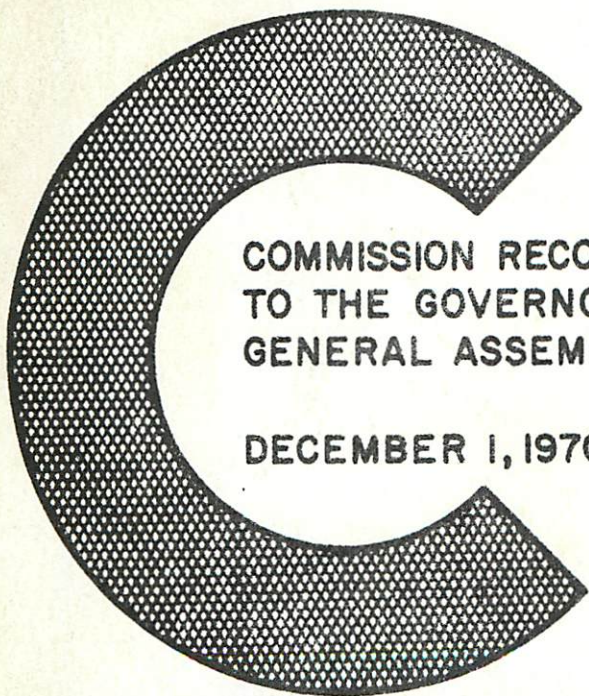


*R. Clark*

# COLORADO LAND USE COMMISSION

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**COMMISSION RECOMMENDATIONS  
TO THE GOVERNOR AND  
GENERAL ASSEMBLY**

**DECEMBER 1, 1970**

SECOND PRINTING

December 21, 1970

(Includes Editorial Revisions)



STATE OF COLORADO  
JOHN A. LOVE, GOVERNOR

OFFICE OF  
**COLORADO LAND USE COMMISSION**  
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Denver, Colorado 80203  
892-2178

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SEN. ANTHONY F. VOLLACK  
REP. PHILLIP MASSARI  
REP. EDWARD I. NEWMAN

December 1, 1970

THE HONORABLE JOHN A. LOVE  
Governor of Colorado  
State Capitol Building  
Denver, Colorado 80203

Dear Governor Love:

The attached report represents the findings and recommendations of the Colorado Land Use Commission.

The Commission is pleased to have the opportunity to work on this timely and significant topic. Many individuals, legislators, officials and groups throughout the state have provided excellent comments regarding land use policy in the state and on the role of the Commission. These comments and observations have contributed greatly to the development of our recommendations.

We look forward to the challenge of developing growth policy and land use planning in the state and to the opportunity of working with the administration and general assembly in the accomplishment of this task.

Respectfully submitted,

S/Dietz Lusk, Jr.

S/John R. Crowley

Dietz Lusk, Jr.,  
Vice-Chairman  
Colorado Land Use Commission

John R. Crowley,  
Chairman  
Colorado Land Use Commission

JRC/DL/btm



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*State Planning Coordinator*

CLAUDE D. PETERS  
*Staff Director*

December 1, 1970

THE HONORABLE SENATE, and  
THE HONORABLE HOUSE OF REPRESENTATIVES  
State Capitol Building  
Denver, Colorado 80203

Ladies and Gentlemen:

This report represents the findings and recommendations of the Colorado Land Use Commission in response to the Colorado Land Use Act of 1970.

The Commission is pleased with the cooperation and assistance given them by a great many public officials, legislators, organizations and individuals. The recommendations have been discussed at a number of public meetings and the Commission feels that its findings represent the concensus of need and action.

We look forward to a challenging opportunity to develop land use policy and planning in the state in concert with all levels of government. We respectfully solicit your support in this timely and significant effort.

Respectfully submitted,

S/Dietz Lusk, Jr.

