agement Regions

This map refines our focus of Map 1 to the northern ¾ portion of Jefferson County. At this closer scale, it is easier to note which Jeffco Open Space lands are held in either easements or fee ownership and which lands are owned by our public land agency partners. While Pike National Forest is not depicted in its entirety on this map, the northernmost portion of it is, including the small town of Buffalo Creek and its popular recreational opportunities.



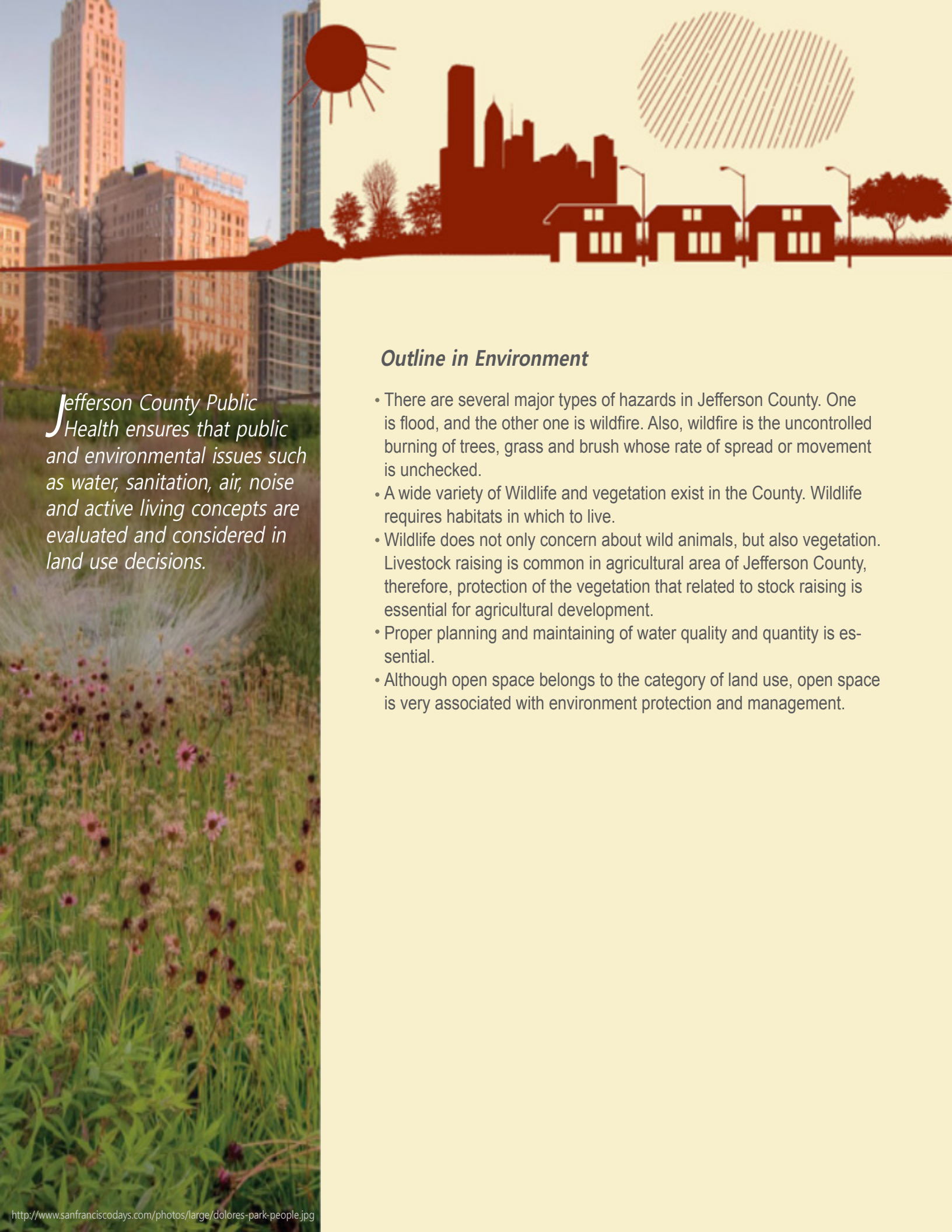
Source: Jefferson County Comprehensive Master Plan





