

North Mountains Community Plan

Masthead

Produced by the Jefferson County Planning Department
Len Mogno, Planning Director
August, 1992

JEFFERSON COUNTY, COLORADO BOARD OF COUNTY COMMISSIONERS

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Thomas Young
Mia Tarolli (*Not a participant in 1991*)

Resolution

It was moved by Commissioner KRAPES that the following Resolution be adopted:

BEFORE THE PLANNING COMMISSION

COUNTY OF JEFFERSON

STATE OF COLORADO

RESOLUTION

IN THE MATTER OF:

CP89-1, North Mountains Community Plan

WHEREAS, Section 30-28-106, 108, and 109, C.R.S. provide that the Jefferson County Planning Commission shall adopt and certify a County master plan as a whole or in components; and

WHEREAS, the North Mountains Interim Community Plan was adopted by the Jefferson County Planning Commission on February 5, 1992, after proper notice and hearing; and

WHEREAS, a public hearing on revisions and clarifications for the final North Mountains Community Plan was held by the Jefferson County Planning Commission on August 5, 1992, for testimony or decision; and

WHEREAS, based on the evidence, testimony, exhibits, and recommendations of the Jefferson County Planning Department, comments of public officials, agencies, and citizens of the County and comments from other interested parties, the Planning Commission finds as follows:

1. That adequate publication of public notice has been provided for hearings before the Planning Commission.

2. That the hearings before the Planning Commission have been extensive and complete and that all pertinent facts, matters, and issues have been submitted and considered, and all interested parties heard.

3. That the North Mountains Community Plan document as set forth in Exhibit "A", attached hereto and incorporated herein by this reference, adequately address the problems and concerns raised in the public hearings by interested parties.

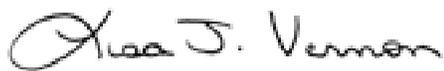
4. That it is the opinion of the Planning Commission that the North Mountain Community Plan, including text and maps as set forth on attached Exhibit "A" should be accepted.

5. That adoption of said Plan is in the best interest of the health, safety, and welfare and morals of the citizens of Jefferson County.

NOW, THEREFORE, BE IT RESOLVED that North Mountains Community Plan, including text, and maps as set forth on Exhibit "A", be and hereby is APPROVED and adopted to be applied as set forth in such plan as a component to the Jefferson County Comprehensive Plan pursuant to Section 30-28-108, C.R.S., and that said approved North Mountains Community Plan and maps be certified to the Board of County Commissioners pursuant to Section 30-28-109, C.R.S.

Commissioner NICOL seconded the adoption of the foregoing Resolution and the Resolution was adopted by unanimous vote of the Planning Commission of the County of Jefferson, State of Colorado.

I, LISA J. VERNON, Executive Secretary of the Jefferson County Planning Commission do hereby certify that the foregoing is a true copy of a Resolution duly adopted by the Jefferson County Planning Commission at a regular hearing held in Jefferson County, Colorado, on August 5, 1992.



Lisa J. Vernon, Executive Secretary

The North Mountains Community Plan and the Mountain Site Design Criteria were adopted by the Jefferson County Planning Commission as an Interim Plan on February 5, 1992 and as a Final Plan on August 5, 1992.

ACKNOWLEDGEMENTS

Starting in June 1989, the Community Advisory Group worked with the North Mountains Community Plan project team formed by the Jefferson County Planning Department to draft a community plan to serve as a guide to future development. Members of the project team included Janet Stromberg, Project Manager, and Joseph T. Crain, Planning Department Advocate. Doyle Harrison was responsible for the document production for print and web. Special appreciation goes to Phyllis Scheneman, Project Secretary and to Jo Blakey and Lisa Vernon for their excellent secretarial support.

Other County departments which contributed to the development of this Plan include Highways and Transportation, Health, Mapping, and the County Attorney's office. Without this interdepartmental cooperation it would not have been possible to produce this Plan. Individuals within these departments who deserve recognition: Jean Ayars and Claire Levy, County Attorney's Office; Jean Montoya, Highways and Transportation; Robert Narracci, Penny Boyd, Jim Truax, Steve Mitchell and Gary Studwell, Mapping Department; and Mindy Arris, Health and Environmental Services. A high level of support was given by the Jefferson County Board of County Commissioners, Jefferson County Planning Commission, and those overseeing the project who included: Terry Green, Director of Administrative Services; Len Mogno, Planning Director; and Joseph T. Crain, Community Planning Supervisor. Planning Department staff providing technical assistance included Christy Clark, Jack Williamson, John Ansbro, Kevin Nichols, Doug Reed, and Julie Woods.

The following public agencies, commissions and organizations were referral entities providing information at the inception and throughout the process, and later reviewing the Plan prior to the public hearings. The cooperation of these groups was an important aspect of the North Mountains planning effort.

Colorado State Demographer
Colorado State Forest Service

Colorado Department of Health
Colorado Department of Transportation
Historical Society of Colorado
Jefferson County Historical Commission
Jefferson County Historical Society
Colorado Archaeological Society
Colorado Board of Land Commissioners
Colorado Division of Parks & Outdoor Recreation
Colorado State Land Board
Colorado Division of Fire Safety
Colorado Division of Water Resources
Colorado Division of Wildlife
U.S. Department of the Interior, U.S. Fish & Wildlife Service
U.S. Department of the Interior, Bureau of Land Management
U.S. Department of Agriculture, U.S. Forest Service
U.S. Environmental Protection Agency
National Park Service
Jefferson County Attorneys
Jefferson Economic Council
Jefferson County Emergency Preparedness
Jefferson County Fire Council
Jefferson County Health and Environmental Services
Jefferson County Public Works
Jefferson County Department of Highways & Transportation
Jefferson County Library
Jefferson County Open Space Department
Jefferson County Mapping Department
Jefferson County Sheriff's Department
Jefferson County R-1 School District
Jefferson Soil Conservation District
Jefferson County Nature Association
Jefferson County Horseman's Association
Denver Regional Council of Governments
League of Women Voters, Jefferson County
Regional Transportation District
Public Service Company of Colorado
United Power, Inc.
W-470 Authority
Jefferson Center Associates

Jefferson Center Metropolitan District No. 1
Gilpin County Planning Department
Clear Creek County Planning Department
Boulder County Planning Department
Coal Creek Canyon Fire Protection District
Golden Gate Fire Protection District
Blue Mountain Water District
North Jeffco Metropolitan Recreation & Park District
City of Arvada Planning Department
City of Arvada Economic Development Department
City of Golden Planning Department
Denver Water Board
Blue Mountain Estates Homeowners Association
Douglas Mountain Homeowners Association
Douglas Mountain Horseman's Association
Canyon Area Residents for the Environment
Canyon Concerned Citizens
Coal Creek Canyon Improvement Association
United Front Range Organization
Union Pacific Railroad
The Anschutz Company

Community support for the planning process was provided by The Golden Transcript, The Mountain Messenger, and The Denver Post through newspaper coverage which disseminated information to community residents. The project benefited from the cooperation of the Golden Gate Grange and the Coal Creek Canyon Improvement Association which provided public meeting places and alerted community residents to public meeting dates and times.

Finally, thanks are due to the many concerned residents of the North Mountains area who took time to attend the Community Advisory Group and the public meetings and hearings, and who completed questionnaires, wrote letters and testified. Their comments and information strengthened this Plan. Some of the historical photos used in this plan were provided courtesy of Louise Ramstetter.

INTRODUCTION

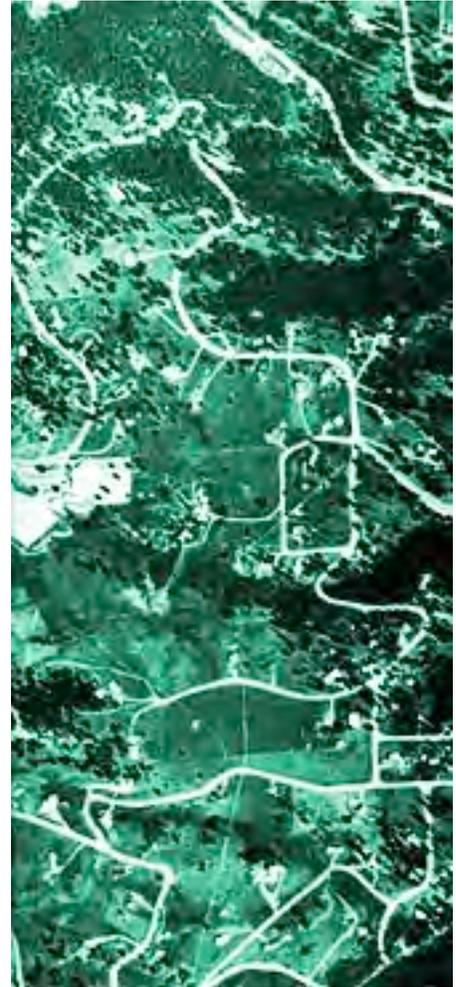
This community plan contains policies which will be used by the Jefferson County Planning Commission, Jefferson County Planning Staff and the Board of County Commissioners as a guide in making land use decisions in the North Mountains area.

The goal of the Plan is to direct the orderly, sensitive growth of the North Mountains area while retaining and protecting its natural beauty, rural character and the existing quality of the mountain area environment including water, air and wildlife habitat. The intent is to achieve a proper balance between man-made environments and natural ones by ensuring that development is sensitive to natural resources and constraints.

This plan reflects the community understanding that change in our area will happen. These policies reflect our attempts to engineer this change carefully. We have tried to encourage careful, imaginative development so that the environment is protected, wildlife is protected, the quantity and quality of our water is protected and our investment in our homes (*present and future*) and our property is protected.

There is a natural balance between the ecology of this or any area and a man-made environment. These policies have been developed to respect that balance. This plan is intended to be a guide. Care has been taken to respect both large and small property owners' rights in the present and for the future.

This community plan was developed by a public/private community advisory group, appointed by the Jefferson County Commissioners on



June 26, 1989. The advisory group consisted of representatives of homeowners, property owners, developers, Jefferson County's Planning Commission and Planning Department who worked with members of the Jefferson County Planning Staff.

HOW TO USE THIS PLAN

While not mandatory, the Plan can serve as a guide for land use decisions made by the Jefferson County Board of County Commissioners and the Planning Commission.

THE PLANNING PROCESS

Members of the Community Advisory Group, appointed by the Jefferson County Board of County Commissioners, expended thousands of unpaid volunteer hours in the process of developing the policies in the North Mountains Community Plan. To ensure that no single viewpoint dominated the recommendations, decisions were made by consensus. Meetings were held in the community to solicit citizen ideas at the beginning of the planning process and prior to finalizing the Plan. The Community Advisory Group formulated recommendations in response to concerns and suggestions expressed by citizens in the North Mountains area. The Jefferson County Planning Commission held public hearings on the adoption of the Interim North Mountains Community Plan on January 22 and 29, 1992. After carefully studying and weighing the concerns expressed during the public hearings, the Commission unanimously adopted the Interim North Mountains Community Plan on February 5, 1992. The text and maps were then



prepared for publication and presented to the Planning Commission for adoption as the final Plan. (See resolution.)

RELATIONSHIP TO OTHER JEFFERSON COUNTY PLANS

The North Mountains Community Plan policies and maps are an addition to the Jefferson County General Land Use Plan and special plans which apply to the entire County.

The special plans are:

The Mineral Extraction Policy Plan which identifies mineral deposits by quality and type and provides guidelines for mineral extraction operations. These deposits are not shown on the maps that accompany this Plan. Only those areas where zoning for mineral extraction exists are identified.

The Sanitary Landfill Plan which provides guidelines for the location and operation of sanitary landfills within the County.

The Telecommunications Plan which identifies the locations and conditions for siting telecommunications facilities within the County.

The Major Thoroughfare Plan which was drafted by the County's Highways & Transportation Department and shows existing and proposed roadways and improvements.

The Jefferson County Open Space Master Plan which was developed by the Open Space Department and shows the locations of existing parks and open space and some of the areas targeted for future open space acquisition.

HOW TO CONFORM WITH THIS PLAN

Development proposed in the North Mountains area should conform to the maps and policies in this Plan. To determine which of the policies apply to an area where development is proposed, all sections and maps of this Plan should be reviewed.

This Community Plan contains two types of recommendations:

Red text identifies policies which can be applied in the land use review processes; and

Other recommendations address concerns which cannot be resolved through the land use review process and require implementation by the Planning Department, other governmental entities, and/or the community.

Please see the *Mountain Site Design Criteria* section of this document for related policies in addition to those identified for each issue. The maps which have been adopted as integral to the Plan should be used during land development review processes.

PLAN AMENDMENTS

The Community Plan contains policies which have been deemed appropriate at a point in time; it cannot provide for all future changes in economic conditions and development demands. For this reason, Community Plans should be updated periodically to consider unforeseen circumstances.

Departmental procedures provide that exceptions or amendments to Community Plan recommendations may be made at three levels.

A. Exceptions

1. Exceptions to the Plan may be approved if the original objectives of the Plan are met, impacts are comparable to the recommendations of

the Plan, the proposal is a unique situation, and has been evaluated by the community.

B. Periodic Review

This review provides the opportunity to identify changes which have occurred in the community, and revisions which should be made to the Plan.

The research and writing of these historical sketches was done by Jan Brescia, Coal Creek Canyon and Mary Ramstetter, Golden Gate Canyon.

HISTORY

The research and writing of these historical sketches was done by Jan Brescia, Coal Creek Canyon and Mary Ramstetter, Golden Gate Canyon.

COAL CREEK CANYON

Coal Creek, named for deposits of coal found along its banks from Marshall through Louisville and Lafayette to Erie, carved the canyon that bears its name.



Coal Creek Canyon runs from the top of Wondervu Pass, with its breathtaking views of the Arapahoe Range, to the Rocky Flats, where the Front Range of the Rockies meets the plains. Although the Community Plan applies only to the Jefferson County section of the canyon, this historical survey will address all of Coal Creek Canyon.

State Highway 72, which provides easy access

to the canyon today, was once the Coal Creek and Black Hawk Wagon Toll Road. It was formally approved for operation by the Colorado Territorial Session on February 2, 1866. Teamsters hauling supplies to miners in Black Hawk paid 60 cents at the mouth of the canyon and another toll at Black Hawk. The 1870 Federal Census listed 57 people living in the Coal Creek precinct. Most of the men listed their occupation as teamster, while others were farmers, sawmill workers, or laborers. There were eight women keeping house, and 20 children. Among the names were 25 year old Michael McNamara and his wife Ellen; their great-great-grandsons, William and Edward Hogan, still live and ranch along Highway 93.

In 1883, Jefferson County Commissioners agreed to survey Coal Creek Canyon Road, and to appoint an overseer to maintain it. After a flood washed out the road in 1894, the commissioners paid laborers \$1.75 a day to rebuild it. The road followed the creek and was maintained by residents hired to grade it with a team of horses and a plow. A line of rocks, pushed by these plows, can still be seen today north of Highway 72 at the mouth of the canyon.

After mining declined and the Homestead Act made land available to settlers, the canyon was populated by immigrants from Germany, Sweden, and England. Charles Anderson was granted the first homestead patent in 1873 for 160 acres in Section 18. Other early pioneers in the 1880s and 1890s were August Brumm, whose grandson, Leavitt Booth, still lives in the canyon, John Caspar, George Rand, Robert Eckhardt, Nils Nilson, James O'Brien, and Bruce Edwards, whose daughter, Lois Ranson, still lives in Plainview. Charles and Louisa Caspar Wilson settled at the mouth of the canyon, and their grandson, John Boyle, lived on the family ranch until he sold it recently. Between 1900 and 1920, Harry Jackson homesteaded the present Copperdale Ranch, Nels Bengson ranched at Beaver Creek north of Twin Spruce Rd., William Seeley lived on the north slope of Blue Mountain, and Arthur G. Seaver bought land on the north and south sides of the road near the present Chapel-in-the-Hills.

Frank Terrell's home, today it is 30410 Highway 72, served as a stagecoach stop, inn, and dance hall. There was a stable for the horses, and a veranda porch for socializing. The homesteaders erected a one-room log cabin as a school at what is now 10607 Twin Spruce Rd. Mr. Booth has a picture of the school, dated 1893, with his Aunt Alvina and Uncle Gus Brumm as students. Children attended school from May 1 to September 30, because it was too difficult to travel in the winter, and some children boarded out with relatives in Golden or Nederland if no teacher was available. The families ranched, farmed, and cut timber for railroad ties, mine props, fences and buildings. Supplies were purchased in Arvada or in Golden.



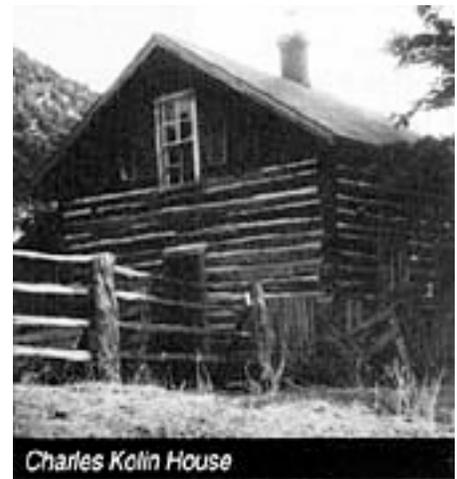
David Moffat, Denver mining king and financier, brought the Denver Northwest & Pacific Railroad to the canyon at the turn of the century. He wanted to build a line from Denver west to Salt Lake City in order to bypass the southern route previous railroads had taken to avoid the treacherous mountains. Known as the Moffat Road, the line was surveyed from July to November of 1902, and work began in December, 1902. Steam engines could not be brought to the steep site, so the men used mule packs, dug the grades by hand, blasted the rocks with dynamite, and drilled the tunnels by hand. On June 23, 1904, the first train steamed into Mammouth, today's Tolland, bringing sightseers from Denver to picnic and pick wildflowers at Yankee Doodle Lake. The trestle crossing Coal Creek was 265 feet long and 60 feet high. It stood until 1938 when a devastating flood washed out the road and damaged the bridge. It was replaced with the current 40 foot span, built 250 feet west of the old bridge. A post office and grocery store also were built at the Crescent Station train stop, where the railroad tracks cross Gross Dam Road today.

The canyon population grew very slowly from 1910 to 1940. A new school was built at 29280 Highway 72 in 1916. It was known as the "*Columbine School*", in Jefferson County District 27; in 1948 it was expanded into a home. Another school was built near Plainview off the main road in 1935; this was used until May, 1951, when children were bused to Golden. A small grocery store and restaurant was built in 1932 on the southwest corner of Highway 72 and Twin Spruce Rd., described as "*soup kitchen for wood haulers.*" The site later became Marten's store, owned by Lester and Ruth Marten, and today is Cummings Realty.

After World War II, the population had grown sufficiently to require community services. In 1946, residents formed the Coal Creek Improvement Association and the volunteer fire department. In 1947, the Community Hall was built with volunteer labor on land donated by Henry Zeller. The Coal Creek Women's Club was organized in June, 1949, meeting twice monthly at members' homes. Through dinners, bake sales and bazaars, the women raised nearly \$5,000 toward expanding the community hall, drilling its well, putting on a new roof, and equipping the kitchen. In December, 1949, the first firehouse was built, bermed into the side of the hill on the north side of Highway 72 and Crescent Park Rd. The fire engine, a surplus Army Command car, was donated by the State Forestry Department, and equipment was purchased through local fundraising and donations. Association members persuaded the Rural Electric Association to run lines for electricity in November, 1947. Telephone lines, with eight parties, were installed in November, 1950 from the Boulder office. A committee of Leavitt Booth, Charles Ruble, Verne Houlton, Pat Berry, and Francis Evans worked to get Coal Creek Canyon Road paved. The mouth of the canyon to Twin Spruce Rd. was paved in 1952; up to Wondervu in 1955, to Pinecliffe in 1956, and to Highway 119 in June, 1958. Property owners along the road donated rights-of-way and it was designated as a state highway. Funds were provided by Jefferson and Gilpin counties, the state, and matching federal monies.

The opening of Rocky Flats, or the Dow Chemical Plant, as it was called then, in 1951 brought new residents to the canyon. The population

increased to about 500, and in October, 1958, new telephone equipment was installed, bringing the dial system to the canyon. The work was completed on February 28, 1959; the area was assigned a Glendale 8 exchange. Later known as 458, this exchange was changed to 642 in July, 1963.



In April, 1957, heavy snows of over 5 feet caused the roof of the firehouse to collapse. A new building, now Station 1, was constructed east of the old one in 1959. Station 2 was completed in 1980 and Station 3 in 1989. Fundraising was a never-ending task, so on August 10, 1959, a public hearing was held to establish a tax district for the fire department. There were no protests, and the district lines were drawn to include the three counties of the canyon: Jefferson, Boulder, and Gilpin. The volunteers fought many small grass fires sparked by trains and several large fires: in 1951, the Community Hall's floor was damaged; in 1954, a fire broke out during the construction of Gross Dam; and in 1971, 25 acres burned east of Blue Mountain Estates.

Coal Creek Canyon was first zoned by the Jefferson County Commissioners as Agricultural One (A-1) and existing businesses as "*commercial*" in September, 1951. Platting had begun in 1948, with the Hilltop as the first development of E.R. (*Emrich Rudolph* or "*Rudi*") Kuhlmann. These first homes were summer cabins. Mr. Kuhlmann, and later his wife, Elsie, and son-in-law, Lionel Brook, platted Georgian Woods and Sylvan Heights in 1952, Blue Mountain View, Lillis Lane, and Vonnie Claire Heights in 1953, and Coal Creek Heights in 1961. Roads were named for family members. In 1955, Walter Burke developed Burland Ranch, and in 1959, Leavitt Booth platted Blue Mountain Estates, and then Crescent Park in 1965.