S/John R. Crowley

Dietz Lusk, Jr.,  
Vice-Chairman  
Colorado Land Use Commission

John R. Crowley,  
Chairman  
Colorado Land Use Commission

JRC/DL/btm

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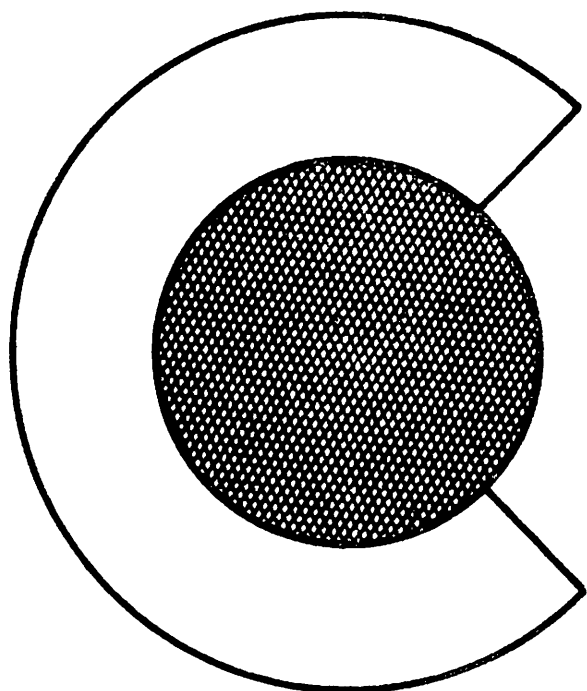
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# PART

# I

• INTRODUCTION





## PART I

### Introductory Statement

The ecological crisis our world is facing today has been subtly growing in magnitude in almost direct proportion to our not so subtle industrial revolution. Our "life support systems" appear to be falling into two classifications:

1. The natural environment and resources; and
2. The man-made materials and services.

It is becoming very apparent that the latter is destroying the former. Since our natural environment is a basic life support system and not man-made, it is incumbent on man to exercise "man control" on the development, use and application of his man-made materials and services.

It is obvious that the basic portion of our natural environment, LAND....and the USE to which it is put....produces a major effect on our environment. The political pulpit and the press of our society are now finding it acceptable to impose controls on man in an effort to overcome the ecological crisis.

The Colorado Land Use Commission has accepted a statutory challenge to design and implement a system for the management of the use of land in Colorado, involving all levels of government. The

Commission feels it has responded to this challenge, and has, as requested by the Colorado Land Use Act, documented the basic specifications of this land use management system in this report, dated December 1, 1970, for consideration and action by the Governor and General Assembly.

#### The Colorado Land Use Act of 1970

The Colorado Land Use Act of 1970 specifies that the Commission prepare its recommendations for developing and implementing land use controls by December 1, 1970. Several other elements of state land use planning are prescribed in the Act for the Commission to prepare and maintain. The Land Use Act of 1970 wisely prescribed this study and recommendation regarding land use control methods, rather than setting forth zoning type classifications in the Act for the Commission to apply geographically, as done in the State of Hawaii.

The Act, as passed by the 1970 General Assembly, contains four major segments as follows:

1. Formation of the seven member commission with five year terms of office.
2. A requirement that the Land Use Commission prepare a state plan for the use of land in Colorado.
3. A requirement that the Commission develop and establish a surveillance or growth monitoring system

of land use and of the resulting impacts or ecological effects .

4. A requirement that the Commission develop and recommend to the Governor and General Assembly by December 1, 1970, methods for adopting a "land use map" and classification system, or as interpreted by the Commission a land use management system, for the State of Colorado.

It is to these major elements that the Commission addresses itself in this "December 1, 1970, Report".

#### Contents of this Report

This report has been designed to document the Commission's response to all four major segments of the Land Use Act. A summary of the land use planning needs noted by the Commission during this five month effort of hearings, meetings and deliberations is also included.

Part I includes an introductory statement of the motivations, intent, and specific requirements of the Colorado Land Use Act of 1970.

Part II summarizes the land use planning needs and includes the complete statement of the Commission recommendations, which

