

COMPREHENSIVE PLAN
FOR
MINERAL COUNTY

PREPARED BY THE
MINERAL COUNTY
PLANNING COMMISSION

1977

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ACT OF 1954, AS AMENDED.

CHAPTER III

PLANNING PROGRAM GOALS, OBJECTIVES, POLICIES AND STANDARDS

This statement of goals, objectives, policies and standards is an integral element of the Mineral County Comprehensive Planning program and is provided to serve as the basis upon which planning decisions can be made in the preparation of the comprehensive plan, and as a guideline to be followed by the community in plan implementation actions and development decisions.

The County should review this statement annually or as frequently as conditions warrant. Revisions should reflect changing needs and desires of the citizens of Mineral County, as well as changes in technology and development techniques. If major revision is required, consideration should be given to updating the comprehensive plan.

GENERAL GOALS AND OBJECTIVES

It is the overall goal of the citizens of Mineral County to maintain and improve the Mineral County and surrounding area by making those improvements within the county that will provide the highest quality living and working environment while at the same time protecting the unique natural environment and natural setting of the county.

Additionally, it is the goal of the County Commissioners and Planning Commission to create a sense of identity, pride and responsibility in and for Mineral County. All citizens have a moral obligation to the community to diligently pursue a process of developing a county which will create an environment of the highest standards physically, aesthetically, culturally and socially. Inherent in achieving these goals is the attainment of the following social, economic and environmental goals.

Social

- To encourage maximum employment, education, housing and recreational opportunities to all the citizens of Mineral County.
- To continue and enhance the sense of community in the county while participating and cooperating with valley-wide regional programs.
- To strengthen the sense of neighborhood through proper subdivision design and public facilities location.
- To encourage a high level of culture and cultural activities and the highest artistic vitality with maximum cooperative use of public facilities.
- To encourage greater individual effort on the part of each Mineral County citizen to provide for their own needs and not depend on local, state or federal governments for assistance.

- To support the highest quality education, educational institutions and encourage close coordination between them and the municipalities and county.

Economic

- To promote and encourage the exploration and extraction of minerals and other natural resources in a manner which will preserve the natural scenic values of the area and yet allow for such development consistent with local, state and national needs.
- To develop Mineral County's attraction as a tourist center in a manner consistent with the limited amount of private land available for development with the knowledge that over-development and over-use of both private and public lands will ultimately destroy those values which are so attractive to local residents and visitors.
- To attract light, clean industrial development which will complement the rural character of the county while providing easily accessible employment. This industrial development should provide a broad spectrum of employment opportunities consistent with the employment needs and capabilities of the area labor force.
- To encourage the attraction, retention and expansion of a sufficient number and variety of industries and businesses to provide jobs for all and a healthy tax base by: creating and maintaining a balanced economy for the county, in order to reduce the impact of seasonal and cyclical unemployment and maintain a healthy business climate. This includes the encouragement and protection of agriculture in appropriate areas through orderly control of development; utilizing the most advanced techniques for planning and protecting industrial sites, including public subsidy when necessary and proper.

Citizen Participation

- To encourage broad, continuing citizen participation in all aspects of government and community life.
- To establish a strong, permanent program for: continued solicitation of citizen opinion on community goals and policies; periodic review and revision of goals to reflect changing citizen consensus; realistic analysis of cost, priority, and timing; and, implementation of these goals and objectives to ensure that any application under the provisions of this plan consults with the local neighborhood caucus or homeowner's association, open to all residents, concerning the compatibility of the uses proposed with existing neighborhood uses and any adopted neighborhood plans.

Conformance with Other Laws

- Compliance with these goals, objectives, policies and standards shall not exempt any person from compliance with any applicable local, state or federal law and regulation, to the extent that the requirements herein differ from any other applicable requirements, the more restrictive requirements shall apply.

Impacts on Taxes and Management of Necessary Services and Facilities

- To encourage future development which will not result in any reduction in the quality of services or public facilities or programs provided the general community or portions thereof.
- To encourage the maintenance of the financial integrity of existing county or special district programs by not allowing overextension, inadequately or poorly phased use levels, or lack of revenue base.

Development Conformance with Mineral County's Goals, Objectives and Plans

- To derive maximum utilization from developed land while maintaining substantial open space to break the monotony of development and encourage the use of Planned Unit Development (PUD).
- To accomodate all land use activities in such a manner that one activity does not adversely affect any other activity.
- To develop in a planned manner, capitalizing upon the benefits of growth while avoiding the liabilities of unplanned and uncontrolled growth.
- To strengthen neighborhood and community identity through land use planning.
- To achieve safety and convenience through judicious distribution and location of land use activities.

POLICIES AND STANDARDS

Attainment of these goals and objectives will be assisted through the implementation of the following policies and standards and those policies and standards identified in subsequent discussion of specific land use categories.

- As growth occurs, areas contiguous to the existing community should be developed first to avoid leapfrog development which results in uneconomical and inefficient provision of community facilities, utilities and services.
- Land use relationships should be determined on the basis of the planned unit development to as great an extent as practical.

- To encourage the prevention of the acceleration of the erosion of soil and rock as erosion contributes to stream sedimentation, dust, gullyng, alteration of drainage patterns, exacerbation of flood hazards, loss of natural vegetation, visual scars, leaching of minerals into lakes and streams, destruction of animal habitats, and increased maintenance costs of roads and similar features.
- To encourage features in any development or activity proposal which will conserve energy resources and minimize the consumption of energy.

Natural Hazard Resource Areas

- To maximize the opportunities afforded by the natural environment and to minimize the adverse environmental impact of development through proper design and development techniques including preservation of high quality open space, recognition of hazard areas, provision for storm drainage, design to complement the natural topography and general harmony of development of nature.
- To discourage the construction of any improvement or the operation of any use which may:
 - A. Subject the occupants or users of any such improvement or use of their property to known natural hazards;
 - B. Create or worsen such conditions affecting other improvements, activities or lands;
 - C. Subject the county to expenses required to mitigate such hazardous conditions, respond to emergencies created by such conditions or rehabilitate the improvements, activities and lands;
 - D. Be destructive to identified natural resources of the county.
- To encourage regulation of land use and development in critical areas such as natural drainage ways, flood prone areas, geologic hazard areas, critical wildlife habitats, mineral resource areas, wildfire hazard areas, and areas of steep topography to preserve the natural environment and protect the health, safety and welfare of the citizens of Rio Grande County.
- To encourage protection of any sites and structures determined to have historical or archaeological significance to the county, the region, or the State of Colorado from any destruction or alteration of the site, structure, or surrounding area which would detract from its meaning as a representative of a period, style, occasion or unique activity.

Scenic Quality

- To encourage the preservation of the scenic quality of the county for the benefit of its residents and the continued viability of a recreation and tourist economy which is dependent upon the quality of its rural and natural setting.
- To encourage the preservation of the natural appearance of the mountain slopes, particularly from major activity areas, public roads, and trails by regulating the location, height, design and screening of development.
- To discourage any adverse visual effects of new roads and other facilities by regulating their alignment, design and construction so as to reduce their impact on the visual quality of any areas in the county and particularly public roads and trails and major activity areas.
- To encourage preservation and creation of scenic views of the surrounding mountains from public places within the county.
- To achieve visual quality within areas of existing and future development by prohibiting or requiring provisions for screening of unsightly equipment, uses and structures.

Agricultural Lands and Operations

It is the policy of the county to preserve the economic viability of agricultural operations within Mineral County by encouraging the preservation of land now committed to or capable of agricultural uses.

Residential Development

Policies and Standards

- In order to achieve these goals and objectives, commercial activities should be accommodated in four general types of commercial areas including central business district, small shopping centers, highway commercial and service commercial areas.

CENTRAL BUSINESS DISTRICTS:

Wherever possible commercial activities should be encouraged to locate within existing central business districts within municipalities and communities in the county.

SERVICE COMMERCIAL AND HIGHWAY COMMERCIAL DEVELOPMENT

Mineral County may experience development of a commercial nature which is not generally compatible with residential land use. The following policies are means of minimizing the adverse effects of this type of development:

- If possible, these activities should be grouped together to achieve proper vehicular access from frontage or service roads.
- If frontage or service roads cannot be incorporated, the curb cuts serving these facilities should be minimized.
- Zoning regulations restricting the height, type and number of signs allowed in these areas should be strictly enforced.

INDUSTRIAL DEVELOPMENT

Goals and Objectives

- To encourage a stable industrial base through development of clean, safe and quiet industries of diversified character.
- To encourage adequate industrial employment opportunities for the area labor force.
- To encourage a stable industrial base without adversely affecting the rural character of the county.

Policies and Standards

- Industrial development should be contained within industrial parks or industrial planned unit developments where possible or practical.
- Where possible, individual industrial establishments should be constructed so that activities are confined within a closed building or in an open area screened from view.
- Industrial establishments should be operated in such a manner that activities and appearances do not adversely affect adjacent land uses.
- Buildings and sites should be aesthetically attractive, well-landscaped and well-maintained.
- Access to arterial streets or higher level transportation facilities should be provided in the most direct manner and in such a way that truck traffic does not pass through residential areas.

UTILITY POLICIES AND STANDARDS

- The county should encourage a policy of controlled and orderly annexation to existing municipalities and communities within the objectives of preventing undue scattering of residential and commercial uses, and providing public facilities and services on an economical basis.
- The practice of Capital Improvement Programming for all anticipated capital

expenditures should be initiated to provide sufficient support data to allow a thorough, realistic discussion of the program by the Planning Commission, the Board of County Commissioners, all town councils and the public.

- Facilities should be designed and constructed so that they adequately serve current needs and can be expanded to meet future requirements.
- The county should provide proper maintenance of facilities to gain efficient service or operation.
- All facilities should be constructed to federal and state standards.
- The use of septic tank disposal systems should be eliminated wherever possible by extending municipal sanitary sewer service or providing central facilities. It is the policy of the county to ensure that land is not committed to any use and that no use is initiated without adequate evidence that facilities to collect, treat and dispose of anticipated types and quantities of waste water are available or can and will be provided with suitable capacity, quality of discharge, suitable point of discharge and dependability.
- The installation of water and sewer mains and distribution, collector and treatment systems by developers should be required.
- The county should provide facilities that will allow solid waste to be collected and disposed of in a manner that protects public health in the most feasible and economic manner.
- It is the policy of the county to ensure that land is not committed to any use and that no use is initiated without adequate evidence that a water supply of adequate quality, quantity, pressure and dependability is available to support the use intended and to provide for protection from fire.
- It is the policy of the county to regulate extensions in a manner which will ensure that utility resources will be constrained to areas of existing development and areas suited to development consistent with other policies of the county and that such areas should be provided the full complement of necessary public utilities rather than to create many areas which are not fully serviced.
- It is also the policy of the county to prohibit extensions which are not financially viable without public expenditures which would otherwise not be made to extend or upgrade components of the system or for increased maintenance or operating needs; to prohibit extensions which would create an inefficient network by requiring duplication of major lines or treatment facilities; to prohibit extensions and development which would be subjected to abnormal construction, maintenance or operating costs due to topographical, soil or geological conditions.

PUBLIC DEVELOPMENT - COMMUNITY FACILITIES

Goals and Objectives

- To work to encourage joint county, municipalities and Regional Planning Commissions for the mutual benefit of the political entities involved.

General

- The recreational opportunities provided by public parks should be supplemented by open space facilities such as linear greenbelts. These greenbelts should be planned as an integral part of the neighborhood and provided in conjunction with streams or natural drainage ways for both functional and aesthetic purposes. If feasible, access to the public park system should be provided not only by streets, but also by hiker-biker trails to facilitate safe, convenient and enjoyable access by children. In all park areas, the portion of the park to be utilized for passive recreation should have an attractive natural appearance.
- Encourage increased cooperative planning between public and private schools, colleges, the county and municipalities in the development of school, college and park spaces as recreation areas and recreation program development should be achieved.
- Encourage cooperative planning needs to be established between the public and private sector in providing open space and recreation for the area.
- Resolutions requiring private developers to dedicate land or subsidize acquisitions and development of land for parks to serve their subdivisions should be adopted.
- Water rights-of-way should be developed for parks, bicycle and hiking trails, recreation and wildlife areas where practical.
- Public easements and residual public properties should be utilized for park and recreational developments as well as for other appropriate purposes.