In the 1960s the population had grown sufficiently to support a local school. On November 5, 1962, 60 students attended the new Coal Creek Elementary School. The architect designed the building to

complement the ruggedness of the mountains, with the roof sloping to accommodate northwest wind patterns.

Today, Coal Creek Canyon is a thriving community of about 1,500, with a few summer residents returning each year. There is a grocery store and gas station, 3 restaurants, a beauty shop, auto parts store, craft store, 4 churches (*2 of which meet in the Community Hall*), a monthly newsmagazine, the *Mountain Messenger*, published by Tolene Clark, and a newsletter printed by the C.C.C.I.A. Residents enjoy a place of spectacular beauty and the spirit of community that can be experienced in the holiday dinners, blood drives, and fundraising efforts to help victims of fire and auto accidents. Through the Community Plan, we hope to sustain the North Mountains area as a place that people are proud to call home.

GOLDEN GATE CANYON

The Golden Gate Canyon area is bounded on the south by Clear Creek Canyon, on the west by Colorado 119, on the north by the northern boundaries of Golden Gate Canyon State Park and Ralston Creek, and on the east by the uplift of the foothills.

Prehistoric sites excavated in the Van Bibber drainage, incorrectly called Magpie Gulch, revealed the presence of Woodland Occupation, 600-1000 A.D. Highway construction in 1975 unearthed a prehistoric human burial in the Guy Gulch creek bed directly south of Robinson Hill Road. The bones, those of a man, 30-35 years of age, left-handed, 5-1/2 feet tall, were thrown in a gunny sack and the site destroyed without further archaeological investigation.

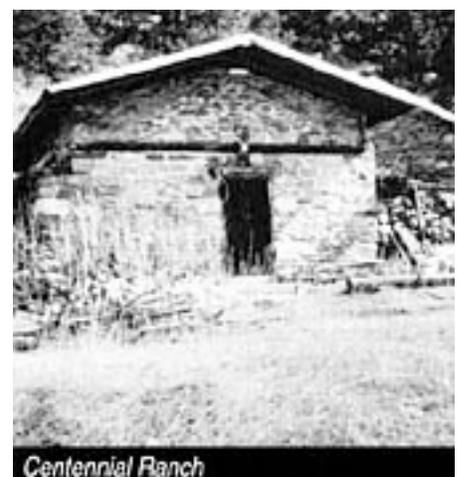
Beginning in the 1800s historic Indian tribes, chiefly Arapahoe, migrated through the region and campsites have been found on the backs of the mountains. Horace Greeley made extensive mention of the Arapahoe travois trail between Golden and Black Hawk and early settlers referred to the gulch, by which the trail descended to the prairie, as Indian Gulch. A U.S.G.S. error gave this name to another gulch which the settlers called Magpie Gulch for the large number of magpies which

wintered there. The settlers' Magpie Gulch opens on Clear Creek Canyon and is extremely steep and difficult to climb through. As a result of this transposition, confusion exists between historical accounts and mapped locations. The Arapahoe travois trail left the prairie through the original Indian Gulch, used the backs of the mountains to reach Guy Gulch, crossed into the Elk Creek drainage and turned northwest to follow Smith Hill Road to the junction with Clear Creek.

In 1820, Major S. H. Long assigned the first known English names to landmarks. They were Cannonball Creek, now called Clear Creek, and Cannonball Gulch for the canyon through which the creek flows. In the 1830s, mountain man Louis Vasquez gave his name to this creek by locating his trading post at the creek's junction with the South Platte. Ralston was the next name to surface but it has not been determined if the name came with gold seekers in 1850 or in 1858. The earliest known written description of Golden's nearby foothills was by Rufus Sage in 1841.

Indian names for landmarks were swept away by the rapid settlement that resulted from the 1859 Pikes Peak Gold Rush. No attempt seems to have been made to preserve Indian culture, although Indian migration continued into the 1900s. Early settlers spoke of shoeing Indian ponies and of Indian amusement at the wagon roads crawling through the bottoms of the canyons instead of staying to the rolling backs of the mountains. Reports of harassment on the part of the Indians are minor, having to do with stealing baked goods and chickens from the settlers.

By Spring 1859, an estimated 50,000 gold seekers lived in the prairie settlements within sight of the mountains. Their inability to find great stores of gold in the creek beds was exceeded only by their reluctance to explore the headwaters of those creeks. In May 1859, John Gregory, an experienced gold miner who offered his services to a party from Indiana, found lode gold on Clear Creek's north fork. The news reached Denver like a thunderclap.



Gold seekers poured by the thousands up the road Gregory had engineered to accommodate the Hoosiers' supplies. Today's highways follow Gregory's original route from Centennial House in Guy Gulch to Black Hawk via Colorado State Highway 119.

This road ascended the approximately 7,150 foot peak immediately north of the entrance to Golden Gate Canyon. The miners called it Enter Mountain and all lamented its steepness. A few pointed out the beauties which could be seen from the top. One of the most detailed descriptions of the road was written by Horace Greeley, who noted the grave on the face of Enter Mountain of a youth who accidentally shot himself.

This route in its entirety was used approximately 2-1/2 months. By the time a wagon toll road was punched through the canyon south of Enter Mountain, two miners' supply towns had sprung up near the canyon entrance: Golden Gate and Rocky Mountain cities, the second and third cities in what would become Jefferson County and the first two cities to supply the Gregory diggings.

Golden Gate was literally Golden's Gate City, founded by Tom Golden and named for two tall rock columns immediately inside the canyon entrance. From a distance, the columns resembled Mother Hubbard and a man wearing a flat hat. Both columns were toppled when the road was moved from the south side of the creek and up the mountainside in the 1900s. The tumbled remains of a portion of the rock gate are visible on the hillside above the road. Golden's Gate City, also known as Gate City, was also called Baled Hay City for the large amounts of baled hay sold there.

Rocky Mountain City, east of Golden Gate, appears to have lasted only a year or two at best. The canyon to which Golden Gate gave its name was also called Eight Mile for the distance from the prairie to the top of the canyon. In the 1860s the canyon got another name which came to be the official name for the water drainage itself: Tucker Gulch.

Alfred Tucker settled in Golden Gate City in the early 1860s and claimed the land previously surveyed for townsites. He also claimed the

toll road up the canyon and took the road's builder, Dan McCleery, to court. The court awarded Tucker possession. In 1862, Tucker began collecting tolls in the canyon. The demise of Golden Gate City has been laid to Tucker. It has also been laid to the opening of Clear Creek Canyon in 1863 to wagon traffic. This latter reason was probably invalid as the Clear Creek wagon road washed out constantly and was eventually abandoned. By 1872, when the railroad was built up Clear Creek Canyon, Golden Gate City had already withered away. But Tom Golden's name remained: a mountain called both Mt. Tom and Golden Peak, the town of Golden, Golden Gate State Park, and Golden Gate Canyon.

The base of the original Gregory road and the sites of several Golden Gate buildings, including a hotel, were located east of the Golden Gate Canyon entrance at approximately the Jefferson County Shop site.

Other well-known names dating from gold-rush days are Michigan Hill, named by freight haulers from Michigan; Mt. Douglas, possibly named for Illinois Congressman Stephen Douglas, Lincoln's unsuccessful opponent in the 1860 presidential race; Smith Hill (*Gilpin County*) for road builders E.B. and N.K. Smith; Belcher, Bowser, Drew, Guy, and Robinson hills, and Crawford and Guy gulches, all for early settlers.

Some of the five one-room grade schools took their names from their locations. There was also one unnamed school on Belcher Hill prior to the opening there of the Belcher Hill School. All served as community centers for a wide variety of get-togethers including dances and Sunday School. One church, no longer in existence, was erected near the Belcher Hill Road.

The Union Pacific Railroad (*using the Colorado Central name*) operated through Clear Creek Canyon until 1941, with seven stops within the canyon itself. There was also a Union Pacific railroad stop at the mouth of Ralston Creek.

The Golden Gate Canyon environment has been more or less under siege since gold seekers arrived on the scene, a pick in one hand, a

match in the other. The fires, set to locate rock outcroppings, were called the "*miners' fires*" and took a considerable toll on human life. Eventually the fires were declared illegal by a court in Denver.

Travelers plinked away at every animal in sight for target practice.

The traffic in the canyons stirred up so much dust that dray animals choked and died and the resulting stench caused travelers to insist that the dead animals be hauled away.

Prior to World War II agricultural and timbering interests severely depleted the native pastures and greatly reduced wildlife habitat. Meadowlands were plowed up and, as a consequence, washed away. Extensive timbering denuded the hillsides and resulted in severe gullies. Ironically, many of the trees cut down were so huge that they were left to rot where they fell. Wildlife was overhunted and well into the 1940s hunters searched for days to find a track, and then tracked that track for days to find the animal.

The Schwartzwald Mine has produced uranium since the 1950s.

In more recent years, the public and private sectors have extracted gravel from area pits and mining operations continue to be proposed.

Since World War II, the region has evolved into a bedroom community. This change has gradually reduced pressure on the native grasses, timber and wildlife. Jefferson County's White Ranch Open Space Park and Golden Gate Canyon State Park are jewels in the crown of the area. Another asset has been Senate Bill 35 which required County regulation of subdivision development.

The two historical sites remembered by markers in the Golden Gate Canyon area are inside the mouth of Tucker Gulch at what is called Quarter-mile Gulch. A plaque on a granite rock commemorates Tucker's toll road. The second marker is located at Centennial Ranch house on Golden Gate Canyon Road. It is hoped that our historical heritage will be better commemorated than the Indian culture has been.

AIR, ODOR & NOISE

Air, odor and noise are elements of the environment that contribute to the quality of community life.

GOAL

Future development in the area should not result in significant degradation of these elements.

AIR

Proper planning and adherence to federal, state and county standards and regulations, increased ride sharing, variable work schedules, and improved control of dust pollution are measures which should be encouraged to protect people and property from the harmful effects of air pollution, excessive noise and noxious odors.

OBJECTIVES

1. The County should initiate a study, to be done in cooperation with the appropriate agencies, to review air quality in the North Mountains area. The study should assess the appropriateness and adequacy of air quality regulations for mountain areas. If results show that unique circumstances in these mountain canyons and valleys warrant different regulations, the County and the State should adopt new regulations for these areas.
2. Minimize fugitive dust generated by vehicular traffic and construction and mining activities.



3. Limit the opportunity for airborne particulates by mitigating man-made disturbances.
4. Protect the health of people from detrimental effects of industrial, vehicular, and home-heating emissions.
5. Control the negative impacts of unclean air.
6. Determine the adequacy of current standards.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to air, odor and noise should be followed.

Red text identifies policies which can be applied in the land use review processes.

- 1. All future development in the area should be planned to minimize areas of disturbance including road and driveway cuts, homesite clearings, and industrial grading and blasting areas, and to maximize revegetation opportunities.**
- 2. All roads carrying 200 average daily automobile trips or greater should be paved.**
3. The County should continue to explore environmentally sensitive dust suppressant techniques which do not damage vegetation or contaminate water courses or groundwater.
4. Improved air quality should be a criterion included in the County's road maintenance priority setting. The paving priority list should include a timetable for road paving and the method of financing the paving, including but not limited to cooperative financing arrangements with homeowners.

5. The County Planning, Health and Public Works Departments should work together to assure that snow and ice removal materials are used which do not damage vegetation or water quality. These should be applied judiciously to avoid over-sanding and over-salting roadways, and should be removed as soon as possible to reduce fugitive dust pollution.

6. The state Mined Land Reclamation Division, or the County, should enforce reclamation, and an incentive plan should be developed by the County or the State to induce current owners of pre-Reclamation Act mining sites to implement voluntary reclamation.

7. When development is proposed for a site which has unreclaimed mining activity predating the Mined Land Reclamation Act, mitigation of the unreclaimed area should be included in the new development proposal.

8. Development should be in balance with the transportation network to prevent stop and go traffic that increases vehicular emissions.

9. RTD and DRCOG should do a survey of commuter patterns in the North Mountains area which can guide the development of car and van-pool programs and public transit service. These should be publicized through community organizations and local publications.

10. The County should work with RTD to locate additional park-n-ride sites. Safety, security and convenience should be improved at existing park-n-ride sites and included in the criteria for new park-n-ride locations.

11. Bikeways, equestrian trails and pedestrian paths should be developed to encourage the use of alternative modes of transportation. When trails shown on state and county trails maps cross a proposed development site, that portion of the trail should be secured. Dedication of road right-of-way should be sufficient to provide trails and paths where appropriate.

12. New fireplaces and stoves, as of 1987, are required to comply with the new Colorado legislation regulating fireplaces and woodburning stoves. The County should encourage the retrofitting of existing fireplaces and stoves to bring them into compliance with the new standards through incentive programs. Example: a one-time property tax incentive.

13. A comprehensive study of the current air quality and the unique meteorologic conditions that affect air quality should be undertaken for the study area to determine existing ambient air quality. If the results of the study indicate that different air quality regulations should be adopted for the North Mountains area, the County should seek to have existing regulations changed.

14. Once appropriate air quality regulations are adopted for this area, an Air Quality Improvement Plan effort should be sponsored by the County in conjunction with the Regional Air Quality Council to develop implementation methods to maintain and improve air quality in the study area.

Such methods could include tax credits for more efficient vehicles and fuels, and for conversion of woodburning fireplaces, education, increased RTD ridership, etc.

15. The County, in conjunction with the state and federal governments, should make every effort to gain compliance with, and enforcement of, all applicable air quality regulations, standards and permit conditions.

16. The County should support State legislation to strengthen vehicle emission standards, and increase enforcement of these regulations.

ODOR

To maintain the quality of life in the North Mountains area, the generation of offensive odors should be avoided.

OBJECTIVES

1. Minimize the adverse impacts of odors associated with waste disposal, home occupations, commercial, industrial, and agricultural operations.
2. Plan, construct and maintain septic systems and sewage treatment facilities to prevent offensive odors.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to air, odor and noise should be followed.

Red text identifies policies which can be applied in the land use review processes.

1. Sewage treatment facilities and septic systems should be located and engineered to avoid the generation of odors that will adversely affect existing or future developments.
2. Housing development and commercial centers should be planned to ensure safe and efficient septic system and sewage treatment placement. These waste disposal systems should employ appropriate technology to avoid producing noxious odors that will adversely affect existing or future developments.



3. Commercial and industrial developments should use exhaust systems which remove noxious odors.
4. New site plans should consider and respect the existing agricultural and ranching activities including odors which are associated with them.
5. Agricultural, industrial and commercial development should be encouraged to use management practices and appropriate technology to minimize odor emissions.
6. Jefferson County Zoning Regulations for the keeping of livestock in residential areas should be reviewed for the appropriateness of the number of animals for the size of the parcel and type of zoning. If changes are indicated, the Zoning Resolution should be revised and reviewed with County residents, interest groups, appropriate agencies and County departments.
7. Jefferson County should facilitate the coordination of the various agencies with responsibility for livestock protection and related environmental issues, to develop a comprehensive approach to handle livestock-based complaints. A list of these agencies is in the *Appendix*.
8. Jefferson County should work with the Colorado Air Quality Control Commission to ensure strict enforcement of the "Odor Emission Regulations". The County and/or the Air Quality Control Commission should write an understandable version of these Regulations and distribute it to community groups in the County.

NOISE

Quietness is a component of privacy and hence, part of the character of rural communities and neighborhoods. This rare resource should be protected from intrusions of noise levels higher than would be generated by the land uses permitted or zoned for the surrounding areas. These high noise levels and associated land uses would not be considered compatible unless mitigation can decrease the number of

noise sources or alter how the noise is heard. The public should be protected from hearing loss, disruption of normal activities and negative physiological or psychological damage from excessive noise levels. An overriding concern is that current noise standards may not be suitable for mountain areas and that a noise study should be done to determine if different standards should be adopted for mountain areas of the County.

OBJECTIVES

1. Minimize noise and protect privately owned areas valued for their quietness.
2. Determine the appropriate maximum levels and sound factors required to protect and improve the character of the North Mountains area.
3. Plan land uses that can meet the appropriate regulations for noise.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to air, odor and noise should be followed.

Red text identifies policies which can be applied in the land use review processes.

1. Jefferson County should undertake a study with the State Health Department to determine appropriate noise standards for rural mountain environments. This study should assess the typical level of man-made background noise of mountain, residential/mountain open lands at their logical and legal buildout. It should address:
 - a. the intensity (*db*) level of sounds;
 - b. the frequency spectrum of sounds;

- c. the time varying character of sounds;
- d. the duration of sounds; and
- e. the dynamics of sound travel in mountain topography.

If the study concludes that acceptable noise levels are different in the mountain areas than in the urban and suburban areas, the County Commissioners and the State Health Department should adopt noise ordinances tailored to the mountain areas.

- 2. Noise generated by any and all noise sources should not be allowed to exceed the noise standard established for surrounding permitted or zoned land uses, nor allowed to exceed the standards recommended or adopted pursuant to Policy #1. Noise should not be allowed to adversely affect the health of community residents nor interfere with their normal activities.**
- 3. New development should be encouraged to provide for noise reduction, through construction and other techniques, to protect itself from existing legal noise generators.**
- 4. New site plans should consider and respect the existing agricultural and ranching activities and any noise which is associated with them.**
- 5. The Jefferson County Sheriff's Department and Health Department are encouraged to act as friendly facilitators to work with the people or businesses responsible for noise generation to secure voluntary compliance with County and State noise standards and the mitigation of annoying noises not covered by the standards, and to enforce the standards when voluntary compliance cannot be achieved.**

HAZARDS

The protection of the environment, property and life should be considered in the planning and land development review process. All three factors need to be examined to properly locate residential and commercial development.

Where potentially hazardous conditions exist, hazardous events are more apt to occur. As an example, unstable slopes can become a landslide area when triggered by severe or continuing rains, by poorly selected sites and poorly designed land disturbance. Colorado law requires counties and municipalities to control land development in areas where existing hazards have been identified.

The intent of the policies in this section is to identify hazards in the North Mountains area which should be mitigated or eliminated prior to development and to identify the governmental entities with the authority to safeguard people, property and the environment from injury or damage caused by hazardous conditions and events which are natural or triggered by human activities.

GOAL

Protect life and property from the adverse impacts of natural and man-made hazards.

OBJECTIVES

1. Ensure that land use activities do not aggravate geologic hazards, and ensure that grading and excavation do not accelerate erosion.



2. Ensure that land use activities do not increase the risk of wildfire.
3. Ensure that air and water intended for human consumption meet the applicable federal and state air and water quality standards for radioactivity.
4. Limit the type of land uses permitted in areas where potential hazards due to radioactivity exist.
5. Protect the public within 10 miles of the Rocky Flats Nuclear Facility in the event of a release of hazardous material.
6. Protect the public from health hazards caused by electromagnetic radiation from telecommunication towers, power lines, etc.
7. Protect people and property from increased risk of flooding.
8. Ensure that land use on or adjacent to abandoned sanitary landfills has adequate protection from methane gas and differential settlement.
9. Ensure that the spread of noxious weeds is not enhanced by improper grading and development practices.
10. Fit development to terrain to ensure that development does not increase the potential for adverse impacts in geohazard areas.
11. Ensure nitrate contamination will not be a hazard to present and future residents. See the *Water & Sanitation* section for additional information.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to hazards should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. Geologic Hazards

Various combinations of geologic hazard conditions are found throughout the study area. These include Slope Failure Complex, Unstable Slopes, rockfalls, landslides and subsidence.

1. No development should be allowed in zoned geologic hazard areas unless adequate mitigation or elimination of the potential hazard can be demonstrated. Hazard areas in the North Mountains area are on the Geologic Hazards Overlay Zone District, which are shown on the *Environmental Constraints* map at the back of the Plan.

Geologic hazards are described in the *Appendix*.

2. In unzoned hazard areas, each site should be reviewed and the appropriate site development criteria should be applied from the *Mountain Site Design Criteria* section.

3. Development activities should be designed to ensure adequate slope stability, and should result in a natural appearance which blends in with the surrounding landscape.

4. Drainage on unstable slopes should be designed to improve slope stability.

5. Final land forms which result from development activities should be stable and revegetated with drought resistant species to control erosion and improve stability.

6. Existing structures in the area around a proposed project should be protected from adverse impacts caused by the project. Existing potential hazards should not be aggravated by development activity. These adverse impacts include, but are not limited to:

a. disturbance of existing vegetation, which can lead to accelerated erosion and sedimentation;

b. aggravation or acceleration of existing potential hazards.

7. Abandoned mines should be fenced, posted and mapped. Mine openings should be closed.

B. Erosion

Highly erodible soils are easily disturbed soils, having certain characteristics which have been identified by the Soil Conservation Service. Accelerated erosion can cause the destruction of aquatic life, increase the risk of flooding and increase pollution.

1. Overgrazing caused by livestock should be avoided by limiting the number of livestock, or limiting the area set aside for livestock. This is especially important on small lots where well and septic are used.

2. Disturbed areas should be stabilized as quickly as possible to reduce fugitive dust and erosion potential.

C. Wildfire Hazards

The threat of wildfire is a constant hazard faced by mountain area residents. As development and related human activity continues to increase in the North Mountains area, the risk of wildfire will increase. Therefore, it will be important to reduce the risk of wildfire through mitigation, maintenance, education, and by providing adequate access for fire protection equipment and water supplies.