2014-2019 Jeffco Open Space Master Plan Acknowledgements

## ***06. ENVIRONMENT***



*Jefferson County Public Health ensures that public and environmental issues such as water, sanitation, air, noise and active living concepts are evaluated and considered in land use decisions.*

### ***Outline in Environment***

- There are several major types of hazards in Jefferson County. One is flood, and the other one is wildfire. Also, wildfire is the uncontrolled burning of trees, grass and brush whose rate of spread or movement is unchecked.
- A wide variety of Wildlife and vegetation exist in the County. Wildlife requires habitats in which to live.
- Wildlife does not only concern about wild animals, but also vegetation. Livestock raising is common in agricultural area of Jefferson County, therefore, protection of the vegetation that related to stock raising is essential for agricultural development.
- Proper planning and maintaining of water quality and quantity is essential.
- Although open space belongs to the category of land use, open space is very associated with environment protection and management.



## Hazard

Being the Gateway to the Rocky Mountains, there are two major types of hazards in Jefferson County. One is flood, and the other one is wildfire. We will examine the two major issues in the following.

### Flood

As we all know, two things relate to the causation for floods: climate and topography. Here is the climate situation in Jefferson County. From this chart, we found out that the average rainfall in Jefferson County is actually lower than the average rainfall level in United States, which makes us examine deeper into this causation of flood. According to Jefferson County's hazard discovery report, the most flood happening season is spring. What's more, based on the snowfall level of Jefferson County and compared with the national level, the snowfall melting in spring would cause the flood happening in spring.

Another important causation relates to flood in Jefferson County is its special topography. Jefferson County is marked by some distinctive geologic features. The hogback formations, which are rock formations that rise sharply just at the base of the foothills and provide a steep valley between the formation and the formal foothill regions, are unique in appearance and easily identified by travelers. One of the most notable elements of the hogback is the Dinosaur Ridge foundation, where fossils and dinosaur tracks are easily located along the Front Range of the Rocky Mountains. Jefferson County has a very unique mountainous topography that makes it very easy to accumulate snow in the mountainous areas and the narrow valley makes the spring water more torrential than the flatlands.

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### Climate in Jefferson County, Colorado

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[Overview](#), [People](#), [Health](#), [Economy](#), [Housing](#), [Rankings](#), **[Climate](#)**, [Crime](#), [Education](#), [Comments](#), [Transportation](#), [Cost of Living](#), [Religion](#), [Voting](#)

Climate	Jefferson, CO	United States
<a href="#">Rainfall (in.)</a>	17.8	36.5
<a href="#">Snowfall (in.)</a>	72.4	25
<a href="#">Precipitation Days</a>	82	100
<a href="#">Sunny Days</a>	245	205
<a href="#">Avg. July High</a>	86.1	86.5
<a href="#">Avg. Jan. Low</a>	15.8	20.5
<a href="#">Comfort Index (higher=better)</a>	58	44
<a href="#">UV Index</a>	5.7	4.3
<a href="#">Elevation ft.</a>	7,149	1,443

Source: <http://www.bestplaces.net/climate/county/colorado/jefferson>



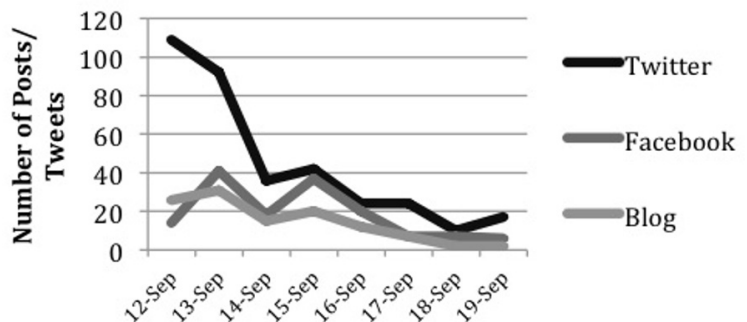


From this screen shot from Google Earth, we can see that Jefferson County right locates in the flatlands near the valley. When spring comes, as the temperature goes up, the heavy water melted from the heavy snow will crowd into the narrow valley can causes the flood. Luckily, Federal Emergency Management Agency (FEMA), Jefferson County, and Urban Drainage and Flood Control District have taken the flood issue into serious consideration.