**include the following elements:**

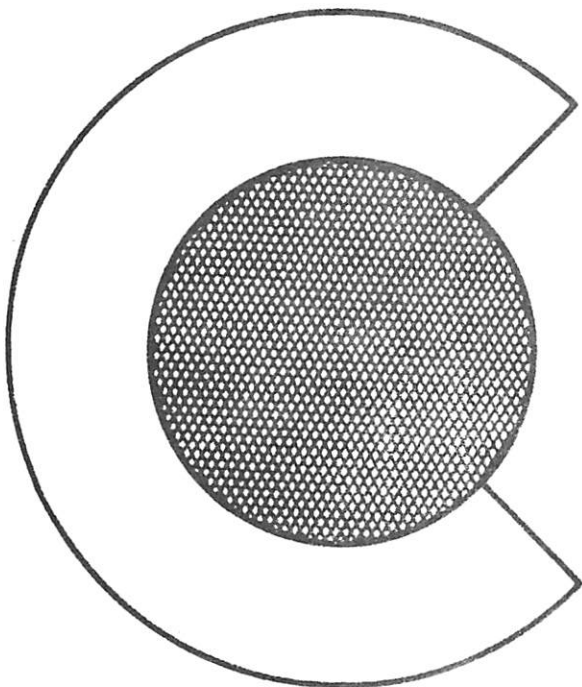
- . An Interim Land Use Plan.
- . A Final Land Use Plan and Procedures.
- . Land Use Map and classifications into two categories: Areas of State Concern, and Areas of Local Concern.
- . Effective dates of Commission authority regarding Areas of State Concern.
- . Planning tools to be developed and maintained by the Commission which include: A Land Use Management Matrix; a Land Use Environmental Matrix; a Land Use Impact Model System; and a Growth Monitoring (surveillance) system.
- . Organization and appropriation recommendations.

The areas of state concern are specified and define planning review requirements, authorization for the Commission to prepare, hold public hearings and adopt state plans, and also minimum standards and procedures relative to local subdivision controls, drainage and other environmental issues related to land use.

# PART

# II

- PLANNING NEEDS
- RECOMMENDATIONS



PART II  
SECTION A

Colorado Land Use Planning Needs

During the five months period from July through November, the Commission has held fifteen public meetings or hearings, and has met informally on numerous occasions. At all of these occasions, the land use planning needs have been discussed and representatives have repeatedly stated a need to strengthen and support local decision making through a better definition of standards and a state framework for local, state and federal land use decision making.

The 1970 Colorado Land Use Act has properly indentified many planning needs. These needs appear justifiable for the following reasons:

- . There is no accepted statewide statement of development policy or planning process.
- . There is no coordination of total government effort in the state regarding land utilization policy and control.
- . There is no coordinated state effort regarding development standards and criteria for land use and environmental control.
- . The federal government is now developing rational land use policy for action by the Congress, which will require these policies, plans, standards, controls and enforcement at the state level to be accomplished.

- . An agency, with authority to develop, adopt and maintain land use standards and control measures, has become a necessity.

Based on the Commission hearings and deliberations, the following paragraphs outline specific needs that have been identified.

### What are the Land Use Planning Needs of Colorado?

There is a need --- to provide a clearer definition of urban growth and development in the state and its relationship to transportation, utilities and communication on a statewide basis.

There is an explicit need --- for identification of and coordination of federal, state and local land use policy; also, the need exists for coordination and communication regarding current controls on public lands, parks, national forests, mining and extraction activities, etc.

There is a need to --- provide better tools to aid in the accomplishment of balanced development regarding the physical-social-economic needs of people and the communities who serve them.

Such environmental tools should aid in relating:

- . Jobs to industrial sites and utilities.
- . Jobs to housing and transportation.
- . Housing to services and amenities.
- . Housing (family) income to commerce and recreation.
- . Recreation to national accessibility.

- . Ranch and crop land to productivity.
- . Land use to ecological change.
- . Land use to municipal financial capabilities.

There is a need to --- accelerate, update and support community and regional planning in the state. This may be accomplished in part by requiring local government in selected "areas of critical planning need" to perform local land use planning. Financial assistance should be recommended as appropriate.

There is a need to --- monitor factors and rates of land consumption by types of land use and change for regions in the state. Such information should be communicated to all levels of government on a reliable and regular basis and should identify the impacts of certain changes.

There is a need to --- develop and maintain state land use planning and development policy. This should include the classification of all lands, functions and responsibilities into areas of local concern and areas of state concern.

AREAS OF STATE CONCERN should include federal lands, national parks and forests, state lands, and conservation areas (existing and proposed) throughout the state. Areas of state concern should also include specification of minimum standards and criteria for land development, preservation of natural drainage ways and open space. Also, the state should be concerned with land use development or change related to:



- . Water source and delivery systems.
- . New towns.
- . Substantial new growth areas of all types and their impact on the affected region.
- . Trends in urbanization.
- . Employment patterns.
- . The natural environment.
- . Open space and recreation.
- . The conservation or use of natural resources.
- . The need for state-level services.
- . Major public investments at the state level.
- . Transportation facilities.
- . Housing beyond local area performance capabilities.

