

GOLDEN
BALSAM
LEAF

jefferson county

1974

THE
GOLDEN-
RALSTON
COMPREHENSIVE
PLAN

JEFFERSON COUNTY COLORADO

PREPARED BY THE ADVANCED PLANNING SECTION OF THE
JEFFERSON COUNTY PLANNING DEPARTMENT 1973 - 1974

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INTRODUCTION

The following written material gives the background of the way this "Plan" was developed, prime considerations in its development, and a better understanding of the intent of the Future Land Use Map and related maps. Therefore, this text should be considered a part of the Comprehensive Plan for the Golden/Ralston Area.

purpose

The general purpose of this update to the Golden/Ralston Area Comprehensive Plan is to simply serve as a guide for accomplishing a coordinated, harmonious, and orderly development of the County for the general welfare of the community.

In accomplishing the General Purpose, the Plan has been developed in accordance with present and future needs and resources to promote the general welfare of the inhabitants, as well as to be efficient and economical in meeting this end by reducing the waste of physical, financial, and human resources.

The failure to consider these aspects leads to excessive congestion and/or scattering of population and a resulting failure to meet the general purpose of this plan.

concept

It is important that the general concept of the master plan development be understood in order that the Plan will have greater meaning and clarity.

The general concept to the methodology is how the physical world is viewed in relation to serving man's social needs and functional requirements, and under what planning objectives this takes place.

The functional requirements of man, such as housing, job opportunity, and educational facilities, are closely tied to the social aspects of man. To accommodate these functional requirements, we must look at the physical world around us to find where they can best be located. This allocation is a difficult task primarily because of the general population increase and the on-going change in man's desires.

Therefore, the Plan needs to be flexible yet clear in intent to deal with today's world of change.

The physical world will be considered in terms of the man-made environment (buildings, and their function; streets, and other public facilities) and the natural environment (wind, land, and water).

In viewing these, it is important to have the following planning objectives in mind.

ALLOCATION AND BALANCE

As the functional requirements are analyzed in terms of space, numerous locational factors are used to determine where the allocations should take place. Since all the various functions are competing for the same space, it is important that a proper balance be achieved.

HEALTH AND SAFETY

Planning for health and safety needs no explanation. Particular attention will be given to the natural environment as it presents hazards to life and property.

EFFICIENCY AND ECONOMY

Citizens expect their tax money to be spent in a way that provides maximum benefits from every dollar. There have always been more needs for public expenditure than taxpayers have been able to provide for. It is important therefore, to seek ways to eliminate costly services and public facilities along with providing regulation where needed to prevent economic loss to the public and private sectors.

Encouragement of contiguous development, proper utilization of natural resources, and efficient utilization of the land, all help work towards this end.

PRESERVATION AND CONSERVATION

A major concern is to strengthen existing neighborhoods and secure their preservation. Conservation is the planned management of the natural resources to prevent exploitation, destruction or neglect. Preservation and conservation go hand in hand.

HARMONY AND COMPATIBILITY

The interrelationship of one land use to another would hopefully be done in a harmonious way which would insure compatibility and promote the preservation of existing uses. Also important is a compatible relationship of the man-made environment to the natural environment.

IDENTITY AND ORDER

In an effort to shape the community into a desirable environmental image, identity is a major component in providing for a neighborhood or community. Order or arrangement of the major components in a harmonious way help achieve this identity. A good environmental image gives one an important sense of emotional security, thus fulfilling one of man's basic psychological needs.

The planning process does include certain peripheral activities which are important, only as they serve to facilitate the above planning objectives, and to help achieve the "Plan" itself.

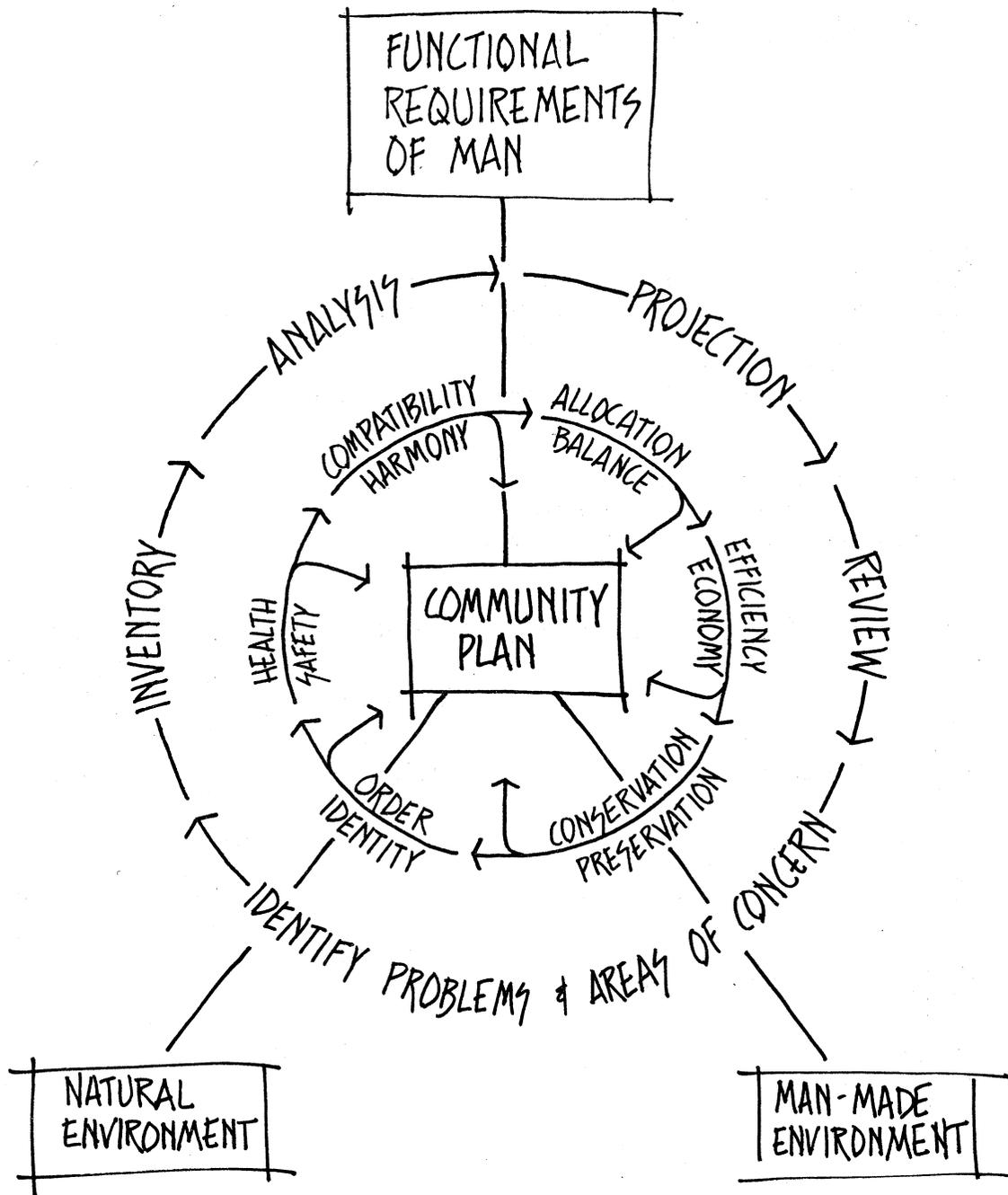
As a starting point, it is important to Identify Problems and Areas of Concern. Inventory is a special investigation to find the exact nature of problem situations, whether land use compatibility or transportation systems. An Analysis is an attempt to explain the causes of a given situation and provide insight into how we are going to deal with the situation. Projection Into the Future is a portrayal of what the problem situation will be, based on present trends or expected trends, and the effect alternative corrective measures might have on the problem. Also, projections, such as population forecasts, future school enrollments, or job opportunity, can provide input for other planning and decision making. Review is important, as the proposals and plans must be continually reassessed. This requires going back into these other steps of identifying problems and areas of concern: inventory, analysis, and projection into the future.

The following schematic diagram of this Concept of the Planning Methodology will better illustrate the intercomponents.

As we focus in on the Community Plan (the center circle) three key elements must be considered; Functional Requirements of Man, the Natural Environment and the Man-Made Environment.

The criteria applied to these three major elements are referred to as the planning objectives, shown in the middle ring. Examples being compatibility and harmony, efficiency and economy.

In order to facilitate the planning process, certain peripheral planning activities have to be undertaken and these are represented by the outer ring.



description

STUDY AREA BOUNDARIES

- North: County line
 South: Sixth Avenue and U.S. Highway #6
 East: From north to south, Indiana Street, Ward Road, Youngfield Street (generally the incorporate limits of the cities of Lakewood and Wheat Ridge).
 West: Front range of the mountains (where the 30% slope begins)

It is important to view statistical data in a comparative framework if there is going to be an understanding of the impact of such data. The table below offers such comparison:

GENERAL STATISTICS AS COMPARED TO THE TOTAL COUNTY AND THE DENVER S.M.S.A.*

	GOLDEN/RAILSTON	COUNTY WIDE	DENVER S.M.S.A.
LAND AREA (SQUARE MILES)	72	785	3,700
POPULATION (1973)	28,000	300,000	1.3 MILLION
NO. OF DWELLING UNITS	7,650	88,000	475,000
MEDIAN INCOME**	\$ 10,512	\$ 10,998	\$ 8,390
MEAN INCOME**	\$ 11,592	\$ 11,861	\$ 9,720
OWNER OCCUPIED HOUSING**	69.1%	71.6%	59.0%
MEDIAN HOUSE VALUE**	\$ 22,375	\$ 22,300	\$ 19,100
SINGLE FAMILY HOMES**	82.0%	82.3%	70.3%
HOUSING WITH PUBLIC WATER**	84.5%	89.5%	95.5%
HOUSING WITH PUBLIC SEWER**	72.0%	86.6%	93.6%

* A STANDARD METROPOLITAN STATISTICAL AREA (S.M.S.A.) IS A COUNTY OR GROUP OF CONTIGUOUS COUNTIES WHICH CONTAINS AT LEAST ONE CITY OF 50,000 INHABITANTS OR MORE, OR "TOWN CITIES" WITH A COMBINED POPULATION OF AT LEAST 50,000.

** 1970 CENSUS DATA

One factor that gives insight about where we have been and where we are going is the element of change-population growth.

Growth changes for the past, along with projections into the future, are outlined below:

	GOLDEN/RALSTON		COUNTY WIDE	
	POPULATION	% CHANGE	POPULATION	% CHANGE
1960	13,000	-	127,520	-
1970	23,000	76.9	235,300	84.5
1980	36,000	56.5	392,000	67.0
1990	49,000	36.7	550,000	40.3
2000	63,000	28.5	700,000	27.3

NOTE: THE COUNTY POPULATION FOR 1973 IS ESTIMATED AT 300,000 IN COMPARISON TO A GOLDEN/RALSTON TOTAL OF 28,000 PERSONS.

RPJ

man-made environment

In order to describe the man-made environment, the following aspects have been inventoried and analyzed.

EXISTING LAND USE

The existing land use gives much insight to those areas currently being utilized and their function. Existing land uses are scattered in terms of location and function. It is imperative to reinforce the organization of existing physical structure through careful designation of future uses. Therefore, it is important to recognize where continued development of a given use is not desirable while providing for different uses that can be compatible.

One area that is extremely important in the part of the man-made environment is that contained in the "public sector". Examples of this are parks, roads, and facilities along with special purpose districts such as the water and sanitation districts and fire districts.

LAND USE BREAKDOWN - GOLDEN/RALSTON AREA

	ACRES	PER CENT
RESIDENTIAL	2,532	4.9
COMMERCIAL	133	0.2
INDUSTRIAL	3,566	6.8
AGRICULTURAL/VACANT	*	78.0

* IN THIS AREA 78% OF THE LAND IS VACANT, THE TERM 'VACANT' DENOTING AREAS VOID OF DEVELOPMENT.