TRANSPORTATION

Goals and Objectives

- To establish and maintain consistent transportation policies providing for well-planned and well-maintained transportation facilities to adequately serve the needs of people and goods.
- To achieve a well-balanced, convenient, safe and economical transportation system.
- To achieve a well-balanced transportation system, including automobile, pedestrian, bicycle and mass public transportation.
- To encourage in any new development or activity proposal, measures which minimize automobile congestion and promote traffic safety and to discourage automobile sources of air pollution. To this end, it is the policy of the county to encourage in any new development or activity proposal measures which promote nonmotorized transportation alternatives such as trails,

measures which encourage the use of transit as opposed to the use of the automobile; and measures which reduce the number of vehicle trips per day.

- To discourage future development which creates traffic volumes or patterns which will create traffic hazards, or significant service level reductions, or increase maintenance needs beyond the capacity of the county to alleviate without significant cost to the general public, or disruption to other policies of the county including aesthetics, sedimentation and planned patterns of accessibility and alternative transportation modes.
- To protect residential, commercial, industrial, and public areas from undesirable and unnecessary traffic while at the same time providing proper access to these areas.

Policies and Standards

- There are four general functional categories of streets including principal arterials, minor arterial roads, major and minor collector roads, and local roads. Following is a description of each functional category and its respective right-of-way width and use standards.

RURAL PRINCIPAL ARTERIAL SYSTEM

- The rural principal arterial system consists of a connected rural network of continuous routes having the following characteristics:
 - A. Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.
 - B. Rural principal arterial systems are limited access routes that provide for rapid, long distance movements within and through an area designed to permit high speed movement of vehicles and have full access control. They should perform no direct land-service function.
 - C. Although rural principal arterial systems right-of-way standards vary, the minimum accepted width is 200 feet, and the desirable width is 300 feet.

RURAL MINOR ARTERIAL ROAD SYSTEM

- The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:
 - A. Link cities and towns (and other traffic generators such as major resort areas that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county service.
 - B. Be spaced at such intervals, consistent with population density, so that all developed areas of the state are within a reasonable distance of an arterial highway.

- C. Provide (because of the two characteristics defined immediately above) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.
- D. The primary functions of minor arterial systems are to carry relatively high speed through traffic to accomodate traffic moving considerable distances within the county.
- E. Access should be limited and parking should not be permitted.
- F. Large traffic generating activities should have access to arterials through use of properly designed exits and entrances.
- G. Direct access to residential and commercial properties from an arterial street generates traffic movements which are undesirable to the function of arterial streets and may cause higher accident rates. Controlled access should be accomplished by reversing lots so they back up to arterial streets; providing service roads, turning bays and acceleration and deceleration lanes.
- H. As traffic volumes increase on minor arterial roads and streets, the provision of turning bays is required. For this reason minor arterial roads and street rights-of-way should be 120 feet allowing for a median strip and turning bays.

RURAL COLLECTOR AND ROAD SYSTEM

- The rural collector routes generally serve travel of primarily intra-county rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average. Rural collector roads should:
 - A. Have adequate space available at all times for two lanes of moving traffic; and
 - B. Encourage the desirable right-of-way minimum standard width for collector roads which is 80 feet.
- In order to define more clearly the characteristics of rural collectors, this system should be subclassified according to the following criteria:

Major Collector Roads - These roads should: (1) provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intracounty travel corridors.

Minor Collector Roads - These routes should (1) be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; (2) provide service to the remaining smaller communities; and (3) link the locally important traffic generators with their rural hinterland.

RURAL LOCAL ROAD SYSTEM

- The rural local road system should have the following characteristics: (1) to serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified as principal arterial, minor arterial road, or collector road. (3) The local street right-of-way should be 60 feet in width; and (4) through traffic movement should be discouraged on local roads or streets.

General

- The county should adopt and implement a comprehensive road plan and classification system which will accomodate local and regional traffic needs.
- The county should continue to promote and improve the county airport facilities to serve the growing needs of Mineral County for general and commercial aviation and to enhance Mineral County as one of the prime commercial, service, and tourist centers of the San Luis Valley.
- The county should participate in regional transportation planning performed by the San Luis Valley Council of Governments.
- The major road system plan should be utilized in all plat reviews to assure a well-coordinated arterial and collector street system.
- Pedestrian and bicycle circulation should be accomodated in linear greenbelts, where practical.
- When existing streets are improved, or new facilities are constructed, the design standard selected for that certain facility should be related to the anticipated traffic volumes on the streets, adjacent land uses and the function of the street.

It is the policy of the county to ensure that new and upgraded roadways are designed, engineered and constructed so as to minimize future maintenance costs, and to regulate the development of new roads and roadway systems in a manner consistent with other county policies.

CHAPTER IV
POPULATION AND ECONOMIC BASE

INTRODUCTION

The Mineral County Comprehensive Plan identifies both existing and expected needs of Mineral County's residents based upon existing population characteristics and future expected population levels. Therefore, an analysis of the existing population and a forecast of future population growth are essential tools for developing the comprehensive plan.

PAST POPULATION TRENDS

Historically, Mineral County's population has followed closely the cyclical nature of the County's mining industries. As prices of base and precious metals rose and new discoveries were made, so did mining activity and the County's population. This relationship is to be expected as the mining industry is Mineral County's principal economic base. Table 4-1 below shows the fluctuating population levels in Mineral County and Creede between 1900 and 1970.

TABLE 4-1
POPULATION OF MINERAL COUNTY AND CREEDE, 1900 - 1970

POPULATION		
Year	Mineral County	Creede
1900	1,913	938
1910	1,239	741
1920	779	500
1930	640	584
1940	975	670
1950	698	503
1960	424	350
1970	786	653

SOURCE: U.S. BUREAU OF THE CENSUS, 1970.

As can be seen, the one word to describe Mineral County's population is cyclical. Indeed, Mineral County's population almost doubled in the ten-year period between 1960 and 1970. This kind of cyclical fluctuation will undoubtedly continue until Mineral County can substantially expand its economic base.

POPULATION CHARACTERISTICS AND ECONOMIC BASE

In analyzing Mineral County's population and economic base, it is important to look at the unique characteristics of the County's population and employment patterns. As of 1970, Mineral County had a total population of 786, 653 of whom resided in Creede. This means that only 133 people lived in Mineral County proper. Yet, the 1970 Census revealed a total of 222 housing units within Mineral County. These two figures show the impact of tourism - recreation - second home development on Mineral County's population, i.e., many more people reside in Mineral County during the summer than are reflected in the U.S. Census. This seasonal change is even more pronounced today than in 1970 as the total number of housing units in Mineral County has increased from 222 to 630.

Another important characteristic of Mineral County's population is its age and sex distribution. Table 4-2 provides a breakdown of the age and sex distribution in Mineral County and Creede. Unfortunately, this breakdown is based upon a 20% sample of Mineral County's residents and overestimates the actual number of people in the county - especially within Creede. In addition, members of the Mineral County Planning Commission living in Mineral County observed that the population distribution for the County was grossly in error and did not accurately reflect the true population breakdown of residents living in Mineral County. Nonetheless, the general ratio indicated by these figures should still hold. For the Town of Creede, the table shows that the largest numbers of people are in the age groups 0-2, 7-9, 10-13, 22-24, 25-34, 35-44 and 45-54. These figures underscore the dependence of Mineral County on the mining industry as a large portion of the county's population is in the prime working-age categories.

TABLE 4-2
POPULATION, AGE AND SEX DISTRIBUTUION IN MINERAL COUNTY

Age	Creede		Mineral County	
	Male	Female	Male	Female
0-2	28	27	0	5
3-4	22	11	0	4
5	4	8	0	0
6	13	9	0	9
7-9	38	58	0	0
10-13	66	34	5	0
14	0	4	5	0
15	8	4	4	0
16	16	3	0	0
17	7	8	0	0
18	6	0	0	0
19	4	11	0	0
20	4	4	0	0
21	0	4	0	0
22-24	27	31	0	0
25-34	68	79	10	10
35-44	48	41	6	5
45-54	32	44	6	10
55-59	9	13	0	0
60-61	0	0	0	0
62-64	22	9	0	0
65-74	0	16	0	8
75 and over	14	14	0	0
TOTAL	436	432	36	56

SOURCE: U.S. BUREAU OF THE CENSUS, 1970.

The employment patterns in Mineral County also reveal its dependence on the mining industry. Table 4-3 below shows the employed population of Mineral County by industry. As can be seen 177 or 57% of Mineral County's population were employed by the mining industry as of 1970. With the recent increase in mining activity in Mineral County, this figure is probably low. In fact, the 1975 Division of Mines publication showed 194 persons employed in mining in Mineral County. In addition, Table 4-4 shows both the employment levels and payroll generated by the major industries in Mineral County in 1974. This Table shows that in 1974, the mining industry employed 138 or 62% of the County's work force and accounted for 84% of the County's payroll.

TABLE 4-3
EMPLOYMENT BY INDUSTRY - MINERAL COUNTY

Category	Number	1970
		Percent
Civilian Work Force - Total	319	100%
Unemployed	8	2.5%
Employed	311	100%
Agriculture, Forestry and Fisheries	15	4.8%
Mining	177	56.9%
Construction	15	4.8%
Manufacturing	4	1.3%
Transportation	4	1.3%
Communications & Utilities	7	2.3%
Wholesale Trade	0	0%
Retail Trade	22	7%
Finance, Insurance & Real Estate	0	0%
Selected Services	21	6.8%
Hospitals & Health Services	4	1.3%
Educational Services	26	8.4%
Welfare, religious and non-profit membership organizations	0	0%
Legal, engineering and miscellaneous professional services	6	1.9%
Public administration	10	3.2%

SOURCE: U.S. Bureau of the Census, 1970.

TABLE 4-4
EMPLOYMENT AND PAYROLL

Industry Classification	Quarter Average # of Employees	Total Quarter Payroll Dollars
Agriculture, Forestry & Fisheries	0	\$ 0.0
Mining	138	398.5
Contract Construction	0	0.0
Manufacturing	(D*)	(D*)
Transportation, Communication and Public Utilities	0	0.0
Wholesale & Retail Trade	41	43.9
Finance, Insurance & Real Estate Services	0	0.0
	34	25.7
Government	0	0.0
Total "Covered" Employment & Payroll	222	475.8

*D Withheld, and included in totals, to avoid disclosure.

Another indicator of the impact of mining on Mineral County is the value of minerals produced in the County. In 1975 alone, the mineral production in Mineral County was valued at \$13,801,958. Only Lake and San Miguel Counties had higher values of base and precious mineral production in 1975 in Colorado than Mineral County. Analyzing the impact of mining activity in Mineral County on the rest of the San Luis Valley is even more impressive. In 1975, Mineral County accounted for 98.2% of the value of all minerals produced in the San Luis Valley. Suffice it to say, mining is big business in Mineral County.

In the last decade, tourism has become another important industry in Mineral County. Although no figures are available, it would be safe to assume that Mineral County's population doubles and perhaps triples during the summer months. Table 4-5 shows the impact of tourism in Mineral County on retail sales. As can be seen, the three summer months account for 51% of Mineral County's total retail sales. This figure should be considerably higher today.

TABLE 4-5
EMPLOYMENT LEVEL AND PAYROLL

	SUMMER (July-Sept. 1971) % of Total		FALL (Oct.-Dec. 1971) % of Total		WINTER (Jan.-Mar. 1971) % of Total		SPRING (Apr.-June 1971) % of Total		TOTAL
Mineral County	810,674	50.7%	373,046	23.8%	202,145	13.4%	214,559	13.4%	1,600,434
Creede	504,085	44.2%	271,561	23.8%	175,487	15.4%	189,567	16.6%	1,140,700
Remainder	306,589	66.7%	101,495	22.1%	26,658	5.8%	24,992	5.4%	459,734

The above descriptions of Mineral County's population and employment characteristics establish the base for estimating future population levels in Mineral County and Creede, and the public services needed to accomodate these future population levels.