.....in short, as stated in the Land Use Act, it is of state concern to evaluate both the governmental responsibilities and the physical relationships of natural ecological systems to the urban-industrial-agricultural-recreational-functional man-made systems.

AREAS OF LOCAL CONCERN retain regional, county and municipal planning and plan implementation authority. Total land use systems development and evaluation will also be executed by local government. To meet this authority, local government responsibility should include:

- . Responsibility to prepare, adopt and maintain land use plans and land use controls.

- The application of appropriate minimum state land development standards.
- Involvement with applicable regional, state and federal land use decision making processes.
- The responsibility for including state and regional land use determinations in the local planning process.

## SECTION B

### Recommendations of the Colorado Land Use Commission

The following are the recommendations of the Commission in response to the Colorado Land Use Act of 1970. Backup material and appendices are included to provide greater detail in support of the recommendations.

#### RECOMMENDATION A - Land Use Plan as a Basis for a Land Use Map (Act Reference 106-4-4)

1. It is recommended that an Interim Land Use Planning System and a Final Land Use Planning System and Procedures be developed by the Land Use Commission; that the Commission hold hearings and be authorized to adopt said land use plans and procedures; and that the adopted plans and procedures be the basis for guiding the use and development of land in the State of Colorado, guiding the investment of public funds relating to the use or conservation of land for any purpose, and for guiding the development of services, utilities, transportation, communication and other such land use related programs and projects.
2. The Interim Land Use Planning System, to be completed by July 1, 1972, shall map and describe existing federal, state and local plans, policies, standards and procedures and recommend action where deficiencies exist.

3. The Final Land Use Planning System and Procedures, to be completed by July 1, 1973, shall be continually updated, and shall extend the Interim Plan to specify total state development policy and procedures, and shall include all of the planning elements defined in the Colorado Land Use Act of 1970 (Section 106-4-4).
4. Classifications. These plans shall become the basis for planning review procedures and for the adoption of a land use map, based on the following two major classifications:
  - . Areas of state concern; and
  - . Areas of local concern.

Existing government planning and control authorities reside at all levels of government. This dispersion makes the identification of responsibilities related to any specific function extremely difficult. The classification of areas into state and local concern, together with the other provisions of the proposed legislation, will promote greater coordination and more effective assistance to local government in discharging the responsibilities associated with their authority.

RECOMMENDATION B - Land Use Map, Classifications and Administration (Act Reference 106-4-3(1)(2))

It is recommended that the Commission be granted the authority for the preparation, public hearings and adoption of a land use map, classifications, procedures and requirements as follows:

1. Areas of State Concern
  - a. Authority to designate selected geographic areas of

the state as areas of critical planning need, and to require local government units within these designated areas to develop or improve and adopt land use plans, maps and controls within specified time limits. Also to allocate state planning aid funds to such designated areas.

- b. Authority to review all proposed local, state and federal governmental land use plans and controls, or proposals which will affect land use in the state regarding their compliance to the state land use plan procedures. Such review shall apply to all levels of government.
- c. Authority to review major development proposals in the state which fall into the following classifications:
  - . Development of new towns.
  - . Major land development proposals or recreation facilities in excess of any one or more of the following: 640 acres; 2,000 dwelling units; 1,000 parking spaces; 300,000 square feet (non-residential) of floor space; and 200,000 gallons per day water use or sewage effluent.
- d. Authority to develop, hold hearings, adopt and enforce land utilization standards related to the use and conservation of natural resources and environmental quality in the State of Colorado.

- e. Authority to develop, hold hearings and adopt performance standards and criteria regarding land use development and natural drainage ways and flood plains, and set forth the local government responsibilities and administrative requirements associated therewith.
- f. Authority to map, hold hearings, specify permitted uses therein, and adopt conservation and recreation areas and access ways.
- g. In Areas of State Concern the Commission may recommend land purchases and use rights purchases, and priorities to the Governor and General Assembly.
- h. Effective dates of Commission authority relative to Areas of State Concern.
  - (1) Authority to designate areas of critical planning need shall become effective July 1, 1971, (see Recommendation B, 1, a).
  - (2) Authority to review proposed public and private development plans, as defined in Recommendation B, 1, b & c, shall become effective January 1, 1972. All review comments shall be made in writing to the originating agency, with copies to the Governor's office and the affected municipality. Review shall be advisory in nature.