EXISTING ZONING:

The above characteristics and planning objectives of existing land use are again reflected in the zoning for the area.

Future growth is discussed many times in terms of the relationship to existing densities of the area and allowable densities under existing zoning.

Therefore, all the residential zoning districts were analyzed in terms of density that would be expected to be yielded.

Reference is made to the chart entitled "Analysis of Existing Zoning Districts" found on the following page.

In the first column to the left is the listing of all existing zoning districts allowing residential use. The expected density for each is listed under single-family, two-family, and multi-family, if applicable. Under R-3, for example, it is permissible to develop under all three categories; 4.5 units/acre, 7.7 units/acre, and 17.7 units/acre respectively. In the column to the right entitled "Proposed Density Categories" is the grouping of these existing zoning districts into what is felt to be realistic categories for depicting desired densities on the map "Future Land Use Map." The A-1 and A-2 zoning districts are not really designed to accommodate residential use inasmuch as the agricultural uses for which they are named.

SOCIAL ECONOMIC DATA

An additional indicator to help describe the general character of the man-made environment is termed "social-economic" data. This data, taken from the 1970 census, gives information about two particular areas of the man-made environment: population and housing. The data provides information on the social and economic conditions of the populace and thus serves as an indicator of land-use requirements associated with that populace. As an example, family income indicates the ability of those presently living in the area to afford adequate housing and to choose their general life style. The housing data provides information such as value of housing, tenure, and general quality, which serve to indicate the stability of an area.

The Golden/Ralston community has been split into neighbor units (census tracts) in order to better analyze these factors. Comparisons have been made between the Golden/Ralston planning area, Jefferson County, and the metropolitan region to view the community in respect to larger surrounding environs.

Reference is made to tables which compile this socio-economic data in the appendix.

ANALYSIS OF EXISTING ZONING DISTRICTS AND PROPOSED DENSITY CATEGORIES

EXISTING RESIDENTIAL ZONING DISTRICTS	DENSITY BY HOUSING TYPE						PROPOSED DENSITY CATEGORIES	
	SINGLE FAMILY		TWO-FAMILY		MULTI-FAMILY		AC/UNIT	UNITS/AC
	AC/UNIT	UNITS/AC	AC/UNIT	UNITS/AC	AC/UNIT	UNITS/AC		
A-2	10.5						35 fUP	
A-1	5.25						10-35	
GR-5	5.25						5-10	
GR-2	2.16						2-5	
GR-1	1.15							0-2
MR-1		2.0		3.6				
MR-2		2.0						
R-1		2.8						2-4
R-1A		2.8						
R-1B		4.5						4-7
R-2		2.8		5.6				
R-3		4.5		7.7		17.7		
R-3A				7.7		11.8		
MR-3		5.4		7.7				7-20
R-T						14.3		
R-4						20-50		20 fUP

DENSITY--Expressed as Acres/Unit or Units/Acre that would be expected to be produced in an area to include local roads, but not to include major drainageways, parks, school sites, etc.

man's interaction with the environment

The emphasis so far has been on the man-made environment. The following section discusses the natural environment. The questions that are addressed are:

- 1) What constraints does the natural environment place upon man's land uses?
- 2) What attributes does the natural environment have that encourages man's land uses?
- 3) How can we obtain a sound balance between the natural and man-made environments so that the objectives of this plan are realized?

It can easily be proven that sound environmental planning leads to sound economics and a better community in which to live. The following elements are inventoried and assessed.

- 1) Climatic conditions
- 2) Elevation and slope
- 3) Vegetation
- 4) Soils
- 5) Geologic setting
- 6) Surface and subsurface hydrology
- 7) Natural resources

It is important to realize that if man does something to enhance or degrade one of these elements that other elements are also affected. All of the elements exist on every parcel of ground, but the combined constraints and attributes vary greatly from parcel to parcel, creating many different conditions. The supporting maps locate these conditions and were used in combination with each other to determine which land uses should be placed on a given parcel of land.

This process and the resulting land uses depict how man can interact with nature to provide for the quality of living conditions that we seek.

CLIMATIC CONDITIONS

There are four major problems in the Golden/Ralston Area in relationship to climate. They are:

- 1) Low precipitation levels
- 2) High winds
- 3) Flooding
- 4) Dry soils caused by high winds and low precipitation levels

The climate of the Golden/Ralston Area is profoundly affected by differences in elevation, and to a lesser degree, by the orientation of the mountain range and valleys with respect to general air movements.

While temperature decreases, precipitation generally increases with altitude. These patterns are modified by the orientation of mountain slopes with respect to the prevailing winds and by the effect of topographical features in creating local air movements. Eastern slope areas receive relatively small amounts of precipitation. The Golden/Ralston Area receives 15 to 20 inches of total precipitation annually. An important feature of the precipitation in this area is the fact that 70 to 80 percent falls during the period of April through September.

The greatest climatic hazard along the foothills are the chinook winds, with reported gusts up to 120 MPH, which occur most frequently during winter and spring months. These winds tend to dry out soils which are not well supplied with moisture and contribute to a lack of vegetative cover.

The spring flood potential is caused by two factors, heavy snow melt and heavy spring rains. Either of these can cause flooding. The combination of the two cause the worst floods.

The high winds and low precipitation levels tend to dry out soils in the Golden/Ralston Area. This leads to heavy erosion with increased run-off potential. These factors lead to heavy sedimentation of streams and an increased potential for flash flooding.

In relating climatic problems to future land use, we emphasized the following planning criteria.

- 1) Low densities should be placed in high wind areas.
- 2) All flood plains should be placed in conservation to preclude any major development.
- 3) Low densities should be placed where poor soils and drainage problems exist.

TOPOGRAPHY: ELEVATION AND SLOPE

Topography is composed of elevation and slope. Elevation is expressed in vertical feet from sea level. The Golden/Ralston Area is in the range of from 5,500 feet and below on the east to approximately 6,200 feet on the west. The Golden/Ralston Topographic Map displays the elevations and helps one see the great diversity of the ground. This map is also a key to the major drainage areas of the planning area.

Slope is expressed in percentages and is a relationship of how many feet of vertical rise exists along a specific horizontal length. The Golden/Ralston Slope Map delineates the following:

- 1) Slopes under 5%
- 2) Slopes 5% to 15%
- 3) Slopes 15% to 30%
- 4) Slopes over 30%

The major considerations related to topography are:

- 1) Drainage and run-off potential
- 2) Susceptibility to erosion
- 3) Slope stability and related foundation stability problems

Drainage patterns and run-off potential are a direct function of elevation and slope. Poor drainage exists where elevation is stable and slope is below 3%. Drainage becomes better from the 3% slope upwards. Run-off potential also increases as slope increases, and is affected by such things as amount of soil and amount of vegetation. Run-off can be a hazard in areas with steep slope, poor soils, and little vegetation by being conducive to flooding.

Susceptibility to erosion is related to these same characteristics. Where the run-off potential is high, poor soils exist and little vegetation grows. The ground is more likely to be eroded than in an area where these conditions are favorable.

Slope stability and related foundation stability problems are a combination of all factors mentioned so far. In the Golden/Ralston Area there are many known landslides and areas of potential landslides. These are indicated on the Foundation Stability Map.

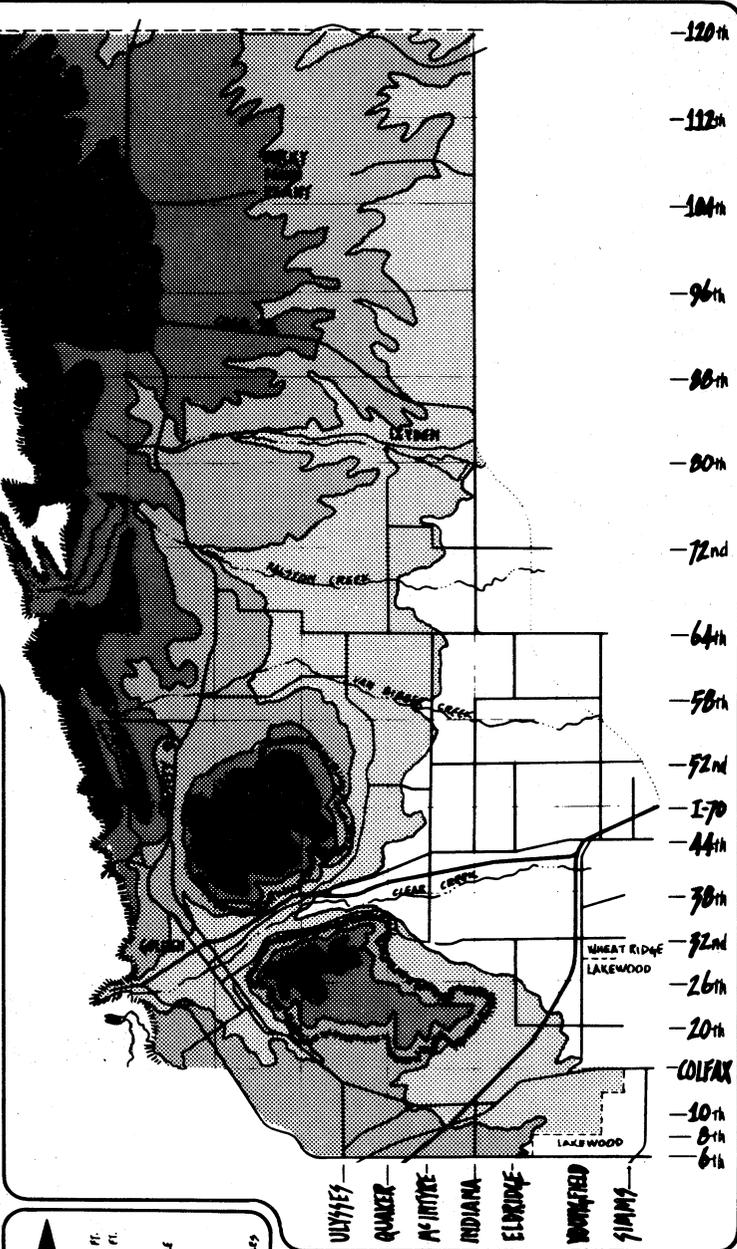
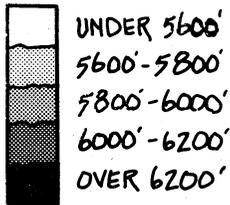


JEFFERSON COUNTY PLANNING DEPARTMENT

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U. S. GEOLOGICAL SURVEY 7.5 MINUTE QUADRANGLES WERE USED FOR BASE MAPPING.