The dead wood which is accumulating at an increasing rate on public and private land heightens the potential for wildfires which



cross county boundaries. Intergovernmental cooperation will be needed to cope with this problem.

Key to wildfire management are several forest fuel types which warrant special attention.

These fuel types may present serious problems for fire protection on any slope. Often, it is not possible for fire fighters and their equipment to protect property and lives where these fuel types are present. Such fuels include, but are not limited to: Scrub Oak, Lodgepole Pine, and Ponderosa Pine.

1. Accepted methods of forest land management should be used to reduce all severe wildfire hazard areas to a low or moderate rating.

2. Jefferson County and the State Forest Service should use the same standards for the measurement of wildfire hazards.

3. Jefferson, Clear Creek, Gilpin, and Boulder Counties should work with the Colorado Forest Service to develop and implement a program to reduce the hazard of wildfire. This program should include:

a. a hazard overlay map showing the degree of wildfire hazard, i.e., severe, moderate and low;

b. a standard procedure to ensure the completion and long-term maintenance of fuel hazard mitigation for all new development;

c. a procedure to ensure the completion and the long-term maintenance of fuel hazard mitigation for existing development;

d. a description of fuel hazard mitigation practices, e.g., forest thinning, fuelbreaks to protect structures and access, fire retardant building materials, onsite water supplies, and access requirements for fire protection equipment, etc.;

- e. an educational program for public and private landowners, residents, and business people, in the four counties, to inform them about wildfire hazards and mitigation techniques;
- f. an active, environmentally safe pest management program to be used on public and private land;
- g. a designated management structure to oversee program implementation;
- h. an implementation schedule; and
- i. a funding mechanism to pay for the program.

4. When the program described in Policy 3 above has been developed, Jefferson County should take appropriate action to adopt the resolutions, regulations and work programs necessary to implement the recommendations of the program.

5. Until the program in Policy 3 above has been developed, Jefferson County should create and adopt a wildfire hazard overlay map. It should be used as an indicator of the presence or absence of wildfire hazard areas with the degree of wildfire severity shown. The provisions of Section 44: W-H of the County Zoning Resolution should be followed. Jefferson County should implement the recommendations in 3.a-i. above, to the extent possible.

6. Development proposals in areas where severe or moderate wildfire hazards are present should continue to be referred to the Colorado State Forest Service and local fire protection districts to assess the severity of the wildfire hazard, determine the mitigation techniques which will be needed and the fire protection measures required. Colorado State Forest Service Wildfire Hazard maps and Jefferson County Wildfire Hazard and Fireline Intensity maps should be used to determine hazard levels, which should be confirmed by site inspections.

General fire protection policies are in the *Public Facilities, Services & Utilities* section of this Plan and additional wildfire hazard information is included in the *Appendix*.

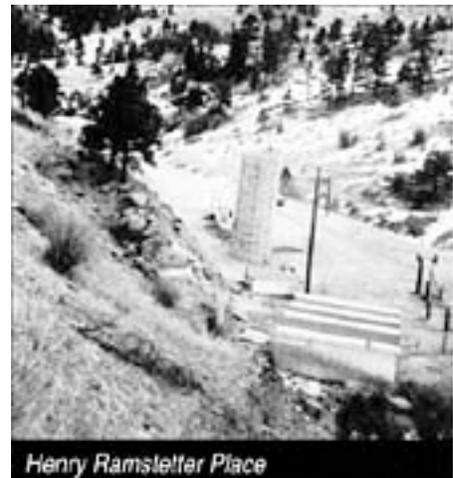
7. To achieve excellent site design and the maximum number of units allowed under the *Housing* policies, structures should not be located in high wildfire hazard areas, e.g., fire chimneys.

8. Local fire departments should apply consistent and reasonable standards in issuing permits for prescribed burning of slash, which is a wildfire hazard. These standards should apply to all applications, whether they are public agencies or private individuals.

See the *Public Facilities, Services & Utilities* section of this Plan for additional fire protection policies.

D. Radiation Hazards

Radioactive elements are natural components of the mineral rich rocks of the Front Range. Radon-222, an inert, radioactive gas, is a radioactive decay product of Radium-226 (*member of the Uranium-238 decay chain*). Radon-222 and Radium-226 are the important radioactive elements from a health standpoint.



1. Radon

Radon is emitted from the earth and can accumulate inside buildings where it can become a health hazard. Preventive and corrective measures can be used to avoid and mitigate the hazard. Standards for safety have been set by the U.S. Environmental Protection Agency which are higher than the standards advocated by the American Society of Heating, Refrigerating and Air Conditioning Engineers. It is less expensive and more efficient to construct a home using simple radon

mitigation methods than trying to retrofit an existing structure once high levels of radon are discovered.

- a.** The Jefferson County Building Code should require that new construction, in areas which have high levels of natural radioactivity, use building techniques to prevent high radon levels.
- b.** Jefferson County should adopt regulations which would ensure that construction techniques are used which would reduce high levels of radon. These regulations could be incorporated into the Land Development Regulation, and/or be placed as a note or restriction on plats and exemptions from platting which would require construction plans showing radon reduction techniques prior to issuing a building permit.
- c.** The Jefferson County Health and Planning Departments should work with the Colorado Health Department to set health safety standards for radon.
- d.** Jefferson County should initiate state legislation to require testing of air for radon prior to the resale of property and provide appropriate remedies to protect purchasers.

2. Drinking Water

There is concern about health-endangering amounts of nitrates and radiation in groundwater. Radiation results from natural radioactive deposits and other sources, e.g., mine dumps.

Some private wells in the area have been identified as having elevated levels of gross alpha radioactivity, i.e., uranium Radium-226. However, only a small fraction of existing wells have been tested by their owners, so the extent of the problem is unknown. Although removal processes are available for these constituents, careful design is required to avoid additional radiation problems. Large scale treatment facilities could engender radiation and waste disposal problems. Currently, there is not a state requirement for testing. The Colorado Geological Survey can be

consulted for risk areas before new wells are drilled, and the U.S. Geological Survey's hydrogeological study, when completed, may be a source of information about geological and water relationships which have radiation hazard potential.

a. Jefferson County should initiate state legislation to establish state standards for radioactive elements in water. A well testing program should be created which requires water testing for radioactivity, as well as nitrates, prior to the sale of property, with or without structures in place.

b. Water used for human consumption should not exceed the maximum levels for radioactive elements as set forth by the Environmental Protection Agency (*EPA*).

3. Uranium Deposits

Uranium deposits occur in the North Mountains area. Uranium mines have been mapped and are not considered suitable for construction purposes by the Colorado Health Department. See the *Appendix* for additional information.

a. The Jefferson County Planning Department should refer to the State of Colorado and Jefferson County Health Departments' development proposals to evaluate the existence and extent of radioactivity which could impact proposed and existing development.

b. Uranium mines should not be built upon, nor should mining residue be used for construction purposes.

4. Rocky Flats Nuclear Facilities

Radioactive and hazardous materials such as plutonium, a radioactive isotope, is used at the Rocky Flats Nuclear Weapons Plant. If contained and controlled properly, there is minimal risk of exposure. The major concern is with the release of radioactive and hazardous material which could have adverse health impacts.

This type of release creates a planning dilemma more serious than a natural hazard such as flooding, because the type, particle size, and quantity of materials in a release cannot be reasonably anticipated with accuracy. In addition, wind speed and direction at the time of the release influences the size and shape of the affected area.

Areas within 10 miles from the plant are significant in the event of a release of radioactive isotopes into the environment.

Protecting people from probable exposure risks from industrial radioactive and hazardous materials in the event of a release is a major concern and should be considered when land use decisions are made.

a. The emergency response plan for notification and evacuation within 10 miles of the Rocky Flats facility should be communicated to residents within this area.

5. Electromagnetic Radiation

There is an increased awareness that health problems may be caused by the emission of electromagnetic radiation from transmission power lines, electrical substations, telecommunications facilities such as radio and television antennae and microwave installations. Studies of this problem are underway which could produce more definitive information on the health hazard potential from electromagnetic radiation. Another health concern focuses on the cumulative and interactive effect of the various types of radiation. As research provides more data on this subject, the Colorado and Jefferson County Health Departments should monitor the data, reevaluate the current standards and consider revising the current standards in accord with new findings.

a. The Jefferson County Health and Planning Departments should initiate a study to evaluate the potential health hazards associated with the emission of electromagnetic energy from power lines, communications facilities, substations, etc. This study should:

- 1) collect data and policies from other jurisdictions, health and regulatory agencies, scientific studies, industry reports;
- 2) provide for ongoing research into the problem, i.e., the cumulative effect of different sources of radiation;
- 3) evaluate the adequacy of the American National Standards Institute (ANSI) standard, which does not cover transmission lines, currently used to determine whether or not a different standard should be adopted;
- 4) identify hazard areas, i.e., safe distances from electromagnetic energy sources;
- 5) map facilities, including power lines, which emit electromagnetic energy;
- 6) adopt appropriate regulations, zoning resolutions and building codes for new development;
- 7) provide for corrective actions for existing developments which are at risk; and
- 8) assign responsibility for monitoring emission sources.

b. Development proposals in the vicinity of electromagnetic energy emission sources should be referred to the Jefferson County Health Department for evaluation of health hazards.

E. Floodplain Hazards

Construction in or any alteration to a floodplain can cause a potential danger to life, property, and the environment. The Jefferson County Floodplain Overlay District regulates development in the floodplains.

1. All development involving property where the 100-year floodplain exists should comply with the Jefferson County Floodplain Overlay Zone District.

2. The Jefferson County Drainage Engineer and the Planning Department should cooperate in drafting an amendment to the County Storm Drainage Design and Technical Criteria Manual to allow mitigation of a flood hazard in the mountains with a natural design approach.

3. Small impoundments under 10 feet, not regulated for safety by the State Division of Water Resources, should be examined by the County and/or the State to determine if a potential flood hazard exists.

4. When existing uses in the floodplain create or increase the flood hazard, a community floodplain mitigation and alternatives study should be done to find reasonable ways to reduce the hazard area. The following issues should be addressed in the study.

a. Human safety.

b. Design options, e.g., channelizations, which mimic the natural environment and configuration, etc.

c. Land use options, e.g., trails, open space.

d. Financial options, public and private.

e. Property value.

f. Community and County responsibilities.

F. Hazardous Materials & Waste

The generation, transportation and disposal of toxic and hazardous wastes is a serious concern. However, the extent and nature of such activities in the North Mountains area is currently unknown.

1. All toxic and hazardous wastes should be transported to federal, state, and/or municipal approved disposal sites.

- 2.** The handling, storage and transportation by truck and rail of all toxic and hazardous, and potentially hazardous materials and wastes, and explosives should comply with county, state, and federal laws and regulations, including the aggressive toxic waste minimization program as required by law.
- 3.** Railroads and trucking companies should provide local fire districts and/or emergency handling teams with a list of the hazardous materials being transported through their districts, and provide copies of their emergency response plan.
- 4.** Fire districts should be informed of chemicals, explosives, hazardous materials, products and their wastes stored or manufactured on sites, or transported within their districts.
- 5.** The use or creation of toxic substances by industry should comply with county, state, and federal laws and regulations.
- 6.** Additional waste transfer or recycling stations should be located in the North Mountains area when the demand for them exists. One criterion for location should be close access to major arterials or freeways.
- 7.** Fire districts should review development referrals to assess their capacity to respond to fires and emergencies when hazardous materials are involved in a proposed project.
- 8.** The Jefferson County Building Department should be encouraged to coordinate with the fire district of jurisdiction when construction plans are submitted for projects which will have hazardous materials onsite during construction and/or operation.
- 9.** The Jefferson County Health Department should initiate, in cooperation with the Colorado Health Department, a study to establish and adopt health safety standards for the disposal of biomedical waste.

G. Methane Gas

This flammable gas is produced by decaying organic matter which can build up inside structures and create the potential for an explosion. The extent of methane gas generated by abandoned landfills in the study area is not currently known.

1. Development proposed on or in the vicinity of abandoned sanitary landfills should comply with the following recommendations.

a. All structures on landfills should be properly vented to prevent methane build-up and be equipped with methane monitors and alarm systems.

b. Methane from landfills should be vented or collected prior to development.

c. The design of structures and improvements should be based on careful site design and subsurface testing before construction is permitted on landfills to prevent damage from differential settlement.

H. Noxious Weeds

1. The County should revise its weed ordinance to comply with the Colorado Weed Management Act. Control techniques which should be considered are: environmentally sensitive early mowing and grazing. Jefferson County should add Canada Thistle and Musk Thistle to the noxious weed list. See *Appendix* for additional information.

I. Rodents

1. Prairie dog populations should be controlled by landowners, including public entities, to prevent the spread of disease, increased erosion, damage to grasses propagated under the Federal Crop Recovery Programs, and danger to livestock from stepping into burrows.

J. Climatic Conditions

- 1. In high wind areas, structures should be sited to avoid adverse impacts from blowing snow on adjacent roads and building entrances.**
- 2. The amount of overlot grading that occurs at any one time should be limited to avoid dust pollution.**

K. Airport/Heliport/Ultralight Operations

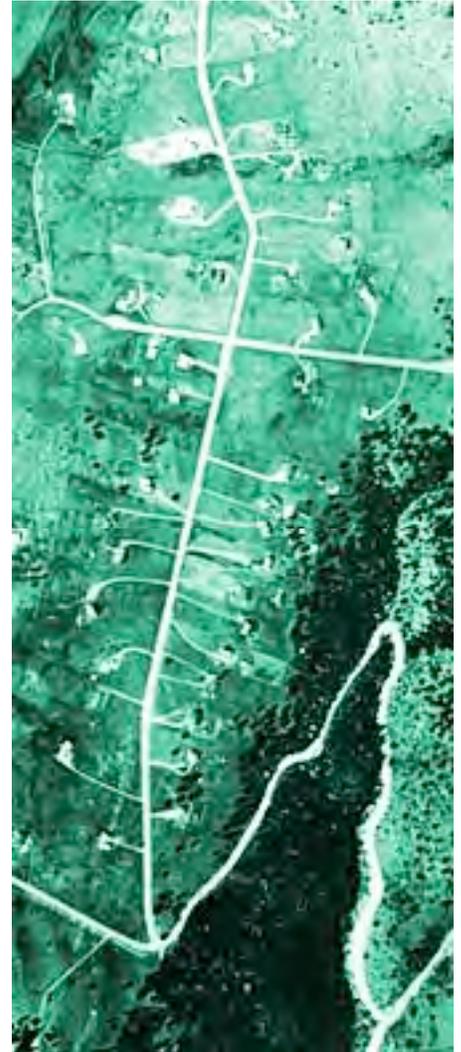
Impacts associated with helicopters and ultralights which land on private property are not always covered by existing federal laws and regulations. To ensure that these impacts are considered, Jefferson County should amend the Zoning Resolution to protect people from adverse impacts related to aircraft operation on privately owned land.

- 1. Proposed airport/heliport/ultralight locations should be reviewed on a site-by-site basis to ensure that noise, lighting, and other undesirable impacts on the surrounding areas are avoided.**
- 2. Proposed sites should meet requirements of the appropriate regulatory agencies.**
- 3. The County Zoning Resolution pertaining to aircraft should be amended to provide for control over the private use of light aircraft, helicopters and ultralights, when F.A.A. does not regulate them, to protect the safety and health of the public when landing sites are located.**
- 4. Noise levels from aircraft should be within the acceptable decibel range set by the State of Colorado and/or Jefferson County. The stricter standard should apply.**
- 5. Landing approach and takeoff patterns should not endanger people or property.**

HOUSING

This rural, mountain area is characterized by expansive views of natural terrain, abundant wildlife, quiet, relatively low levels of traffic, and high levels of privacy. These features, plus proximity to metropolitan Denver, are reasons the North Mountains is a "place of choice" for residents. The natural environment in the area should be respected and enhanced when development occurs.

The housing recommendations in this section are intended to accommodate future housing needs in a way which is compatible with the unique resources of the North Mountains area. When development is proposed, the characteristics of the site are identified and development impacts are evaluated. It is during the development review process that wildlife and visually sensitive areas are identified, the capacity of the roads to carry additional traffic is determined, the water and sanitation concerns are noted, and the availability of essential services identified.



The other sections of this Plan, including the *Mountain Site Design Criteria*, contain more definitive recommendations which should be applied during the land development review process.

GOAL

Provide for a diversity of housing opportunities consistent with the unique resources and constraints of the North Mountains area.

OBJECTIVES

1. Housing development should complement the natural surroundings.
2. Housing development should have a minimal effect on the natural processes of the ecosystem.
3. Adequate facilities and services should be available to support the development.
4. A high level of privacy for existing and future residents should be achieved.

POLICIES

In addition to the following policies, applicable housing criteria in the *Mountain Site Design Criteria* section should be followed.

Red text identifies policies which can be applied in the land use review processes.

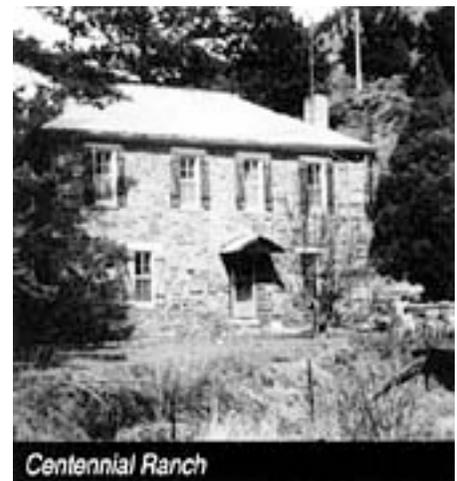
A. General

1. Rezoning should be processed as Planned Development.
2. New residential development should complement the character of the community, comply with the recommendations in other sections of this Plan, and comply with the applicable criteria in the *Mountain Site Design Criteria* section.
3. Land that is zoned and platted, or is exempted from platting, should be encouraged to comply with this Plan's recommendations and criteria in the *Mountain Site Design Criteria* section at the time of building permit application.
4. Development should be served by a fire protection district.

5. Excellence of site design should be based on conformance with the *Mountain Site Design Criteria* section for Excellent Project Design.

6. No development should be allowed in critical wildlife areas and the density earned by slope category may be located on another portion of a site. However, the "*critical wildlife*" designation should be applied in a reasoned way, not solely relying on lines drawn on a map (see *maps*). The *Mountain Site Design Criteria* and *Wildlife* sections should be reviewed for additional information and guidance.

7. No development should be allowed in the Geologic Hazard Overlay Zone District unless adequate mitigation or elimination of the potential hazard can be demonstrated. No transfer of density should be allowed from areas inside the Geologic Hazard Overlay Zone District.



8. In geologic hazard areas which are identified during analysis of a site, and which are not included in the Geological Hazard Overlay Zone District, the density earned by slope category may be transferred to another portion of a site.

9. In floodplain hazard areas on the Flood Plain Overlay Zone District adopted by the County and shown on the *Environmental Constraints* map (see *maps*), no credit for the transfer of density should be given, and only development which meets the County Floodplain Management regulations would be allowed.

(Recommendations 7 and 9 are based on the premise that the Geologic Hazard Overlay Zone and the Floodplain Overlay Zone District maps adopted by the County currently restrict development and therefore it is not reasonable to give a development transfer credit.)

10. Before development occurs, severe wildfire hazards should be mitigated to moderate or low hazard levels. Moderate wildfire hazards should be mitigated to a low hazard level.

11. Traffic generated by new development should not exceed the Level of Service recommended in the *Transportation* section of this Plan.

12. Within the visually sensitive areas shown on the *Visual Resource* maps (see *maps*), development should make maximum use of the site's existing vegetation to screen development. The appropriate recommendations in the *Visual Resources* and *Mountain Site Design Criteria* sections should be followed.

13. At rezoning, when lot sizes less than 10 acres are proposed, the recommendations in the *Water and Sanitation* section provide alternatives which should be applied to address water and sanitation problems.

14. When resource areas overlap on a site, the resource evaluation should balance the competing values of these resources to achieve the intent of this Plan.

15. Housing densities shown in this Plan should not be construed as guarantees of the number of residential units which may be built upon a site. The actual number of units is determined by applying the recommendations in this and other sections of this Plan and by the degree of compliance with criteria in the *Mountain Site Design Criteria* section.

16. The Jefferson County Land Development Regulation should be revised and updated to reflect modern planning and engineering principles.

B. Residential Development Served By Well and Septic

1. Housing density for a site should be determined in the following manner:

a. First, based on a slope analysis, the acreage within the 0-30%, the 30-40%, and 40%+ slope categories is established.

b. Based on these acreages, the range of possible housing units is calculated using the following chart:

Site Design		
Slope	Standard	Excellent
0%-30%	1 du/10 ac	1 du/5 ac
30%-40%	1 du /10 ac	1 du/7 ac
40%+	1 du/35 ac	1 du/35 ac

Under standard and excellent site design, units can be transferred off 40%+ slopes at a credit of 1 du/20 ac, to be built on the 0-40% slope portion of the site.

c. The actual number of housing units should be based on compliance with applicable recommendations in other sections of this Plan, including the *Mountain Site Design Criteria* section.