To be more specific, they have Identify 100-year Floodplains on Official Development Plans (ODPs). as the same time, they have strongly discourage development in areas below dams, spillways, and levees that would require the State Engineer to upgrade the classification of these structures. What' more, schools, fire stations, hospitals and similar facilities essential to public safety should be located outside of 500-year Floodplains.

Apart from the policy perspective, Jefferson County also develops new technologies to better deal with flood. For example, Information and communication technology (ICT), and specifically social media, provide additional means for people to receive information about emergencies beyond mass media and public meetings. (StDenis.etc, 2014).

From this chart, we can see that during the flood on Sep.12 and Sep.13, people use social media to share information about flood information.



Summary of Daily Communications during the 2013 Floods (StDenis.etc, 2014)

## Wildfire

Wildfire is the uncontrolled burning of trees, grass and brush whose rate of spread or movement is unchecked. It can be caused by human activity or natural means. Due to the county's geographic makeup, wildfire is always a concern, and it is a more potent threat during droughts or dry spells. Jefferson County's climate is fairly temperate but demonstrates four distinct seasons. The average temperature in July (the hottest month) is 74°F and in January (the coldest month) is 30°F. From the climate chart above, we can also see that the rainfall in Jefferson County actually lower than the nation rainfall level. Therefore, wildfire takes a lot of attentions from Jefferson County. And Jefferson County actually does a very good job in this field. There is the app for both android and apple to give emergency warning about wilfires.



Source: <http://dfs.state.co.us/programs-2/emergency-management/wildland-fire-management>

What's more, Jefferson County has implemented a Defensible Space program to address development in Wildfire hazard areas. Similar with the flood planning system, Jefferson County also sets policy restrains for development within the potential wildfire areas. For instance, Development in moderate or Severe Wildfire Hazard Areas should identify "no build" areas, building construction and design, landscaping/ Defensible Space/fuel management, access and water availability.

To sum up, to promote public safety and reduce loss of property due to geologic hazards and constraints, Jefferson County has done a great job in hazard mitigate and recovery.



## **Habitat**

### ***Protection of Wildlife***

A wide variety of Wildlife and vegetation exist in the County. Wildlife requires habitats in which to live. The quality of Wildlife Habitat is determined by the environment's ability to support life by providing food, cover, water, and space. As development increases, there is increased competition between Wildlife and humans for habitat.

By evaluating development proposals for proximity to Wildlife habitats and providing low impact development, Jefferson County tries to Minimize and/or mitigate impacts to Wildlife and their habitats as development occurs.

However, based on our analysis about economy, Jefferson County's economy relied heavily on tourism development. As a County with both plains and mountains, Jefferson County has many stunning views and vistas.

Therefore, balancing the relationship between habitat protection and human activities. The visible natural land will provide people places for tourism while the invisible one will provide perfect habitat for wildlife. So to restrain the developers to do deeper development into invisible land for commercial use, Jefferson County will make a lot of hard decisions between making profits and protecting environment. At the same time, the relationship between wildlife protection and necessary development is also a problem faced by Jefferson County.

For example, the transportation development relates a lot to wildlife protection especially in the mountainous areas just Jefferson County. For instance, Jefferson County proposed to Consider Wildlife corridors when planning road construction projects and, where practicable, incorporate Wildlife bridges or crossings and signage into design and Avoid planting wildlife-friendly seed species along highway rights-of-way to keep Wildlife from grazing along roadways.

### ***Vegetation***

Wildlife does not only concern about wild animals, but also vegetation. Livestock raising is common in agricultural area of Jefferson County, therefore, protection of the vegetation that related to stock raising is essential for agricultural development. Apart from protecting the vegetation that is beneficial for agricultural development, a new issue about noxious weeds has been rose up recently.