TOPOGRAPHY



GOLDEN/RALSTON COMMUNITY

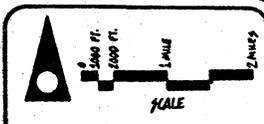
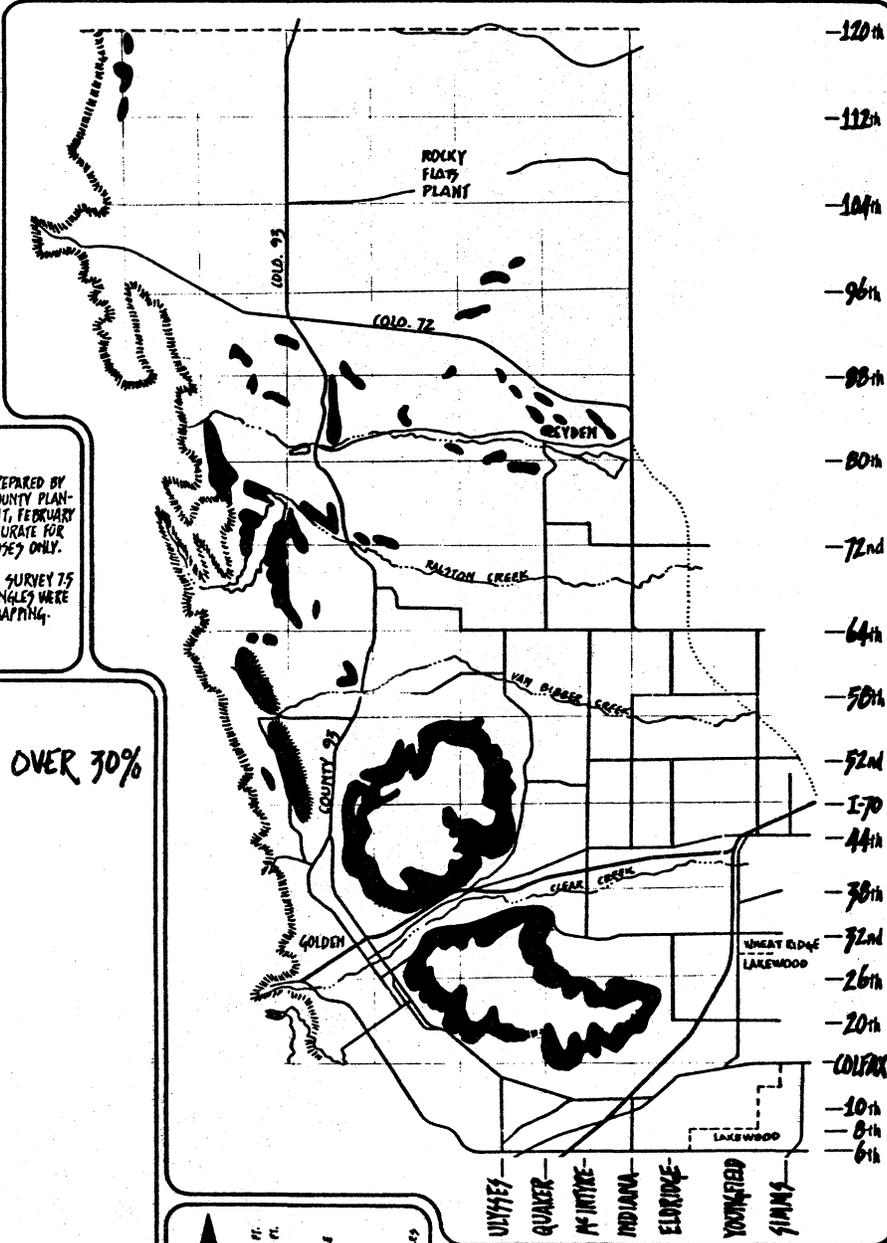


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SLOPES OVER 30%



GOLDEN/RALSTON COMMUNITY

In relating problems of topography to placement of future land use, the following planning criteria were utilized;

- 1) Careful consideration should be given to drainage patterns and the alteration of these patterns when placing future uses.
- 2) We must be careful of increasing run-off potential to avoid flooding and increasing erosion.
- 3) Generally, slopes over 30% should not be developed or altered because of slope and foundation stability problems.

VEGETATIVE COVER

The vegetation of the Golden/Ralston Area is generally composed of scrub grasses found in semi-arid climates. The lack of trees and the absence of other lush vegetation contributes to the stark nature of the area. This is especially noticeable the further north one travels. The reasons for this are varied. High winds decrease the possibility for trees to take root and grow to a healthy status. Poor soils and the low moisture level are conducive to only the hardy scrub grasses and bushes.

The problems related to this are those already mentioned in other portions of the text (i.e., increased run-off soil erosion, etc.). The planning criteria, therefore, remain the same.

It is important to note at this point how the elements discussed so far depend upon one another and how alteration of one can affect several others.

SOILS

Soil type, depth, and quality depend on a variety of factors. The soil type is determined by the geologic structure that has been decomposed over time. The depth of soil depends greatly upon the length of time the geologic structure has been decomposing, how much has been blown away by winds, and how much vegetation has stabilized the soil deposits. Soil quality depends upon the geologic base material and the decomposition of vegetation.

The Golden/Ralston Area is generally characterized by poor soils of shallow depth. The soil was formed in many areas by decomposed clays that have a high shrink-swell potential.



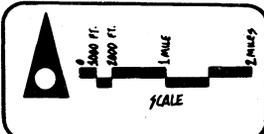
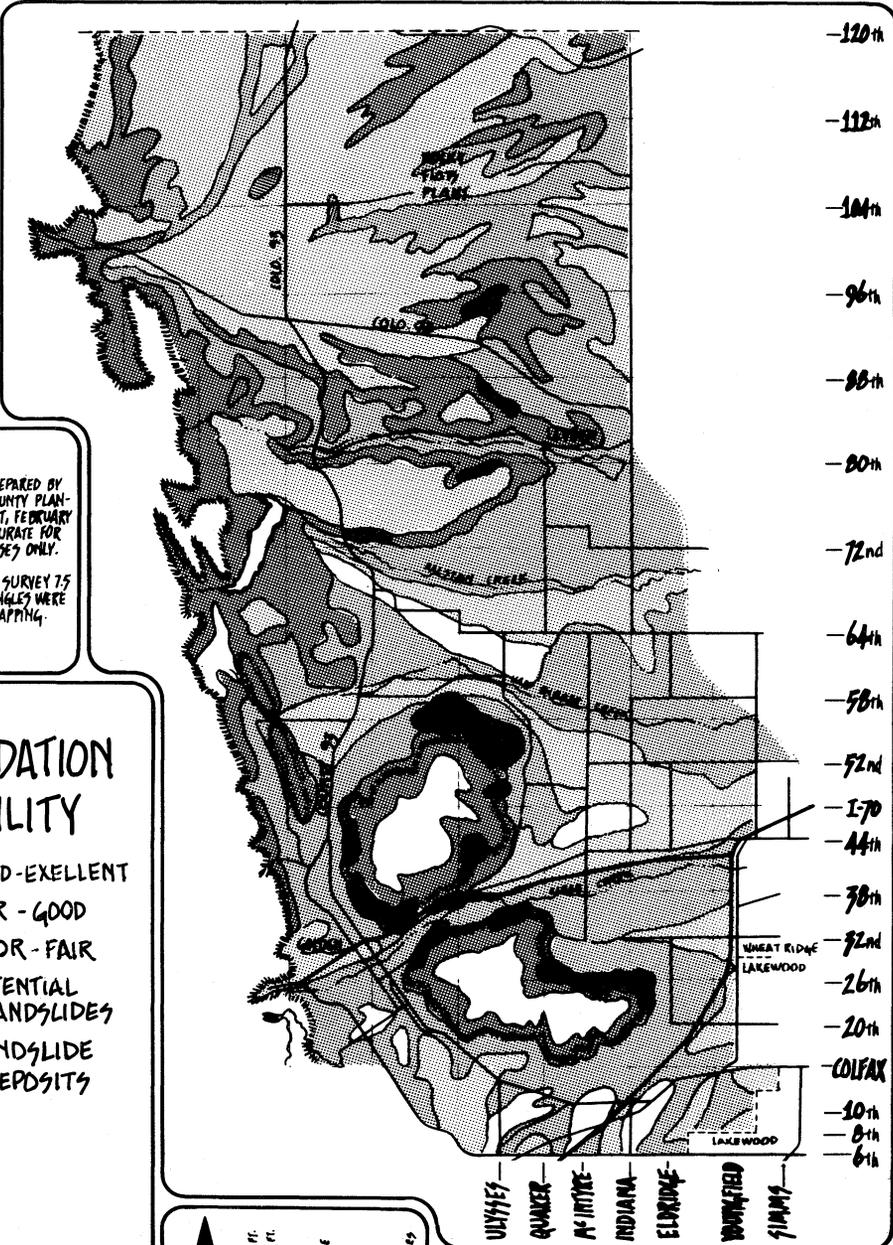
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FOUNDATION STABILITY

- GOOD-EXCELLENT
- FAR - GOOD
- POOR - FAIR
- POTENTIAL LANDSLIDES
- LANDSLIDE DEPOSITS



GOLDEN/ RALSTON
COMMUNITY

The Golden/Ralston Area also contains settling soils, primarily those containing loess. Saturated loess loses its strength and becomes a problem to constructing foundations (this information was used in formulating the Foundation Stability Map).

The high winds and lack of vegetative cover have combined to reduce the amount of soil to much less than eight feet in most of the area. The quality of soil is also poor because there is not enough vegetation decomposing to add much needed nutritional value.

Planning problems related to soils in the Golden/Ralston Area are:

- 1) Expanding soils
- 2) Settling soils
- 3) Shallow depth of soils
- 4) High erosion potentials
- 5) Slope and foundation stability problems

Planning criteria related to soil conditions are:

- 1) Avoid expanding and settling soils when placing future use, unless special precautions are taken to stabilize the problems.
- 2) Avoid septic systems because of shallow depth and poor percolation characteristics; rely on sewage and sanitation districts to serve such area.
- 3) Care should be taken so as not to increase soil erosion.
- 4) Slope and foundation stability should not be decreased by excessive cut and fill or extensive development.

GEOLOGIC SETTING

The geologic formations of the Golden/Ralston Area are a series of different rock types which are upturned along the mountain front and are lying flat as they extend east. Refer to the geologic cross-section found in the Appendix.

Along the western boundary the Dakota sandstones form the north-south Hogback. Progressively younger rocks are exposed, or occur under a thin soil mantle, as we proceed eastward.

The Benton Formation, consisting of claystone shale, forms the toe of the east slope of the Hogback as well as the gentle plain directly east of it. Also forming part of this valley are the Niobrara Formation, consisting of soft limestones and shale, and the Pierre Shale. Overlying the Pierre Shale is the Fox Hills Sandstone and the Laramic Formation. The shales in these formations form valleys, while the limestones and sandstones generally create small ridges. These ridges and valleys extend from one-half mile to two to three miles east of the Hogback. The angle of incline of the rocks lessen

as the next formation, the Arapahoe, overlays those already mentioned. The Denver Formation overlays the Arapahoe, both being fairly flat. The Denver is exposed, or is near the surface, and forms the bedrock under the surficial soils.

The geologic setting is the key to four major planning considerations:

- 1) Hydrology
- 2) Natural resource deposits
- 3) Foundation stability
- 4) Unique structures that add character and identity to the area.

Hydrology and natural resource deposits will be covered in separate sections of the text.

Foundation Stability is a combination of geologic factors, slope, and soils (refer to the Foundation Stability Map). The quality of ground in relationship to building structures is classified as follows:

- 1) Good to excellent
- 2) Fair to good
- 3) Poor to fair

Also included are known landslide areas and potential landslide areas.

Unique structures that add character and identity to the Golden/Ralston Area are the Hogback and North and South Table Mountains.

Planning criteria related to geology are:

- 1) Promote development in the good to excellent and fair to good areas unless additional constraints dictate otherwise.
- 2) Discourage development in the poor to fair, and known and potential landslide areas.
- 3) Protect areas of unique quality from any form of degradation, and maintain their intrinsic value.

SURFACE AND SUBSURFACE HYDROLOGY

Surface and subsurface hydrology are interrelated to a great extent, but can be separated from the discussion that follows.