C. Residential Development Served by Public Water & Sanitation District

1. The total number of units allowed should be determined in the following way:

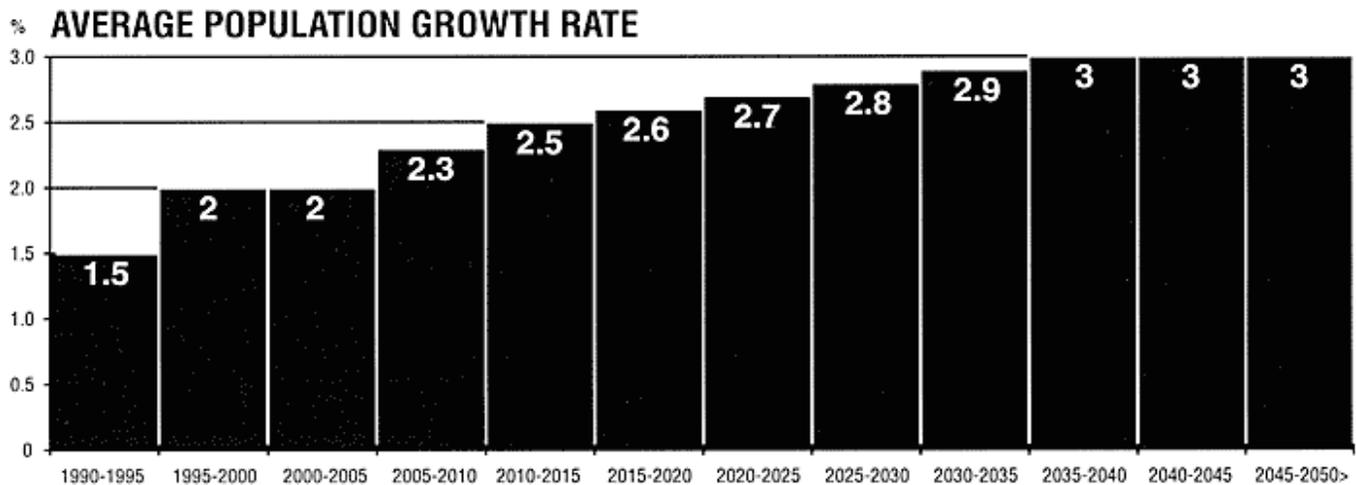
a. Compute the gross density by dividing the total site acreage by 2.5 acres per 1 dwelling unit.

b. Allocate the resulting number of units to the 0-40% slope area of the site.

c. Conform with applicable policies in the Plan and criteria in the *Mountain Site Design Criteria* section.

The maximum number of units can be earned when the proposed project conforms with the policies in the Plan, achieves excellent project design under the *Mountain Site Design Criteria*, is served by a public water and sanitation district, and meets the acceptable level of service for roads.

North Mountains 5-year Projections



Potential Housing Supply & Population

	Housing Units	Population ¹	Projected Year of Buildout ²
Existing (1991)	940	2452	1992
Buildout of zoning approved as of 1991	3837	9899	2043
Buildout of Plan Recommendations:			
Well & Septic			
Average Design ³	2791	7201	2031
Average Design ³ w/ Transfer of Units ⁴	3104	8008	2036
Excellent Design ³	4182	10790	2040
Excellent Design ³ w/ Transfer of Units ⁴	4915	12681	2051
Public Water & Sanitation			
Excellent Design ³	512270	31657	2082

- 1 Calculated at 2.58 persons per household.
- 2 Buildout occurs - can vary with fluctuations in housing development activity.
- 3 Site design rating is subject to conformance with the Mountain Site Design Criteria and Plan policies.
- 4 Criteria related to the transfer of housing units is in the Housing section.
- 5 This number assumes the entire area would have public water and sanitation.

Methodology appears under Appendix heading: Housing

OFFICE, RETAIL, INDUSTRIAL & MOUNTAIN COMMUNITY CENTERS

While these land uses may be needed as the community grows, proper planning is necessary to maintain the balance of these uses with residential development and maintain the mountain rural community and its natural setting. The absence of public water and sewer districts could constrict the type and amount of retail, office and light industrial development in the North Mountains. Access to goods and services in Golden, Boulder and Arvada reduces the demand for extensive commercial and light industrial activity in the area.



GOALS

Accommodate retail, office and light industrial land uses which are compatible with the character of the rural mountain community and are of a scale which supports residential development in the area.

OBJECTIVES

1. Provide commercial and light industrial activities that are needed for the convenience of local residents and provide limited employment opportunities.
2. Ensure that commercial and light industrial activities are compatible with surrounding land uses in terms of visual appearance, traffic generation, water and sewer requirements, noise and air quality impacts.
3. Locate commercial and light industrial land use in mountain community centers to avoid strip development along roads, especially along Golden Gate Canyon and Coal Creek Canyon Roads.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to office, retail, industrial and mountain community centers should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. General

1. All new retail, office and light industrial development should be processed as Planned Development.
2. All new retail, office and light industrial development should comply with applicable criteria in the *Mountain Site Design Criteria* section.

MOUNTAIN COMMUNITY CENTERS

The mountain community centers proposed for the North Mountains area are intended to minimize the pressure for strip development along the roads by designating areas where commercial and light industrial development could occur. These centers would provide convenient access to goods and services needed by local residents and should be either convenience or neighborhood centers in size. They should be sited and designed to be compatible with the surrounding area.

Revegetation of disturbed land in mountain areas is difficult given the lack of irrigation water, the thin layer of top soil, and the short growing season; therefore, land disturbance should be minimized.

Benefits to residents would include fewer miles driven to purchase goods, get to work, and take children to athletic activities, music lessons, etc. This reduction in miles driven would contribute to better air quality in the mountains and the metropolitan region, and lower transportation costs.

The centers are not intended to provide the major employment opportunities nor to duplicate the diversity of goods and services found in the commercial and light industrial areas which exist in the metropolitan area.

Each mountain community center is described in more detail on the following pages. Policies which are common to all mountain community centers are listed first. Specific land use recommendations and design policies are listed for each center. These centers are shown on the *Summary* map (see [maps](#)).

Designated mountain community centers are:

- * Coal Creek Canyon, Twin Spruce and Crescent Park Roads
- * Proximity of intersection of Crawford Gulch and Golden Gate Canyon Roads
- * Top of Guy Hill area

* Crawford Gulch Road, proximity of access road to White Ranch

North Mountains Nonresidential	
Gross Leasable Area (GLA)	
Existing	41840 Sq. Ft.
Buildout existing zoning	45840 Sq. Ft.

POLICIES

In addition to the following policies, the applicable criteria in the *Mountain Site Design Criteria* section which apply to office, retail, industrial and mountain community centers should be followed.

Boxed text identifies policies which can be applied in the land use review processes.

A. General

1. Preservation of existing vegetation for screening and erosion control should be a priority in site plan development.
2. Landscaping should emphasize the use of vegetation which needs minimal water to live. Earth shaping in conjunction with the creative use of rock are alternative techniques which should be considered.
3. Safety should be a primary concern when access plans are developed.
4. Mountain community centers should be designed to serve the daily needs of residents and tourists.
5. The criteria in the *Mountain Site Design Criteria* section should be applied to all nonresidential development.

B. Inside Mountain Community Centers

1. Retail, office and compatible light industrial activities should be located inside mountain community centers.

2. Mountain light industrial development that is compatible with mountain community center land uses should be located inside mountain community centers to concentrate employment and traffic, provide convenience, and to avoid proliferation of light industrial development outside of designated mountain community centers.

Light industrial activities compatible with the mountain community center concept are those which have the characteristics of mountain light industrial uses. These are:

a. building(s) of a scale compatible with a rural mountain environment and consistent with the *Mountain Site Design Criteria* section policies for landscaping, open space, visual, architecture, scale, and mass, etc.;

b. automobile and truck trips that do not exceed 5.45 trips per day per 1,000 square feet of GLA;

c. operations which do not pollute, and do not produce noise, smoke, glare, vibration, fumes, hazardous and other adverse environmental impacts which extend beyond the property line;

d. fabrication and manufacturing processes should be limited and all activities should be enclosed;

e. commercial activity should be limited and restricted to low volume wholesale sales, repair, rental, or servicing of any commodity which is manufactured, fabricated, processed, or warehoused onsite;

f. outside storage, including heavy vehicles, should be limited, suitably screened, and substantially set back from adjacent properties and public areas; and

g. a significant percentage of the site should remain in natural open space.

3. New rezonings should allow only those uses which can be supported by the legal and physical presence of water as determined by the hydrologic study described in the *Water & Sanitation* section, unless service will be provided by a public water and sanitation district or a public water district.

C. Coal Creek Canyon Road (S.H. 72), Twin Spruce & Crescent Park Roads

1. This mountain community center should be a neighborhood center where the services and goods available are needed daily by residents within the community.

2. The existing commercial and light industrial center at this location should be incorporated into the overall design for this center when an Action Plan is done.

3. A minimum of 25% open space should be provided.

Implementation Strategy

1. The County should do an Action Plan for this area and include, as a minimum, representatives from the community, existing businesses, property owners, the Jefferson County Public Works Division, Health Department, Planning Department, Open Space Department, Colorado Department of Transportation and Regional Transportation District. The purpose of this plan should be to draft a conceptual design for redevelopment of this center.

2. The objectives for the plan should be to:

a. rehabilitate the stream corridor;

b. improve the quality and extent of services and physical appearance;

c. provide pedestrian access;

- d. improve traffic access and parking capacity;
- e. provide landscaping and visual impact mitigation;
- f. create a stream-side park and other community facilities; and
- g. increase the economic viability of the center.

3. The Action Plan should include the following:

- a. Access and parking plan for the center, including the expansion parcels.
- b. Landscape plan for the center which identifies the mitigation measures necessary to reclaim mountain scarring and unvegetated areas.
- c. Design for a park and other public community facilities.
- d. Designated park-n-ride location for ride sharing and RTD buses.
- e. The funding source(s) required to implement the Action Plan recommendations. Techniques which could be used include creation of special overlay zone or improvement districts, public/private joint ventures, grants, and awards.
- f. An implementation schedule which establishes completion dates and assigns responsibilities for each action.

4. The Action Plan Group should be responsible for presenting the Plan to the public for review and comment, and to the Jefferson County Planning Commission for adoption.

D. Golden Gate Canyon & Crawford Gulch Intersection

1. This mountain community center should be a convenience center with a minimum of 25% open space. The development should have the appearance of smaller stores and offices and avoid an unbroken expanse of walls. Development should be located in one, not more than two, quadrant(s) of the intersection.

2. If and when the County Shops are moved, this location should be considered for commercial or community land use.

Implementation Strategy

1. Representatives from the community, the Grange, property owners, and the County Planning, Public Works, and Health Departments should be consulted about proposals for this center's development.

2. The objectives for this center should be to provide for convenience shopping and enhance fire protection for area residents. The plan for this site should include:

a. access and parking plan which provides for shared parking;

b. criteria for structures which would blend with the existing terrain, i.e., the structures should avoid expanses of unbroken walls and should have an architectural finish compatible with the rural mountain setting;

c. established setbacks from the roads for structures;

d. techniques which make maximum use of the topography and existing vegetation to provide screening; and

e. a program which addresses cut and fill standards, scarring, erosion, and revegetation, to be implemented within the first year.

3. The Golden Gate Fire District should be consulted about locating a fire station at this site.

E. Top of Guy Hill

1. This mountain community center could be a convenience center, with a minimum of 25% open space.

2. Development of this center could include offices, community facilities, convenience shopping, and appropriate services which will be used by area residents.

3. The types of community and commercial activity considered desirable include: convenience store, non-drive through facilities, craft suppliers, studios, medical and veterinary offices, other professional services offices, etc.

Implementation Strategy

1. Representatives from the community, the Jefferson County Public Works Division, Health, Planning, and Open Space Departments, Regional Transportation District, and other appropriate agencies should be consulted about proposals for this center's development.

2. The objectives of the site plan should be to:

a. improve the quality and extent of services available,

b. provide pedestrian/equestrian and bicycle access from adjacent residential areas,

c. provide safe traffic access and adequate parking capacity, and

d. provide landscaping and visual impact mitigation.

3. The site plan should include the following elements.

a. An access and parking plan.

b. A landscape plan which identifies the mitigation measures necessary to minimize scarring, revegetate disturbed ground, establish standards for screening, architectural treatment, i.e., colors, materials, heights, and building mass.

Because existing vegetation is sparse in this area, the visual impacts associated with development of this center will require greater attention to the scale and architectural finish of structures.

c. A park-n-ride location with shelter, telephone, and seats.

d. A public travelers rest stop with public restroom facilities to serve the needs of tourists and commuters.

F. Crawford Gulch Road/White Ranch Area

1. This mountain community center should be a convenience center with a minimum of 25% open space.

2. Uses allowed in this center could include convenience retail and cottage industries, e.g., artist studios, craft shops, etc., to serve the need for convenience shopping and services of the nearby residents, tourists and visitors to White Ranch.

3. The site plan should provide for safe access, landscaping and land shaping.

4. Structures should be designed to blend with the existing terrain, i.e., should avoid expanses of unbroken walls and should have an architectural finish compatible with the rural mountain setting.



G. Mountain Community Center Boundary Changes

Changes in mountain community center boundaries should be the exception, not the rule. The following criteria should be considered when mountain community center boundary changes are proposed.

1. The proposed project will meet an unmet community need.
2. The proposed project cannot be accommodated within the mountain community center.
3. Better site design can be achieved.
4. Impacts on surrounding areas can be adequately mitigated.
5. Expansion is contiguous with the mountain community center.
6. The expansion will not result in strip development.
7. Traffic access points are safe and do not result in the proliferation of driveways on the primary access roads.
8. The traffic pattern of the proposed project and existing traffic movements can be integrated within the mountain community center.
9. Additional traffic does not adversely affect the roadway network capacity.
10. The services and facilities required by the proposed project will be available, and the quality of existing services will not be adversely affected.
11. The character of the mountain community center can be maintained and enhanced.
12. The balance of uses within the mountain community center can be maintained.

H. Outside Mountain Community Centers

1. No new retail zoning should be allowed outside of designated mountain community centers except as provided in other policies. Office

and service uses can be located outside of community centers when these uses are at the same scale provided for under "*cottage industry*".

2. When industrial development is proposed which will serve the needs of residents but has visual, noise and other impacts which are not appropriate inside mountain community centers, it may be located outside mountain community centers when impacts associated with these uses can be mitigated. Examples of this type of development: heavy equipment, LP gas facilities.

This type of industrial development may be located outside of mountain community centers only when all of the following criteria are met:

a. traffic will use collector roads with existing Golden Gate Canyon Road and Coal Creek Canyon Road access;

b. a minimum of 80% of the site remains in natural open space;

c. the height of any building does not exceed 35';

d. it is proposed as a Planned Development;

e. the visual resource corridors, specifically the visual foreground, are preserved along roads, especially Golden Gate Canyon, Coal Creek Canyon and Clear Creek Canyon Roads;

f. adverse impacts i.e., air, visual, noise and odor, can be mitigated;

g. traffic will not go through residential communities;

h. it complies with the recommendations in other sections of the Plan; and

i. it complies with the *Mountain Site Design Criteria* section.

3. Cottage industry should be allowed when it meets the following criteria for cottage industry in rural areas:

- a.** it is located on or near road junctions, unless the traffic volume is low or can be mitigated;
- b.** it is a Planned Development;
- c.** it has the characteristics of art and craft work, technical and professional support services, and light assembly, repair and manufacture;
- d.** it does not have more than 3 employees;
- e.** it is a limited, low volume retail activity;
- f.** the traffic impacts are similar to residential use;
- g.** the architectural quality and size of buildings is equivalent to residential quality;
- h.** outside storage is very limited and screened, with substantial setbacks from adjacent properties;
- i.** the percent of site coverage does not exceed that of neighboring residential development;
- j.** noise, smoke, glare, fumes, vibration, hazardous and other adverse environmental impacts do not exceed those associated with a residential use.

4. Home occupations under the current County Zoning Resolution are allowed for a limited range of businesses such as professional services, consulting, tutoring, craft work, small repair services, and art studios. While the County does not enforce covenants which may limit or prohibit home occupations, residents are advised to review applicable covenants prior to applying for home occupation status. This Plan endorses a continuation of the home occupation regulations, with amendments that will accomplish the following objectives.

- a. Allow an increase in the permitted number of employees from 1 to 2.
 - b. Require that the residence to be used is the principal residence of the applicant, not a secondary one.
 - c. Provide adequate off-street parking.
 - d. Impose limitations on home occupations allowed on very small residential lots more strictly than on larger lots which can better absorb impacts. Office, Retail, Industrial & Mountain Community Centers
 - e. The use, storage, or production of any hazardous materials, substances, by-products, residue, or wastes should comply with all applicable local, state and federal regulations.
 - f. Prohibit adverse effects from noise, odors, smoke, glare, or vibration beyond that associated with adjacent uses.
- 5.** Churches, schools, bed and breakfasts and group homes should be allowed when:
- a. the architectural quality and size of the building(s), the percent of site coverage and traffic impacts are similar to those of surrounding land uses.
 - b. off-road parking is provided and screened from adjacent properties.

If these land uses are not able to meet the foregoing criteria they should:

- 1) be located inside mountain community centers, or
- 2) meet the resort policies.

Conformance with the appropriate criteria in the *Mountain Site Design Criteria* section should be demonstrated.

6. Resort development: Gambling activity in adjacent Gilpin County could increase the potential for the development of destination resorts which provide recreational and leisure time activities. These land uses should be permitted when the following criteria are met.

- a.** The development is a planned development.
- b.** The development site is 35 acres or larger.
- c.** A minimum of 80% of the site is retained in open space.
- d.** The development is buffered and/or screened from the public access road.
- e.** Private access is provided that meets the requirements of the *Transportation and Public Facilities, Services & Utilities* sections of this Plan.
- f.** The development will have limited impact on the surrounding community.
- g.** The scale of the development is compatible with a rural mountain environment.
- h.** The requirements of County and State regulatory agencies for water and sewage disposal can be met.
- i.** Traffic generated by the resort can be accommodated by the road system.
- j.** Access to public open spaces can be maintained or improved.
- k.** There is minimal external signage.
- l.** The recommendations in other sections of this Plan and the *Mountain Site Design Criteria* can be met.

m. This type of development does not become the predominant land use in the general area.

n. The types of use which could be permitted include campsites, cabins, RV parking, lodges, hotels, apartments, condominiums, restaurants, or any combination thereof.

o. Onsite commercial activity should be directly associated with the resort, ancillary to the development, of a scale compatible with the development and the rural mountain environment.

I. Development Outside of the Study Area

1. Mixed use development proposed in the City of Golden at the intersection south of State Highway 93 and Golden Gate Canyon Road will provide many benefits to the Golden Gate Canyon Road and Clear Creek corridor residents and minimize the impacts on the mountain community. The uses planned for this center include: motel, restaurant, offices, retail establishment, RTD transfer location, and public traveler's rest area.

This type of development at this location would benefit the study area by:

a. reducing the distance and time of commuting;

b. reducing the pressure on the study area to accommodate such intense development; and

c. improving access to goods and services for area residents.

OPEN SPACE, TRAILS & RECREATION

Public and private undeveloped land is essential to maintaining the mountain community character. The large amounts of natural, undeveloped open lands are integral to the character of much of the North Mountains area.

Most of this undeveloped land is privately owned and could be developed. The maintenance of the area's character depends on having key open spaces between developments. In addition, privately owned open space can be used to enhance the community's cultural, historical, agricultural and ranching heritage, which is an important land use and amenity in the community.

Much of the study area is within a sensitive and valuable environmental zone. The area lies between the highland wilderness of Colorado's Continental Divide and the urbanization along the Front Range. These lands are an important source of food and shelter for numerous wildlife and plant species and are a valuable source of pride and community identity for residents.

Securing the land necessary to keep the "*open feeling*" characteristic of Jefferson County's North Mountains area will require increased coordination among public agencies and private citizens. This could require the creation of new forums, management agreements, or other mechanisms. In addition to enhancing the quality of life, the specific benefits that could accrue from these cooperative arrangements include, but are not limited to:

- * keeping a significant amount of natural open space;
- * protecting important wildlife habitats;



- * dispersing recreational opportunities throughout the study area;
- * protecting view corridors and visual amenities;
- * contributing to the creation of an open land separation between developments;
- * maintaining the agricultural and ranching heritage of the community;
- * reducing the threat of danger to life and property by avoiding development in natural hazard areas; and
- * encouraging appreciation of, and knowledge about, the area's natural environment.

Agriculture/ranching, although it is a declining activity, is supported as an important land use and amenity of the community.

There are no incentives in the present system of land use controls and tax assessment policies for owners of larger, privately-owned, undeveloped lands to maintain them as private open space. The State's requirement of annual verification of agricultural use, to qualify for agricultural tax status, and other restrictive rules regarding tax assessments, makes it difficult to maintain large land holdings.

GOAL

Maintain the open character of the North Mountains as development occurs, and protect ecologically sensitive areas. Connect all parts of the area through a network of public and private open space, trail corridors and active and passive recreation areas.

OBJECTIVES

1. Keep a significant amount of natural open space.
2. Protect important wildlife habitats.
3. Protect unique plant species.

4. Disperse recreational opportunities throughout the study area.
5. Protect view corridors and visual amenities.
6. Contribute to the creation of an open land separation between developments.
7. Provide open land or park experiences within future developments.
8. Maintain the agricultural and ranching heritage of the community.
9. Reduce the threat of danger to life and property by avoiding development in natural hazard areas.
10. Encourage appreciation of, and knowledge about, the area's natural environment.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to open space, trails and recreation should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. General

1. The Jefferson County Open Space acquisitions should include land purchases which target scenic corridors and key parcels of undeveloped land which will contribute to the open character and significant natural features in the North Mountains.

2. The North Jeffco Recreation and Park District and the Jefferson County Open Space Department own public open space in the North Mountains area. There should be improved communication among the

agencies, the school district, and private organizations responsible for buying and managing public land in the North Mountains. Improved communication among these groups could result in more efficient management of public lands and a higher level of use. Coordination among these public entities, their regional counterparts, and the County Planning Department should facilitate more effective siting of private open space to:

a. secure access easements across private property to public land;

b. encourage dedication of private land by providing information about incentive programs; and

c. suggest, where appropriate, that the open space within a development be located to augment adjacent public land.