Noxious weeds, the non-native aggressive invaders that replace native vegetation, which reduces agricultural productivity, causes wind and water erosion and pose an increased threat to communities from wildfire. To better protect public and private properties, Jefferson County should take more notices to this situation. Otherwise, that would a real threat for economic and natural activities.

## **Water**

Proper planning and maintaining of water quality and quantity is essential. An adequate and safe supply of water protects the health of the community's residents and the environment. Land development affects both the quality and the quantity of Ground Water and surface water. Because of this direct link, the adverse impacts of existing and future development on this necessary resource should be studied and mitigated. This also relates with balancing the relationship between human activities and environment.

Although Jefferson County is a place with not much precipitation in rainfall, but water resource is very essential in mountainous areas. Jefferson County has done some good jobs related to water management. For example, Utilize Low Impact Development (LID) as a storm water management approach and set of practices that can be used to reduce runoff and pollutant loadings by managing the runoff as close to its source(s) as possible.

However, The County does not provide any water or wastewater services. These services are provided by municipalities, Special Districts, and private companies. Water quality is regulated by both state and federal agencies. The adequacy of water supplies is determined by the County. This imbalance between local and state and federal government will cost problems to Jefferson County's water management.



## ***Open Space***

Although open space belongs to the category of land use, open space is very associated with environment protection and management.

From environmental perspective, land acquisition and management must balance preservation and healthy nature-based experiences. At the same time, open space provides good living environment for residences, which leads to healthy lifestyle.

The same with the rest of environmental management, with open space, Jefferson County will also balance the relationship between open space development and environment protection. For instance, setting restrictions of open space development within the invisible land will be a better way to conduct open space development.



*Source: Jefferson County, Colorado, Open space MasterPlan*



<http://adityamehta.in/wp-content/uploads/2014/08/Sky-Blue-Sky.jpg>

## ***07. SWOT ANALYSIS***



## **SWOT Analysis**

### **S**trengths

- The Local economy growth and the household income is considered high comparing to other county.
- Variety of business and industries with professional supporting programs.
- Variety of business and industries with professional supporting programs.
- Very educated community with more than 93% of residents holding high school and high certificates.
- Abundant natural resources
- Pleasant living environment is beneficial for people's health
- Mature hazard mitigation and recovery plan.

### **W**eaknesses

- Congested streets and highways.
- Lack of affordable housing.
- The competition of Downtown Denver where some new firms and company prefer to be located in.
- Potential hazards like wildfire and flood.
- Lack of local water management system
- Noxious weeds situation for natural and economic actives

### **O**pportunities

- The rich Rocky Mountain area with minerals and tourist sites.
- Mature hazard mitigation and recovery system
- Abundant natural resources for tourism development
- The Rocky Mountain will make Jefferson County more famous, which is beneficial for tourism development.
- Denver's population will be attracted by the pleasant living environment and raise the property value of Jefferson County.

### **T**hreats

- The immigrant from the county to nearby county and the slow growth rate will impact the economy growth.
- The percentage of older people group increase. This will have impact on the Tax revenue and municipalities plans.
- Harmful weather in the winter that slow the business and became an obstacle for transportation activities.
- Geographic features will easily cause natural disaster like landslide, flood and wildfire.