SURFACE HYDROLOGY

This category includes:

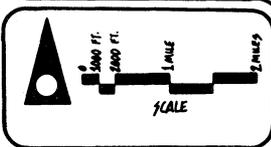
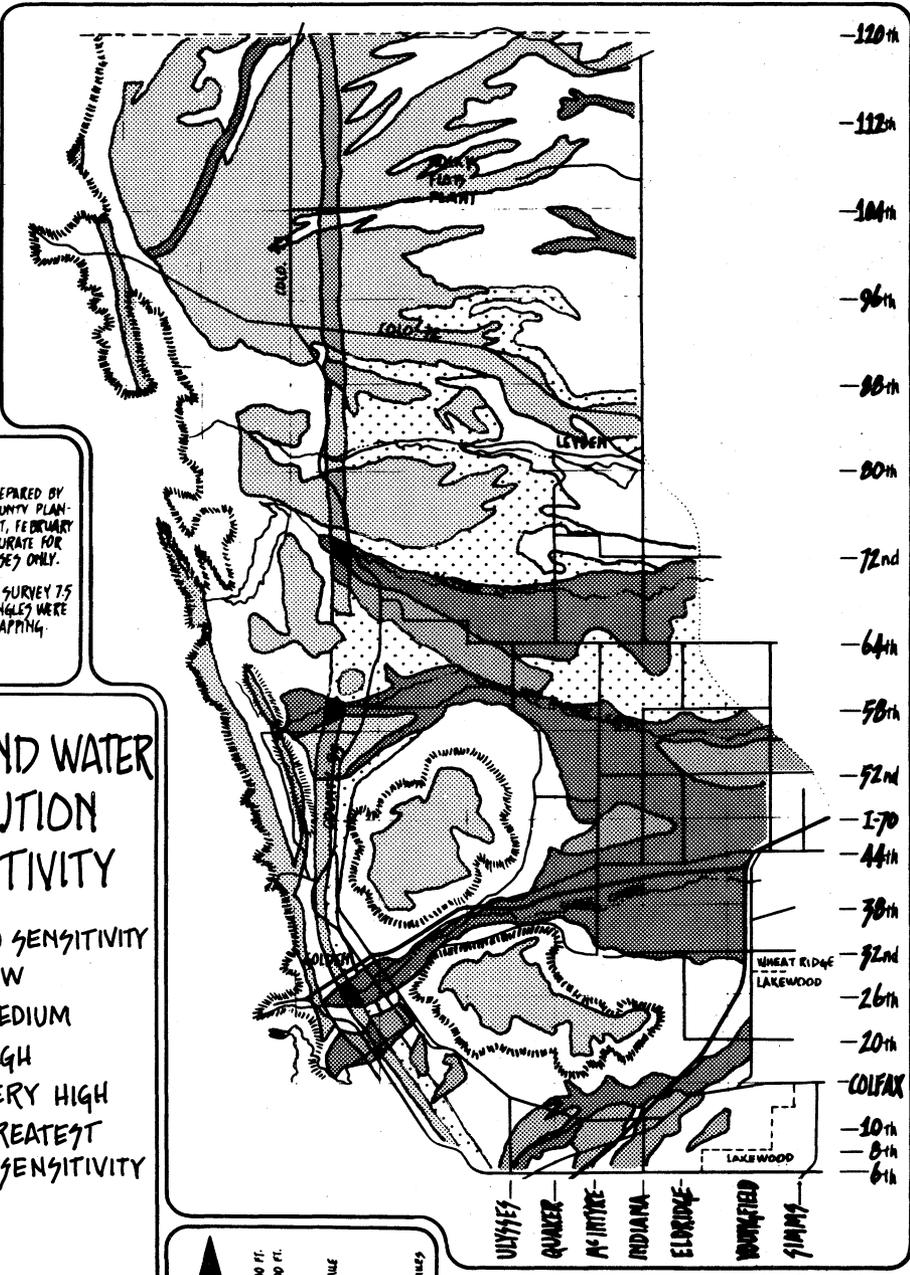
- 1) Lakes, ponds, reservoirs
- 2) Streams, creeks, gulches
- 3) Flood plains
- 4) Drainage basins



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GROUND WATER POLLUTION SENSITIVITY

	NO SENSITIVITY
	LOW
	MEDIUM
	HIGH
	VERY HIGH
	GREATEST SENSITIVITY



GOLDEN/RALSTON COMMUNITY

The primary planning considerations in surface hydrology are:

- 1) Proper drainage
- 2) Flood plains (includes flash floods)
- 3) Adequate quantity to serve expected population and related uses
- 4) Adequate quality for human use (water free of pollution)

SUBSURFACE HYDROLOGY

These same planning considerations carry over in the sub-surface systems or ground water systems. This ground water system is made up of geologic structures that have the capacity to hold and transport water. They are called aquifers. Refer to geologic cross-section in the Appendix. Aquifer recharge areas are the places where water is allowed to enter the ground water system. The major recharge areas can be one of two types. The first is where the geologic structure actually reaches the surface. The second type of recharge is where major surface streams flow over the underground aquifer. Water from the streams percolates down through the stream bed and enters the underground supply.

This underground system adds additional planning criteria to the hydrologic concerns.

- 1) Major areas of recharge should not be altered in any way.
- 2) Surface streams should not be channelized because recharge is reduced.

The Ground Water Pollution Sensitivity Map relates the above concerns and criteria to the hydrology system of Golden/Ralston.

Hydrology is an extremely important aspect of this planning area. The major aquifer systems that begin in the area are regional in scope.

Water that enters this system along the foothills of Jefferson County travels underground for many miles to the north, south, and east. This supply is used for human consumption and crop irrigation. We must protect the supply and the major recharge areas. The Ground water Pollution Sensitivity Map should be utilized as a guide for future decisions on placement of major roads, sanitary land fills, and any other use that can degrade the hydrologic system.

NATURAL RESOURCES

The Golden/Ralston Area is abundant with various forms of natural resources that bear major significance on the Metropolitan Region. These resources are:

- 1) Clay
- 2) Coal
- 3) Sand and Gravel
- 4) Uranium

The major problem concerning these resources focuses on the fact that there is not a substantially sound conservation program.

Expanding urbanization has taken its toll on these deposits, not only because of rapid use of the materials, but also because we have placed our land uses upon the deposits. By doing so we have removed materials we need from the market by making them inaccessible, thus creating many conflicts for ourselves.

In order to resolve these conflicts, the County has taken two steps which compliment each other.

The first was the formation of a Citizen Industry Advisory Committee whose objective is to formulate policies and procedures relating to the resources.

The second step is being taken by the Planning Department.

It consists of an inventory and mapping of the resources. Once the Committee establishes its policies and procedures, the maps can be utilized to establish a logical conservation program (refer to the Non-Metallic Mineral Resources Map which includes coal, clay, sand and gravel, rock, and decorative rock).

At this point in time, the planning criteria relating to natural resources can only be stated in a generalized way because the concentrated effort has just begun. These criteria are:

- 1) Identify all deposits
- 2) Relate them to regional need and economics
- 3) Establish a sound preservation program
- 4) Set up policies and procedures that will enable the County to deal with the deposits in a comprehensive manner.

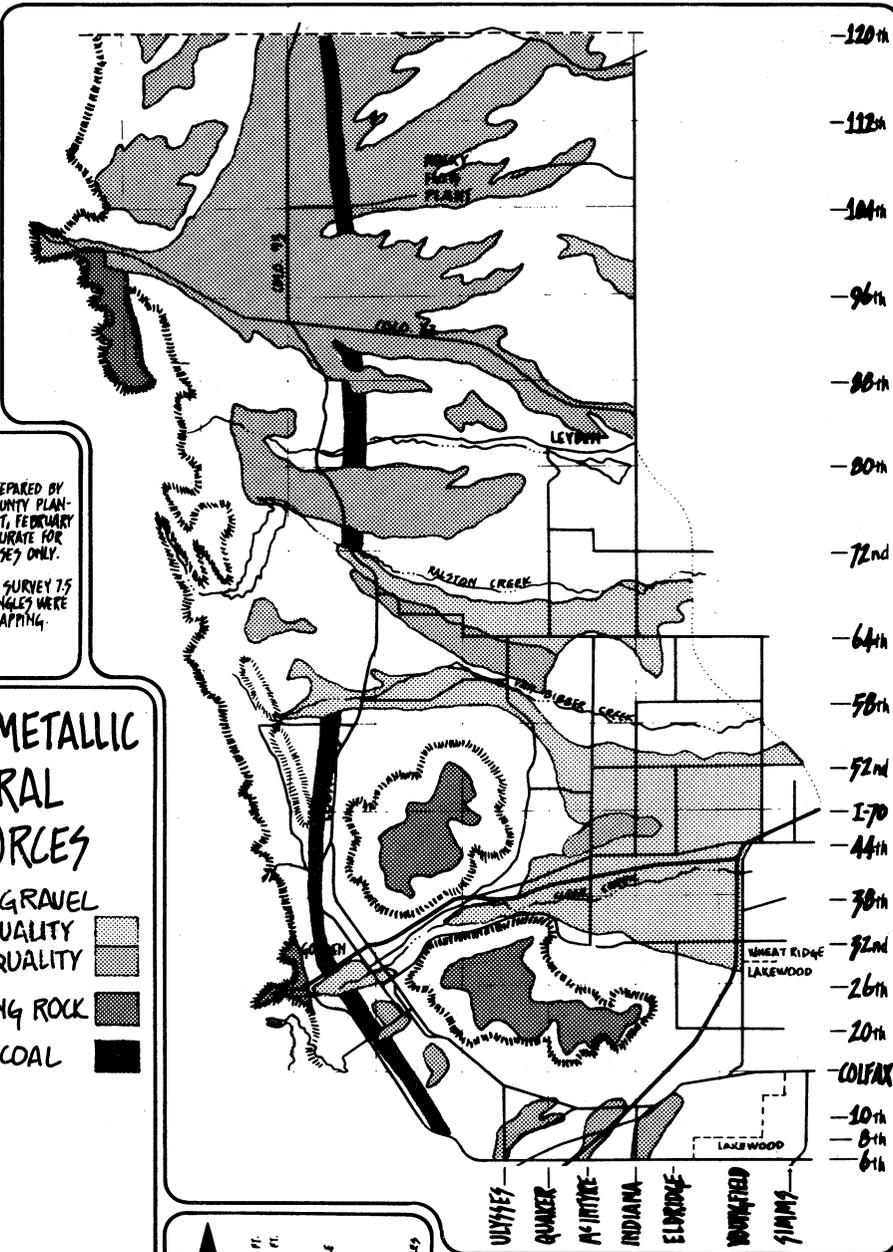


THIS MAP WAS PREPARED BY THE JEFFERSON COUNTY PLANNING DEPARTMENT, FEBRUARY 1973, AND IS ACCURATE FOR PLANNING PURPOSES ONLY.

U.S. GEOLOGICAL SURVEY 7.5 MINUTE QUADRANGLES WERE USED FOR BASE MAPPING.

NON-METALLIC MINERAL RESOURCES

- SAND & GRAVEL
 - HIGH QUALITY
 - GOOD QUALITY
- CRUSHING ROCK
- CLAY & COAL



GOLDEN/RALSTON COMMUNITY

other land use locational factors

We have devoted a great deal of emphasis on environmental factors of land use placement, primarily because of its major importance and because of the lack of recognizing these factors previously. We must consider the other factors at this point. Any potential land use carries with it certain inherent characteristics (refer to Land Use Locational Factors Diagram in the Appendix). They are as follows:

- 1) Function
- 2) People
- 3) Space requirements
- 4) Movement systems
- 5) Pollution and aesthetic potentials
- 6) Ecologic balance

Function can be defined by type and intensity of use.

People refers to the number of people utilizing the land use, and the number of people generated by the land use (i.e., employees, other supporting personnel, etc.).

Space relates to required size, service area radius, and area of influence.

Movement systems refer to all modes of transportation (including pedestrian), traffic generation, parking needs, access required, and impact on surrounding uses.

Pollution and aesthetic potentials refer to inherent characteristics of a use such as noise and vibration generation, air and water pollution potentials, odor potentials, and visual characteristics.

Ecologic factors have been explained earlier.

All of these factors have a dramatic effect on our quality of life and the environment in which we live, work, and play. Ignoring any of these factors leads to a degraded environment and poor quality of life.

OUTPUT:
FUTURE LAND USE

introduction

The proposed Plan will accommodate a high population estimate of approximately 110,000 persons, of which 30,000 would be contained within Golden. As these figures are based on maximum allowable densities, it is realistic that an actual population estimate of the area based on the expected development would be 85,000. This figure is calculated by using the average density per category rather than the maximum. (The agricultural areas are considered to develop only 10 - 20% of maximum density allowable.) The expected population in 1990 is 49,000. However, the Plan can accommodate 73% more population, or 85,000 persons.