3. Active and passive recreational sites should be located throughout the study area to diffuse the impact of growth on any one area. These recreational areas could be located to create greenbelt separations that would help preserve the uniqueness of this area.

4. The acquisition of undeveloped land for public benefit should be related to the following planning objectives:

a. Maintenance of important visual resources;

b. Maintenance of open spaces between developments;

c. Provision of needed recreational opportunities;

d. Protection of significant wildlife habitats and wildlife corridors;

e. Protection of areas subject to significant natural hazards, e.g., floodplains;

f. Protection of areas having cultural and historical significance;

- g.** Provision of a connecting trail system;
- h.** Retention of unique or relict flora, i.e., tallgrass prairie, sites with rare and endangered plants, and sites with high quality riparian vegetation;
- i.** Protection of ecologically sensitive areas;
- j.** Control of soil erosion; and
- k.** Protection and conservation of vegetation.

While these areas are desirable as open space, development should not be precluded if sensitive site planning accommodates these concerns.

5. When communities which are not served by a recreation/park district want to provide recreation and community facilities, and formation of a district is not feasible, the County should assist them with design, construction, and funding. Park fees dedicated by development in the area would be one source of funding. The Jefferson County Open Space Department would be another resource for communities. The Douglas Mountain/Robinson Hill Road community is one example of an area where residents have expressed an interest in providing some multiple-use paths, playing fields, and other small-scale community facilities.

6. Plantings in dedicated and designated open space areas should be native or naturalized species.

B. Public Open Space

1. As much open space as possible should be secured in the North Mountains area before additional development occurs.

2. Access to public land should be assured when sensitive wildlife habitats, fragile terrain and unique vegetation are not threatened.

C. Private Undeveloped Land

1. The existing State statutes should be revised to favor stewardship of the land rather than development of the land.

D. Designated Undeveloped Private Land

1. Designated private open space should be protected, and its creation should be encouraged to safeguard the rural character, to maintain visual and scenic quality, to protect wildlife habitat, to buffer existing and future development, and to provide open land or park experiences within future development.

2. Designated private open space should be used to provide a link to the community's cultural and historic ranching heritage.

3. Designated privately-owned parcels with natural or cultural significance should be protected. One or more of the implementation techniques listed later in this section could be used.

E. Trails Network

1. An improved trails network should be developed that provides additional trails for hiking, biking and equestrian use, and other nonmotorized trail activities. These trails should:

a. vary in length, ascent and nature experience;

b. link areas within the North Mountains, and link the North Mountains area with adjacent communities and counties;

c. traverse diverse landscape;

d. access views and vistas;

e. intersect to allow the traveler a choice of paths to a destination; and

f. avoid damaging or impairing areas containing endangered species or fragile environments.

2. Incentives should be offered to developers to link private trails to the public trail system or to provide public trail access through their property to link the whole system.

3. Accessible trails should be provided for all citizens, including barrier-free trails where possible, recognizing that trail users have different levels of ability and seek different levels of challenge.

4. Public land should be made more accessible when wildlife habitats and fragile natural environments can be protected.

5. Trail corridors should be negotiated which utilize floodplains, public rights-of-way, utility rights-of-way, leased private property, parks, and public open space.

6. Liability releases for private landowners should be made available to remove this obstacle to the creation of public trails across private land.

7. Areas of intensive development should have trail connections to areas of natural open space. Safe crossings of major roads and railroads should be provided.

8. Jefferson County Open Space Department should work with other organizations with similar responsibilities to fund trail corridors to connect public open space parcels.

9. Equestrian and jogging trails should be unpaved and marked, and where appropriate, tunnels should be considered.

10. Trails should be separated and buffered with landscaping from streets and roads when possible.

11. Carefully planned and developed parking areas should be provided at trail heads to facilitate trail usage.

12. Appropriate public facilities, i.e., restrooms and telephones, should be provided at major trail intersections and significant open space sites.

13. Maintenance of open space, recreational areas and trails should be provided by the entity responsible.

14. Three types of trails should be provided: neighborhood trails within the North Mountains community, County trails that extend into adjacent communities, and regional trails that extend beyond the County boundary.

15. During land use review, those portions of trails identified in state and county trails plans should be identified and proposed for acquisition by the appropriate agency.

The *Open Space, Public Lands, Trails & Recreation* map shows the major trail corridors, existing and proposed, for the North Mountains area(see maps).

F. Recreation

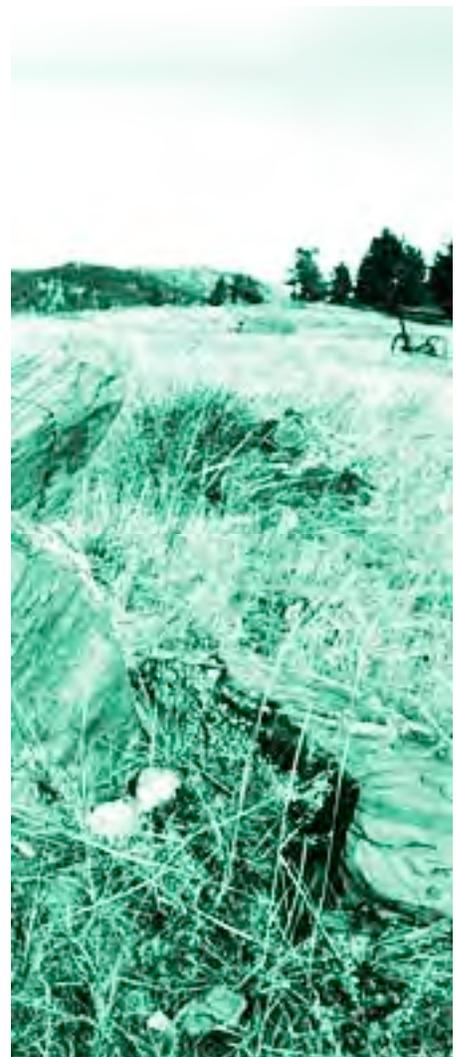
General

1. As future growth occurs, the need for additional passive and active recreational areas should be met.

2. Recreational uses should be targeted to the needs of community residents.

Active Recreation

1. Active recreational facilities should be provided as demand increases. These facilities should include, but not be limited to:



multiple-use playing fields for volleyball, softball, soccer, football, and other sports and recreational facilities such as swimming pools, shooting ranges, and recreational centers. A park and/or recreation district can be formed when the community votes to do so.

2. School recreational facilities, especially playgrounds and multi-use fields, should be available for community use to reduce the pressure for the development of additional recreational areas.

G. Coordination

1. The public entities responsible for open space, parks, or trails should continue to communicate regularly through an established formal system of coordination to plan, protect and manage lands under their jurisdictions.

These public entities should cooperate to develop a trails plan for the North Mountains and adjacent areas.

2. Trails planning by the County, communities and cities should be coordinated with the State Recreational Trails Plan and landowners.

3. Incentives should be offered to developers for linking private trails to the public trail system, or for providing public trail access through their property and to school sites.

4. Public and private entities should coordinate in providing for trails and public access as part of the acquisition, development, and improvement of: floodplains and flood-control projects; pipelines, powerlines and other utility corridors; ditches, roads, freeways, rapid transit and other transportation projects.

5. Security in parks should be increased. Coordination among law enforcement agencies should be considered to improve the cost effectiveness of this protection.

H. Acquisition

1. New acquisitions of undeveloped land should continue. Examples of acquisition strategies:

- a. Public acquisition to safeguard undeveloped land, including acquisition subject to life or term estates;
- b. Creation of private trusts to purchase land, easements, or development rights;
- c. Private donation of land to Jefferson County Open Space Department, city agencies or special districts, private trusts or State parks;
- d. Corporate donations of land;
- e. Purchase and sellback of land with restrictions, using Open Space funds to purchase properties which are then sold to another owner with restrictions, e.g., minus the development rights;
- f. Lease agreements for undeveloped land;
- g. Recreation districts should be encouraged to take land in-lieu-of fees when subdivisions of 30 or more acres are proposed; and
- h. Dedication of natural open space in-lieu-of park and recreation land or fees should be encouraged, where appropriate.

I. Mountain Site Design Criteria

1. Applicable criteria in the *Mountain Site Design Criteria* section should be used in siting, designing and developing passive and active recreation areas and facilities.

2. Trails:

- * A variety of trail systems should be provided with appropriate fencing and signage to minimize trespassing.
- * Looped trail systems should be provided for short day hikes. These should have multiple access points to minimize trespassing.
- * Longer, more strenuous trail systems with limited access should be available.
- * The trails should come together at strategic points to allow travelers a number of choices to reach a desired location.
- * Areas containing endangered species or fragile environments should be avoided.
- * Intersections between paths should be defined with a good visual warning of an intersection as it is approached.
- * Trails should take advantage of the diversity of the landscape through which the trails pass. As the landscape changes, its dominant features should be clearly seen from the paths, i.e., good observation points for views and vistas that feature landmarks.
- * Bicycle paths should be designed for safety and clearly marked. Three ideas related to bicycle facilities are: a) Provide safe roadways, paved shoulders. b) Provide off-road paths for multiple users. c) Utilize road and transportation rights-of-way, e.g., the railroad bed in Clear Creek Canyon.
- * A trail should connect Clear Creek to the Beaver Brook Trail.

PREHISTORICAL, HISTORICAL & ARCHAEOLOGICAL RESOURCES

The North Mountains area of Jefferson County is rich in prehistorical, historical and archaeological resources which provide links to the past, chronicle change, and mark growth. They are often fragile, limited and nonrenewable, and their destruction would be an irreversible loss to the community. As development occurs, a way should be found to maintain the integrity of these resources.

Historic sites, structures, roads, trails, and railways can be found in this area. These historic resources are valued by residents, tourists, historians, governments, geologists, and archaeologists. They can be preserved through identification, classification and protective regulations.

Structures of local, state or national significance are often associated with notable events or individuals, are works of master architects and builders, have a unique style typical of the locale or are of a style disappearing from the area, or reveal important information.

The Colorado State Archaeologist has responsibility for archaeological resources of both the prehistoric and historic eras. Examples of these resources include places of human occupation, work areas, areas where evidence of economic practices is found, burial or other funeral remains, aboriginal artifacts, structures dating from prehistoric periods, and paleontological specimens.



The opportunity to preserve and, when appropriate, to excavate archaeological sites properly is important and ensures a continuing link to information about this area's past inhabitants and geological condition.

Cooperation among residents, agencies and governments will be needed to preserve important prehistorical, historical and archaeological resources because most of this area has not been surveyed, nor has the information been recorded by state agencies.

GOAL

Preserve, maintain and protect prehistoric, historic and archaeological sites which are significant links to the community's past, present and future.

OBJECTIVES

1. Prevent damage and enhance prehistorical, historical and archaeological resources.
2. Ensure that development is harmonious with the character of the prehistorical, historical and archaeological sites.
3. Ensure that prehistorical, historical and archaeological resources are preserved to further the education and enrich the environment for present and future residents.

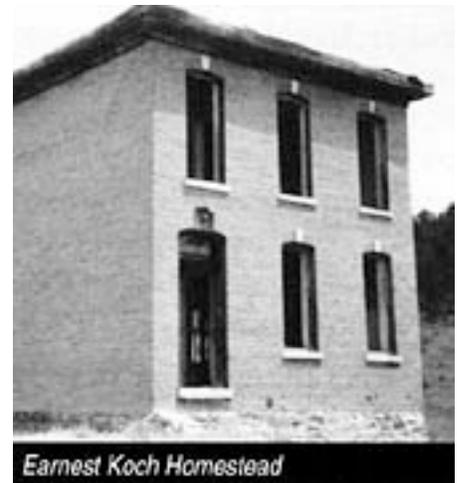
POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to prehistorical, historical and archaeological resources should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. Survey and Inventory

1. A survey should be undertaken by the community, the County and state agencies as a cooperative effort to identify the prehistorical, historical and archaeological resources in the North Mountains area of Jefferson County. Upon completion of the inventory, the resources should be assessed to determine which structures and sites are important to preserve.



2. The appropriate agencies and organizations which should be contacted to assist in this work include: Jefferson County Historical Commission, Jefferson County Historical Society, Colorado Historical Society, State Archaeologist, Colorado Archaeological Society, National Park Service, local museums and citizens.

3. Monument-style markers showing maps of the historical trails, sites and structures in the area should be placed in appropriate locations where room for automobile parking can be provided safely and aesthetically, e.g., safe pull-off access and without ugly cuts into the sidewalls of the canyons. Examples of these locations include, but should not be limited to, Golden Gate, Coal Creek and Clear Creek Canyon Roads.

4. To identify and preserve archaeological sites and artifacts, additional resources will be needed to supplement the state's work. With professional supervision, trained volunteers should be encouraged to identify and assess the importance of archaeological sites in the North Mountains area to compile a more complete listing of these sites.

5. The appropriate historical and archaeological organizations, school children and interested citizens should be encouraged to cooperate in identifying funding sources, volunteers and other resources to survey and identify these prehistorical, historical and archaeological resources

which are important parts of the heritage of the North Mountains community.

6. Professional cultural resource inventories should be encouraged in advance of specific development projects.

7. The information compiled in conjunction with the development of the Community Plan for the North Mountains area could be used as the basis for an expanded compendium of prehistorical, historical and archaeological information for the area.

The *Appendix* has a list of the groups known to have an interest or mandate to protect prehistorical, historical and archaeological resources.

B. Preservation

1. Land uses should be allowed which preserve and maintain prehistorical and historical resources. If necessary and appropriate, these resources should be relocated to suitable sites for preservation, and recorded completely prior to relocation.

2. Development proposals should integrate historically significant structures or sites into site design and development plans to maintain and complement the unique features of the historical resource, preserve all relevant aspects of the setting and prevent any destruction or deterioration of the resource.

3. Innovative techniques, e.g., public and private purchase, tax incentives and conservation zoning, etc., should be explored to preserve prehistorical, historical and archaeological resources.



4. The Jefferson County Open Space Advisory Committee should be encouraged to consider acquisition of prehistorical, historical and archaeological resources.

C. Archaeological Resource Protection

1. When new development is proposed, the *Historic* map adopted as part of this Plan should be reviewed to determine the presence of historical sites and structures, and the development proposal should be referred to the appropriate organizations and state agencies for review and comment (see maps). Any site specific information related to archaeological resources should be secured and restricted.

2. Archaeological resources should be protected through the preservation of land or the proper excavation of artifacts and site documentation before development occurs.

3. Development proposals should be referred to appropriate agencies/organizations for assessment of potential archaeological finds. When it is recommended by referral agencies/organizations, developers should be encouraged to have at least a sample survey done of the site to assess the nature and significance of archaeological finds.

4. Development proposals should preserve the archaeological resource areas or complete the required excavation and documentation specified by the office of the State archaeologist before development begins. See *Appendix* for additional information.

5. An incentive program should be considered by the group formed to expand awareness of the heritage of the North Mountains area. It should encourage people to report archaeological finds, while respecting public and private ownership. Examples include: projectile points, e.g., arrowheads, pottery shards, etc., and the locations where they are found. Both prehistoric and historic artifacts should be left in place and documented.

PUBLIC FACILITIES, SERVICES & UTILITIES

The perception of the quality of life in a community depends, in part, on the quality of the schools, fire, sheriff and emergency services, and utilities. At the same time, the North Mountains area has a unique mountain character that should be preserved. Therefore, these services should be compatible with this mountain environment and should not be expected to duplicate the level of service found in urban areas. For these reasons, the impact of land development on the quality of services should be managed with care to ensure that the provision of public services is consistent, reliable and adequate for the development it serves, and appropriate for the North Mountains area.

GOAL

Assure that adequate public services are provided to support the land use recommendations for the North Mountains area.

OBJECTIVES

1. Construct community/service facilities appropriate in scale, design, etc. for this mountain community.
2. Ensure that all areas in the North Mountains are served by public fire protection providers.
3. Minimize risk of fire damage and loss.
4. Allow all group homes which are compatible with the services and constraints of this mountain area.
5. Ensure adequate, consistent, reliable public services.
6. Maximize shared use of community/service facilities.

7. Expand information programs on fire dangers.
8. Improve intergovernmental, interdistrict cooperation for fire, law enforcement, emergency/disaster, and school services.
9. Expand law enforcement in public land areas.
10. Avoid overcrowded school programs.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to public facilities, services and utilities should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. Service Facilities

1. The scale and siting of new service facilities should be appropriate for this mountainous area and should be in compliance with other policies in this Plan, including the *Mountain Site Design Criteria* section.
2. New service facilities should be sited and located in compliance with the *North Mountains Community Plan* policies including criteria in the *Mountain Site Design Criteria* section.
3. Applicants are encouraged to involve community representatives in the location and design of new and expanded service facilities.
4. Adaptive reuse and shared use of existing structures and facilities should be considered before new facilities are constructed.

B. Community Facilities

Additional community facilities which serve area residents should be considered when the demand and community support for them exists.

- 1.** New facilities should be designed to complement the mountain environment in scale, building materials, and architecture. Separate and distinct facilities and activities should be close to each other to create true community centers, i.e., youth centers, senior resource centers, and libraries.
- 2.** The demand for community facilities, e.g., libraries and community centers, increases as an area grows. When the need for these facilities has been determined by the residents in the North Mountains area, the location should be selected in accord with the Community Plan recommendations and community representatives.
- 3.** Shared use of community facilities should be explored by community organizations. This would minimize the need for new structures.

C. Fire Protection

The conditions relevant to fire protection are the location of wildfire hazards, road network, proximity of fire stations to development, training of personnel, the type of equipment, and availability of water. It should be recognized that fire protection and rescue services are provided by volunteer personnel in this community.

- 1.** The potential for damage and loss from fire should be reduced and fire protection and/or wildfire mitigation measures should be provided to all development in the North Mountains area.
- 2.** All areas of the community and all development should be served by a fire protection provider.
- 3.** Fire protection service for the community should be maintained or improved as new development occurs. New development should pay for

service in proportion to its needs when those needs exceed the capacity of the district, i.e., buildings, equipment and training.

4. New development, including exemptions from platting, should be required to provide an adequate onsite water supply for fire fighting purposes, as required by the fire district of jurisdiction, prior to the issuance of a building permit.

5. Fire protection providers should continue to review development proposals and exemptions referred to them by the Jefferson County Planning Department prior to approval of new development and exemptions. This review should include an assessment of the:

- a.** adequacy of the proposed water supply and water storage facilities;
- b.** accessibility, external and internal, to the site for emergency vehicles;
- c.** capacity of the personnel and equipment to serve the development; and
- d.** developer's fire reduction program when the site has a wildfire hazard. The "Wildfire" section in the *Hazards* section of this Plan has more specific recommendations.

6. All public thoroughfares, access roads, and driveways should be designed to meet fire district equipment access requirements.

7. Fire district master plans should be considered as an Addendum to this Community Plan as they are developed. The fire districts should be encouraged to include in the master plans, a capital improvements and training budget, map of the district, etc.

8. Intergovernmental and interdistrict agreements on joint responsibility for outlying areas should be adopted to ensure that response time is as short as possible.

9. Consolidation of fire districts should be explored to maximize fire protection capabilities.

10. Employment centers in the North Mountains should cooperate with local fire districts to support fire protection service. Example: water storage, employee release time as fire volunteers, etc.

11. Installation of sprinkler systems should be encouraged in new development, residential and commercial, when there is adequate water supply and pressure. The districts and insurers should consider incentive programs for the installation of sprinkler systems. When sufficient water pressure is not present, then a modified sprinkler system which protects exit paths should be considered.

12. The Jefferson County Building Department should add to the adopted Uniform Building Code, a classification for residential sprinklers in the mountains.

13. The fire districts, in cooperation with the Jefferson County Planning Department and the Colorado State Forest Service, should identify, map, and maintain current maps of wildfire hazard areas within their district.

14. The fire districts, in cooperation with community representatives, should identify locations and funding to secure large water storage facilities for fire fighting in the North Mountains area.

15. Street addresses should be prominently displayed near the road, preferably in three inch or larger numerals made of reflective material.

16. Local fire departments should apply consistent and reasonable standards in issuing prescribed permits for burning slash, which is a wildfire hazard. These standards should apply to all applicants, whether they are public agencies or private individuals.

17. Prescribed burning should comply with health regulations regarding air quality and fire regulations regarding public safety and welfare.

18. There should be stricter adherence to the regulations governing outdoor burning. This will require information/education, monitoring and enforcement. See the *Hazards* section for additional information.

19. The fire districts and the Jefferson County Fire Council should undertake informational and educational programs to tell the public about fire prevention techniques and fire protection limitations in the mountain environment.

20. Publicly-owned lands in mountain areas should contribute financially to support the fire district of jurisdiction.

21. Area fire departments should make their standards and requirements consistent, to the maximum extent possible.

D. Emergency and Disaster Services

Providing emergency medical and disaster services in the North Mountains area could become harder as growth and development occur. County and interdistrict coordination and cooperation could become essential to meet the needs of residents in this community.

1. Emergency service levels should be maintained and improved as new growth and development occurs.

2. Expanded funding sources, intergovernmental service agreements, equipment and training should be sought to meet the increased demands associated with new growth and development.

3. Emergency service providers should map the site and number of incidents, to inform the community of dangerous traffic accident locations.