Upon adoption of the Interim Plan review shall be advisory, except where it has been determined that

adopted minimum standards have not been met, or where a proposal is in conflict with adopted state planning recommendations. Where said deficiencies exist, the Commission shall have the authority to prevent the issuance of a building or construction permit by the appropriate government agency until the conflict has been resolved.

- (3) Authority to develop, hold hearings and adopt plans, standards and criteria as defined in Recommendation B, 1, d, e & f shall become effective upon adoption of the Interim Land Use Plan.

## 2. Areas of Local Concern

Local government is currently endowed with considerable enabling legislation relating to land planning and controls.

While such legislation has appropriately placed this authority in town, city and county government, there is need for increased coordination between these and state government. The following recommendations respond to this need by providing positive input from local government into statewide policies and planning systems.

- a. Responsibility to prepare, adopt and maintain land use plans and controls as required; and, that state and regional land use determinations shall be included in the local plans and processes. All land use plans and controls developed in a designated Area of State Concern shall be submitted to the Land Use Commission

for their review prior to adoption by the respective local government agency. Also, the right to request designation as an area of critical planning need.

- b. A legislative requirement that local government shall adopt, or include in local controls, minimum state development standards, as appropriate, such as subdivision rules and regulations, drainage standards and other applicable standards as may be adopted by the Land Use Commission.
- c. A legislative requirement that all counties, cities, towns and special districts formally submit all plans and controls related to the use and development of land and services related thereto, to the Colorado Land Use Commission by July 1, 1971; and that all such plans and controls adopted at any subsequent date thereafter be transmitted to the Commission within twenty (20) days after their adoption.
- d. A legislative requirement that each city, town and county be a participating member of a regional planning agency in its planning region, as shown on the attached map showing twelve (12) planning regions. Such regional planning agencies shall be formed by September 1, 1971. Said regional planning commissions shall be the agencies responsible for developing



regional plans and aiding municipalities in developing plans and adopting land use controls.

e. Effective dates of responsibilities and requirements in Areas of Local Concern.

- (1) Responsibility to perform local planning as required and transmit plans and controls to the Commission as defined in Recommendation B, 2, a, shall become effective July 1, 1971.
- (2) The requirement to adopt or include minimum state development standards, as appropriate, in local controls as defined in Recommendation B, 2, b, shall become effective January 1, 1972.
- (3) Time requirements for Recommendation B, 2, c and d are as specified in those sections.

Recommendation C - Mandatory Planning Tools to be Maintained on a Continuous Basis by the Land Use Commission. (A current requirement of the Land Use Act of 1970)

The Colorado Land Use Act of 1970 requires the Commission to "...initiate and conduct on a continuing basis a surveillance of the ecological systems of the state..." (Act reference 106-4-3 (3)(a) through (g))

In order to provide a consistent planning information base to appropriately administer Recommendations A and B, growth measuring and plan impact tools for all levels of government in the state, it is recommended the Land Use

Commission shall establish and maintain the following (illustrated in the accompanying backup material):

1. A Land Use Management Matrix

Document current land use policy, plans, and controls and responsibilities existing at the federal, state and local levels of government and develop this information into a formalized structure and communicate with state and local government in Colorado the current products of this management matrix.

2. A Land Use-Environmental Matrix  
(Act Reference 106-4-3(3)(d)(e))

In order to have a continuing surveillance of environmental change, this matrix will organize existing knowledge and identify areas of inadequate knowledge concerning the land use relationships and dependencies of natural ecological and man-made systems. The relationships expressed within this matrix shall also be utilized in the design and selective application of land use-impact models as further described.

3. Land Use-Impact Model System  
(Act Reference 106-4-3(3)(e)(f))

Develop procedures and programs for the evaluation of land use change impacts on the natural ecological systems and man-made systems, utilizing the data base maintained by the growth monitoring system. Where appropriate, apply these procedures and programs to the evaluation of alternative land use patterns and alternative land use policies by all levels

of government in the State of Colorado. The results of these evaluations shall be made available to the general public.