An explanation of how this population can be accommodated, and how it relates to non-residential uses, will be presented in the following paragraphs.

residential

The residential areas are depicted in terms of density range. For example, 4 to 7 units per acre is provided to insure that the density is compatible at the time of rezoning when greater consideration can be given to a specific area.

agricultural

Areas shown as agricultural on the Future Land Use Map are not necessarily prime ground for cultivated crops or for grazing cattle. However, neither are these areas generally acceptable for major urbanization. Therefore, they should not develop to the extent where major urban services would be required.

One consideration to better insure the above would be to change the ten acre minimum lot requirement to 35 acres for the agricultural-two district, and the agricultural-one district from a five acre minimum to a ten acre minimum.

Acknowledging that a large portion of this study area is on the urban fringe, combined with many environmental constraints, these recommendations are felt to be more than justified.

CONSERVATION

Conservation areas (CO) are to restrict land use to insure that natural hazards will not endanger life or property. To explain some of these potential hazards, we can first identify general CO areas and then discuss specific areas.

FLOOD PLAINS:

All land included within the 100 year flood plains, as set by the U.S. Army Corps of Engineers, are designated as conservation areas. These consist of Leyden Gulch, Ralston Creek, Van Bibber Creek, and Clear Creek, where it is not channelized.

MINOR STREAMS, DRAINAGE DITCHES, AND DIVERSION CANALS:

These are also shown in CO because they present a potential threat during flooding conditions and because the easements are required to maintain the water courses.

1) Green Space Buffers Around the AEC Rocky Flats Plant:

The buffer is delineated from the report, "Environmental Statement", Land Acquisition, Rocky Flats Plant, Colorado, and from the United States Atomic Energy Commission, Publication Washington, 1518, published in April, 1972. These 4,620 acres are intended to provide a 1½-mile buffer zone around the existing facility. This buffer will serve as a greenbelt free of development. The acquisition program has been reviewed and generally accepted by all federal, state, regional, and local governmental entities concerned. Six million dollars have been appropriated and a planning program for the acquisition is

presently underway. All areas inside this buffer generally exceed the State Health Department Standard on levels of plutonium pollution in the soil. State Health Department Standards are included in the Appendix.

2) Leyden Mine Area:

The old Leyden Coal Mine is presently used for gas storage by the Public Service Company of Colorado. It is unreasonable to consider any development over this mine area in view of the gas storage and the potential subsidence problem. Much of this area is also spotted by known and potential landslides. The terrain is extremely rough and climatic conditions are poor.

3) Ralston Reservoir Area:

The area around Ralston Reservoir, upper Long Lake and lower Long Lake, is extremely important for drainage into these bodies of water and is sensitive in terms of pollution potential. The remaining portion is extremely poor for foundation stability. Soils are very poor and high wind conditions exist along the entire area.

NORTH AND SOUTH TABLE MOUNTAIN:

There are two aspects to these Mountains. They have very positive attributes and very negative constraints.

First, the positive aspects. The Table Mountains contain a source of extremely fine quality aggregate. This factor should not be overlooked because of the regional significance of these deposits. Also, the Table Mountains are an extremely important visual aspect of the community; they identify Golden and are a unique geologic asset.

The negative aspects of the Table Mountains are extreme. There are many known landslide areas around both mountains. They could be easily reactivated by construction of roads or other facilities.

The caprock of the mountains insures their unique quality. Without the caprock, the Table Mountains would be rounded and look like any other small mountain in the area.

The caprock is highly fractured, leading to several problems. The drainage system of the mountains is very sensitive and relies on the fracture system. If this system is altered, serious landslides along the mountain sides are possible. The caprock also is being broken constantly by weathering processes causing huge rockfalls. There are many residential areas existing where these fallen rocks can be seen nearby.

The Table Mountains were included in the CO areas because of the cumulative affect of the above-mentioned positive and negative aspects.

Our present Conservation Zone is not adequate to handle all types of conservation. Specifically, there should be a distinction made between lands reserved for open space, primarily non-intensive uses and/or lands reserved for mineral extraction.

The Ad-Hoc Committee on Mining should formulate procedures and policies for conservation, mining, reclamation, and after-use in relationship to the Future Land Use Plan. Reference should be made to the Non-Metallic Mineral Resource Map. More information is needed as to the commercial quality of these deposits, in order to project which deposits will be needed and mined in the near future. There exists a strong possibility that as more information becomes available, more deposits will be located. However, considerably more data is needed to fully plan for sequential land use.

To insure that natural resources are not built over, between the present time and the time the Ad-Hoc Committee's policies and procedures are adopted, we suggest that developers be required to submit a report on the quantity, quality, and type of natural resources that exist on the subject property. This can be accomplished in coordination with other geologic studies required under present subdivision procedures. The Planning Department, Planning Commission, and County Commissioners would utilize this additional data through the subdivision review process.

industrial

Presently, the Golden/Ralston planning area has two major areas of industrial development. They are the Rocky Flats area and the Clear Creek area. These two concentrations provide the County with major employment centers. They need logically placed industrial development for future expansion. New industrial development also needs to be taken into account.

The major area delineated for future industrial expansion is along Colorado 93 and Colorado 72. The area is not suited for residential development. However, good road access, rail access, and the Jeffco Airport facility to the east could serve a potential industrial development. Placement of industrial uses in this area also reduces potential conflict with residential uses.

The entire area north of Leyden Gulch is unsuitable for residential development now as well as at anytime in the future.

In the Clear Creek area we have allowed room for the expansion of the Coors industry. Coors is a rapidly expanding industry, and if its proposed recycling operation is to be accomodated, we must allow room for this much needed regional service.

Industrial growth is not limited to Coors in this area. Industries have been expanding into the residential area known as Fairmount.

The Future Land Use Plan is an attempt to allow some expansion of these industries and at the same time maintain the integrity of the residential area. If the industrial areas are planned properly, many problems such as traffic congestion, unattractive buildings, noise, odor, and pollution can be avoided. This can be accomplished under Planned Development in sensitive sections.

There are several areas designated as research park facilities. One such area is on the east side of McIntyre Street, north of Van Bibber Creek, to approximately 69th Street. This is envisioned for clean industrial use which would not cause conflicts. Another such area is planned in the vicinity of I-70, north of Old Golden Road, and northwest of Colfax. This research park area should be designed under Planned Development criteria. It has good highway access and if designed properly, would not conflict with surrounding uses.

A final industrial designation exists in the triangular piece of land bounded on the south by 6th Avenue, on the north by U.S. 40, and on the east by I-70 and running north mid-block between Noble Street and Nile Street. The intention of this designation is as follows:

- 1) develop under Planning Department
- 2) limit access onto 40 and no access to 6th Avenue or I-70.
- 3) develop functional internal circulation system.
- 4) create an employment base with uses like:
 - a. assembly
 - b. light fabrication
 - c. manufacturing
 - d. computer related forms

These uses shall be regulated by high performance standards regarding the off site impact from noise, smoke, vibration, odor, glare, and air pollution.

- 5) Low water users.
- 6) Outdoor storage permitted only when totally screened (landscaped) from view from adjoining properties and roadways.
- 7) Within this area adequate buffers shall be provided so parking areas are adequately screened from adjacent major roadways. The area should also be developed with sensitivity to open spaces so the entire area maintains an open or park-like setting.
- 8) Building height should be limited to 35 feet to not interfere with views from surrounding residential development.
- 9) Architecture and signs will be reviewed by the County and will be restricted to be compatible with surrounding land uses.

Good highway access is available for transportation needs and development under Planned Development should limit any potential conflicts with residential uses.

The amount of land allocated to industrial use should serve needed expansion. It should be noted that natural resources are not delineated as industrial. A major recommendation is that natural resource extraction be deleted from industrial zoning categories as a use by right, to insure greater control over reclamation procedures.

Commercial

As an aid in the interpretation of the Plan, commercial use will be defined as those uses involving retail sales or the provision of services. Wholesaling and warehousing are not considered a commercial use and will be provided for in the industrial categories.

Commercial areas will be designated according to the type of use or orientation (shopping center, general, and highway commercial) and the basic function (neighborhood, community, or regional in nature).

Neighborhood commercial will serve a radius of approximately one mile and provide commonly used items such as food products, staple goods and some services. Usually, the driving time to this type of use should not exceed five or six minutes if it is to remain convenient and local in character.

Commercial uses at the community level will have an average service radius of approximately two miles and should have good access to major roads.

Regional commercial will usually have a service area radius of two and one-half miles or greater, depending upon the type of use, and should have good access to expressways and/or freeways to avoid congestion and keep driving time to a minimum.

It should be pointed out that these criteria are intended to serve as general guidelines and should remain flexible enough to account for individual variations throughout the area.

Highway commercial includes fairly intensive uses with a strong highway orientation such as service stations, motels, and restaurants.

General commercial includes a wide variety of uses not ordinarily included in either a shopping center complex or highway oriented commercial. Examples of this use would be areas such as Golden Central Business District or some of the commercial areas proposed in the vicinity of I-70 and Highway 40.

This category could also contain small businesses with local orientation such as convenience food stores. This type of use is usually too small to include in a plan which is general in nature as these uses require a very detailed study for correct placement. It is intended that this type of use be provided for on an individual basis, contingent upon the needs of a particular neighborhood in each instance.

After analysis of the Golden Ralston planning area using the above criteria, the recommendations for future commercial are as follows:

1) Neighborhood Level:

In surveying the need for neighborhood orientated centers, it should be pointed out that these should remain fairly small due to lower densities in the area. Many of the needs at this level are fulfilled by the community centers provided.

The locations for neighborhood facilities are at 48th and McIntyre and at 26th and Youngfield.

Most of the neighborhood centers for the Golden/Ralston Area will tend toward the lower limits for average requirements, yet have a larger service area due to the rural-suburban character of the Plan. Proposals for this type of center should be evaluated keeping this in mind, to insure compatibility with the structure on the local level. An attempt has been made to show several locations for this type of center to keep travel distance to a minimum and keep these local in character.

2) Community Level:

In surveying community level shopping centers a need was found for this type of facility in the area generally known as Fairmount. The location chosen is at McIntyre and 58th and is intended to comprize approximately ten acres. Although this could possibly conflict with the Applewood Village Center, it is believed that by remaining fairly small, it could function with a minimum of overlap in service area. If the makeup of store types were slightly varied, it could become complimentary.

3) Regional Level:

A survey has been made of the shopping centers at a regional level, that leads to the conclusion that due to the proximity to several large centers and the lower densities in much of this area, no large regional center is justified on this Plan.

public facilities

SCHOOLS

Included in the Future Land Use Maps are proposed elementary, junior high, and senior high school sites.

These schools represent approximate locations based on criteria found in the Appendix. Also included are present enrollment figures and approximate numbers of students bussed.

PARKS AND OPEN SPACE

The parks plan is not fully delineated. There is a need to develop a separate plan for open space that provides greater detail, an outline of the guidelines for specific facilities, and addresses the question of priorities and acquisition.

Hopefully, Jefferson County Open Space Advisory Committee will be primarily responsible for development of this plan.

Some of the trails and portions of major parks would be contained in the vicinity of many of the conservation areas.

TRANSPORTATION SYSTEM

The existing road network and the adopted Major Thoroughfare Plan have been reviewed in relationship to proposed land uses.

It is found that accomodation of the proposed Plan does not pose any problems in terms of existing transportation planning.

Preliminary changes to the Thoroughfare Plan have been considered. However, additional studies and regional coordination are needed prior to final recommendations.

planned development recommendations

To insure that proposed land use in certain areas will be compatible with the surrounding area and will provide maximum benefit to the community, it is recommended that they be developed through the Planned Development concept.

The areas that are marked for Planned Development are done so based on the inherent characteristics of the property and problems that may arise due to these characteristics, namely internal and external traffic problems, irregular shape of the parcel, difficulty in insuring compatability with surrounding land uses, etc.