E. Sheriff Protection

Because property ownerships cross or abut county boundaries, law enforcement in the North Mountains is complex. Intergovernmental agreements could facilitate law enforcement in this area.

1. Community concerns should be addressed, including response time and the need for improved coordination among County and state law enforcement agencies serving the area.
2. Law enforcement services provided by the Jefferson County Sheriff's Department should be maintained and expanded as new growth occurs.
3. Park security should be improved through increased cooperation and coordination among the agencies with the security responsibility, i.e., Jefferson County Sheriff, North Jeffco Recreation District security, U.S. Forest Service, Bureau of Land Management.

F. Schools

Overcrowding, lengthy time and distance commutes for students, and coordination between the community, the Jefferson County R-1 School and Boulder County School Districts are concerns underlying the following policies.

1. Planning for school locations should be coordinated with the *North Mountains Community Plan* to:
 - a. reduce commuting time and distance;
 - b. ensure facility design that is sensitive to the mountain environment;
 - c. ensure facility design that provides for shared use of facilities by the community; and
 - d. provide continued community involvement in decisions on school facilities.

2. Land use solutions to school problems should be considered when new development results in overcrowded schools, or the Jefferson County R-1 District standards cannot be maintained. Such solutions may include, but are not limited to:

- a.** phasing development;
- b.** modifying the project; and
- c.** changing the project phasing.

3. New development should share the cost of providing major capital improvements and new school facilities that would be required because of the growth impact of new development.

4. Jefferson County R-1 Schools and Jefferson County should continue to monitor growth, the impacts of development proposals on school facilities, and seek alternatives to the overcrowding of schools.

G. Group Homes

Group homes can be appropriate in the North Mountains when the necessary support services are available, e.g., transportation, medical, and police and fire protection services, etc.

1. Applicants and operators of group homes should be knowledgeable about the unique problems and opportunities associated with mountain living. The adequacy of support services to meet the special needs of group home residents should be carefully considered.

H. Utilities

The North Mountains area is served by Public Service Company of Colorado and United Power, Inc. Adequate and timely provision of services by these organizations will be essential for growth.

1. Utility service providers should review rezoning and exemption proposals prior to approval to ensure the availability of an adequate and timely level of services.
2. Utility facilities should be planned and designed in conformance with the *North Mountains Community Plan* policies, including criteria in the *Mountain Site Design Criteria* section.
3. The utilities serving the area should work with residents of the community in site selection and design of facilities.

TRANSPORTATION

Maintaining the mountain community character of the North Mountains area is a primary concern of residents.

While the existing limited road network in the North Mountains area serves the present needs of residents and commuters, traffic from future development could exceed acceptable levels of service (*LOS*) on the roads. The topography of Golden Gate, Coal Creek, and Clear Creek Canyons could significantly constrain expansion of these roads because of the prohibitive cost and unacceptable visual impact. Golden Gate Canyon, Coal Creek Canyon and Clear Creek Canyon Roads are weekday commuter routes for local and neighboring county residents, as well as routes for tourists.

A limited feeder road network funnels area residents onto these three roads. Additional traffic generated by future development could confront the state, the county and the community with hard choices:



1. Expand the canyon roads, which would be an expensive and visually impactful option, given the narrow canyon, steep cliffs and adjacent creeks.
2. Accept a lower service level and increased travel times.
3. Adopt and create incentive programs which foster home occupations, cottage industry and neighborhood commercial development.
4. Provide alternatives, e.g., ride-share programs and public and/or private bus, van and rail transit.
5. Make safety improvements, e.g., climbing lanes, shoulder improvements, etc.

While these choices are not imminent, they could occur in the coming years. The competing needs of local residents and travelers through the community should be resolved in a way that preserves the visual amenities and the integrity of the mountain community.

GOAL

Safeguard scenic corridors and the mountain community character, and provide a safe transportation system that satisfies the demands of local residents and travelers through the community. This system should provide local road links that foster a sense of community and the facilities and programs needed to support alternatives to single occupancy vehicle travel, i.e., pedestrian, equestrian and bicycle paths, park-n-ride locations, and increased ride-sharing opportunities.

OBJECTIVES

1. Preserve the scenic qualities of the mountain road system.
2. Balance the transportation system with development.

3. Provide the transportation facilities needed for safe travel.
4. Adopt a schedule of improvements and identify the funding sources to ensure that needed infrastructure is available to support future development.
5. Coordinate planning and design of road improvements with the community and appropriate agencies and special districts.
6. Use maintenance techniques which improve air quality and safety, and reduce damage to vegetation.
7. Promote alternative modes of travel through education, and by providing mass transportation services which are reliable and convenient to use.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to transportation should be followed.

Red text identifies policies which can be applied in the land use review processes.

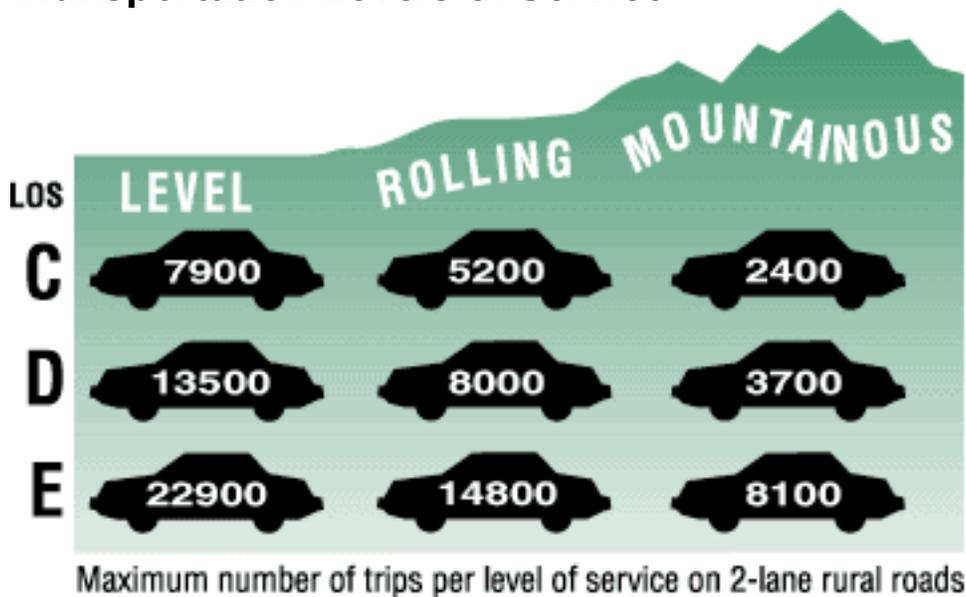
A. General

1. The North Mountains area community, and school and fire districts, should be included in the planning and implementation of transportation improvements from the beginning of the process.
2. Physical improvements should be made in ways that are sensitive to the community and protect the visual amenities along the roadway corridors.

3. High traffic generators, i.e., higher density housing, retail, office and industrial land use, should be located near mountain arterial and collector roads.

4. The design and maintenance of the North Mountains road network should recognize the traffic generated in neighboring counties, especially Gilpin and Clear Creek.

Transportation Levels of Service



From Table 8-10, p. 8-14, “Highway Capacity Manual”, Special Report 209, Transportation Research Board, Washington, D.C., 1985.

5. Roads should be limited to two through lanes with appropriate turning, acceleration and deceleration lanes, climbing lanes and other safety improvements. Given these system constraints, the Plan fully recognizes that during certain times of the day a lower level of service may occur on some area road segments which will result in more congested roadways. Some additional congestion is preferred over major roadway widening.

6. The Plan accepts LOS D during peak travel times and recommends that when LOS D extends into nonpeak travel times (*given current road and laneage configuration*) the County should implement road

improvements, see #5 above, to ensure that appropriate improvements are accomplished to avoid a LOS below D.

This recommendation is intended to ensure that a level of service lower than D during off peak travel times does not become the norm by default, and that road improvements are made concurrently with new development to avoid a LOS lower than D as long as possible. When it becomes apparent that all appropriate road improvements have been made and continued buildout of the Plan will result in LOS E during nonpeak travel times, the County and the community should work together to resolve the problems.

The community and the Jefferson County Department of Highways and Transportation consider LOS C to be desirable as a standard for mountain roads. However, the Jefferson County Highway and Transportation Department accepts LOS D for mountain roads during nonpeak travel times, and 20% into LOS E during peak travel times.

7. At the time of rezoning, developers of new projects should provide studies which demonstrate that the road system can accommodate the traffic generated by the proposed development and comply with the level of service recommended in the Plan, or show how the roads can be improved to accommodate the traffic generated by their project and comply with the Plan's LOS recommendations. These studies should assess the capacity of the existing roads, the County Major Thoroughfare Plan plus capacity increments which would accrue from road improvements proposed by the County, and the potential traffic which would be generated by buildout of the *North Mountains Community Plan* recommendations.



The intent of this recommendation is to provide the transportation impact data necessary to make informed land use decisions in accord with the *North Mountains Community Plan* recommendations.

8. The County should establish a procedure which would facilitate the sharing of responsibility for providing improvements, necessitated by their developments, in proportion to the traffic impacts of projects on the community's road system. Requiring road improvements or assessing an equitable impact fee are two techniques which could be used.

9. Road improvements should not be made when the public costs for the improvements would exceed the potential public benefits derived.

10. New developments which require rezoning within the planning area should be phased when the traffic generated would result in a LOS lower than E on existing road segments within the North Mountains area. An exception should be allowed when agreements exist that commit public, private or combined public and private money to fund future road improvements which would result in acceptable levels of service, would satisfy environmental concerns, and would be constructed within 5 years. A description of Levels of Service (LOS) appears in the *Appendix*.

11. To reduce accidents and to eliminate existing hazards, the state and county should make road improvements such as:

- * Traffic signals including turn indicators
- * Passing lanes
- * Paving
- * Shoulder upgrading
- * Intersection realignments
- * Line-of-sight obstacle removal
- * Guard rails
- * Acceleration, deceleration and turning lanes
- * Multiple-use paths for nonmotorized travel
- * Pedestrian crosswalks
- * Living snow fences

- * Embedded reflectors along centerline

Specific road improvements needed include:

- * Intersection of Golden Gate Canyon Road and S.H. 93 and the Golden Bypass, especially for left turn westbound traffic
- * Guard rails on Douglas Mountain Road and at Butcher's Turn on Coal Creek Canyon Road
- * S.H. 72 at Copperdale Lane, at Ranch Elsie Road, at Twin Spruce Road and Skyline Road

12. A bicycle plan should be developed for Coal Creek, Golden Gate and Clear Creek Canyon Roads to improve safety for bicyclists and motorists.

13. The County should continue to consider road capacity and transportation standards when making land use decisions, and should apply density or phasing restrictions equitably to developments when the traffic generation would result in a level of service lower than LOS E on the road network.

14. Road improvements and right-of-way dedications by developers should include sufficient width to accommodate multiple-use paths, where appropriate. Maintenance and liability coverage agreements for these paths should be secured.

15. Increased cooperation among the park and recreation districts, Jefferson County Open Space and Highways and Transportation Departments, the Colorado Department of Transportation and the Golden and Arvada Public Works Departments should be pursued to ensure that the multiple- use paths can become



dedicated rights-of-way under the jurisdiction of one of the aforementioned entities.

16. Sand should be removed from paved roads as quickly as possible to reduce vehicle damage, air pollution, vegetation damage, and to improve safety and aesthetics.

17. All dirt roads carrying 200 ADT or greater should be paved to reduce dust pollution and to comply with EPA standards. This should include roads on public lands. As an alternative to pavement, the County should continue to experiment with environmentally sensitive dust suppressant materials.

See additional recommendations in the *Air, Odor & Noise* section of this Plan.

18. Public transportation should be encouraged as a viable alternative to private vehicle travel. It can reduce the number of vehicles using the roads and, in effect, extend the capacity of the roads for a longer period of time, as well as reduce the amount of air pollution. For these reasons, the following actions should be encouraged:

a. Public transit service should be encouraged to serve the travel needs of the community's residents.

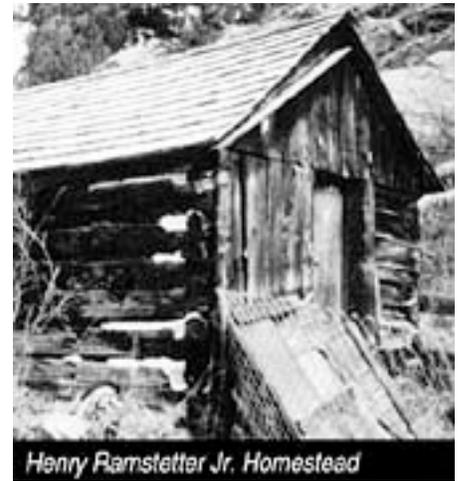
b. Park-n-ride sites should be provided as demand increases.

c. Commuter rapid transit should be provided when the ridership demand exists, and feeder bus routes should be established to serve rapid transit stations.

19. Public telephones and restroom facilities should be provided at park-n-ride sites and commuter rail stations when there is sufficient demand.

20. The County should support transportation alternatives to reduce the impact of commuter travel which include, but are not limited to, the following:

- a. Flexible work days and variable work hours to extend the peak travel hours;
- b. Increased use of car and van pools; and
- c. Multiple purpose paths which connect residential areas with local neighborhood commercial areas and community facilities.



Henry Ramstetter Jr. Homestead

21. Vegetation along roads and in medians should be provided. Native species and naturalized grasses and wildflowers which are drought-tolerant should be used.

22. The County, the state and cities should coordinate their work to achieve consistency of road surfaces, paved and unpaved, on roads that cross jurisdictional boundaries, and to develop compatible design standards, e.g., right-of-way widths, turn lane queues, and multijurisdictional intersections.

23. Coordination among the County, the cities and the communities should be instituted to plan and provide transportation improvements to avoid the adverse impacts of increased traffic from new development on the road system in the North Plains and North Mountains areas, and to resolve transportation concerns raised by annexations and roads which cross jurisdictional boundaries.

24. A comprehensive transportation study should be done for the northern area of Jefferson County, which would identify specific transportation improvements and funding arrangements which may be necessary to accommodate the travel demands generated by the land use proposed for the North Plains and North Mountains areas.

This study should be a cooperative effort of the municipalities, communities, state and Jefferson County, and should consider the principal transportation facilities in the incorporated and unincorporated areas.

Examples of the strategies to be considered are:

- * expanded laneage or key facilities;
- * urban interchanges at key arterial intersections;
- * significantly expanded transit; and
- * a trip generation element associated with employment uses.

25. Upon completion of the above transportation study, the North Plains and North Mountains community plans should be reviewed to determine the compatibility of these community plans with the transportation study.

26. A revised thoroughfare plan should be prepared for the North Mountains area, with a significant amount of community and bicyclist involvement. Following are topics which should be included in this study.

- * Identify needed safety and capacity improvements and establish a timetable for these improvements.
- * A Capital Improvement Program (*CIP*) should be completed for the study area, which outlines new construction and safety improvements by priority, with estimated costs, and funding methodology which allocates costs equitably among all who will benefit.
- * Integrate alternative modes of travel into the overall transportation system, e.g., multi-use trails.
- * Identify park-n-ride sites.



27. Communication and coordination between Colorado Department of Transportation and the County should be enhanced, especially to provide for bicycle facilities and signage on and along canyon roads.

28. The County and the community should actively participate in the Regional Transportation District's planning programs to upgrade public transit service as needs change.

29. The Jefferson County Land Development Regulation should be amended to allow more flexible construction standards for mountain roads which are more sensitive to the environment and yet are safe and functional. On a case-by-case basis, private roads within developments should be allowed to deviate from County standards, provided Jefferson County Public Works Department's and fire district's objectives for access, maintenance and safety can be met.

30. The County should work with affected property owners to acquire the necessary right-of-way on heavily traveled roads which are not maintained because of the lack of right-of-way.

31. Where private roads are maintained by the County through prescriptive right, the County should continue to work with the owner to clarify the survey and legal description, then reduce the property tax obligation on the portion of the property used as a public road, usually done through a quit claim deed.

32. The County should continue to evaluate its salt and sanding program to minimize the damage to trees and other forms of vegetation caused by the salt and to minimize the fugitive dust air pollution caused by the sand.

33. The County maintenance facility on Coal Creek Canyon Road should be substantially landscaped to minimize visual impact. Improvements to this site should be identified when an Action Plan for this area is developed.

34. The Colorado Department of Transportation, in designing the intersection of S.H. 93, Golden Gate Canyon Road and the Golden Bypass should provide for safe left turning movements westbound on Golden Gate Canyon Road.

B. Financing

1. The County is encouraged to undertake a financial analysis to determine if additional road monies are required to augment Federal, State and County road funds. Such a financing program should include a consideration of impact fees, property taxes, improvement districts, payback agreements, toll roads, and sales taxes to spread the cost of improvements equitably among existing and future users. Large and small developers should pay their fair share.

2. Developers should bear a proportionate responsibility for providing improvements, both on and off site, which will be needed to accommodate the traffic generated by new projects.

3. Monies generated for road improvements to mitigate the traffic impacts associated with new development in the North Mountains area should be earmarked for road improvements in the community.

VISUAL RESOURCES

In visually sensitive areas, development should be designed to complement the landscape. Protection of visual open space should be a priority because it is a critical element of the unique character of the rural mountain environment in the North Mountains area. Minimizing visual disruption through sensitive site planning is important because the ecosystem is fragile, vegetation is sparse, and scars on the landscape heal slowly.

Significant visual resources shown on the *Visual Resources* maps (see [maps](#)) and the recommendations in this section and in the *Mountain Site Design Criteria* section should be considered carefully when development proposals are reviewed, starting with rezoning requests.



GOAL

Development should complement the area's visual resources.

OBJECTIVES

1. Ensure the integrity of landscapes which have special visual qualities and are seen frequently by many people.
2. Minimize visual disruption by ensuring that when and if development occurs it makes maximum use of the natural screening capabilities of the landscape.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to visual resources should be followed.

Red text identifies policies which can be applied in the land use review processes.

- 1. When development is proposed, visual resources should be systematically evaluated by considering:**
 - a. Landscape quality including vegetation, water, color, adjacent scenery, landform, scarcity and man-made modifications.**
 - b. Viewer sensitivity, including the number of people viewing the site, proximity of views from major highways, communities and parks, the value of such views held by the public and impact on adjacent landowners.**
 - c. Distance of views.**
- 2. The created environment, existing and future, should visually complement the natural environment. This can be achieved by making sensitive choices regarding site and building design, building heights and materials, landscaping, road cuts, exterior lighting, signage, colors and allowing flexibility in setback requirements. Visual resources can include: meadows, ridges, hillsides, waterways, significant vistas, unique vegetation, historic structures, valleys, and rock outcroppings. The significance of a visual resource should be determined on a site-by-site basis.**
- 3. Where significant visual resources occur, the intensity and site design of development should be compatible with these resources and the appropriate *Mountain Site Design Criteria* should be followed.**

4. Development on ridges should be sensitive to visual resource areas shown on the *Visual Resources* map (see maps) and the appropriate criteria in the *Mountain Site Design Criteria* section should be followed. Examples of the criteria are:

a. Buildings and other structures should be located to avoid a dominant silhouette on the top of the ridge.

b. Maximize the use of existing vegetation and natural landforms wherever possible.

c. Integrate buildings into the site through the use of landscaping, earthwork, or natural materials.

d. Buildings should blend with surrounding environment, not appear monumental.

e. Construct and locate roads in a manner that will blend with the topography and minimize visual disruption of the landscape.

5. In valleys and vistas and around major rock outcroppings, preferred land uses are open space, agriculture and low density residential. When development is proposed in these visual resource areas, it should be compatible with the natural environment.

6. New development should complement historic structures.

7. Scenic corridors, as shown on the *Visual Resources* map (see maps), should have minimal disturbance as follows:

a. Structures should be sited with sensitivity.

b. Access roads should be shared wherever possible to limit the number required to serve development.

c. Grading for roads and structures should be kept to a minimum. Cut and fill slopes should be sensitively designed to blend with the natural

terrain using methods such as revegetation, berming, staining, rocks, etc.

d. Rock outcroppings, unique vegetation or historic structures, meadows, and ridgelines should be conserved.

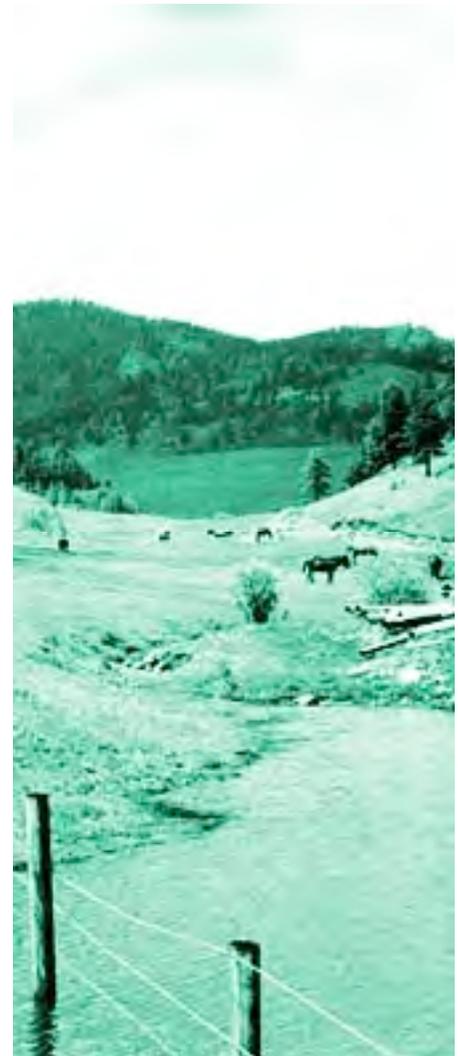
e. The mass, materials, and colors of buildings should complement the natural landscape.