POPULATION PROJECTIONS

Projecting future population levels is extremely risky business since population depends upon so many variables. As in the past, the mining industry will continue to be the most important variable affecting population in Mineral County. However, Mineral County's mining industries are directly affected by such things as prevailing prices for base and precious metal, the national economy, federal, state and local laws regarding mining, new technologies dealing with mineral extraction and procession, and, perhaps most importantly, new mineral discoveries in the county. In addition, tourism and recreation have become increasingly more important to the economy, and in turn population, of Mineral County. But as with the mining industry, tourism and recreation are cyclical in nature and depend upon the national economy. Consequently, any population projections developed must be accepted as best estimates rather than definitive projections.

Presently, there are two principal sources of population projections for Mineral County, the Colorado Division of Planning, and the San Luis Valley Council of Governments. Table 4-5 shows the projected population levels for Mineral County to the year 2000 as developed by the Colorado Division of Planning. These projections provide both a high and a low figure and are based upon a computer modeling method of estimating population. Table 4-6 shows the population projections for Mineral County developed by the San Luis Valley Council of Governments in 1974. As can be seen, these figures are higher than those developed by the Colorado Division of Planning. In fact, they show an annual population growth rate of approximately seven (7) percent. This is primarily due to the fact that SLV-COG's projections assume increased tourism and recreation-related development in Mineral County which would increase the County's permanent population as well.

TABLE 4-6
COLORADO DIVISION OF PLANNING
POPULATION PROJECTIONS
MINERAL COUNTY

POPULATION RANGE	YEAR						
	1970	1975	1980	1985	1990	1995	2000
Low	786	866	858	883	916	944	951
High	(Same)	882	890	944	1,016	1,098	1,177

Although these two population estimates are the only available estimates at this time, they are not completely satisfactory since one (DOP's) projects very little population growth and the other (SLV-COG's) projects a very large population increase. An alternative to these projections and one that is very simple to develop, is to project population based upon a constant percentage increase in population. Table 4-7 below estimates Mineral County's population based upon constant percentage increases. For example, if we assume a 2% annual increase in population over the next 25 years, Mineral County's population would increase to 1608.

TABLE 4-6 .

SAN LUIS VALLEY POPULATION PROJECTIONS, 1970-2000

	1970	1975	1980	1985	1990	1995	2000
Alamosa County	11,422	11,995	12,500	13,875	15,400	17,095	19,000
Alamosa	6,985	7,475	7,960	9,200	10,440	11,685	12,930
E. Alamosa	1,040	1,220	1,405	1,860	2,315	2,770	3,230
Hooper	80	90	100	110	125	135	150
Mosca	108	110	110	110	115	115	115
Conejos County	7,847	7,450	7,100	7,150	7,200	7,250	7,300
Antonito	1,113	1,100	1,135	1,170	1,205	1,240	1,275
Capulin	185	175	165	165	170	170	175
Guadalupe	30	30	25	25	25	30	30
La Jara	768	775	785	810	830	855	880
Manassa	814	775	735	740	750	755	765
Romeo	352	335	315	320	320	325	330
Sanford	638	610	575	580	590	595	600
Costilla County	3,091	2,995	2,900	2,875	2,850	2,825	2,800
Blanca	212	230	245	260	280	295	315
Chama	160	150	140	130	115	105	95
Ft. Garland	350	365	385	400	420	435	455
Garcia	120	110	100	90	85	75	65
San Luis	781	790	800	810	815	825	830
Mineral County	786	980	1,300	2,275	3,250	4,225	5,200
Creede	653	850	1,100	1,450	1,800	2,150	2,500
Rio Grande County	10,494	11,860	13,200	14,775	16,350	17,925	19,500
Del Norte	1,569	1,755	1,945	2,180	2,420	2,655	2,895
Monte Vista	3,909	4,105	4,300	4,645	4,995	5,340	5,690
South Fork	275	1,210	2,700	3,800	4,900	6,000	7,100
Saguache County	3,827	3,815	3,800	3,850	3,900	3,950	4,000
Bonanza	10	25	40	60	85	105	125
Center	1,470	1,545	1,620	1,625	1,630	1,635	1,640
Crestone	34	80	130	180	235	285	340
Moffat	98	95	95	95	95	100	100
Saguache	642	625	610	615	620	630	635
TOTAL REGION	37,467	39,095	40,800	44,800	48,950	53,270	57,800

Source: San Luis Valley Council of Governments
1973

TABLE 4-8
POPULATION ESTIMATES FOR MINERAL COUNTY, COLORADO
BASED UPON FIXED ANNUAL GROWTH RATES

Annual Percentage Increase	YEAR					
	1975	1980	1985	1990	1995	2000
1%	980	1030	1083	1138	1196	1257
2%	980	1082	1195	1319	1456	1608
3%	980	1123	1302	1509	1750	2028
4%	980	1192	1451	1765	2147	2612
5%	980	1251	1597	2038	2601	3320

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1977.

Based upon discussions with the Mineral County Planning Commission, this Comprehensive Plan will use a combination of these three estimates for its official population estimates. Specifically, it will use the Colorado Division of Planning's estimates as low figures in its population projections. In addition, it will use the San Luis Valley COG's estimates as high figures for each of the five-year periods. Finally, it will use a middle-range estimate based upon an annual 2% growth rate shown in Table 4-8. Table 4-9 shows the final population estimates to be used by Mineral County in its Comprehensive Planning activities. Using three separate estimates for each five-year period allows the Planning Commission the flexibility to choose the estimates it feels most accurate given the prevailing economic conditions in the County.

TABLE 4-9
FINAL POPULATION PROJECTIONS FOR
MINERAL COUNTY

Mineral County Population Estimate	YEAR					
	1975	1980	1985	1990	1995	2000
High	980	1,300	2,275	3,250	4,225	5,200
Medium	980	1,082	1,195	1,319	1,456	1,608
Low	882	890	944	1,016	1,098	1,177

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1977.

To conclude this section of Mineral County Comprehensive Plan, it must once again be cautioned that the above population projections should only be considered as best estimates given current knowledge. As such, they should be considered as "ballpark" figures when being used to determine future land use, housing, community facilities needs, etc. Because of this uncertainty, many local governments choose to base their projected land use, housing, community facilities needs, etc., to population thresholds regardless of the year they are attained rather than to population projections tied to a specific future date, e.g., 1985. In so doing, they can prepare to meet future county needs based upon a given population size rather than on a specific date. Throughout the remainder of this Plan, both methods will be used in forecasting future county needs.

CHAPTER V

LAND USE ELEMENT

MINERAL COUNTY COMPREHENSIVE PLAN

INTRODUCTION

The land use element is basic to the proper physical development of Mineral County. Its primary purpose is to determine the best utilization of the land (i.e., locations for residential development, business, industry, etc.) to support necessary functions with minimum conflict and cost. These determinations are based on anticipated future population levels. This element translates the needs of future populations into land use proposals for Mineral County. It establishes the magnitude of other planning efforts and the functional programs that provide for streets, schools, utilities, and other service requirements. Ultimately, the land use element is the basis of development regulations and land use controls. It must therefore reflect the type of growth desired in Mineral County and be realistic in its projections of development potential and economic opportunities.

The land use element contains the recommended directions in land use that government officials intend to pursue in achieving their mandated goals and objectives. Various inventories and data searches are required as the basis of this element. From this material, which includes historical trends in growth and land use and determinations of the external effects likely to influence development, projections can be made and conclusions drawn as to how the area might develop. The scope of this element involves natural resources, man-made structures and utilities, and population and employment characteristics.

The land use element must consider all adopted plans, programs, and special studies relating to physical development of Mineral County. The location, extent and purpose of land uses proposed or adopted in these plans should be recorded. The extent of public lands and uses should be inventoried. Completion of the environmental element is especially beneficial in pointing out present and potential development hazards and indicating areas of potential open space and recreational use. Land use regulations, particularly zoning ordinances and maps, should be studied to determine the number of people zoned areas would accommodate if they were developed to their allowed holding capacities. Finally, transportation plans should be consulted to determine the potential distribution patterns of new land use.

LAND USE INVENTORY

The Mineral County Land Use Element begins with the collection of data and information from which further analyses can be made and issues identified. Without this base information, enlightened decisions cannot be made regarding the future growth of Mineral County.

LAND USE CATEGORIES

Land use refers to the kind of activity for which any given parcel of land is being utilized. In the Mineral County Comprehensive Plan, land use will be divided into nine (9) categories. These nine categories are the same as the first order categories used in the Colorado Land Use Classification System and include the following:

010 Urban and Community Functions

This category includes the various commercial, service institutional, light industrial and other combinations of land use that are normally found in intricate complexes at central locations. They represent the "commercial center" or "central business district" of the community, or the various subcenters and strip or scattered developments that provide similar services. This category may also include some residential use where it exists in areas which are predominately commercial, service or light industrial.

020 Residential

This category includes the large areas of most communities which are devoted almost exclusively to residential use, perhaps including small areas where services are provided for the local neighborhood. Because purely residential land use is significantly different in landscape and economic effect from that of the "commercial center", a separate major category is provided for it.

030 Heavy Industry, Transportation and Utilities

This category is characterized by land uses that have very pronounced social, economic and other environmental effects in spite of the generally small areas they occupy. They often are the features representing critical economic functions of community support facilities. They also frequently have significant actual or potential visual impacts or polluting effects. Finally, they are frequently associated with the use of natural resources. Thus, their location, even more than the area they occupy, is of critical importance for planning.

040 Resource Extraction

This category includes land uses similar to heavy industry in their environmental and economic significance, but "resource extraction" is more closely related to the use of natural, or land-based, resources. The resource extraction process itself has characteristic effects on the land, and furthermore, is directly dependent on the existing of natural resources and the manner in which they are removed.

050 Developed Outdoor Recreation

This category includes land on which the primary use is recreation, and on which recreational activity accounts for dominant characteristics of the land. The category includes all developed municipal, county, state, federal or private parks, campgrounds, ski areas, golf course, or other recreational facilities involving large land areas. It includes playing fields, shooting ranges and major sports stadiums. It does not include areas that are undeveloped except for primitive trails, roads and campsites, such as wilderness areas of national forests and national parks. These areas should be classified as "low impact land use".

060 Irrigated Farmland

Water is a critical resource in Colorado, and irrigation depends on its availability. Furthermore, irrigated land is several times as productive as unirrigated land, and often provides hay crops critical to livestock operations on unirrigated rangeland. For these reasons, together with the increasing importance of food production and the more general environmental values of maintaining irrigated agriculture and the pastoral economy, irrigated farmland is considered important enough to warrant identification as a major land use category.

070 Unirrigated Farmland

This category includes both extensive grain production and concentrated livestock production operations. It also includes rotational livestock grazing on lands which are periodically plowed and planted or which are occasionally mowed for hay ("Unirrigated hay or pasture") and grazing lands which were once cultivated but are presently submarginal for cultivation and have reverted to more extensive use ("submarginal or casually grazed").

080 Rangeland

This category includes land on which domestic livestock graze on "natural" vegetation which maintains itself from year to year without periodic plowing and replanting or artificial irrigation. This category includes in addition to native grassland, open woodlands which are used for grazing and mountain meadows which are grazed by domestic stock but not mowed for hay.

090 Low Impact Land Use

This category includes areas with landscapes essentially unaltered by human activity. Such lands have important environmental functions as watersheds and recreational lands. They also include environmentally critical areas: high altitude tundra and meadows, steep rocky slopes, avalanche paths, and undeveloped floodplains. The category contains such diverse areas as legislatively-reserved wilderness and municipal watersheds. Although these areas have important recreational functions, they are differentiated from "developed outdoor recreation" because of their essentially natural character, relative absence of structures, low-intensity recreational use, and usually large areas.