It is felt that desirability of use can best be provided when the inherent problems of the site are directly confronted and resolved through the flexibility of Planned Development and provision of specific restrictions.

Reference is made to the map depicting future land use and the specific areas marked for Planned Development. This is not to suggest that these are the only areas that should be considered for Planned Development.

APPENDICES

APPENDIX A

COUNTY COMMISSIONERS HEARING DATE: July 23, 1973

Mr. Commissioner NEWMAN moved that the following Resolution be adopted:

BEFORE THE PLANNING COMMISSION
OF THE COUNTY OF JEFFERSON
STATE OF COLORADO
RESOLUTION

RE: Golden/Ralston Consolidated Plan

WHEREAS, the Jefferson County Planning Department has completed extensive research, analysis, review and public hearings on the Golden/Ralston Consolidated Plan and;

WHEREAS, a public hearing of the Golden/Ralston Consolidated Plan was held by the Jefferson County Planning Commission on the 29th day of May, 1973, at which time this matter was continued for further consideration until June 13, 1973 and;

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

1. That proper publication and public notice has been provided as required by law for the hearings before this Planning Commission.
2. That the hearings before this Planning Commission have been extensive and complete and that all pertinent fact, matters and issues have been submitted and considered, and all interested parties heard.
3. That it is the opinion of this Commission that the Golden/Ralston Consolidated Plan as submitted represents the best plan for projected land use in this area, with the exception of those changes pertaining to the A-1 and A-2 zoning classification. That the zoning classification be excepted and that the legend be accepted as submitted.
4. That said plan is in the best interest of the health, safety, welfare and morals of the citizens of Jefferson County.

NOW, THEREFORE, BE IT RESOLVED that the Golden/Ralston Consolidate Plan, as delineated by the above resolution with exceptions and acceptions as noted there-with be and is hereby approved; and that said approved Golden/Ralston Consolidated Plan be certified to the Board of County Commissioners for their review pursuant to 1963 Colorado Revised Statutes 106-2-8 as amended.

Mr. Commissioner PETERSON seconded the adoption of the foregoing resolution.

The roll having been called, the vote was as follows:

Mr. Commissioner NEWMAN - Aye
Mr. Commissioner PETERSON - Aye
Mr. Commissioner VINQUIST - Aye
Mr. Commissioner ROBINSON - Aye
Mr. Commissioner WOLF - Aye

the Resolution was adopted by unanimous vote of the Jefferson County Planning Commission.

Dated: June 13, 1973

APPENDIX A

COMPREHENSIVE PLAN - Golden/Ralston

The Comprehensive Plan for the Golden/Ralston area was presented to the Board for public hearing on July 30, 1973 and August 7, 1973, by Mike Davidson and Paul Gesso, Jefferson County Planning Department. On August 7, 1973 the matter was continued indefinitely. The general location of the proposed plan is West 6th Avenue, the east front edge of the Foothills, Indiana Street and Ward Road, and the north County line.

Upon motion of Commissioner Trezise, duly seconded by Commissioner Anderson, and by unanimous vote, the Board resolved that the Golden/Ralston Plan as submitted, be approved.

Dated: April 2, 1974

Located at: Page 358 of Journal BB

C E R T I F I C A T I O N

I, NORMAN C. ALLEN, County Clerk and Recorder and Clerk to the Board of County Commissioners of the County of Jefferson, Colorado, certify that the above is a true copy of the minutes taken at the regular meeting of said Board of County Commissioners held on April 2, 1974.

NORMAN C. ALLEN

S E A L

BY: *Eleanor V. Martin* Deputy
County Clerk and Recorder and
Clerk to the Board

APPENDIX A

It was moved by Mr. Commissioner Robinson that the following Resolution be adopted:

BEFORE THE PLANNING COMMISSION

COUNTY OF JEFFERSON

STATE OF COLORADO

RESOLUTION

RE: Approval and Certification of the amendment of the 1973 Golden/Ralston Comprehensive Plan

WHEREAS, on the 27th day of August, 1974, the Planning Commission reviewed a proposed amendment* to the 1973 Golden/Ralston Comprehensive Plan; and

WHEREAS, the Commission has reviewed and studied the proposed amendment with its relevant maps and descriptive matter, all attached hereto and referred to as Exhibit "A"; and

WHEREAS, the Planning Commission of Jefferson County has conducted public hearings on the matter, heard testimony thereon and has given due consideration of the proposed amendment, and finds the same to be in the best interest of the health, safety, morals, convenience, order, prosperity and welfare of the citizens of Jefferson County.

NOW, THEREFORE, BE IT RESOLVED that the proposed amendment to the 1973 Golden/Ralston Comprehensive Plan be and hereby is approved and certified to the Board of County Commissioners pursuant to the provisions of C.R.S. 106-2-7 and C.R.S. 106-2-8, 1963, as amended.

Mrs. Commissioner Basham seconded the adoption of the foregoing Resolution and upon a vote of the Commission as follows:

Mr. Commissioner Robinson	- Aye
Mrs. Commissioner Basham	- Aye
Mrs. Commissioner Fockler	- Aye
Mr. Commissioner Newman	- Aye

the Resolution was adopted by unanimous vote of the Planning Commission of the County of Jefferson, State of Colorado.

I, David E. Peterson, Secretary of the Jefferson County Planning Commission, do hereby certify that the foregoing is a true copy of a resolution duly adopted by the Jefferson County Planning Commission at a regular meeting held in Jefferson County, Colorado, on September 11, 1974, as the same appears in the minutes of said meeting.

*Amendment to cover that area bound by Indiana on the east, U.S. Highway 40 on the north and U.S. Highway 6 on the south.

APPENDIX A

GOLDEN/RALSTON COMPREHENSIVE PLAN - Pleasant View Area Update
Approval and Certification
of the amendment of 1973

Upon motion of Commissioner Trezise, duly seconded by Commissioner Anderson and by unanimous vote, the Board resolved that the Amendment to the Golden/Ralston Comprehensive Plan concerning the Pleasant View area, particularly that area bounded in the area West of Indiana, south of Highway 40 and north of Highway 6, be approved as recommended to this Board by the Planning Commission and authorize the Chairman to sign on behalf of the Board.

DATED: September 16, 1974

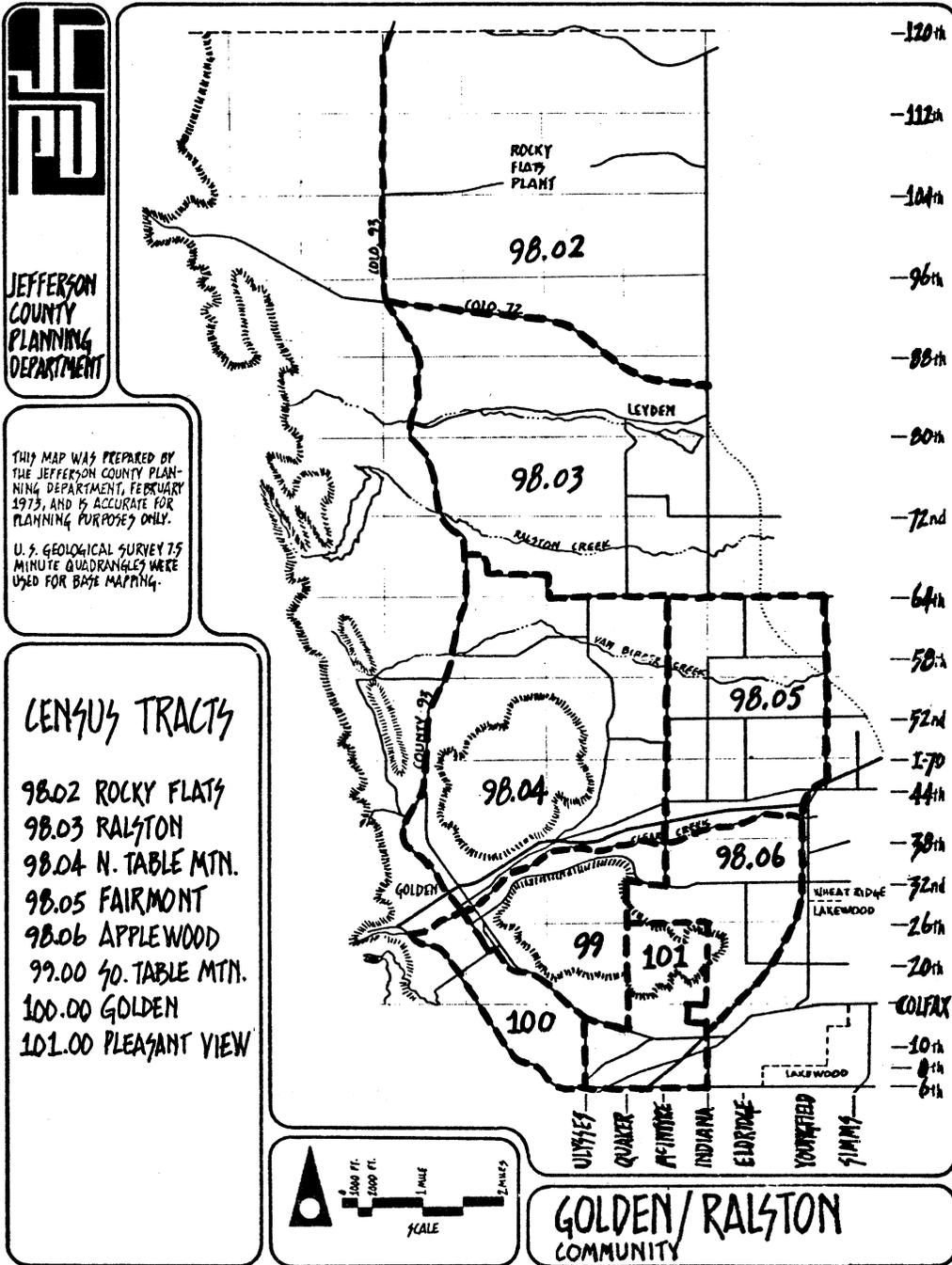
C E R T I F I C A T I O N

I, NORMAN C. ALLEN, County Clerk and Recorder and Clerk to the Board of County Commissioners of the County of Jefferson, Colorado, certify that the above is a copy of the resolution adopted at the regular meeting of said Board of County Commissioners held on September 16, 1974.

NORMAN C. ALLEN

S E A L

By: *Eleanor J. Martin* Deputy Clerk
County Clerk and Recorder and
Clerk to the Board



APPENDIX B

TABLE #1

COMPARISON OF CENSUS TRACTS IN GOLDEN/RALSTON AREA*

FAMILY INCOME (MEAN)		OWNER OCCUPIED HOME	
Applewood	\$18,764	Applewood	93.4%
Ralston	14,507	Rocky Flats	83.6%
Rocky Flats	13,620	Fairmount	81.7%
South Table Mountain	13,553	Ralston	81.6%
Fairmount	12,310	Pleasant View	70.0%
North Table Mountain	11,729	North Table Mountain	67.2%
Golden	11,667	South Table Mountain	63.7%
Pleasant View	9,680	Golden	33.5%

UNRELATED INDIVIDUALS (MEAN INCOME) People that are single and living alone		HOUSING VALUE (Median)	
Pleasant View	\$5,278	Applewood	\$30,700
Applewood	4,746	Rocky Flats	30,200
South Table Mountain	4,579	Ralston	24,300
North Table Mountain	4,471	South Table Mountain	20,500
Fairmount	3,485	Fairmount	19,900
Rocky Flats	3,381	Golden	19,800
Golden	2,850	North Table Mountain	18,700
(Ralston Information not available)		Pleasant View	14,900

SCHOOL ENROLLMENT Percent of population enrolled in elementary through college		GROSS RENT	
Golden	42.1%	Applewood	\$267
Rocky Flats	40.7%	Ralston	150
Applewood	38.8%	South Table Mountain	121
Fairmount	37.7%	North Table Mountain	115
Ralston	36.3%	Pleasant View	115
North Table Mountain	34.5%	Rocky Flats	113
Pleasant View	27.5%	Fairmount	100
South Table Mountain	27.1%	Golden	93

APPENDIX B

TABLE #1 (Cont'd)

STRUCTURES BUILT BEFORE 1940

	<u>UNITS</u>	<u>% OF TOTAL</u>
Golden	511	46.2%
North Table Mountain	302	29.0%
Pleasant View	166	13.8%
Ralston	118	39.1%
Fairmount	116	21.6%
South Table Mountain	114	20.2%
Rocky Flats	59	15.0%
Applewood	48	4.4%

UNITS WITHOUT PUBLIC WATER SUPPLY

Ralston	218	72.2%
Fairmount	196	36.6%
Rocky Flats	154	39.1%
Pleasant View	132	11.0%
North Table Mountain	129	12.4%
Applewood	97	8.9%
Golden	31	2.8%
South Table Mountain	8	1.4%

UNITS WITHOUT PUBLIC SEWER

Fairmount	420	78.4%
Rocky Flats	312	79.2%
North Table Mountain	293	28.2%
Ralston	278	92.1%
Pleasant View	225	18.8%
Applewood	166	15.1%
South Table Mountain	29	5.1%
Golden	22	2.0%

*The above information is from the 1970 census.