<http://adityamehta.in/wp-content/uploads/2014/08/Sky-Blue-Sky.jpg>

## ***08. PROPOSED PLAN***



## ***Purpose of Plan***

- A collection of healthy, energy-efficient communities with a range of housing types for all income levels that address the needs of those who work and live here and provide opportunities for those with special needs.
- A County that fosters sustainable economic development by accommodating a balance of land uses that create Primary Jobs, maintain and enhance the County's fiscal viability, economic diversity, and social and natural environment while enhancing the economic vitality of the County.
- A County that values the acquisition, preservation, and protection of public and private open spaces, parks, trails, scenic corridors, and the mountain backdrop for the enjoyment and health of present and future communities.
- A County that recognizes that water is an essential resource and balances water use with physical supply, while protecting the long-term quality and quantity of water resources.
- Life, health, and property of residents are protected from the effects of hazardous conditions by avoiding the development of those areas unless elimination or Mitigation of the hazard is possible.
- An environment where the management of air quality, light, odor, and noise impacts protects and enhances the public health and quality of life.
- A place where significant Historic, Cultural, Archaeological, and Paleontological Resources have been preserved and protected to provide future generations a sense of place and continuity with the past.
- A place where Visual Resources are identified and protected in order to preserve or enhance the natural beauty and community character.  
An environment where Wildlife and Wildlife Habitats are managed to ensure the continued health and the biological, economic and aesthetic value of this natural resource.
- A County that integrates transportation and land use to ensure a safe, efficient, and effective multi-modal Transportation System that is practical and has the capacity to serve the needs of residents and businesses.

## Demographics Part

### Housing

Jefferson County offers residents a wide variety of housing options. The Plains Areas offers everything from high density residential living to pockets of rural, large-lot development, all in close proximity to downtown Denver, the foothills, and the mountains. In the Mountain Areas, residents can choose from multifamily units to 35+ acre lots and most areas are a short drive into the Denver Metro Area. The plan recommends different housing types because a variety of housing is important to ensure economic and social diversity in the County

#### Main Goal

Provide a variety of housing options, which complement the existing community character and utilize excellent design and materials. Also, promote well-planned sustainable residential neighborhoods that create a sense of place.

#### Proposed Strategies

##### [Affordable Housing]

- Affordable Housing developments should provide a diversity of housing types and sizes.
- The preferred location for Affordable Housing should be located near major transportation corridors, schools, and Services.
- It is preferable that Affordable Housing be integrated into market rate housing and not segregated from it.

##### [Senior Housing]

- Provide housing options to accommodate the growing aging population, including independent living, Co- Housing, accessory dwelling units, assisted living, and nursing care options and Visitability and Universal Design tenets.
- The preferable location for senior housing is near transit and Services that provide for everyday needs.



<http://adityamenta.in/wp-content/uploads/2014/08/Sky-Blue-Sky.jpg>



## ***Economic Part***

### ***Business and Industry***

Retail, Office, and Industrial uses are an essential part of a balanced community, and they assure convenience and jobs for residents. In order to maintain a vibrant local economy, these uses need to be maintained in an appropriate balance. The more diverse the economic base of the County, the more resilient the County will be to economic cycles.

#### ***Main Goal***

Promote land uses that expand and diversify the County's economic base and create Primary Jobs.

#### ***Proposed Strategies***

##### [Commercial zoning]

- When Commercial zoning is proposed, Office and Light Industrial, as well as uses that support small businesses are generally desirable.
- Discourage Commercial Strip Development that is inconsistent with the character of the area.
- Support home-based businesses that are compatible with surrounding residential communities.
- Encourage a full range of health care facilities.

##### [Industry]

- Buildings should have a residential appearance.  
The percent of site coverage should not exceed neighboring residential development.
- The lot size should be sufficient to mitigate negative impacts.
- The percent of site coverage should not exceed neighboring residential development.
- The lot size should be sufficient to mitigate negative impacts.
- Traffic should access the site from a collector road and should not go through residential streets.
- Fabrication or manufacturing uses must be located within a building.
- The percent of site coverage should not exceed neighboring residential development.

## ***Transportation Part***

### ***T*ransportation System**

The quality of life of a community depends, in part, on the quality of the Infrastructure and Services that are provided to citizens. Infrastructure and Service include roads, heavy and light rail lines, trails, emergency services, and Utilities. Transportation Systems, such as highways, streets and trails, are provided and maintained by the Colorado Department of Transportation, the County and other jurisdictions. Transportation Plans developed by the County include the Major Thoroughfare Plan, the Countywide Transportation Plan, and the Bicycle/Pedestrian Plan.

#### ***Main Goal***

Ensure that the Transportation System will have the capacity to support future population growth while maintaining an acceptable level of service.