The above nine (9) categories are first-order categories which distinguish between the primary uses of land in Mineral County. In addition, these nine (9) first-order categories can be further broken down into a number of second-order categories for more detailed classification of existing land use. A complete breakdown of the first and second-order classification system used in Mineral County is provided in Appendix A.

LAND OWNERSHIP IN MINERAL COUNTY

The ownership of land ultimately determines how land will be used in the future. In Mineral County, this is especially true since the U.S. Forest Service controls the vast majority of lands within the County. Table 5-1 provides a breakdown of the major land ownership categories in Mineral County as of 1977. As can be seen, of the total 561,986 acres in Mineral County, the vast majority of land (525,269 acres or 93.5%) is owned by the U.S. Government and managed by the U.S. Forest Service. And if we exclude the 621 acres owned by the State of Colorado and 150 acres within the Town of Creede, there are only 35,946 acres of privately owned land in Mineral County proper. Map 5-1 geographically portrays land ownership in Mineral County as of 1973. Detailed (scale 1:24,000 and 1:50,000) land ownership maps are shown in the Mineral County Data Base Book.

TABLE 5-1
MINERAL COUNTY LAND OWNERSHIP, 1977

Land Ownership Category	Total Acres	Percent of Total
Rio Grande National Forest	386,266	68.734%
San Juan National Forest	139,003	24.735%
Mineral County Privately Owned Land	35,946	6.397%
Colorado State Land	621	.111%
Municipality of Creede	150	.003%
Total	561,986	100%

LAND USE IN MINERAL COUNTY

Before projecting future land use needs and developing a land use plan for Mineral County, it is imperative to know the present use of land in Mineral County. In 1976 and 1977, the Mineral County Land Use Administrator, Charles Steele, conducted a land use inventory of Mineral County. Tables 5-2 and 5-3 show the results of this inventory. Table 5-2 breaks down the existing land use for all lands in Mineral County. Since the U.S. Government holdings are so large, this table tends to skew the percentage breakdowns to insignificant levels for most privately-owned land use categories. Consequently, Table 5-3 shows the existing land use for all lands excluding the U.S. Forest Service. As can be seen, the total area remaining in privately or state-owned land is 36,717 acres.

Map 5-1 shows the existing land use in Mineral County by major land use category at a scale of 1:50,000. In addition, enlargements of this map (scale 1:24,000) are shown in a series of maps numbered 5-2. Both of these maps are included in the Mineral County Data Base Book. The following is a detailed discussion of each of these land uses in Mineral County.

TABLE 5-2
MINERAL COUNTY LAND USE, 1977
(ALL LANDS)

Land Use Category	Acres	Percent of all Land	Acres per 100 Persons
010 Urban and Community Functions	291.8	.06%	30.6
020 Residential	1,665.7	.30%	170.2
030 Heavy Industry, Transportation and Utilities	1,459.6	.25%	148.9
040 Resource Extraction	3,769.7	.65%	384.7
050 Developed Outdoor Recreation	1,916.0	.33%	195.5
060 Irrigated Farmland	0	0%	0
070 Unirrigated Farmland	0	0%	0
080 Rangeland	22,210.8	3.94%	2266.4
090 Low Impact Land Use	<u>530,814</u>	<u>94.5 %</u>	<u>54228.1</u>
TOTAL	561,986	100.0%	57,408.9

Source: San Luis Valley Council of Governments

TABLE 5-3
MINERAL COUNTY LAND USE, 1977
(PRIVATELY OWNED LANDS)*

Land Use Category	Acres	Percent of all Land	Acres per 100 Persons
010 Urban and Community Functions	291.8	.8%	30.6
020 Residential	1,665.7	4.5%	170.2
030 Heavy Industry, Transportation and Utilities	1,459.6	4.0%	148.9
040 Resource Extraction	3,769.7	10.3%	384.7
050 Developed Outdoor Recreation	1,916.0	5.2%	195.5
060 Irrigated Farmland	0	0	0
070 Unirrigated Farmland	0	0	0
080 Rangeland	22,069	60.5%	2266.4
090 Low Impact Land Use	<u>5,545.2</u>	<u>15.1%</u>	<u>565.8</u>
TOTAL	36,717.0	100%	3746.6

*Excludes All U.S. Forest Service Lands

Source: San Luis Valley Council of Governments

existing land use for Mineral County at a scale of 1:50,000. In addition, Map 5-2 shows Mineral County's land use as of 1973 at a much smaller scale. The following is a detailed discussion of each of these land uses in Mineral County.

Urban and Community Functions -- 010

In Mineral County 291.8 acres or .8% are devoted to urban and community use. This land is concentrated in the Creede area where the only large community in Mineral County is located (see Map 5-1). The Town of Creede is dependent almost entirely on the mining and tourism industries. As stated earlier, the population of Creede fluctuates directly with the well-being of the mining industry. Presently, Creede has very little undeveloped acreage for future growth. In fact, there is less undeveloped acreage in Creede than in any community in the San Luis Valley. And as will be shown later, a number of environmental constraints exist which limit the possibilities for future growth in areas immediately adjacent to the Town of Creede.

Residential -- 020

Presently, 1665.7 acres or 4.5 % of Mineral County's land is classified as residential. This land is primarily included in approved residential subdivisions located throughout Mineral County. Map 5-1 shows these subdivisions in Mineral County. As can be seen, five (5) subdivisions are located within four miles southwest of Creede along the Rio Grande. Another six (6) are located further southwest of Creede along the Rio Grande or just north of the Rio Grande (near Santa Maria Reservoir). Finally, one other subdivision is located east of Creede along State Highway 149 near the Mineral - Rio Grande County line, and another is located in southwestern Mineral County southwest of the Continental Divide. These subdivisions contain a total of 1662 lots available for development. Of the 1662 lots, only 540 have been sold leaving a total of 1122 lots unsold or 67.5 % of the total available lots. As can be seen, a large number of lots already exist to accomodate future growth in Mineral County.

Heavy Industry, Transportation and Utilities -- 030

Generally speaking, Mineral County has relatively little land devoted to heavy industry, transportation and utilities. By far the largest acreage devoted to this category is found in the Santa Maria Reservoir area where 1240 acres are classified as heavy industry, because of its use as a water storage reservoir. The remaining 219.6 acres in this category are split between the Creede airport (87 acres) located South of Creede, the propane bulk storage plant and power substation (98 acres) located just southeast of Creede.

Resource Extraction -- 040

The third largest category of land use found in Mineral County, and by far the most important to the County's economy, is mineral resource extraction. The total acreage in this category (which includes patented mining claim areas) is 3769.7 or 10.3% of the County's privately-owned land. Land in this category is generally found within the borders of land publicly owned by the Forest Service (see Map 5-1). The largest single block of land in this category is found directly north of Creede where major mining activity is presently in progress. Although the land ownership is comprised of numerous patented mining claims held by individuals, groups and corporations, the two largest mine operators in the district are the Homestake Mining Company and Minerals Engineering Company¹. Several other large blocks of patented mining claims are located in the southern half of Mineral County. Unfortunately, most of these claims are now included in recently designated Wilderness areas and will be impossible to mine.

Developed Outdoor Recreation -- 050

The fifth largest category of land use in Mineral County is developed outdoor recreation. This category accounts for approximately 1,916 acres or 5.2% of Mineral County's land use. All of the land in this category is included in a number of guest or tourist ranches catering to the summer tourism trade. Map 5-1 shows the locations of these guest ranches. As can be seen, they are located principally along the Rio Grande in the northern part of Mineral County. The one exception is a guest ranch along Highway 160 near the Mineral - Archuleta County line.

¹ For a more detailed description of mining in Mineral County, see Mineral Resource Inventory for Mineral County, Colorado.

Irrigated Agriculture and Pasture -- 060

No land in Mineral County has been classified as being within this category.

Unirrigated Agriculture and Pasture -- 070

No land in Mineral County has been classified as being within this category.

Rangeland -- 080

This land use category makes up the second largest use of land in Mineral County, and the largest use of the privately owned land. It accounts for approximately 22,210.8 acres or 60.5% of the privately-owned land. As is shown on Map 5-1, virtually all of this land is located along river bottoms in the northern part of Mineral County with another large area being located along West Fork of the San Juan River south of the Continental Divide. Although grazing has decreased in recent years, it is still a major use of the land placed in this category.

Low Impact Land Use -- 090

This final category comprises the overwhelming majority of land in Mineral County. The Low Impact Land Use category includes all U.S. Forest Service lands and some private lands and makes up approximately 530,814 acres or 94.5% of Mineral County's total land area. The land in this category is rich in natural resources (e.g., timber, minerals, wildlife, etc.) and serves as a major tourist attraction during the Spring, Summer and Fall. An additional piece of information relevant to this plan is that 109,000 acres or 21 % of this public land is now under the "Wilderness Area" classification and an additional 189,280 acres is being studied for inclusion into this classification. Since this land is extremely restricted in its use, designation of so much land into the use places potential limitations on Mineral County's growth.

ENVIRONMENTAL CONSTRAINTS

In planning for the future use of land in Mineral County, an important variable which must be considered is the environment. The environment places limits on the way in which land can be safely and economically used. As a consequence, any future use of land in Mineral County should work with nature, not against it.

A number of environmental factors can be classified as having important impacts on land use in Mineral County. These factors include slope, soils, wildfire hazard potential, geologic hazard potential and floodplain hazard potential. Each of these environmental factors are discussed below.

SLOPE

Slope is a major factor which must be considered in determining the future use of land. Generally speaking, as slope increases, land becomes less suitable for development. This is because increasing slope frequently means increasing soil instability, increasing chances for wildfire hazard, increasing problems for access and road maintenance, etc. Therefore, the greater the slope, the greater the potential for problems in using land.

Much of the private land in Mineral County has already been mapped for slope. These maps are included in the Mineral County Data Base Book and include detailed slope mapping (categories of 0-15%, 16-30%, and above 30% slope) for the Bristol Head, Creede, Workman Creek and Wolf Creek U.S.G.S. Quadrangles. In addition, mapping of slopes in excess of 30% have been completed for the Spar City and Beaver Creek Reservoir quadrangles. Generally speaking, land with slopes up to 15% can be developed with few, if any, problems. Slopes between 16% and 30% may pose potential problems and should be evaluated on a case by case basis as to their suitability for development. And slopes over 30% should not be developed.

SOILS

A second potential environmental constraint to future land use in Mineral County is the soil. Different soils types pose different problems to development such as soil instability, septic tank limitations, expansive or clay soils, etc. Consequently, knowledge of soils information is imperative in order to make informed decisions regarding future land use.

The Soil Conservation Service has mapped the major soil associations in Mineral County (see Map 5-3). According to the SCS, all of the major soils associations in Mineral County pose severe limitations on the use of septic tanks. This is perhaps the greatest limitation to future land use posed by soils in Mineral County.

GEOLOGIC HAZARDS

A third environmental constraint to future land use in Mineral County is that of geologic hazards. According to the Colorado Geological Survey, "geologic hazard means a geologic phenomenon which is so adverse to past, current, or foreseeable construction or land use as to constitute a significant hazard to public health and safety or to property". It includes nine (9) types of hazards, five (5) of which are relevant to Mineral County: (1) avalanches, (2) landslides, (3) rockfalls, (4) mudflows and debris fans, and (5) unstable or potentially unstable slopes.

A professional geologist from Colorado State University identified and mapped the five geologic hazards in Mineral County in 1976. These geologic hazards are shown in the Mineral County Data Base Book and cover all of the privately-owned land in Mineral County. Generally speaking, future developments in areas of geologic hazards should be discouraged unless appropriate mitigation procedures are possible and implemented.

FLOODPLAIN HAZARDS

A fourth environmental constraint which limits the future use of land is floodplain hazard. This hazard poses potential threats to the life and property of landowners choosing to build in floodplains. As a consequence, development in floodplains should be discouraged unless proven mitigation procedures are followed.

Once again, a professional geologist from Colorado State University identified and mapped floodplain hazards for parts of Mineral County. These floodplain hazard areas are shown in the Mineral County Data Base Book and include the Rio Grande southeast of Creede to the Mineral-Rio Grande County line and a short reach of Red Mountain Creek as it joins the Rio Grande.