4. Growth Monitoring (Surveillance) System  
(Act Reference 106-4-3(3)(a))

- a. A land use growth monitoring system to record and report changes in use of land and natural resources in areas ranging in size from that of the entire state to that of census tracts. That, in counties having suitably automated property assessment files, the system be updated directly by using materials created by the assessor in maintaining his own files. That the Land Use Commission, in concert with the State Tax Commission, advise counties, which are currently maintaining automated property assessment files or which are designing such files, to attain uniformity in the methods of data maintenance and presentation. To this end, the Commission shall prepare and distribute manuals, forms, and such other material as necessary.
- b. That in counties for which suitable automated property assessment files do not exist, all currently available data resources, such as plans and surveys, shall be made available to the Commission to develop a data

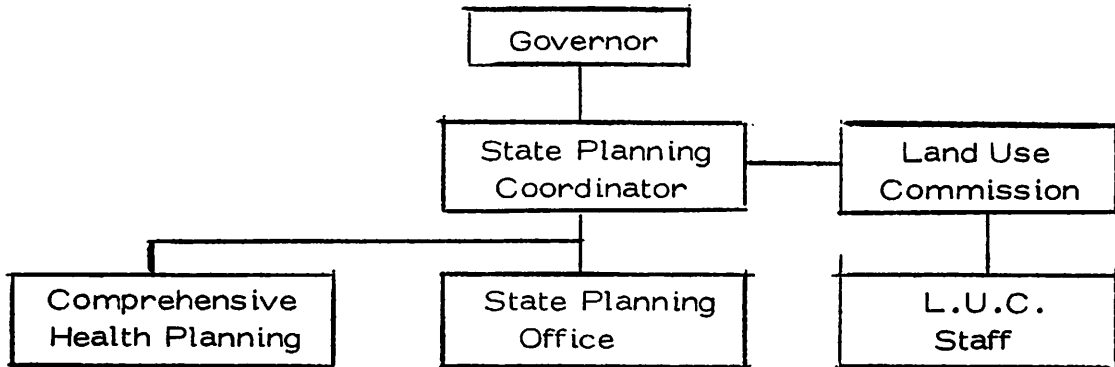
base which shall subsequently be maintained by formalized recording of change through building permits, subdivision and zoning change applications. That the Commission advise counties and municipalities in the institution of such procedures where they currently do not exist, and the Commission in concert with the State Tax Commission as applicable be authorized to develop, hold hearings and adopt procedures, manuals, forms and such other materials as necessary, which will require counties to institute such formalized recording procedures.

- c. That other data sources, including existing and future inventories, be examined for the identification of additional data which might be usefully incorporated within the growth monitoring system.
- d. That the departments and agencies of state government shall make available to the Commission such data, inventories, plans, facilities and personnel as necessary for it to perform these activities.

Recommendation D - Organization and Administration of the Land Use Commission

In order to develop and maintain the land use plans and procedures outlined, the Commission recommends the following organization and administration:

1. Organization Recommendation (example)



Article 106-4-2 established the Land Use Commission within the Office of the Governor. Due to the extensive and special nature of the assignments, the Commission recommends it be maintained as a Commission, directly responsible to the Office of the Governor, and its staff directly responsible to the Land Use Commission. At such time as the land use plan, systems and requirements are established and operational, the Commission recommends a re-evaluation of the entire state planning environmental complex as an operating department of the state government.

2. Administration Recommendations.

It is the recommendation of the Commission that the Land Use Commission appropriations be designated for the explicit use of the Commission.

Due to the Commission's special staffing requirements, the Commission recommends that it be authorized to maintain

its own staff and make contracts for special services.

#### Recommendation E - Appropriations

In order to accomplish the work program outlined, which spans several fiscal years, annual appropriations will be requested to reflect the work load of that period. A 1971-72 fiscal year appropriation is included in this recommendation.

Also, local government units will be required to perform planning functions for which they may need financial assistance, therefore, a separate state-local planning aid fund is recommended.