#### ***Proposed Strategies***

##### **[Connectivity]**

- Ensure that New Development has adequate transportation infrastructure to serve it, including Facilities for safe pedestrian, bicycle and transit use, as appropriate.
- Utilize the Countywide Transportation Plan, the Major Thoroughfare Plan, and the Bicycle/Pedestrian Plan when reviewing New Development proposals.
- Development proposals should demonstrate how Transportation Systems can accommodate the traffic generated by the proposed development, or how the system will be improved to accommodate the traffic generated by the development.
- New Developments should mitigate negative impacts to Transportation Facilities. Development should not degrade the Level of Service (LOS) below level D during peak periods.
- Transportation infrastructure and parking areas should balance safety, neighborhood character, and environmental impacts.

##### **[System]**

- New Developments should mitigate negative impacts to Transportation Facilities.
- Development should not degrade the Level of Service (LOS) below level D during peak periods.
- Transportation infrastructure and parking areas should balance safety, neighborhood character, and environmental impacts.

## ***Land Use Part***

### ***Land Use Development***

A variety of uses is needed to create a vibrant, enduring community. The availability of Services such as schools, Commercial services, Recreational opportunities, and employment opportunities is a factor in quality of life. Well-planned retail, employment, and Service uses, balanced by sufficient residential development, provide a source of community identity within convenient walking or short driving distances. Infill and redevelopment opportunities should be seen as valuable as greenfield development to both the community and County. Infill and redevelopment projects improve the vitality of the community, reduce sprawl, maximize existing Infrastructure, and increase tax benefits to the County.

#### ***Main Goal***

Encourage development that is appropriate to the area, promotes healthy, active lifestyles, and ensures that there are unique and diverse communities in which to live, work, and enjoy outdoor Recreation.

#### ***Proposed Strategies***

- Accommodate the development and redevelopment of a balance of land uses.
- Rezoning from commercial or Industrial uses to non-commercial uses should be strongly discouraged. Proposals that potentially reduce the amount of Commercial or Industrial land in the County should submit documentation showing the costs and benefits to the County of the proposed zoning change.
- An analysis of the benefits of a New Commercial or Industrial Development project, such as potential job creation or economic benefit, may be considered in the evaluation of a project.
- New Development should strive to properly and reasonably mitigate the harmful effects, if any, on existing and currently entitled (zoned) uses on adjacent parcels.
- New Developments should be evaluated for their impacts to the health of the community.
- Consider regional impacts when evaluating development (air quality, transportation, etc).



## **Environment Part**

### **Natural hazards Mitigation**

Geologic Hazards are geologic conditions or processes that pose a significant threat to health, life, limb, or property. Geologic Constraints are geologic conditions that do not pose a significant threat to life or limb, but which can cause intolerable damage to structures.

#### **Main Goal**

Promote public safety and reduce loss of property due to Geologic Hazards and Constraints.

#### **Proposed Strategies**

- Discourage development in Geologic Hazard areas. Development should only be allowed in these designated hazard areas when adequate Mitigation can be demonstrated.
- Development proposals should address how Geologic Constraint areas will be mitigated. Mitigation for Geologic Constraints should take into account aesthetics.
- Mitigation measures should meet other Goals and Policies of this Plan, where practicable.

### **Wetlands**

**Main Goal:** Protect Wetlands..

#### **Proposed Strategies**

- Encourage the protection of Wetlands, including those not under the jurisdiction of the US Army Corps of Engineers, Riparian Areas, natural springs, ponds, and drainages through innovative planning and Best Management Practices.
- Where impacts to Wetlands are unavoidable, appropriate Mitigation should be provided.
- New Development should not adversely affect the Recharge of nearby Wetlands.
- Wildlife access to Wetlands should be protected and, where possible, enhanced.

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***PLAN 613 SPRING 2015  
PLAN METHOD & TECHNIQUES***

LAUP Department, Texas A&M University

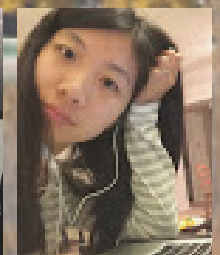
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