WILDFIRE HAZARDS

A final environmental constraint affecting the future use of land in Mineral County is wildfire hazard. The severity of this environmental constraint depends upon such variables as the type of vegetation present, its density and the slope of the terrain. Generally speaking, those areas which have moderate wildfire hazard potentials can be developed with a few minor safeguards. However, those areas with severe wildfire hazard potentials should not be developed unless proper mitigation procedures are followed.

In 1976 a trained forester mapped wildfire hazard areas for parts of Mineral County. These areas are shown in the Mineral County Data Base Book and include the private lands in the Creede, Spar City, Beaver Creek Reservoir, and Wolf Creek Pass U.S.G.S. Quadrangles.

MINERAL COUNTY RESOURCE AREAS

Mineral County residents have a vested interest in protecting certain unique county resources which help form the county's economic base. Three of the county's most important resources are its mineral resources, wildlife, and historic sites. These three county resources are critical to the county's two economic bases, mining and tourism. Each of these three county resources are discussed below.

MINERAL RESOURCE AREAS

The mining industry is Mineral County's principal economic base (see Chapter IV). Therefore protection of potential mineral resource areas from other conflicting types of use is critical to the economic well-being of Mineral County's residents. As a consequence, Mineral County should discourage conflicting types of development in areas of known mineral resource potential.

To this end, the San Luis Valley Council of Governments, with the assistance of the U.S. Geological Survey and a Colorado State University Geologist, identified and mapped all known mineral resource areas in Mineral County. These mineral resource areas were divided into proven, probably and possible mineral resource areas based upon their mineral resource potential and are shown in the Mineral County Data Base Book. Generally speaking, proposed developments in either proven or probable MRA's should be discouraged, and developments in possible MRA's should be closely scrutinized to ensure no significant mineral resources indeed exist.

WILDLIFE HABITAT AREAS

Wildlife serves as one of the chief attractions for tourists coming to Mineral County each summer and fall. As such, it must be considered as an important resource for the County. With this in mind, proposed developments or future uses of land which jeopardize this important resource should be discouraged.

Although wildlife habitat areas have yet to be mapped for Mineral County, the Colorado Division of Wildlife has indicated their willingness to do the mapping as time permits. Consequently, once these areas are mapped, they should serve as a guide for reviewing future land use proposals in Mineral County.

HISTORIC SITES

A third important resource area for Mineral County is historic sites. Once again, the scenic and historic sites within Mineral County serve to attract many tourists to the county. As such, these sites should be protected from potentially conflicting land uses, or developments wherever possible. The Mineral County Land Use Administrator has these developments or land use changes.

UTILITY CONSIDERATIONS

The economical extension of electrical, gas, telephone and sewage collection is a factor which must be considered in determining the most desirable areas for future development. Although all utilities are important, the two most critical are electrical and sewage service.

Since Mineral County has relatively little privately owned land, it does not have an extensive network of electrical power lines. In fact, almost all of the electrical power lines follow closely the main roads in Mineral County - Highways 160 and 149. This means that most of the privately-owned lands near or adjacent to these major roads have relatively close access to electrical power. Map 5-4 shows the location of these power lines. As can be seen, the proximity of electrical power does not appear to be a major limitation to development except for a few isolated pieces of privately-owned land within the U.S. Forest Service boundaries. The sole provider of electrical service to Mineral County is the San Luis Valley Rural Electric Cooperative.

Although the proximity to electrical power lines does not appear to be too great a problem, the availability of electrical power from electrical generating sources poses a potential limitation on future development. During the past year a moratorium on new electrical service was threatened by SLV-REC. However, this moratorium never materialized, but may still be a possibility in the future unless more power is made available to Mineral County.

Dealing with sewage disposal is a major problem in Mineral County. The only central sewage treatment system presently in Mineral County is operated by the Town of Creede. The costs of extending this system to residential areas outside the Town of Creede are prohibitive. Consequently, the overwhelming emphasis for sewage treatment in Mineral County is the individual septic tank. But this system is not without its problems. Primary among the problems associated with septic tanks in Mineral County is the relative unsuitability of the soil for their use. As a consequence, Mineral County has adopted a 3 acre minimum lot size for subdivided lots not to be serviced by a central sewage treatment or collection system. Since all land in Mineral County has been identified by the Soil Conservation Service as having limited suitability for septic tanks, this consideration applies county-wide and will not affect any one location.

MINERAL COUNTY'S FUTURE LAND USE NEEDS

Estimating future land use needs depends upon three principal factors: (1) past land use relationships, (2) possible new or changing land use relationships, and (3) estimated future population levels. For Mineral County, the future population estimates were shown in Table 4-9. In addition, past land use relationships were shown in Tables 5-2 and 5-3. Therefore, the only variable in real question is that of any new or changing land use relationships in Mineral County.

LOCATION OF FUTURE POPULATION GROWTH

From present information the most important change likely to occur in the future in Mineral County is the location of future population increases. As of 1975, it was projected that of the estimated 980 Mineral County residents, 850 or 86.7% lived in the Town of Creede, while only 130 or 13.3% lived in Mineral County proper. Given the environmental constraints in the undeveloped land within the Town of Creede and in privately-owned lands immediately adjacent to Creede, it is highly unlikely that this past pattern will continue. It is more likely that a much larger percentage of the permanent population growth will occur in the county in the next 23 years. Therefore, for the remainder of this land use element it will be assumed that future population growth will be distributed 33% to Creede and 67% to Mineral County proper. Based upon this assumption, Table 5-4 below shows the anticipated distribution of population and households between the Town of Creede and Mineral County.

TABLE 5-4
PROJECTED DISTRIBUTION OF FUTURE POPULATION
IN MINERAL COUNTY

Year	Town of Creede		Mineral County		TOTAL
	Number	# of Households ¹	Number	# of Households	
1975	850	275	130	42	980
1980	884	295	198	66	1082
1985	921	307	274	91	1195
1990	962	321	357	119	1319
1995	1007	336	449	150	1456
2000	1057	352	551	184	1608

¹ Assumes a population to household ratio of 3.0

SOURCE: San Luis Valley Council of Governments, 1977.

As Table 5-4 shows, future land use in Mineral County must accomodate a projected 142 additional households by the year 2000. It was also noted in the preceding sections that a total of 1120 residential lots remain unsold at this time in Mineral County. Therefore, we can see that enough vacant developable land already exists in Mineral County to accomodate the anticipated growth in population for Mineral County.

THE IMPACT OF SEASONAL-TOURIST POPULATION ON MINERAL COUNTY

An important consideration which has not been directly addressed thus far is that of Mineral County's seasonal population. For example, the 1970 U. S. Census showed a total population for Mineral County of 133. Assuming an average household size of 3 (from the U.S. Census) this means that 44 of these housing units were occupied by full time county residents with the remaining 176 being used for seasonal-recreation purposes, with a total housing count of 222. In 1977 the differential is even greater. Whereas the estimated county population is still only about 130, the number of housing units has risen to 630. This means that permanent Mineral County residents account for only 7% of the County's housing while the seasonal-tourist population (predominantly second-home and recreational cabins) account for the remaining 93% of the housing. A direct consequence of these statistics is that in planning for the County's future growth, the County must take into consideration the impact of the seasonal-tourist population on future land use needs.

Translating the impact of the seasonal-tourist growth on future land use needs in Mineral County is extremely risky business at best. A number of simplifying assumptions need to be made at the outset. The first assumption is that this type of growth is acceptable to Mineral County and will be encouraged over the next 23 years. This is a fairly reliable assumption since the Mineral County Planning Commission has implicitly adopted this as policy in its land use deliberations. Secondly we will assume that the seasonal-tourist growth will continue at the same rate that has occurred over the past seven (7) years, i.e., development on approximately 60 new lots per year. In addition, that for every lot developed another 15 lots are purchased for either speculation purposes or future development. Therefore, each year an estimated 75 lots will be either developed or purchased for seasonal-recreational use. Table 5-5 projects the land use needs for the seasonal-recreational use.

TABLE 5-5

FUTURE LAND USE NEEDS RELATED TO SEASONAL
RECREATIONAL USE

Year	Lots to be Developed ¹	Lots to be Sold ²	Total # of Lots
1977		45	225
1980	180	75	375
1985	300	75	375
1990	300	75	375
1995	300	75	375
2000	300	75	375
TOTAL	1380	345	1725

¹ Assumes 60 lots to be developed (conventional home, trailer, etc.)

² Assumes lots sold for each lot developed

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1977.

As a concluding note of caution, this last assumption of continuing growth in seasonal-recreational development is somewhat questionable given possible national trends in fuel prices and the economy. Revisions should be made in these figures as soon as such trends materialize.

PROJECTING FUTURE LAND USE NEEDS
FOR MINERAL COUNTY

Based upon the preceding estimates of land use needed to accomodate future permanent and seasonal population growth, it is possible to compile an overall land use needs inventory for Mineral County. Table 5-6 shows the future land use needs for Mineral County just for residential growth. As can be seen, by 1980 a total of 249 lots will be needed to accomodate the anticipated permanent and seasonal population. By the year 2000 the number of lots needed will be 1867.

TABLE 5-6
RESIDENTIAL LAND USE NEEDS
IN MINERAL COUNTY

Year	Lots Required for Permanent Population	Lots Required for Seasonal Population	Total
1980	24	225	249
1985	25	375	400
1990	28	375	403
1995	31	375	406
2000	<u>34</u>	<u>375</u>	<u>409</u>
Total	142	1725	1867

SOURCE: San Luis Valley Council of Governments, 1977.

While residential land use is only one of nine land use categories of concern to Mineral County, it is probably the most important one in terms of direct impacts on the County and the County's ability to control it. Having projected the future land use needs to accomodate residential development, we can now turn to the other land use categories. As shown in Chapter 3, Mineral County will strive to attain the following land use allocations over the next 23 years:

TABLE 5-7
MINERAL COUNTY LAND USE ALLOCATIONS

Land Use Category	Total Acres	Acres Per 100 Persons ¹
010 Urban and Community Functions	320	20
020 Residential	2720	170
030 Heavy Industry, Transportation & Utilities	1600	100
040 Resource Extraction	5600	350
050 Developed Outdoor Recreation	3200	200
060 Irrigated Farmland	0	0
070 Unirrigated Farmland	0	0
080 Rangeland	20000	1250
090 Low Impact Land Use	5680	355
Total	<u>39,120</u>	<u>2,445</u>

¹Based upon permanent Mineral County population

SOURCE: San Luis Valley Council of Governments, 1977

As can be seen by this Table, in order to accomodate substantial increases in acreage for residential and developed outdoor recreation, corresponding decreases were made in rangeland and low impact land uses.

MINERAL COUNTY LAND USE ISSUES AND PROBLEMS

The most important land use issue and/or problem in Mineral County is that of what the future holds for the County. Presently, there appear to be no major land-use related problems in the County. Although the amount of developable land in and around Creede is limited, substantial subdivided land already exists to accomodate anticipated future permanent residents. The big question is the future of the seasonal-recreation related development. This type of development depends in large part upon national trends outside the control of Mineral County, i.e., the national economy, the price of gasoline, building costs, etc. If too much land is subdivided and the economy falters and/or gas prices increase, then Mineral County will have an excess of subdivided land with no prospects for development on that land. Conversely, if the economy stabilizes or flourishes and gasoline prices do not rise dramatically, the demand for seasonal-recreation homes/lots will increase and development on these lots will also undoubtedly increase. The question then becomes how will Mineral County provide the required services to accomodate this new development? This is perhaps the biggest land use issue facing Mineral County.

MINERAL COUNTY LAND USE PLAN

In Chapter 3, Mineral County's Goals, Objectives, Policies and Standards relating to land use were delineated (see pp. 3-1 to 3-4). The next task at hand is how to achieve these goals and objectives given the information provided in the preceding sections?

Most literature on land use planning recognize three alternative approaches in dealing with future land use, (1) trend growth, (2) concentrated growth, and (3) directed or managed growth.