8. Maximum use should be made of a site's capacity to screen development from view. For areas with less than adequate natural landscape screening, the visual diversity and landscape screening of the site should be enhanced. New landscaping should emulate the mass and type of rocks and plants found in the area. Plant material should be drought resistant.

9. Development should be integrated through location, design, color, line, texture and form with the existing natural characteristics of the site.

10. Existing vegetation should be preserved whenever possible. Disturbed areas should be stabilized using techniques such as revegetation with native and/or naturalized plants, berming, boulder placement, landshaping, rock walls, etc.

11. Where appropriate, clustering of development should be considered to minimize visual disturbance resulting from structures and roads. Utility lines should be buried or located and designed so they are not visually obtrusive. If the lines are above ground, they should blend with the background. Communication equipment should be placed where it



is not visually obtrusive, colored to blend with the background and/or screened to mitigate visual impact.

12. A long range plan should be developed to upgrade the appearance of commercial development in the Coal Creek Canyon area. The objectives of the plan should be to develop design guidelines to achieve better continuity of architecture, signage, landscaping, and lighting design.

13. Lighting should be kept to a minimum. If lighting is used, its impacts should be minimized by requiring such techniques as downcast design, shielding and timers.

14. Development should occur outside the visual foreground of significant view corridors unless impacts are mitigated through the use of landscaping, screening, landshaping, building materials and colors such as colored and/or textured finishes which blend with the surrounding landscape.

15. Billboards, i.e., signs not related to the business on the site, should not be allowed.

16. Fencing materials should blend with the natural landscape. Preferably, berms and landscaping should be used to screen parking lots. If fences are used, they should be of natural material or man-made materials which have a natural appearance.

17. County Staff should develop a systematic approach to conducting visual resource inventories. Visual management systems such as BLM, Forest Service, National Park Service, and other visual analysis techniques could be sources for the development of a visual analysis methodology tailored for Jefferson County.

18. The Land Development Regulation as it pertains to visual analysis should be revised to clarify the application of required visual studies and to reflect current engineering and planning practices.

19. The criteria in the *Mountain Site Design Criteria* section relevant to visual resources should be applied on a case-by-case basis.

20. When the Jefferson County Planning Commission and department staff complete the Scenic Corridor Study, the results of the project should be reviewed by the public. Upon adoption of the Scenic Corridor Study recommendation, this Plan should be reviewed to identify and resolve any conflicts.

WATER

Water has defined the history and progress of the West and the physical availability of water is one determinant of the development capacity of the North Mountains area.

In many areas, severe limitations exist for septic tank absorption fields because of steep slopes, depth of rock and coarse textured soil.

The health of the community's residents and its environment depends on an adequate and safe supply of water. While some residents in the community are served by a water district, others depend on less certain groundwater supplies drawn from individual wells and must dispose of waste water through a septic system. Land development affects both the quantity and the quality of the groundwater. Because of this direct link, the impacts of existing and future development on this sensitive resource should be studied and managed effectively.

GOAL

Protect the community's groundwater supply from significant depletion and contamination.

OBJECTIVES

1. There should be a balance between the availability of water and its use to ensure that water resources are not depleted.

2. Development in the North Mountains area should be at a scale consistent with available water resources.
3. Water quality should be maintained or improved as new development occurs.
4. Wildlife access to water and riparian habitats should be protected, maintained, and where possible, enhanced.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to water and sanitation should be followed.

Red text identifies policies which can be applied in the land use review processes.

A. General

1. The existing groundwater resources should be protected. The County should require new or expanded development to provide evidence of existing potable water before lots are sold.
2. Industrial material, waste storage and livestock manure piles should be managed to protect surface water and groundwater quality.
3. Jefferson County Health and Environmental Services should actively explore alternatives to the standard soil absorption systems to treat sewage effluent.
4. The County should facilitate the distribution of information regarding water quantity and quality and sanitation problems so individuals know about problems and can take appropriate actions.

5. Criteria for hydrologic studies should be adopted as part of the LDR which will ensure that information provided in the hydrologic studies, described in Policy B.1.b., enables reviewers to evaluate whether or not the objectives of this Plan have been met.

6. The State should be encouraged to more strictly enforce the conditions placed on well permits and water augmentation plans.

7. Increased awareness of problems associated with special districts has resulted in a growing public concern about the economic viability of these districts. For this reason, the County is encouraged to evaluate these problems during service plan reviews and undertake appropriate action to secure legislation and/or regulations to better control the formation and operation of special districts.

8. A comprehensive study of groundwater quantity and quality should be completed by the State and County for as much of the study area as possible. The community should participate in this study. Upon completion of this study, the conclusions of the study should be incorporated into this Plan.

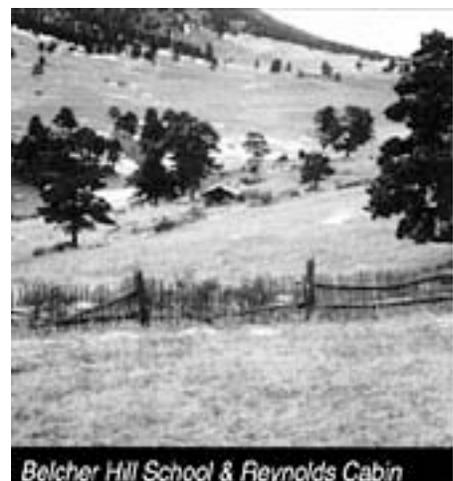
9. Upon completion of the water quantity and quality study, the County should work with the State Engineer to establish the minimum lot size for mountain areas which will protect water quality and quantity, as determined by the study.

B. Outside Mountain Community Centers

1. When rezoning is proposed, lot sizes less than 10 acres should only be allowed if:

a. There is a public water and/or sanitation district;

OR



b. A hydrologic study is presented demonstrating:

- 1) an adequate water supply for the needs of present and future residents;
- 2) no adverse impact on neighboring water users;
- 3) nitrate contamination will not be a concern for future or existing residents.

c. The hydrologic studies should include:

- 1) an assessment of fracture flow, including the flow rate of water through the area;
- 2) consideration of the area's potentiometric surface to determine groundwater flow and needed recharge areas.

AND

d. The applicant can demonstrate an effective alternative to protect water quality for existing and future users. Some examples are:

- 1) individual water treatment systems;
- 2) extra deep casing of wells;
- 3) clustering of individual sewage disposal systems to maximize well to leach field distance;
- 4) utilization of community wells to maximize well to leach field distance.

2. Unless public water and sanitation is available, lots should be a minimum of 3.5 acres, even if the criteria listed in 1.b. and 1.c. are met. An explanation of the relationship of gross density earned by slope to minimum lot size appears in the *Appendix*.

3. The existing groundwater resource should be protected. New or existing development should not be allowed to deplete the existing groundwater supply beyond the ability of the local area to recharge itself.

4. New public water and sanitation districts, public sanitation or public water districts outside of mountain community centers can be formed when one or more of the following conditions exist.

a. Water quality or quantity problems exist which can be mitigated. The boundaries of the new district should be limited to the problem area.

b. The new district will facilitate a better site design, e.g., the clustering of housing units might preclude installation of individual wells and septic systems.

5. To create a more dependable water and sanitation or public water district, the water source should be one that is legally and physically available. Two water sources are preferred as the source of water for the public: water and sanitation or public water district, except for small districts. Wells outside the stream alluvium should not be allowed as the sole or primary source of water for a public water and sanitation district, or public water district.

6. New wells should be discouraged inside a public water and sanitation district or public water district after a district is formed because of the potential depletion of groundwater and the loss of water not recharged to the local area.

7. Within a public water and sanitation district, the housing densities recommended in the *Housing* section of this Plan should be followed.

8. Conversion of wells from residential to commercial use should comply with the regulations of the State Division of Water Resources.

C. Inside Mountain Community Centers

1. Development should meet the same criteria listed in Policy #1 of "*Outside Mountain Community Centers*".

2. To provide coordinated planning and provision of services, each mountain community center should have a single management authority

that provides water and sanitation services, i.e., one public water and sanitation district versus multiple districts.

3. Creation or expansion of public water and sanitation districts or public water districts should be based on the following criteria.

a. The ability to ensure adequate water supply (*pressure/volume*), meet all health and fire standards, etc. in new areas.

b. There are suitable guarantees of an adequate physical and legal supply of water for all lands to be served.

c. There is hydrologic evidence that neighboring water users will not be adversely affected.

4. When a new or expanded water and sanitation district is to be formed for a mountain community center, provision should be made to allow existing well and septic systems to remain in use until the property is sold, the user voluntarily chooses to become part of the district, or the property is phased into the system.

WILDLIFE

Protection and management of wildlife resources is important in maintaining the quality of life people have come to expect in the North Mountains area. Wildlife is a unique resource and one of the factors attracting people to the area. Wildlife and available habitat should be kept in balance and managed to prevent overpopulation, disease and other problems. This should be done through consultation with the state Division of Wildlife.

Wildlife needs should be considered in land use decisions. While some species of wildlife



can adapt to human encroachment to a certain extent, careful planning is needed to ensure that important wildlife habitats are not destroyed and that wildlife/human conflicts are minimized.

GOAL

Enhance, maintain, and manage a balanced wildlife habitat to ensure the continued biological, economic, and aesthetic value of this resource.

OBJECTIVES

1. Wildlife needs should be accommodated as development occurs.
2. Wildlife should be managed in relationship to available habitat.

POLICIES

In addition to the following policies, the criteria in the *Mountain Site Design Criteria* section which apply to wildlife should be followed.

Red text identifies policies which can be applied in the land use review processes.

1. The following habitats are designated critical wildlife habitats:
 - a. Habitat of threatened or endangered species
 - b. Riparian habitat
 - c. Wetlands
 - d. Elk calving areas
 - e. Raptor nesting sites
 - f. Critical wildlife movement corridors

2. The designation of critical habitats should be applied in a reasoned way, not solely relying on lines drawn on a map. For instance, if those parcels mapped as "*elk calving area*" are selected for protection and the surrounding area allowed to build with high density housing, the value of these areas to species may disappear since the animals might not be able to reach the ground which is undeveloped. Each development proposal still needs to be analyzed and evaluated individually with the "*critical*" areas as a guide. In general, there should not be any structures, grading, or fences within the critical wildlife habitats. Road crossings in these habitats should be avoided, but may be allowed if they are designated on an Official Development Plan, their location is the only viable option to access developable land, and their presence does not unreasonably affect the viability of these habitats. The number of housing units which would be earned, based on the slope category, should be transferred to another portion of the site. In no case should this policy be interpreted to prohibit reasonable development of private property.

3. Critical wildlife habitat may be used for lot area subject to the restrictions outlined in Policy #2. However, appropriate buffers should be provided between human activity and critical wildlife habitat. The extent of these buffers should be defined in consultation with the Division of Wildlife and should consider the needs of wildlife for cover, food supply, and water. Development encroachment on wildlife habitat should be minimized by using effective mitigation techniques.

4. Where severe winter range areas exist, the appropriateness of development proposals should be evaluated case-by-case and:

a. mitigation plans and recommendations from the Colorado Division of Wildlife, the Colorado State University wildlife experts or comparable source, should be a significant factor in development review, and

b. conformance with applicable criteria in the *Mountain Site Design Criteria* section should be demonstrated.

5. The Division of Wildlife should review all development proposals for impacts on wildlife to:

a. ensure the preservation of viable wildlife habitats. Open lands which contain diverse food and cover should be consolidated or inter-connected whenever possible. Those habitats not designated as "*critical*" may nonetheless have important wildlife values which should be considered during evaluation of each proposed development.

b. identify vegetation important to wildlife which should be preserved to the maximum extent possible.

c. ensure that water quality in bodies of water used by wildlife are not degraded to a degree which would be detrimental to wildlife.

d. ensure that wildlife populations are managed in relationship to available habitat and to minimize human/wildlife conflicts.

6. The Jefferson County Planning and Mapping Departments, in conjunction with the Division of Wildlife, should map the critical wildlife habitats.

7. The Jefferson County Planning Department and Division of Wildlife should:

a. prepare and distribute guides for use by the public and developers to provide education on the needs of wildlife; and

b. explore offering incentives to those who accommodate wildlife needs in the planning of their projects.

8. Public and private interests should be encouraged to cooperate in the development and implementation of a wildlife management program, preferably supervised by the state Division of Wildlife.

9. Critical wildlife habitat which should be preserved in perpetuity should be identified and mapped by the State Division of Wildlife and then

acquired through the use of fee-simple purchase, conservation easements, or some other techniques. See *Open Space, Trails & Recreation* for additional acquisition techniques.

MOUNTAIN SITE DESIGN CRITERIA

Housing densities allowed under the slope categories (see the Housing section) should not be interpreted as guarantees. Once the Policy recommendations in this Plan have been met, the densities provided under "Standard Design" can be achieved. Additional units, up to the maximum shown, can be earned through compliance with the *Mountain Site Design Criteria*.

To achieve excellent project design, the criterion which apply to a site will be evaluated on two levels.

Criterion shown in **bold and blue** print are essential to the achievement of excellent project design in the mountains. Criterion in regular type can be applied with a greater degree of flexibility when tradeoffs among conflicting design values are necessary.

OBJECTIVE

The purpose of this criteria is to assist and encourage landowners and their designers in creating high quality development which respects the environment and to encourage creative and flexible approaches to site design. By using the criteria listed below, it is anticipated that more sensitive development will occur. Developers who comply with these criteria should be awarded increased density. The density gained under excellent design can range from the number of units allowed for



standard design up to the maximum number of units under excellent design, depending upon the degree of excellence achieved.

The dramatic beauty of the surrounding natural landscape is a major asset in the mountains. Scenic or high quality elements of the natural landscape need to be maintained or enhanced, while unattractive areas should be rehabilitated or enhanced. All development should be integrated, through location and design, with the existing natural character.

Visual quality of an area is the impression created by the landforms, vegetation, color, adjacent scenery, scarcity or uniqueness, and cultural modifications within the view of a site. Generally, the more visual variety in a landscape, the more aesthetically pleasing. Variety without harmony, however, is unattractive, particularly in terms of alterations (*cultural modifications*) made without care.

The views seen from major transportation corridors can have a great impact in the mountain areas. The large numbers of viewers make these corridors very important in establishing a positive image to visitors and residents alike.

Wildlife and unique vegetation are aesthetic, economic and environmental assets to Jefferson County. They contribute to the physical and psychological well-being of the residents and are a major part of the quality of life in the County. They contribute to the County's economy by providing and enhancing recreational activities, such as hunting, fishing, camping, hiking, etc. They are valuable indicators of environmental quality because they are sensitive to change, especially environmental deterioration.

The relationship between vegetation, animals, and human activities needs to be respected and consciously protected. During the initial development, site preparation and construction stages of projects, the potential for adverse impact on plants and changes in unique plant-life and wildlife patterns are most likely to occur. The adverse impacts are often far-reaching and complex.

The varying characteristics of individual sites will determine which of the following criteria may be applicable. In some cases, all of the criteria may be applicable, while in others, only some may apply.

I. Key Elements

A. Views

1. Maximize views of significant features on and off site as amenities of site design.

2. Structures should be placed to avoid obscuring significant public views.

B. Treeless Areas

1. Naturally occurring wet meadows are scarce and should not be disturbed.

2. In areas where very little natural buffering occurs, e.g., treeless clearings, place site development into the vegetation along the edge of the open area. Encroachment into open areas or clearings at the edges may occur only if additional features are provided, i.e., vegetation which enhances the existing buffering.

C. Ridgelines

Buildings or other structures should be located to avoid a dominant silhouette on the top of the ridge. The ridgeline silhouette should be composed predominantly of trees and landforms. *(Inside mapped Visual Resource areas (see maps), this criterion should be applied as an essential element in the achievement of excellent project design.)*

D. Site Features

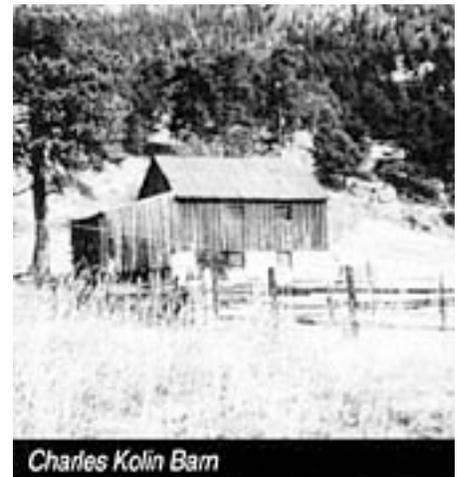
1. Maintain site features in their natural state or enhance all significant features on a site:

a. **Maintain and/or enhance streams and wetlands.**

b. Maintain and/or enhance other significant features, e.g., ponds, major rock outcroppings and unique vegetation.

II. Site Improvements

Man-made features should not be the dominant features in the landscape, but should blend with the surrounding environment. Cultural modifications should be integrated into the landscape to minimize visual scars and erosion and to create an impression that the new use *"belongs"* on the site.



A. Buffering Development

1. Soften or interrupt views from off-site to developed areas onsite, e.g., buildings, parking areas, roads, by the use of landforms, rocks, or vegetation.

B. Transition Between Uses

1. Between two adjacent areas of different uses, provide a clear transition from one use to the other, and provide a buffer between incompatible uses if appropriate.

2. Where two projects of the same use abut, use similar density or intensity at the common edges or other mitigating techniques.

C. Landscaping/Open Space

1. Landscape projects sufficiently to enhance the aesthetics and functional qualities of the site and project.

2. Maximize the use of existing vegetation and natural landforms wherever possible.

3. Introduced landscaping should consist primarily of native or naturalized materials, placed in groups that emulate the natural environment. Select and group plants to minimize consumption of irrigation water.

D. Grading and Erosion Control

1. Design site development to minimize disturbances (cut, fill, tree clearing) caused by the introduction of roads, buildings, and other structures.

2. Revegetate or enhance all earth disturbances regardless of magnitude (e.g., road cuts, building cuts, graded areas) with staining and/or planting with native or naturalized materials within one growing season.

3. Roll regraded slopes back into the surrounding topography to a grade that, when revegetated, will be stable and look natural.

4. Retain drainageways and storm water detention areas in their natural state, or emulate the natural environment, whenever possible.

III. Structure Design and Placement

The relationship between structures and the surrounding landscape is extremely important. This relationship can be defined in terms of scale, form, massing, orientation, and materials.

The perceived mass of structures and their overall form should convey a small town/village image that provides visual variety and a welcome to the passers-by.

Building materials should reflect the character and image of the community as well, emphasizing natural looking materials.

The placement of structures should not be dictated by roads and parking, which can create a "*strip*" development pattern, but by landforms and vegetation, views, and implementation of the village concept.

Historic sites and structures should be protected and preserved. Development around such sites should adhere to the character of the historic element.

Roofs and other architectural components should blend with the landscape.

Service and accessory uses are often afterthoughts in a project. Because these elements are especially important to pedestrian views, they need similar architectural treatment to the primary structure.

A. Building Orientation

1. Orient buildings for maximum solar exposure and to capitalize on primary views.
2. Group and design buildings to ensure privacy among units.

B. Architecture/Scale/Massing

1. Design and site buildings to:

a. Be in proportion to the size of the lot, to the surrounding landform and vegetation, to existing buildings and to the intended user, rather than appearing monumental in scale.

b. Be placed sensitively within a site, rather than to dominate or overpower a site. Integrate buildings into the site through the use of landscaping, earthwork, or natural materials.

c. Utilize an architectural design emphasizing natural materials, light, shadow, depth, and texture in all exterior building surfaces. Vary facades and roofs to minimize large expanses of flat planes.

d. Minimize exposed building foundations. Screen all mechanical equipment including rooftop, with materials similar to or compatible with the building facade.

e. Within a project, incorporate a unified scheme for buildings, design, style, and complementary materials.

f. Work with the topography, vegetation and views.

C. Historical Recognition

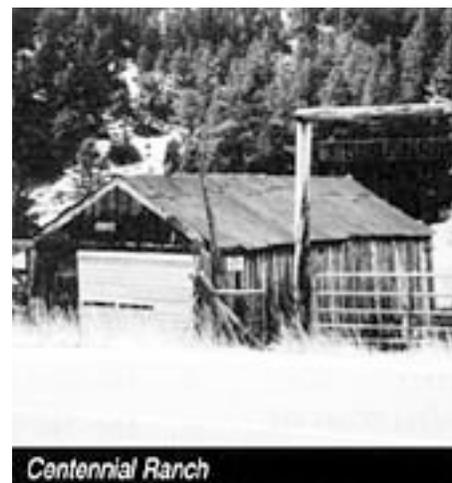
1. New development should complement the historical and unique character of the area. Design new development to harmonize with and complement the character of the area in mass, scale, design and materials.

IV. Infrastructure Improvements

Infrastructure improvements should not detract from the careful planning efforts taken elsewhere on the site for the primary uses.

A. Utilities

1. Install utilities in a manner that will minimize visible structures, power poles,



overhead powerlines, tree removal, and other site disturbances. Landscape materials should blend with existing natural materials.

B. Circulation Systems

1. Construct and locate roads in a manner that will blend with the topography and minimize visual disruption of the landscape.

2. Coordinate circulation to allow access among projects, and to limit the number of access points to collector and higher volume roads.