APPENDIX B

TABLE #2

SOCIAL-ECONOMIC DATA IN REGIONAL CONTEXT

	<u>*GOLDEN/RALSTON</u>	<u>JEFFERSON COUNTY</u>	<u>DENVER SMSA</u>
NUMBER OF PERSONS	20,421	235,300	1,227,529
Source: Table P-1, 1970 Census			
INCOME IN 1969 OF FAMILIES AND UNRELATED INDIVIDUALS			
ALL FAMILIES	5,235	60,135	304,465
Mean Income	\$13,229	\$13,218	\$12,156
Median Income	\$11,631	\$12,045	\$10,777
UNRELATED INDIVIDUALS	1,741	12,010	135,934
Mean Income	\$4,113	\$5,069	\$4,265
Median Income	\$3,534	\$3,915	\$3,008
FAMILIES AND UNRELATED INDIVIDUALS	6,976	72,145	440,399
Mean Income	\$11,592	\$11,861	\$9,720
Median Income	\$10,512	\$10,998	\$8,390
Source: Table P-4, 1970 Census			
SCHOOL ENROLLMENT			
Enrolled persons 3 to 34 years old	7,277 (35.6%)	77,144 (33.1%)	386,350 (31.4%)
Source: Table P-2, 1970 Census			
ALL HOUSING UNITS	6,151	72,055	410,509
ALL YEAR ROUND HOUSING UNITS	6,151	70,936	408,349
TENURE			
Owner Occupied	4,250 (69.1%)	50,767 (71.6%)	241,010 (59.0%)
Renter Occupied	1,763 (28.7%)	17,555 (24.7%)	151,050 (37.0%)
Vacant Year-Round	138 (2.2%)	2,614 (3.7%)	16,289 (4.0%)
VALUE			
Specified Owner Occupied Units	3,499	45,767	214,198
Median	\$22,375	\$22,300	\$19,100
CONTRACT RENT			
Specified Renter Occupied Units	1,690	17,154	148,862
Median	\$110	\$125	\$105
GROSS RENT			
Specified Renter Occupied Units	1,745	17,176	148,844
Median	\$135	\$135	\$117

Source: Table H-1, 1970 Census

APPENDIX B

TABLE #2 (Cont'd)

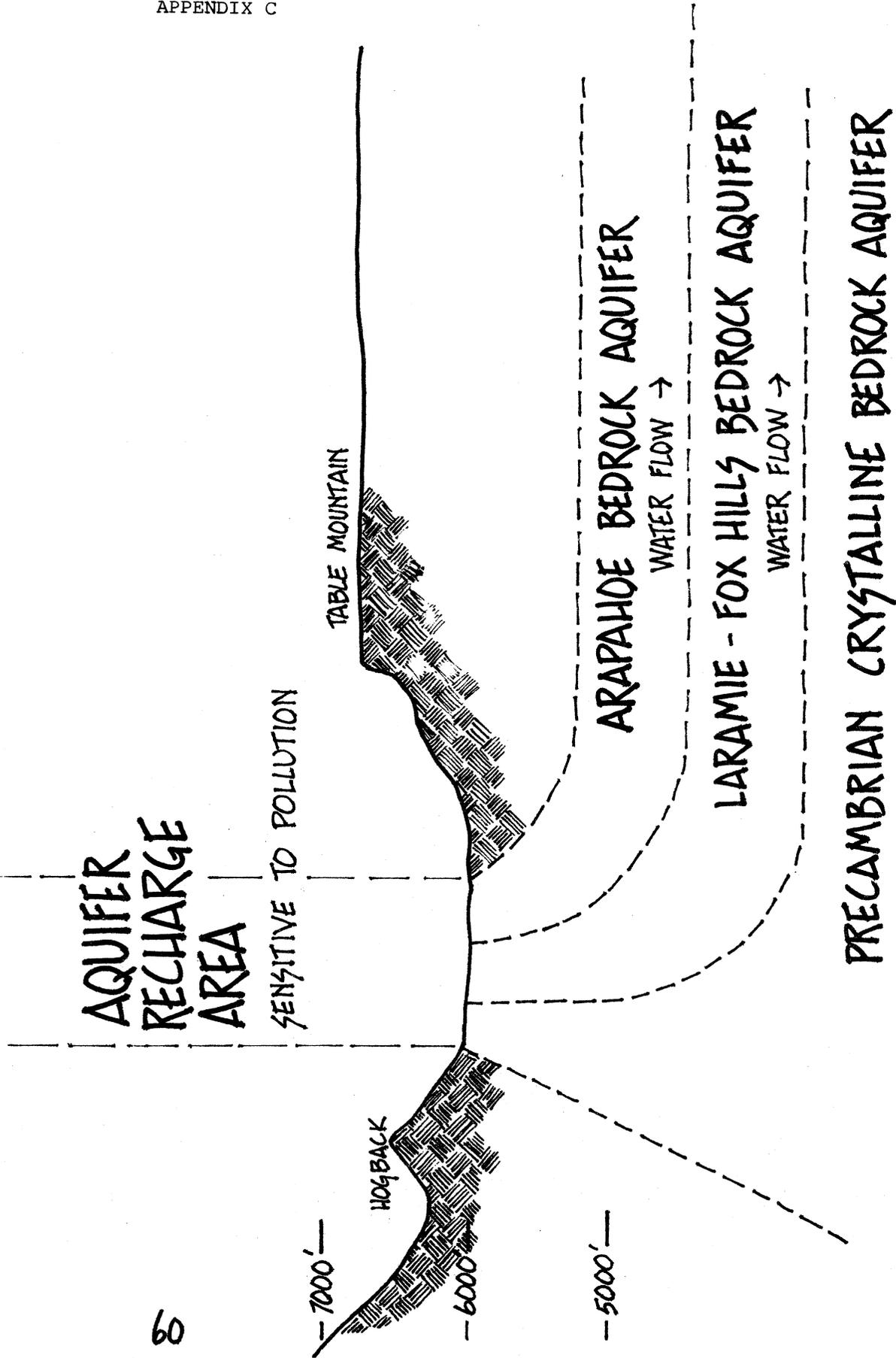
	<u>*GOLDEN/RALSTON</u>		<u>JEFFERSON COUNTY</u>		<u>DENVER SMSA</u>	
**ALL YEAR-ROUND HOUSING UNITS	6,239		71,145		408,646	
NUMBER OF UNITS IN STRUCTURE						
One (Includes mobile home or trailer)	5,116	82.0%	58,548	82.3%	287,147	70.3%
Two	275	4.4%	3,285	4.6%	22,182	5.4%
Three and Four	246	3.9%	2,242	3.1%	15,229	3.7%
Five to Forty-nine	555	8.9%	6,568	9.2%	68,902	16.9%
Fifty or more	47	.8%	502	.7%	15,186	3.7%
***YEAR STRUCTURE BUILT						
1969 to March 1970	317	5.1%	4,542	6.4%	20,899	5.1%
1965 to 1968	732	11.7%	10,889	15.3%	45,187	11.0%
1960 to 1964	1,698	27.2%	19,510	27.4%	72,540	17.7%
1950 to 1959	1,368	21.9%	21,786	30.6%	116,709	28.5%
1940 to 1949	690	11.0%	6,269	8.8%	45,867	11.2%
1939 or earlier	1,434	23.0%	8,149	11.4%	107,444	26.3%
WITH PUBLIC SEWER	4,494	72.0%	61,613	86.6%	382,754	93.6%
WITH PUBLIC WATER SUPPLY	5,274	84.5%	63,687	89.5%	390,272	95.5%
ALL OCCUPIED HOUSING UNITS	6,106		68,365		392,103	
YEAR MOVED INTO UNIT						
1968 to March 1970	2,314	37.9%	27,037	39.5%	165,448	42.2%
1965 to 1967	1,375	22.5%	14,991	21.9%	75,586	19.3%
1960 to 1964	1,231	20.2%	13,559	19.9%	64,590	16.5%
1950 to 1959	812	13.3%	9,772	14.3%	57,834	14.7%
1949 or earlier	374	6.1%	2,966	4.3%	28,645	7.3%

Source: Table H-2, 1970 Census

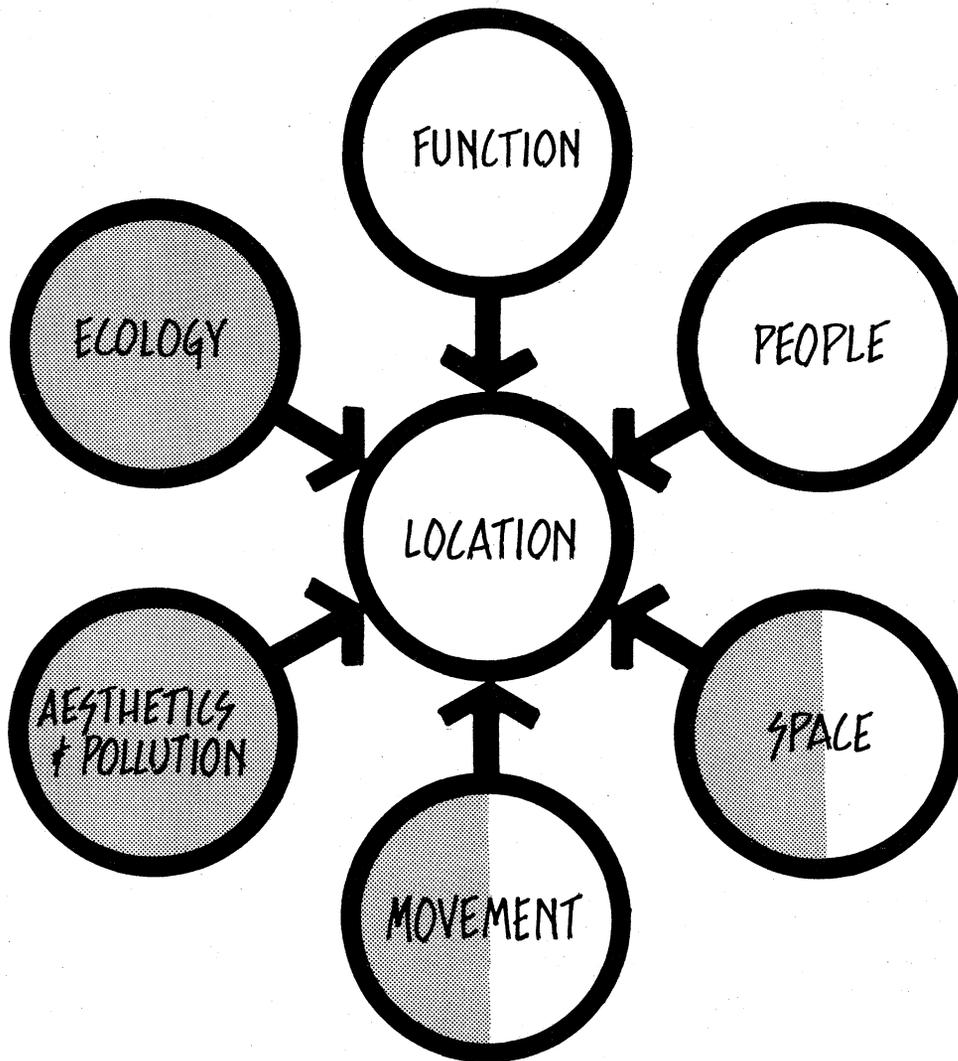
*Golden/Ralston figures are compiled from Census Tracts: 98.02, 98.03, 98.04, 98.05, 98.06, 99, 100, and 101.