The trend growth alternative projects the way the study area would continue to develop without any major changes in public policy toward growth. The concentrated growth alternative contains the growth within the existing urban areas to the greatest extent possible. This is accomplished by infilling vacant and underdeveloped parcels and by redevelopment of underutilized areas to higher intensities of use. The directed or managed growth alternative assumes public policies that fairly rigidly direct growth to several well-defined areas with resources to accomodate new development. This alternative may allow for growth to take place inside and away from existing communities.

In Mineral County, the choice of approaches for addressing future land use is really between the trend growth and managed growth alternatives. As was discussed previously, much of the remaining undeveloped land in Creede and land immediately adjacent to Creede has environmental and/or service constraints. Therefore, the concentrated growth alternative is not really feasible. After much discussion and deliberation by the Mineral County Planning Commission, the trend growth alternative for addressing future land use in Mineral County has been chosen. In general, the Planning Commission feels that no major problems have occurred as a result of past land use trends. In addition, they feel that a continuation of present trends will not pose substantial problems in the future. Finally, they feel that the existing information mapped as part of the County's H.B. 1041 activities and incorporated as part of the county's land use regulations provides sufficient control over areas unsuitable for development due to potential health, safety, environmental, aesthetic or economic reasons.

LAND USE SUITABILITY AS A GUIDE FOR FUTURE GROWTH

Having chosen the trend approach to guiding future growth, Mineral County must now seek a way to ensure that this approach to growth takes into account environmental, health, safety and resource considerations important to all county residents. The approach decided upon by the Planning Commission is to use land development suitability mapping based upon existing land use information gathered through the H.B. 1041 program. In this method, all privately-owned land has been classified as to its suitability, i.e., low, moderate, high, based upon combining such information as wildfire hazard areas, historic sites, wildlife habitat, etc. Low suitability indicates major problems for future development such as known geologic hazards, floodplain hazards, major resource areas, etc. Moderate suitability indicates some development problems which may be mitigated through proper design such as possible geologic hazards, potential major problems identified that might limit development. These areas are where future growth should be encouraged or at least channeled rather than the preceding two classes of land. All privately-owned lands in Mineral County have been mapped as to their suitability for development and are shown in the Mineral County Data Base Book.

IMPLEMENTATION STRATEGIES

Mineral County has already adopted most of the traditional land use regulations, such as zoning, subdivision regulations, mobile home regulations, etc. Consequently, the major implementation strategies to be pursued by Mineral County in the future are those relating to effective administration of these previously adopted regulations and the policies and standards contained in Chapter 3 above. Specifically, Mineral County should undertake the following activities:

1. Continue to administer Mineral County land use regulations in an equitable and expeditious manner.
2. Adopt a set of administrative procedures and a checklist that will be followed when reviewing specific land use requests, e.g., zoning change or variance, subdivision request, etc.
3. Adopt and distribute an information brochure geared towards Mineral County citizens, developers and prospective land purchasers. The purpose of such a brochure is to inform them of the existing land use regulations now in force in Mineral County.
4. Survey the existing vacant and developable lots in Creede and Mineral County to serve as a base for analyzing future development trends in Mineral County.
5. Pursue additional land use related surveys such as floodplain mapping, wildlife habitat area mapping and areas of unique aesthetic consideration so as to make the land use suitability maps as comprehensive as possible.
6. Incorporate the new information gathered in 5 above into the County's Comprehensive Plan and land use regulations.

CHAPTER VI
HOUSING ELEMENT
MINERAL COUNTY COMPREHENSIVE PLAN

INTRODUCTION

The purpose of the housing element is to gain a greater understanding of Mineral County and the Town of Creede's housing needs and desires, to confront these needs more intelligently, and to provide plans and programs which facilitate housing for all families and particularly those with low and moderate incomes. Specifically, this housing element is intended to perform two important functions. The first function is to clarify the existing housing situation in Mineral County and Creede by analyzing housing characteristics, by identifying the town's housing problems and the obstacles to overcoming these problems, and by outlining desirable objectives for the housing programs undertaken in Mineral County and Creede. The second function is to provide Mineral County and Creede with a suggested program of planning activities and recommended actions which will lead to the provision of adequate housing for the citizens of the County and Town.

The provision of adequate housing for the citizens of Mineral County and Creede requires more than the establishment of good housing programs. In order to be effective, the housing programs must be implemented. Not only must the existing problems and obstacles to achieving adequate housing be overcome but the planning activities and housing programs must be realistic in terms of financial resources, community needs and desires and must have the active support of the citizens and public officials.

Finally, while this housing section is directed toward the analysis of housing needs, it should be noted that housing is only one of the many aspects which must be considered in the comprehensive planning activities for Mineral County and Creede. The housing program must be consistent with plans for public services and facilities based on economic population potentials of the County and Town.

BACKGROUND INFORMATION

The first step in planning for housing is to develop data on the nature of Mineral County's and Creede's housing problems, as to both their severity and the number and characteristics of people being affected. To this end, the data in this section of the Mineral County Comprehensive Plan provides a general analysis of the status of the present housing supply and the income levels of the County's and Town's residents.

HOUSING COMPOSITION

In October of 1976, the San Luis Valley Council of Governments inventoried the available housing supply and housing condition in both Mineral County and the Town of Creede. This inventory showed that the total number of housing units in Mineral County was 630 while the total number of houses in Creede was 325. Of these housing units in Mineral County, 509 were conventional housing units and 121 were mobile homes. In Creede, 206 of the 325 housing units were conventional houses and 119 were mobile homes. This information is shown on Table 6-1 below:

TABLE 6-1

Housing Composition in Mineral County

	Conventional Units	Mobile Homes	Multi-Family	Total Housing Units
Mineral County	509	121	0	630
Creede	206	119	0	325

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1976.

TENURE AND VACANCY STATUS

The most recent information available on tenure and vacancy status in Mineral County and Creede is from the 1970 census. According to the U.S. Census, of the 31 occupied housing units, a total of 22 housing units were owned or being bought in Mineral County while 9 were being rented. In Creede, of the 239 housing units, a total of 161 housing units were owned or being bought, 47 were rented for cash rent and 31 were occupied without cash rent involved. In addition, a total of 191 housing units were listed as being vacant in the Town of Creede. However, these figures are indeed misleading, principally because most of the units listed as being vacant year around are vacation homes occupied principally in the summer. Consequently, the vast majority of these units are not actually vacant. It must be cautioned that these figures do not reflect the present situation in both Mineral County and Creede because they are six years old. As was shown in the preceding table, Mineral County now has over 509 conventional units as opposed to 222 listed in the table below. Most of the growth in housing units in Mineral County has once again been due to the rapid increase in second homes occupied for only a short time during the summer.

TABLE 6-2

Tenure and Vacancy Status

<u>Housing Unit Status</u>	<u>Number of Units</u>	
	Mineral County	Creede
Occupied:		
Owned or being bought	22	161
Cooperative or Condominium	0	0
Rented for Cash Rent	9	47
Occupied w/o Rent	<u>0</u>	<u>31</u>
TOTAL	31	239
Vacant Year-Round:		
For Rent	5	0
For Sale Only	0	0
All Other	<u>186</u>	<u>23</u>
TOTAL	191	23

SOURCE: U.S. BUREAU OF THE CENSUS, 1970.

HOUSING CONDITION

A structure by structure survey of housing conditions in Mineral County and the Town of Creede was conducted by the San Luis Valley Council of Governments staff in October of 1976. From the information collected, a statistical evaluation of the housing conditions in Mineral County and Creede was made.

In order to ensure a complete understanding of the information which follows, the terms "housing unit" and "housing conditions survey" should be defined and discusses. As stated in the U.S. Census of Housing, a "housing unit" is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with any other persons in the structure and which have either: (1) direct access from the outside of the building or through a common hall, or (2) complete kitchen facilities for the exclusive use of the occupants.

The Housing Condition Survey provided for the external rating of each housing unit as being in one of the four categories of condition. These four categories are described below:

TABLE 6-3

CONDITION	<u>Housing Conditions</u>			
	Mineral County		Creede	
	#	%	#	%
Good	298	58.5	79	38.3
Fair	138	27.1	84	40.8
Deteriorated	55	10.8	33	16.1
Dilapidated	18	3.5	10	4.8
TOTAL	509	100%	206	100%

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1976.

The condition of housing by location is shown on the Mineral County and Creede Housing Quality Maps. In addition, Map 6-1 on the following page shows the housing quality for the Town of Creede at a much smaller scale as of 1974. With regard to the Town of Creede, these two maps show that no one location in town has a majority of substandard units. Rather these substandard units appear to be fairly evenly distributed throughout the town.

MOBILE HOMES

Although the housing condition survey counted mobile homes, they were not rated as to structural conditions as were conventional housing units. This is not to imply that mobile homes are not an important form of housing. To the contrary, mobile homes represent a current major effort toward providing low cost housing in Mineral County and in the Town of Creede. Table 6-4 below provides an inventory of the mobile homes in Mineral County and in Creede. This table shows that mobile homes supply 19.2% of the total housing for Mineral County and 36.6% of the total housing for the Town of Creede. These figures illustrate the fact that mobile homes are an integral part of Mineral County's housing. It is believed that they will play an increasing role in meeting the future housing needs of Mineral County's residents.

TABLE 6-4

Mobile Home Inventory

NUMBER OF MOBILE HOMES

	On Individual Lots	In Mobile Home Parks	% of Total Park Capacity	% of Total Housing Units
Mineral County	68	53	100%	19.2%
Creede	79	40	100%	36.6%
TOTAL				

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1976.

OVERCROWDED UNITS

Overcrowding of housing units is another measure of the adequacy of housing in a given community or county. A measure of 1.01 persons per room is the commonly accepted standard for reporting overcrowding. Table 6-5 below shows the extent of overcrowding in the Town of Creede. Unfortunately, no comparable information was available for Mineral County. As can be seen, a total of 24 of Creede's 239 housing units were overcrowded as of 1970 census. This is a problem that the Town needs to address.

TABLE 6-5

Overcrowded Units in Creede, Colorado

Persons per Room	Owner Occupied	Renter Occupied	Total
1 or less	146	69	215
1.0 - 1.5	15	9	24
1.5 or more	0	0	0
		TOTAL	239

SOURCE: U.S. Bureau of the Census, 1970

AVAILABILITY

Vacancy rates generally indicate the extent of housing choices available to a community's residents. Low vacancy rates may imply that a number of families are trapped in dilapidated units, due in part to a lack of economic standard housing on the market. In Mineral County, a total of 191 housing units were reported as of the 1970 census. However, as described above, the vast majority of these vacancies are really seasonal units used by tourists and vacationers who own second cottages or cabins or houses in Mineral County. Consequently, it is impossible to get an accurate figure of the actual number of houses available for occupancy for permanent Mineral County residents. In Creede, however, it is possible to get a more accurate idea of availability of housing. According to the 1970 census, 23 housing units were vacant in the Town of Creede. Of these 23 housing units, 9 units were inadequate because they lacked basic plumbing fixtures. Consequently the total number of adequate housing units is 14, and the total vacancy rate for the Town of Creede is 5.3%. Table 6-6 below summarizes these findings. It must be cautioned, however, that these statistics are for 1970, and may not indicate the true housing needs of Creede for 1977. Indeed, new jobs related to increased mining activity are opening up in the Creede area, and local residents frequently complain of the lack of housing for new people who wish to live in the community. Consequently, the true vacancy rate as of 1977 appears to be much lower. Since the vacancy rate of 5-8% indicates a healthy housing supply, major efforts need to be made in Creede to expand its housing supply.

TABLE 6-6

Availability of Housing in Creede

	Total # of Housing Units	Total # of Vacant Units	Total # of Inadequate Vacant Units	Total # of Adequate Vacant Units	Percent
Mineral County	222	191*	45	146*	
Creede	262	23	9	14	5.3%

*This figure includes vacation housing units used only seasonally but unavailable for occupancy by people seeking housing.

SOURCE: U.S. Bureau of the Census, 1970.