3. Design circulation systems to minimize non-neighborhood vehicular trips in residential areas.

C. Parking Lots

1. Buffer parking lots with landforms, vegetation, or buildings.

2. Design parking lots to work with the terrain, minimizing grading, hillside excavation, and/or fill.

3. Limit large, uninterrupted expanses of parking areas by incorporating landscaping, utilizing building placement, landform, or other techniques.

D. Trails

1. Provide pedestrian trails to connect residential areas to adjacent commercial and open space uses. Provide connections within and between commercial and residential projects.

V. Accessory Uses

Accessory uses should not detract from the valuable visual attributes of the area.

A. Lighting/Glare

1. Light sites only to provide for safety and security, and to highlight architectural and landscape features. Eliminate unnecessary lighting and the spread of light/glare off-site.

B. Signs

1. Design signs to be of a scale and character that is compatible with the development and surrounding environment, emphasizing natural materials.

2. Use only wall mounted, under canopy, or monument style signs. Integrate monument signs into the landscape with vegetation, or into the architecture of the buildings.

C. Fences and Walls

1. Avoid perimeter fences except as needed for livestock.

2. Use privacy (*opaque*) fences only to provide private areas immediately around buildings or for noise attenuation.

3. Use fences and walls constructed with natural materials, e.g., wood or stone.

D. Exterior Storage

1. Screen exterior storage, loading, and service areas from public view.

E. Accessory Facilities

1. Screen satellite dishes from off-site view, or select design and color that will blend with the surrounding environment.

2. Screen propane tanks and trash containers from adjacent off-site views.

VI. Wildlife Accommodation

1. Encroach upon critical wildlife habitat only if the remaining habitat is enhanced so that the gross carrying capacity of the site is maintained or enhanced.

2. Maintain wildlife movement corridors in a size, location, and character that will encourage their continued use.

3. Preserve or enhance ecosystems adjacent to or within streams, wetlands, bodies of water, and other riparian habitats.

VII. Nonresidential

A. Nonresidential Style

Development within view from public places and more heavily populated residential areas should have a higher level of compliance with these criteria except when the development is screened from view.

1. All "bold and italicized" criterion in the Mountain Site Design Criteria should be applied to nonresidential site design.

2. Nonresidential developments should emphasize clusters of smaller buildings or be designed to have that appearance.

3. Avoid developments that are strictly road-oriented, strip-style design.

4. Provide pedestrian amenities such as plazas and street furniture.

5. Provide a buffer to adjacent residential development of sufficient design to ensure sensory impacts do not exceed residential levels. The

size and density of the buffer can vary depending on the quality of the site design, based on the design's ability to mitigate sensory impacts; i.e., higher quality site design can earn a reduction in the size and density of the buffer.

6. Use pitched roofs or a design solution that prevents the appearance of large areas of flat roofs.

GLOSSARY

Active Recreation: Recreation which requires some constructed facilities such as soccer, softball and football fields and organized activities.

Adequate water supply for fire fighting services:

1. Water readily accessible to emergency equipment year-round.
2. A storage tank or other source that consistently has water available to assist in fire fighting.
3. A source that is suitable for hookup to the local fire service equipment fire flows. Gallons of water per minute available for effective fire fighting capacity.

ADT: Average Daily Trips

CAPP: Computer Assisted Policy Planning, Jefferson County Planning Department

Critical: The use of the word critical in this Plan does not connote regulatory category as it does when used by agencies responsible for wildlife populations.

Decibel: A unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound, to about 130 for the average pain level.

Destroyed historic railroads: Places where railroads were known to be in existence at one time but where no visible evidence remains.

Du/ac: Dwelling units per acre.

Floodplain Hazards: Floodplains are the area covered by water when a flood occurs. Usually, the floodplain is considered to be the land that would be inundated by a 100-year storm, hence the term 100-year floodplain. A 100-year floodplain is an area which has a 1 percent chance of being flooded every year.

Foreground of visual corridor: The area that is usually 1/4 to 1/2 mile from either side of the centerline of the road, that is visible from the road at normal travelling speeds. Areas beyond 1/2 mile were included and shown on the *Visual Resources* maps (*at the back of this Plan*) if they were part of a significant vista seen for extended periods, or to complete a feature that was partially included, e.g., a mountaintop.

Geologic Hazards: The natural and man-made conditions which threaten public health, safety, or property such as landslide, rockfall, mudflow, creep and Slope Failure Complex.

Landslide: A mass movement where there is a distinct surface rupture or zone of weakness which separates the slide material from more stable underlying material.

Rockfall: Rapid freefalling, bounding, sliding, or rolling of large masses of rock or individual rocks.

Slope Failure Complex: A geologic hazard which means a combination of one or more of the following geologic hazards: landslide, rockfall, mudflow, creep.

Subsidence: The surface collapse of ground over underground mines. Areas of previous mining often contain hazardous conditions such as steep or vertical rock faces of dangerous heights, open or poorly sealed

passageways into areas of previous underground activities, or underground rooms or passageways which constitute a potential location for subsidence. This condition can be very hazardous to public safety and structures built in subsidence-prone areas.

GLA: Gross Leasable Area

Historic Districts: Areas possessing historic value. These areas originally had a form of unity such as a business or mining community.

Historic roads and trails: Ancestral paths, such as the Golden Gate Toll Road operated from 1860 to 1871 between Golden and the mining communities of Black Hawk and Central City. Portions of it exist in the present day Golden Gate Canyon Road.

Historic railroads: Places where some evidence of the rail bed exists today.

Historic sites: The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural or archaeological value. (*National Register Bulletin 16*)

Landscaping: Anything done external to or outside of a building.

LOS: Level of Service

Methane: A flammable gas produced by decaying garbage. Location of development over abandoned landfills is a concern because methane gas can build up in structures and create the potential for an explosion.

Mountain Community Center: An area of the community where more intense land use occurs. A mountain community center may include retail, office, compatible light industrial, higher density housing, and cultural and recreational facilities. Typically 4,000 to 10,000 square feet GLA, but could go up to 25,000 square feet of GLA.

Passive Recreation: Recreation which involves existing natural resources, and has a minimal impact. Examples: hiking, horseback riding, cross country skiing, bird watching, kite flying, and bicycling.

Planned Development: A Jefferson County zone district. The purpose of the Planned Development (*PD*) zone is to provide a means for the achievement of public and private goals not otherwise provided for or inadequately represented in the Zoning Resolution, while ensuring that the intent of the Resolution is fulfilled.

These goals are:

1. Promote the efficient and innovative use of land and public services.
2. Achieve compatibility and preclude land use conflicts through innovative or comprehensive design.
3. Promote integrated building groups or use complexes with continuity of design and development and to promote housing of diverse types.
4. Provide necessary commercial, recreational, educational and employment facilities conveniently located to housing.
5. Conserve and promote the efficient use of common open space.
6. Encourage preservation of a site's natural characteristics and ecological functions by providing a procedure to relate type, design and layout of development to that particular site.

In pursuit of this purpose, the PD zone is a comprehensive procedure which grants applicants significant flexibility and discretion, but also requires that significant additional documentation be submitted. The reason for this documentation is to enable public review to assess effectively the ability of a proposal's design to fulfill the intent of the traditional Zoning Resolution and achieve these public goals.

RTD: Regional Transportation District

Strip Development: The characteristics of strip development are:

1. Building placement and design which cuts off both physical and visual access between projects;
2. An absence of coordination with adjacent projects;
3. Lack of direct vehicular and pedestrian access between onsite parking and adjacent existing and future parking areas greater than 10 spaces in size;
4. Lack of common facilities between projects, both parking and major circulation;
5. Absence of compatible site and building design which exhibits a coordinated pattern or theme;
6. Lack of coordinated landscaping and drainage plans;
7. Lack of setbacks, building shapes, forms, and heights;
8. Absence of cohesive, easily understood sign systems which foster integration through size, number and treatment;
9. Multiple curb cuts and access points; and
10. Structures and parking areas that are not buffered from roads to minimize visual impact.

Unacceptable school overcrowding:

1. Double sessions.
2. The core facility, e.g., the cafeteria, office, library, nurse, etc., will not support the number of students in terms of square feet per student.

3. The core facility is adequate, but temporary facilities lack restrooms or running water and the temporary facility is too far from the core facility.

Wildfire Hazards: The hazard presented by the uncontrollable burning of trees, bush and grass. The magnitude of this hazard is affected by vegetation density, slope, atmospheric conditions, and the presence of special terrain conditions such as saddles, gullies, or fire chimneys which cause a draft much like a fireplace flue. This hazard is rated as low, moderate, and high, and is defined as follows:

Low: A wildfire in these areas can be controlled by available fire fighting personnel and equipment. Little to no property damage is expected, and there is not a threat to human life. They are typified by light fuel loads on slopes less than 30%.

Moderate: A wildfire in these areas can be difficult to control by available fire fighting personnel and equipment. There is the potential for destruction of property, and human life is threatened. They are typified by moderate fuel loads on slopes less than 30%.

High: A wildfire in these areas is generally uncontrollable by available fire fighting equipment and personnel. Protection of property or lives cannot be provided. They are typified by heavy fuel loads, or areas with moderate or heavy fuel loads on steep slopes, greater than 30%, or the presence of special terrain conditions mentioned above.

Maps of wildfire hazards have been produced by the Colorado State Forest Service and the Jefferson County Planning Department.

APPENDIX

AIR, ODOR & NOISE

Agencies

Air & Odor:

DRCOG

State Health Department

State Environmental Protection Agency

State Department of Highways

Jefferson County Health and Environmental Services

Jefferson County Public Works

United States Environmental Protection Agency

Colorado Air Quality Control Commission

Livestock related problems:

Colorado Department of Agriculture

Jefferson County Animal Shelter

Colorado Department of Health - Public Health

U.S. Soil Conservation Service

Water Quality Control Commission

Noise:

Jefferson County Health and Environmental Services

Jefferson County Sheriff's Department

Colorado Health Department

Legislation & Regulation

U.S. Clean Air Act, 42 USC 7401 et.seq.

Colorado Air Quality Control Act, CRS 25-7-101 et.seq.

Colorado Noise Abatement Standards, CRS 25-12-101 et.seq.

Colorado Odor Emission Regulations, CRS 25-7-109(2)(d)

HAZARDS

Please review the following maps which were adopted with this Plan:

- * Wildfire
- * Environmental Constraints
- * Potentially Unstable Slopes

Agencies

Colorado Department of Highways
Colorado Department of Natural Resources, Mined Land Reclamation
Colorado Department of Public Safety
Colorado Geologic Survey
Colorado Health Department
Colorado State Forest Service
Department of Agriculture, U.S. Forest Service
U.S. Environmental Protection Agency
Federal Aviation Administration
Federal Emergency Management Agency
Jefferson County Emergency Preparedness
Jefferson County Health and Environmental Services
Jefferson County Planning & Zoning Department
Jefferson County Sheriff's Department
Jefferson County Soil Conservation District

Legislation and Regulation

Colorado Weed Management Act, CRS 35-5.5-101 et.seq.
Jefferson County Policies and Procedures Section 5.88, Weed Accumulations
Colorado Primary Drinking Water Regulations, CRS 24-4-104 et.seq. and 25-1-107 et.seq.

Publications & Maps

Information on drought resistant vegetation is available from the following sources:

Front Range Xeriscape Task Force
Xeriscape Colorado, Inc., c/o Denver Water Department
U.S. Soil Conservation Service
Colorado State University Cooperative Extension
Johnson Books
City of Aurora
Colorado State University (*Technical Bulletin*)
Genesee Foundation
Museum of New Mexico Press

Jefferson County Recycling Recommendations & Household Hazardous Waste Plan: Available in the Jefferson County Planning Department.

It's Your Water: Jefferson County Health and Environmental Services has prepared this free brochure for homeowners outlining recommended tests on well water to determine water potability.

Wildfire Protection: A Guide for Homeowners & Developers: Available from the U.S. Forest Service.

Radioactive Mineral Occurrences Bulletin #40: Available from the Colorado Geological Survey, Denver, Colorado.

Soils Map: U.S. Department of Agriculture, Soil Conservation Service has mapped the soils of Jefferson County. These maps and supporting documents are available for reference at the Soil Conservation Service and the Jefferson County Planning Department.

Information

Dams: The State Engineer regulates dam safety for embankments greater than 10 feet in height, or water surface area greater than 20 acres, or retains greater than 100 acre feet plus water, CRS37-87-105 as amended. While the State Engineer's office does not have funding to allow examination of small impoundments under 10 feet, a citizen who believes that a dam is unsafe can request an inspection by the State Engineer under Section 37-87-109C.R.S(1973). If the structure is not found to be unsafe, then the person requesting the inspection must pay the expenses incurred by the State Engineer.

Hazardous Materials: The Jefferson County Office of Emergency & Disaster Services has additional information about the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Federal Superfund Amendment and Reauthorization Act of 1986 (SARA), 42 USC 9601 et.seq. and their application to Jefferson County.

Jefferson County Recycling & Household Hazardous Waste Program: The Jefferson County Board of Commissioners in April, 1987, appointed an advisory group to work with the County Solid Waste Coordinator to address recycling and household hazardous waste. For additional information, contact the Solid Waste Coordinator at the Jefferson County Planning Department.

Landfills/Methane Gas: Jefferson County Health and Environmental Services has mapped all known landfills and methane readings in the County. This information is available at the Health and Environmental Services office and includes information on the geology, site physiology and landfill history.

Undesirable Plants: Defined in the Colorado Weed Management Act are the following noxious species: leafy spurge (*Euphorbia esula*); the knapweed plants



commonly known as diffuse, Russian, and spotted knapweeds (*Centaurea diffusa*, *Centaurea repens*, and *Centaurea maculosa*).

The Board of County Commissioners may designate additional undesirable plants within its jurisdiction after a public hearing with thirty days prior notice to the public. *Source: CRS 35-5.5-108*

HOUSING

Please review the following maps which were adopted as part of this Plan:

- * Existing Land Use
- * Potential Land Use

Information

The projections of housing units were computed in the following manner.

1. The North Mountains area was divided into traffic zones.
2. For each traffic zone the amount of acreage for each slope category was determined; 0-30%, 30-40%, 40+%.
3. The amount of acreage for each slope category was reduced by 20% to account for driveways, roads, etc.
4. The reduced slope/acreage was divided by the acreage per housing unit for each scenario: existing zoning (*assumed to be 1 du/10 acres*) and the Housing section policy recommendations.
5. The number of units per traffic zone were then summed.

Note: The number of future housing units assumes existing development. The *Housing* section recommendations for development

served by public water and sanitation were not used to project traffic generation. The traffic projections are based on build-out of existing zoning, standard and excellent design housing density policies.

Well and septic: When well and septic will be used, the potential number of housing units on a site is based on the amount of acreage in each slope category and the degree of excellence of site design, i.e., compliance with other Plan policies and *Mountain Site Design Criteria*. Lot size can vary depending on the site design, hydrologic study, and type of water and sanitation service provided.

OFFICE, RETAIL, INDUSTRIAL & MOUNTAIN COMMUNITY CENTERS

Please review the *Summary* map (see maps) adopted as part of this Plan.

OPEN SPACE, TRAILS & RECREATION

Please review the following maps which were adopted as part of this Plan:

- * Open Space, Public Lands, Trails & Recreation
- * Vegetation
- * Wetlands

Agencies

Colorado Division of Wildlife
Colorado State Forest Service
Department of Agriculture, U.S. Forest Service
Department of the Interior, Bureau of Land Management
Colorado Division of Parks and Outdoor Recreation
State Land Board
Jefferson County Open Space Department

North Jeffco Metropolitan Recreation & Park District
Jefferson Center Metropolitan District No. 1
Boulder County
Gilpin County

Publications & Maps

State Recreational Trails Master Plan: Published by the State of Colorado Department of Natural Resources, Division of Parks & Outdoor Recreation.

PREHISTORICAL, HISTORICAL & ARCHAEOLOGICAL RESOURCES

Please review the *Historic* map (see [maps](#)) adopted as part of this Plan.

Agencies

National Park Service, including the National Register of Historic Places
Colorado Historical Society
Jefferson County Historical Society
Jefferson County Historical Commission
Colorado Archaeological Society
Golden DAR Pioneer Museum

Legislation & Regulations

The importance of the protection given these resources is evidenced by numerous federal, state, and local acts and initiatives:
The Antiquities Act of 1906, 16 USC 431 et.seq./National Register, 16 USC 470 et.seq.

Federal

The National Historic Preservation Act/National Register, 16 USC 470 et.seq.

The National Environmental Policy Act of 1969, 42 USC 4321 et.seq.
The Historical, Prehistorical, and Archaeological Resources, CRS 24-80-401 et.seq.
Historic Monuments Act/Colorado Register of Historic Places, CRS 24-80-501 et.seq.

State

Local Government Land Use Control Enabling Act of 1974, CRS 29-20-101 et.seq.
Areas and Activities of State Interest, CRS 24-65.1-101 et.seq.

Local

Jefferson County Open Space Program

Information

Sites and buildings identified by the Community Advisory Group, which may not be recorded with state agencies:

Gregory Toll Road
Golden Gate Toll Road
Colorado-Central Railroad
Brunnel's houses
Hall Woodland Cave
Sources of Information:
The DAR Pioneer Museum, Golden, CO
Karl Ramstetter's videotape history
Golden #1 Masonic Lodge
Miner's Courts Records
State and local Granges
The Colorado Railroad Museum

PUBLIC FACILITIES, SERVICES & UTILITIES

Please review the *Public Services* map (see maps) adopted as part of this Plan.

Agencies

Blue Mountain Water District
Coal Creek Fire District
Golden Gate Canyon Fire District
Public Service Company of Colorado
United Power, Inc.
Jefferson County Library
Jefferson County R-1 School District
Jefferson County Sheriff's Department
Colorado State Highway Patrol
Jefferson County Emergency Preparedness

TRANSPORTATION

Please review the *Summary* map (*which contains traffic volumes- see maps*) adopted as part of this Plan.

Agencies

Colorado Department of Transportation
Jefferson County Public Works
Regional Transportation District

Information

Highway Capacity Improvements: Additional capacity on two-lane highways can be gained with treatments, such as: Improving sight distance, providing paved shoulders, adding a third lane for passing or climbing, and providing protected turning lanes for left and right turns at intersections. The additional capacity to be gained by these treatments

depends on level of service, type of terrain, and the amount of no passing zones. Depending on the existing conditions and the proposed improvement, the additional capacity gained could range from a few percent up to approximately 50%.

Current Traffic Volumes

Roadway & Location	24-Hour Volume
<i>S.H. 72 south of County boundary</i>	2100
<i>S.H. 72 west of Blue Mountain Drive</i>	3600
<i>Golden Gate Canyon Road east of County boundary</i>	650
<i>Golden Gate Canyon Road west of S.H. 93</i>	2100
<i>U.S. 6 west of S.H. 93 (Golden Bypass)</i>	5700

Level of Service: Level of service (LOS) is used to express, numerically, the driving experience on various roads. LOS A provides relaxed travel at the speed limit without delays. LOS F would mean extreme delays, even gridlock, with speeds well below the posted limit.

A level of service definition generally describes driving experience in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Level of service definitions: In general, the various levels of service are defined as follows for uninterrupted flow facilities:

LOS A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

LOS C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interaction with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

LOS D represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

LOS E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

LOS F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable

speeds for several hundred feet or more, then be required to stop in a cyclic fashion. LOS F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and LOS F is an appropriate designation for such points.

These definitions are conceptual in nature, and they apply primarily to uninterrupted flow. Levels of service for interrupted flow facilities vary widely in terms of both the user's perception of service quality and the operational variables used to describe them. Each chapter of the Highway Capacity Manual contains more detailed descriptions of the levels of service as defined for each facility type.

On the following chart, the amount of traffic is expressed as Average Daily Trips (*ADT*), i.e., the number of trips during a 24-hour period. Peak travel times in the morning and evening can result in a lower level of service.

Maximum AADT (Average Annual Daily Traffic) Versus Level of Service for Two-lane Rural Highway Rolling Terrain

The Colorado Department of Transportation (*CDOT*) and the Jefferson County Highways and Transportation Department use the following definitions for terrain:

Rolling Terrain: Any combination of horizontal and vertical alignments causing heavy vehicles to reduce their speed substantially below that of passenger cars, but not causing heavy vehicles to operate at crawl speeds for any significant amount of time.

Mountainous Terrain: Any combination of horizontal and vertical alignment causing heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals.

CDOT and Highways and Transportation agree that U.S. 6 and S.H. 72 are "rolling terrain". In addition, Jefferson County Department of Highways and Transportation characterizes Golden Gate Canyon and Crawford Gulch roads as "rolling terrain".

VISUAL RESOURCES

Please review the following maps adopted as part of this Plan:

- * Visual Resources
- * Slope
- * Vegetation

WATER & SANITATION

Agencies

Blue Mountain Water District
U.S. Environmental Protection Agency
Colorado Division of Water Resources
Colorado State Health Department
Jefferson County Health Department
Solid waste management providers
Jefferson County Sanitary Landfill (private)

Information

Jefferson County Department of Health and Environment comment: *"It should be noted that all public water districts formed must comply with the Colorado Primary Drinking Water Regulations of the State Health Department. In addition, all public sanitation districts must comply with all applicable regulations regarding wastewater treatment and discharge. It is this Department's position to encourage the establishment of public water and sanitation districts."*

WILDLIFE

Please review the following wildlife maps adopted as part of this Plan:

- * Deer Distribution
- * Elk Distribution
- * Other Wildlife Distribution

Agencies

Colorado Division of Wildlife (*DOW*)

Department of the Interior, U.S. Fish & Wildlife Service

Other sources of wildlife expertise include universities, environmental groups and state, federal and local agencies with related responsibilities.