**Differences in the count of housing units are due to sampling variations of the U.S. Census. The first section, from Table H-1 of the 1970 Census, is from a complete sample of the population. The second section from Table H-2 of the 1970 Census, is from a 20% sampling of the population. The data is used only in comparison of one geographical area to another, and thus the error in any count applies to all areas (and is therefore effectively eliminated).

***Structure is one building which could accomodate a number of housing units.



LAND USE LOCATIONAL FACTORS



All of these land use locational factors should be taken into consideration when a land use is placed. The shaded areas of the diagram are considerations not covered under present zoning regulations. However, some not covered under zoning are covered during the review of subdivision applications.

APPENDIX E

PUBLIC SCHOOL STANDARDS

	<u>ELEMENTARY</u>	<u>JUNIOR</u>	<u>SENIOR</u>	<u>TOTAL</u>
No. of Students	550 - 750	1000+	1500+	---
*Single-family	.75	.25	.20	1.20
*Multi-family	.25	.11	.09	.45
*Townhouse	.33	.16	.14	.63
Radius for Bus Service	1 mile	1½ miles	2 miles	---
**Present Enrollment (Countywide)	40,340	15,082	18,422	73,844
**No. Eligible to be Bussed (Approx.)	10,286	6,531	6,454	23,271

*These figures represent the estimated number of students for one dwelling unit as related to the general type of housing.

**As of March 22, 1973.

PLANNING AREAS

Because of the size, the district has been divided into 81 elementary barrier areas. These areas have been reassembled then to form attendance areas for the secondary schools.

The boundaries for these areas are generally barriers which elementary students would not be expected to cross. These include man-made structures such as railroads, major highways, irrigation ditches and natural features such as lakes, streams, gulches, the Hogbacks and Table Mountain. Large masses of industrial, commercial, recreational, public or other open uses of land were also considered barriers.

It is important to consider community orientation of our school areas so the schools continue to serve the needs of the entire population. The school has traditionally been the focal center of the neighborhood or community and it is important that it continue to be so.

APPENDIX E

SITE SELECTION

Size - It has been determined that the optimum pupil capacities of school buildings and minimum size of sites are:

Elementary Schools	550 to 750 students	10 acres
Junior High Schools	1000 + students	20 acres
Senior High Schools	1500 + students	30 acres

The size required for school sites will vary depending upon the topography, size and type of school and availability of land.

ATTENDANCE AREA

Whenever possible, the school should be centrally located in its attendance area in order to serve the greatest number of students on a "walk-in" basis. The district Board of Education has established a maximum walking distance of one mile for elementary students and one and one-half miles for Junior High students and two miles for Senior High students. Whenever a pupil's residence is determined to be beyond the maximum established walking distance from a school, bus transportation to and from is provided by the district. Schools which are located on the periphery of the expanding residential areas must be planned to receive this traffic from more rural areas. Later, as development advances these schools will reach capacity enrollment from the local neighborhood. School locations and size must be carefully planned for maximum utilization under these changing conditions.

LOCATION (TRAFFIC AND CIRCULATION)

Since schools sometimes generate an appreciable amount of traffic, both vehicular and pedestrian, the circulation pattern of the surrounding areas is an important consideration.

Elementary schools should be located on collector streets (those which carry the traffic generated by the neighborhood to the main traffic arteries). Because Junior High Schools usually will serve more than one neighborhood they should be located on at least a collector street or a minor arterial (a street which collects traffic from several collectors).

Senior high schools generate high volumes of traffic at certain times and must be located on road ways which are designed to carry this load. As a general rule, any school must be located near roadways designed to carry the traffic. Its effect on the overall circulation pattern of the community must be given careful consideration.

APPENDIX E

OTHER CRITERIA¹

- 1) Centrality and accessibility within the school's attendance area.
- 2) Reasonably level topography with good drainage.
- 3) Soil conditions favorable for construction.
- 4) Relative freedom from heavy traffic and traffic noise, offensive land uses and environmental nuisances.
- 5) Proximity to (preferably contiguous to) existing or future public open spaces, such as parks.
- 6) Economy in site acquisition and development.
- 7) Reasonable proximity to utilities.
- 8) The site should be attractive, lend itself to landscaping, and provide pleasing and beautiful natural environment with panoramic views from both on and off the site.
- 9) Areas subject to flooding and landslides must be avoided.
- 10) Special consideration must be given to the land uses surrounding the school site. Zoning laws do not limit the location of schools and care in both location and construction must be exercised to insure compatibility of the school with the neighborhood which it serves.

Note: The above material on Public School Standards was received from Bob Eckhart of the R-1 School District.

¹NCSC Guide for Planning School Plants, National Council on School House Construction, Michigan State University, 1965, pp. 26 and 27.
Master Plan for Public Schools, City Planning Commission, Providence Rhode Island, 1966, p. 34.

APPENDIX F

AMENDMENT TO THE

State of Colorado Rules and Regulations Pertaining to Radiation Control

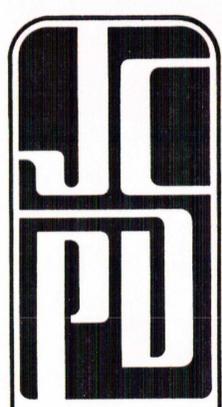
Subpart RH 4.21 is added:

RH 4.21 Permissible Levels of Radioactive Material in Uncontrolled Areas

4.21.1 Plutonium. Contamination of the soil in excess of 2.0 disintegrations per minute of Plutonium per gram of dry soil or square centimeter of surface area (0.01 microcurie plutonium per square meter) presents a sufficient hazard to the public health to require the utilization of special techniques of construction upon property so contaminated. Evaluation of proposed control techniques shall be available from the Department of Health upon request.

Adopted: Colorado State Board of Health
March 21, 1973

Effective: May 1, 1973



**jefferson
county
planning
dept.**

**FUTURE
LAND USE**

ADOPTED BY THE
PLANNING COMMISSION,
JUNE 13, 1973

APPROVED BY THE
COUNTY COMMISSIONERS,
APRIL 2, 1974

AMENDED,
SEPTEMBER 16, 1974

AGRICULTURAL

- OVER 35 ACRES/UNIT
- 10-35 AC/U
- 5-10 AC/U

RESIDENTIAL

- 0-2 U/AC
- 2-4 U/AC
- 4-7 U/AC
- 7-20 U/AC

INDUSTRIAL

- LIGHT INDUSTRIAL
- INDUSTRIAL PARK
- HEAVY INDUSTRIAL

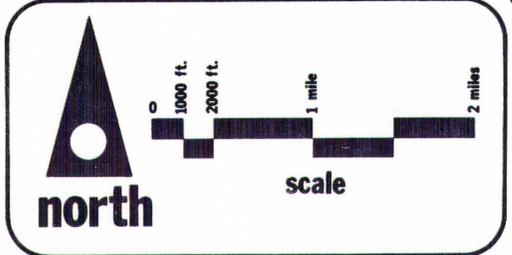
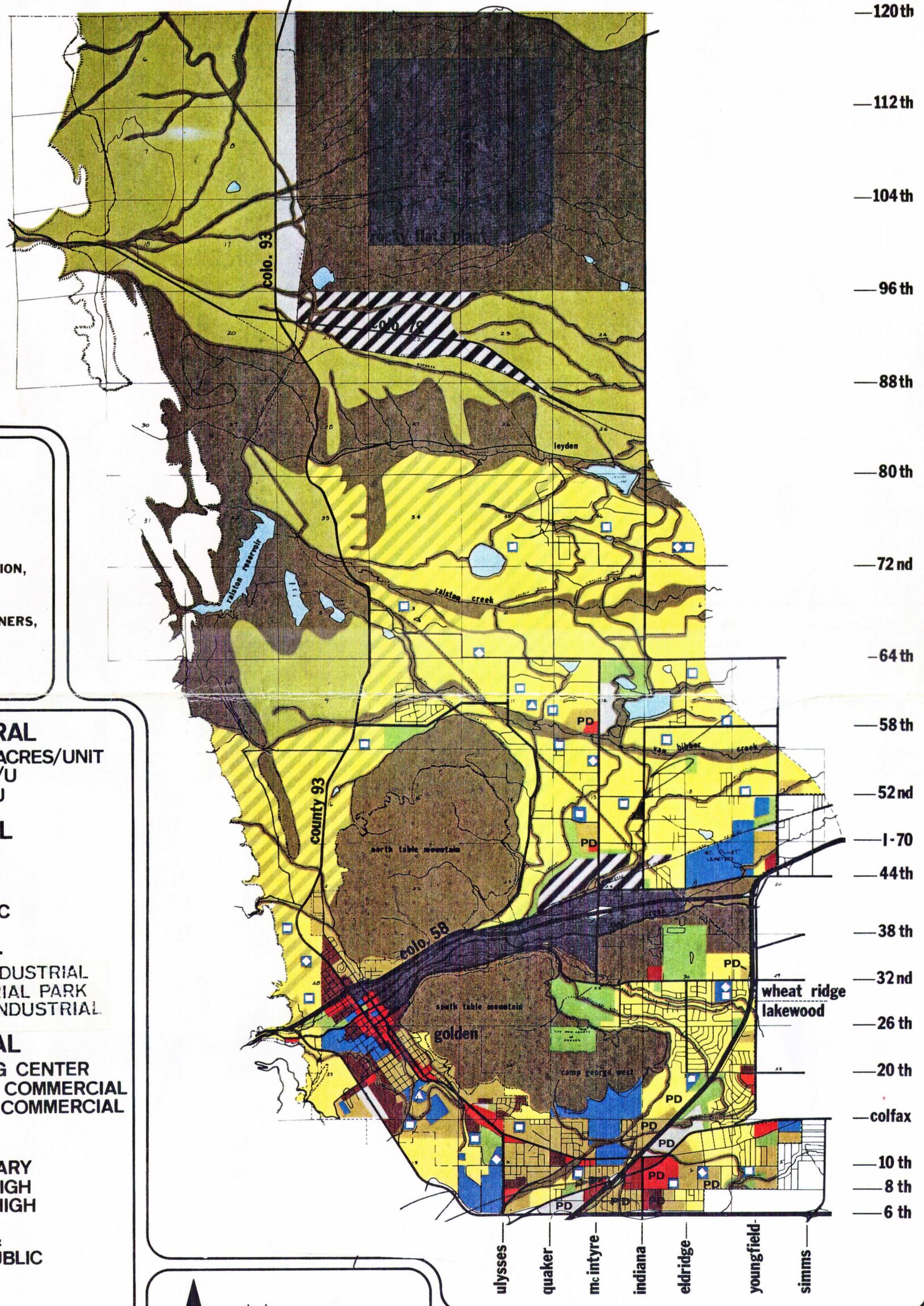
COMMERCIAL

- SHOPPING CENTER
- GENERAL COMMERCIAL
- HIGHWAY COMMERCIAL

SCHOOLS

- ELEMENTARY
- JUNIOR HIGH
- SENIOR HIGH

- PUBLIC & SEMI-PUBLIC
- PARK
- CONSERVATION
- PLANNED DEVELOPMENT



**GOLDEN/RALSTON
COMMUNITY**