VALUE OF HOUSING

While not absolutely indicative of the overall livability of a housing unit, there is usually a correlation between the value (or rent) of a housing unit and the type of shelter which it provides. As is shown in Tables 6-7 and 6-8 below, both the values and rents of housing units in Mineral County and Creede are considerably lower than the State of Colorado as a whole. Both of these tables indicate that the values and rents of housing in Creede are comparatively low and imply that housing in Creede needs to be improved. Unfortunately, similar data was not available for Mineral County.

TABLE 6-7

Value of Housing in Creede

Value of Owner-Occupied	Number	Percent	San Luis Valley Number	Percent	Colorado Percent
Less than \$5,000	8	5.3%	1,163	23%	3.37%
\$5000 - \$9999	75	59%	1,670	33%	12%
\$10000 - \$14999	29	22.8%	1,017	20.1%	22.1 %
\$15000 - \$19999	15	11.9%	649	12.9%	26.1 %
\$20000 - \$24999	0	0	262	5.2%	20.2 %
TOTAL	127	100%	5,055	100%	100%

SOURCE: U.S. Bureau of the Census, 1970.

TABLE 6-8

Value of Rent	Rental Values in Creede				Colorado Percent
	Number	Percent	San Luis Valley Number	Percent	
Less than \$40.00	0	0	417	17.2%	4.6%
\$40.00 to \$59.00	6	12.8%	635	26.1%	11.6%
\$60.00 to \$79.00	0	0	438	18 %	17.3%
\$80.00 to \$99.00	21	44.7%	288	11.9%	15.6%
\$100 to \$149	15	31.9%	181	7.4%	30.4%
\$150 or more	5	10.6%	27	1.1%	14.8%
No cash rent	0	0%	444	18.3%	5.7%
TOTAL	47	100%	2,430	100%	100%

SOURCE: U.S. Bureau of the Census, 1940

AGE OF HOUSING

Age of housing is closely associated with condition of housing. In general, as a housing unit ages it becomes less livable. This is a result of both physical deterioration and technical obsolescence. Table 6-9 below shows that 82.1% of all housing units in Creede were over 25 years old as of 1970. Even more startling than this figure is the fact that 74.1% of all housing in Creede is 37 years or older. These figures dramatically emphasize the need for efforts to repair, remodel and rebuild many of these existing housing units.

TABLE 6-9

Age of Housing in Creede		
Year Structure Built	Number of Structures	Percent of Total
1965-March 1970		
1960-1964	38	14.5%
1950-1959	9	3.4%
1940-1949	21	8.0%
1939 or earlier	194	74.1%
TOTAL	262	100%

SOURCE: U.S. Bureau of the Census, 1970

INCOMES

The analysis of the family income distribution in Mineral County and Creede reveals an important characteristic of the County's population. The income level of any individual family is, of course, directly related to that family's ability to obtain adequate housing. According to the data presented in Table 6-10 below, approximately 18.5% of Mineral County's residents or families, and 19.2% of Creede's families have incomes of less than \$5,000. These figures are roughly equal to that of the State of Colorado as a whole and substantially higher than the San Luis Valley as a whole. However, the cost of living in Mineral County and the Creede area is substantially higher than other parts of the San Luis Valley and of Colorado in general because of its relative isolation and costs of transportation. In addition, the mining industry has traditionally paid higher wages than other primary industries and consequently, tends to increase the per capita family income for Mineral County and the Town of Creede.

TABLE 6-10

Income Levels

Income	Mineral County		Creede		San Luis Valley		Colorado
	Number	Percent	Number	Percent	Number	Percent	Percent
Less than \$3,000	5	18.5%	36	16.9%	1,703	19.2%	8.9%
\$3000 to \$4999	0	0%	5	2.3%	1,866	21.1%	10.2%
\$5000 to \$7999	17	63%	27	12.7%	2,179	24.6%	19.6%
\$8000 to \$9999	0	0%	39	18.3%	949	10.7%	14.4%
\$10000 to \$24999	5	18.5%	106	49.8%	1,968	22.3%	42.6%
\$25000 and over	0	0%	0	0	187	2.1%	4.3%
TOTAL	27	100%	213	100%	8,852	100%	100%
Families with Incomes less than Poverty Level ¹	5		22		2,113		
Percent of all families below Poverty Level		18.5%		10.3%		23.9%	9.1%

¹ Based on the Social Security Administration's 1964 definition as modified by a Federal Interagency Committee. The range of the index is determined by such factors as family size, sex of the family head, number of children under 18 years old and farm and nonfarm residence.

SOURCE: U.S. Bureau of the Census, 1970

EXCESSIVE HOUSING EXPENDITURE

The housing program frequently overlooked is that of excessive housing expenditures. For reporting this problem households devoting more than 25% of their pre-tax incomes to rent fall within an excessive rent income ratio. The home owners housing payment cannot be determined by a similar ratio since relating mortgage payment to income does not portray the complete impact of housing expenditure to the home owner's budget. However, most of the lending institutions use an upper figure of 2 1/2 times the family's income as a guideline for home purchases. Households paying more than 2 1/2 times their incomes for home purchases fall within the excessive housing expenditure classification. Applying these two guidelines in Creede to data contained in the U.S. Census, we find that as of 1970, six (6) families were paying excessive rent based upon their income, and six (6) families were potentially making excessive housing payments. It must be cautioned, however, that these last six families would only be considered as making excessive payments, if indeed they were making payments. Those families already owning their houses would, of course, not fall into this category.

HOUSING NEEDS IN MINERAL COUNTY

PROJECTED HOUSING NEEDED TO ACCOMMODATE GROWTH

In determining the present and future housing needs for Mineral County, one must first determine the future housing needs based upon the projected increase in Mineral County's population. Table 4-8 projects Mineral County's population from 1975 to the year 2000. By dividing the projected population for any future date by the average size household in Mineral County, it is possible to estimate the total number of new houses needed to accomodate this population growth. Table 6-11 below shows the number of new houses needed based upon Mineral County's population projections. In addition, it shows the number of new housing units needed in Mineral County to achieve a vacancy rate of 6.5%. As can be seen, Mineral County presently needs 12 new housing units to achieve a desirable vacancy rate and will need 34 new housing units by 1980 just to accomodate the estimated population growth. Housing units needed for other years are shown in the Table. If Mineral County chooses to use the population threshold method for estimated future housing needs rather than tying it to a specific year, it need simply compute the difference between the County's present population (980) and the assumed threshold population (e.g., 1,500 and divide by the average family size, presently 3.09).

TABLE 6-11

HOUSING UNITS NEEDED TO ACCOMMODATE GROWTH

Year	Change in Population	Household Size Average Family Size	Housing Units Needed
1976		3.09 ¹	
1980	+ 102	3.00 ²	34
1985	+ 113	3.00	38
1990	+ 124	3.00	41
1995	+ 137	3.00	46
2000	+ 152	3.00	51
CUMULATIVE TOTAL			210

- 1 Household size according to the 1970 census
- 2 Assumed household size in succeeding years
- 3 Housing units needed to achieve 6.5% vacancy rate

SOURCE: SAN LUIS VALLEY COUNCIL OF GOVERNMENTS, 1977.

HOUSING NEEDED TO REPLACE SUBSTANDARD UNITS

Table 6-3 Housing Condition in Mineral County showed that a total of 116 housing units in Mineral County were judged to be in substandard condition. Of these 116 housing units, 28 were judged to be in dilapidated condition with immediate replacement needed. The remaining 88 housing units were judged to be in deteriorating condition and would need to be replaced or substantially rehabilitated over the next 10-15 years. In addition, Table 6-9, Age of Housing in Creede, showed that 74.1% of Creede's housing stock was over 40 years old. Some of these units will undoubtedly slip into the substandard classification and require replacement or rehabilitation. Table 6-12 below shows the number of units estimated to require replacement or rehabilitation over the next 24 years.

TABLE 6-12

HOUSING UNITS NEEDED TO REPLACE SUBSTANDARD UNITS

Year	New Units Required to Replace Present Substandard Units ¹	Existing Substandard Units Requiring Rehabilitation ²	New Units Required to Replace Older Units ³	Older Housing Units Requiring Rehabilitation ⁴	Total
1976	28				28
1980	14	15	6	6	40
1985	15	15	6	6	42
1990	15	15	6	6	42
1995			5	5	10
2000			5	5	10
Total	72	44	28	28	172

1 Assumes immediate replacement of dilapidated units and replacement of 50% of deteriorated units.

2 Assumes that 50% of presently deteriorated units can be rehabilitated.

3 Assumes that 12.5% of units 45 years and older will require replacement.

4 Assumes that 12.5% of units 45 years and older will require rehabilitation.

SOURCE: San Luis Valley Council of Governments, 1977.

HOUSING UNITS NEEDED TO RELIEVE OVERCROWDING

Table 6-5, Overcrowded Units in Creede, showed that a total of 24 housing units in Creede were overcrowded. However, though these houses may be overcrowded, this does not necessarily mean that the houses must be replaced. Indeed, many of them can be expanded or rehabilitated to adequately accommodate the families housed by them. In addition, some of these units may be vacated by the present owners/ renters seeking larger housing units and can be used by smaller households. Consequently, forecasting new housing units required to reduce overcrowding is risky, at best. However, a conservative guess would be that four (4) of these 24 overcrowded units need to be replaced at the present time, with the remaining 20 requiring rehabilitation or expansion over the next 24 years. In addition, as Creede's and Mineral County's populations increase, overcrowding will probably continue to exist, to some extent. Consequently Table 6-13 below shows both the present extent of overcrowding and the projected extent of overcrowding to the year 2000.

TABLE 6-13

Housing Needed Due to Overcrowding

Year	Overcrowded Units		Units Needed to Reduce Overcrowding (Replacement, Rehabilitation, Expansion)
	#	%	
1976	24	10%	24
1980	3	10%	3
1985	4	10%	4
1990	4	10%	4
1995	5	10%	5
2000	5	10%	5
Cumulative Total			57

SOURCE: San Luis Valley Council of Governments, 1977.

HOUSING NEEDED TO REDUCE EXCESSIVE HOUSING COSTS

As was shown in the Background Information Section, 6 Renters and potentially 6 homeowners were paying excessive home expenditures as of 1970, in the Town of Creede. Unfortunately, more recent information is unavailable. Based upon these findings, one can project the number of families anticipated to pay excessive housing expenditures over the next 24 years. Table 6-14 summarizes this housing need.

TABLE 6-14

Lower Cost Housing Needed Due to
Excessive Housing Expenditures

Year	Families Paying Excessive Housing Costs #	%	Lower Cost Housing Units Needed
1976	12	5	12
1980	1	5	1
1985	2	5	2
1990	2	5	2
1995	3	5	3
2000	2	5	2
CUMULATIVE TOTAL			22

SOURCE: *San Luis Valley Council of Governments, 1977.*

OVERALL HOUSING ESTIMATES AND PROJECTIONS

The preceding sections provide the bases for making overall housing estimates and projections for Mineral County and the Town of Creede. Table 6-15 below summarizes these estimates. As can be seen, a total of fifty (50) new housing units are needed to replace dilapidated and overcrowded units in Mineral County and Creede as well as raising the vacancy rate to the desirable level of 6.5%. In addition, four (4) housing units need to be rehabilitated to accomodate Mineral County's present housing needs. Looking at the year 1980, a total of 55 new housing units will be needed and 25 houses will require rehabilitation or expansion as to meet Mineral County's anticipated population and housing needs. Mineral County's housing needs for the remaining years to the year 2000 are shown in Table 6-15. This table points out that substantial efforts need to be made as soon as possible to improve Mineral County's housing stock and to expand it for the coming years. A final note of caution is in order before ending this section. As with the land use element, the projections listed in this section of the housing element are only as good as the population projections and the assumptions used in making the projections. Consequently, their accuracy from year to year may vary greatly. However, they are still useful as a general guide for making housing policies for Mineral County.

TABLE 6-15
Overall Housing Estimates for Mineral County

Year	New Housing Units Required by Growth ¹	New Housing Needed to Replace Substandard Units ²	Substandard Units Requiring Rehabilitation ³	New Housing Needed to Replace Older (Substandard) Housing ⁴	Older (Substandard) Units Requiring Rehabilitation ⁵
1976		28			
1980	34	14	14	6	6
1985	38	15	15	6	6
1990	41	15	15	6	6
1995	46			5	5
2000	51			5	5
TOTALS	210	72	44	28	28

1 Assumes average family size of 3.0

2 Assumes immediate replacement of dilapidated units and eventual replacement of 50% of deteriorated units

3 Assumes 50% of deteriorated units can be rehabilitated

4 Assumes 12.5% of housing units 45 years or older will become substandard and require replacement.

5 Assumes 12.% of housing units 45 years or older will become substandard but can be rehabilitated

Table 6-15, Continued

Year	New Housing Units Required to Reduce Overcrowding ⁶	Overcrowded Units Requiring Rehabilitation ⁷	Lower Cost Housing Units Needed to Reduce Excessive Housing Expenditures ⁸	New Housing Units Required to Achieve Desirable Vacancy Rate ⁹	TOTAL New Housing Units Needed	TOTAL Units Requiring Rehabilitation or Expansion
1976	4	4	6	12	50	4
1980	1	5	1		55	25
1985	2	5	1		65	23
1990	2	5	1		65	23
1995	2	6	2		55	8
2000	3	6	1		60	7
TOTALS	14	31	12	12	358	95

6 Assumes that 50% of overcrowded units require replacement

7 Assumes that 50% of overcrowded units can be expanded or rehabilitated

8 Assumes that 50% of these housing units will be occupied by persons with higher incomes

9 Assumes present vacancy rate of 3% and desired vacancy rate of 6.5%

SOURCE: San Luis Valley Council of Governments, 1977.

DISCUSSION AND RECOMMENDATIONS

Housing Problems

Based upon the material presented in previous sections of this housing element, it is possible to identify certain housing problems which are present in Mineral County and the Town of Creede. Presented below is a listing and ranking in order of importance of the housing problems previously identified.

1. Availability - Although the 1970 Census showed a vacancy rate of 5.3% in the Town of Creede, present estimates would indicate a lower vacancy rate of somewhere in the neighborhood of 2 - 3%. In effect, this means that a number of families are trapped in substandard units or overcrowded units, due in part to a lack of economical standard housing on the market. In addition, the tremendous increase in mobile homes in Creede and in Mineral County, imply that other types of housing are either too expensive or unavailable for people desiring to live in Mineral County and Creede. This is a problem that must be addressed immediately.
2. Condition of Housing - A relatively large number of houses in Mineral County are judged to be in a substandard condition. As shown in a previous section, 16.2% of all housing units in Mineral County have been rated as either in dilapidated or in deteriorated condition. Quite obviously, this is a problem which needs to be addressed by the County.
3. Age of Housing - Age of housing is closely associated with condition of housing. In general, as a housing unit ages, it becomes less livable. This is a result of both physical deterioration and technical obsolescence. Since approximately 74 percent of Mineral County's total housing supply is presently 40 years old or older, the need for efforts to repair, remodel and rebuild is extremely important.
4. Value of Housing - While not absolutely indicative of the overall livability of a housing unit, there is usually a correlation between the value (or rent) of a housing unit and the type of shelter which it provides. As was noted in an earlier section of this housing element, both the owner and rental values of housing units in Mineral County are substantially below those of the State of Colorado as a whole.

PROBLEMS AND OBSTACLES IN THE PROVISION OF ADEQUATE HOUSING

Before meaningful solutions to housing problems can be found, the obstacles to these solutions must be identified. The following is a list of major obstacles to the provision of adequate housing in Mineral County.

1. Cost of Increasing Housing Supply - Due to Mineral County's relative isolation, the costs of building housing units in the County is considerably higher than for the rest of the San Luis Valley and for the State of Colorado as a whole. Because of the high cost of housing, new housing starts have been relatively small in Mineral County during the past five years. The exception to this rule has been the second home recreational housing units for people who live principally outside of Mineral County and outside the State. In addition, much of the demand for housing units has been met by mobile homes because of the relative low cost of these units as compared to standard housing. Unless the cost of housing is addressed, it is doubtful that many homes will be constructed in Mineral County in the near future.
2. Lack of Developable Land - Although Mineral County presently has a large number of unsold lots, there is relatively little developable land in the area where additional growth is most desirable. Specifically, it is anticipated that most of the growth could possibly be located in the Town of Creede if additional land were available. However, given the terrain of the Creede area, and its natural limitations, finding additional land for future development is indeed difficult. Consequently, this problem needs to be addressed by Mineral County and by Creede as they plan for future growth in Mineral County.
3. Rapid Influx of Mobile Homes - During the last five years, a significant number of mobile homes have been brought into Mineral County and especially the Creede area to provide adequate housing for County residents. Although mobile homes are significant and an important supply of housing for Mineral County's residents, a rapid and uncontrolled influx of mobile homes does pose potential problems. Specifically, a large number of mobile homes placed relatively close to one another could create fire hazard problems as well as aesthetic problems to the surrounding residential areas. As a consequence, both Mineral County

and Creede, should look closely at the increase in mobile homes and should decide whether or not appropriate regulations need to be adopted or more rigidly enforced to make sure that mobile homes do not create both health and aesthetic problems in Mineral County.

4. Individual Initiative - For a variety of reasons, many households do not place a priority on maintaining their housing. Unless the desire for better housing is instilled in each individual household superior housing will never be achieved. Various studies have indicated that many times individuals can be encouraged by limited efforts on the part of governmental units. This effort might take the form of a clean up campaign. Of course, the adoption and strict enforcement of building codes also encourages people to maintain their housing.
5. Unavailability of Housing Assistance Programs - Presently two housing assistance programs are available to the residents of Mineral County. Perhaps the most useful and widely used program in the San Luis Valley has been the Farmers Home Administration rehabilitation and new construction loan program. This agency provides loans both at current market interest rates and, if a family qualifies, at below the market interest rate. A Department of Housing and Urban Development can assist in the construction of public housing through the Section 8 federally subsidized program. This program provides for federal contribution to the owner of a project so that low income persons need pay only 15 - 25% of their income on rent. Unfortunately because of the relative high income in Mineral County due to the mining operations and the cost of living in the County, most of Mineral County's residents do not qualify for these programs. It is indeed unfortunate that these programs do not recognize the high cost of living, especially for housing, in Mineral County and the Town of Creede. Unless something can be done to expand these programs to include areas like Mineral County, increasing the supply of housing for the County will be a difficult task.

IMPLEMENTATION STRATEGIES

The following five-year series of implementing actions should be utilized as a guide in the provision of adequate housing in Mineral County. It should be recognized that these actions will possibly need to be modified each year based on the review of goals, objectives and policies, and the success of the previous year's programs.

FIRST YEAR

- Adopt the Housing Element of the Mineral County Comprehensive Plan.
- Work with SLV-COG in developing a building code designed to improve the quality and safety of new homes in the county.
- Explore the need and desirability of developing a housing code for Mineral County.
- Investigate possible federally funded housing programs and take advantage of those for which Mineral County qualifies.
- Publicize federally-funded housing programs available to Mineral County residents.
- Work closely with SLV-COG and its rural housing demonstration program to promote new housing and rental units in the county.
- Compile an inventory of vacant lots suitable for development in Mineral County.

SECOND YEAR

- Review housing goals, objectives and policies and update if necessary.
- Adopt building code developed in the first year work activities.
- Develop housing code if determined to be desirable for Mineral County during first year activities.
- Continue to investigate federally-funded programs and apply for assistance if appropriate.
- Administer building code to insure compliance with new home building standards.
- Continue working with SLV-COG rural housing program to expand housing supply in Mineral County.

THIRD THROUGH FIFTH YEARS

- At this stage, Mineral County should be enforcing its subdivision regulations, zoning ordinance and building code. Other annual activities should include the following:

- *Review and update of housing goals and objectives.
- *Continued pursuit of federally-funded programs where needed and appropriate.
- *Continued pursuit of methods to help expand the housing and apartment supply in Mineral County.

APPENDIX A

First Order Categories

- 010 Urban and community functions^{*}
- 020 Residential
- 030 Heavy industry, transportation, and utilities
- 040 Resource extraction
- 050 Developed recreation
- 060 Irrigated farmland
- 070 Unirrigated farmland
- 080 Range grazing
- 090 Low impact land use
- 100 Major military installation

Second Order Categories

- 010 Urban and community functions
 - 011 Undifferentiated or miscellaneous, N.E.C.*
 - 012 Urban core functions
 - 013 Wholesale, warehousing, or light industry
 - 014 Major public buildings and grounds
 - 015 Health or public services
 - 016 Post-secondary education
 - 017 Elementary or secondary education
 - 018 Large-scale or high-impact retail or service
 - 019 Vacant land or buildings, or areas being converted in the community center area.
- 020 Residential
 - 021 Undifferentiated or miscellaneous, N.E.C.
 - 022 Large residential estate (less than one dwelling unit per acre)
 - 023 Low to medium density suburb (1-4 dwelling units per acre)
 - 024 Urban or dense suburban (5-8 dwelling units per acre)
 - 025 Semi-detached, or densely grouped housing (more than 8 dwelling units per acre)
 - 026 Multiple-unit "garden apartment" (3 levels or less)
 - 027 Multiple-unit "elevator apartment" (more than 3 levels)
 - 028 Mobile home residential
 - 029 Vacant land or buildings formerly used for residence or pending development or conversion, in the residential area.

*N.E.C.: not elsewhere classified

030

Heavy industry, transportation and utilities

- 031 Undifferentiated or miscellaneous heavy industry N.E.C.*
- 032 Transportation or communication
- 033 Electric power generation or transmission
- 034 Water collection, treatment, or storage
- 035 Sewage treatment
- 036 Solid waste disposal
- 037 Stockyard or packing plant
- 038 High-polluting industry, N.E.C.
- 039 Vacant land or buildings in industrial area

040

Resource extraction

- 041 Miscellaneous or N.E.C.
- 042 Gravel pit or clay pit - operating
- 043 Quarry - operating
- 044 Gravel pit, clay pit, or quarry - no longer operating
- 045 Surface mining
- 046 Subsurface mining
- 047 Oil or gas fields or wells
- 048 Timber removal (logging)
- 049 Mining waste, tailings, or mines no longer operating

050

Developed outdoor recreation

- 051 Undifferentiated or miscellaneous, N.E.C.
- 052 Park or playground
- 053 Campground
- 054 Ski area
- 055 Golf course
- 056 Equestrian sports, horse maintenance, training or showing
- 057 Participant sports, N.E.C.
- 058 Spectator recreation area
- 059 No longer operating, or being converted to other use

060

Irrigated farmland

- 061 Undifferentiated or misc., N.E.C.
- 062 Irrigated hay or pasture
- 063 Irrigated row crops or grains
- 064 Irrigated orchard
- 065 Truck farming (produce)
- 066 Specialty production (e.g. greenhouses)
- 069 No longer in production, or being converted to other use

*N.E.C.: not elsewhere classified

070 Unirrigated farmland

- 071 Undifferentiated or misc., N.E.C.*
- 072 Unirrigated hay or pasture
- 073 Unirrigated grain production
- 077 Livestock production or feeding
- 078 Submarginal or casually grazed
- 079 No longer in production, or being converted to other use.

080 Rangeland

- 081 Undifferentiated or misc., N.E.C.
- 082 Unimproved grazing
- 083 Improved grazing
- 088 Submarginal or casually grazed
- 089 No longer used for grazing, or being converted to other use

090 Low impact land use

- 091 Undifferentiated or misc., N.E.C.
- 092 National Park (undeveloped preservation areas)
- 093 National Forest Wilderness
- 094 Undeveloped watershed protection
- 095 Undeveloped flood plain
- 099 Being developed for other use

100 Major military installation

- 101 Undifferentiated or misc., N.E.C.
- 109 No longer operating, or being converted to other use

*N.E.C.: not elsewhere classified