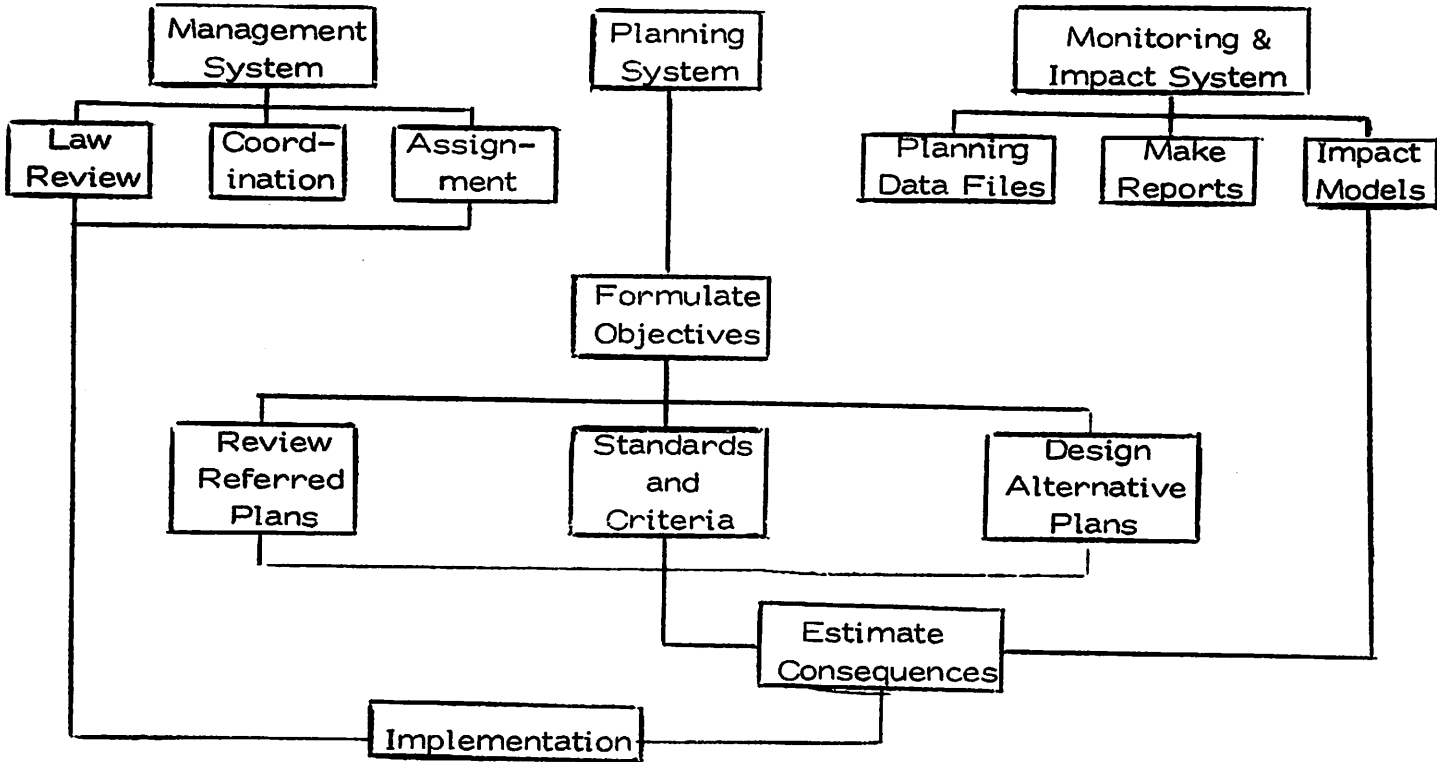
1. For the fiscal year 1971-72:

To accomplish the work items involved in the preceding recommendations the Land Use Commission recommends a minimum level of funding of \$200,000. Any request to accelerate the work program and time table of events will require a corresponding increase in funding.

2. For the fiscal year 1971-72 the Commission recommends a state-local land use plan aid fund be established in the amount of \$150,000. Said funds shall only be applied in regions, counties, cities and towns designated by the Commission as in an Area of Critical Planning need to develop plans and controls within a specified time period. Special work programs and budgets shall be required and must be approved by the Commission. The state fund shall be

utilized on a cost sharing basis of 1/3 local funds, 2/3 state land use funds of the approved program budget.

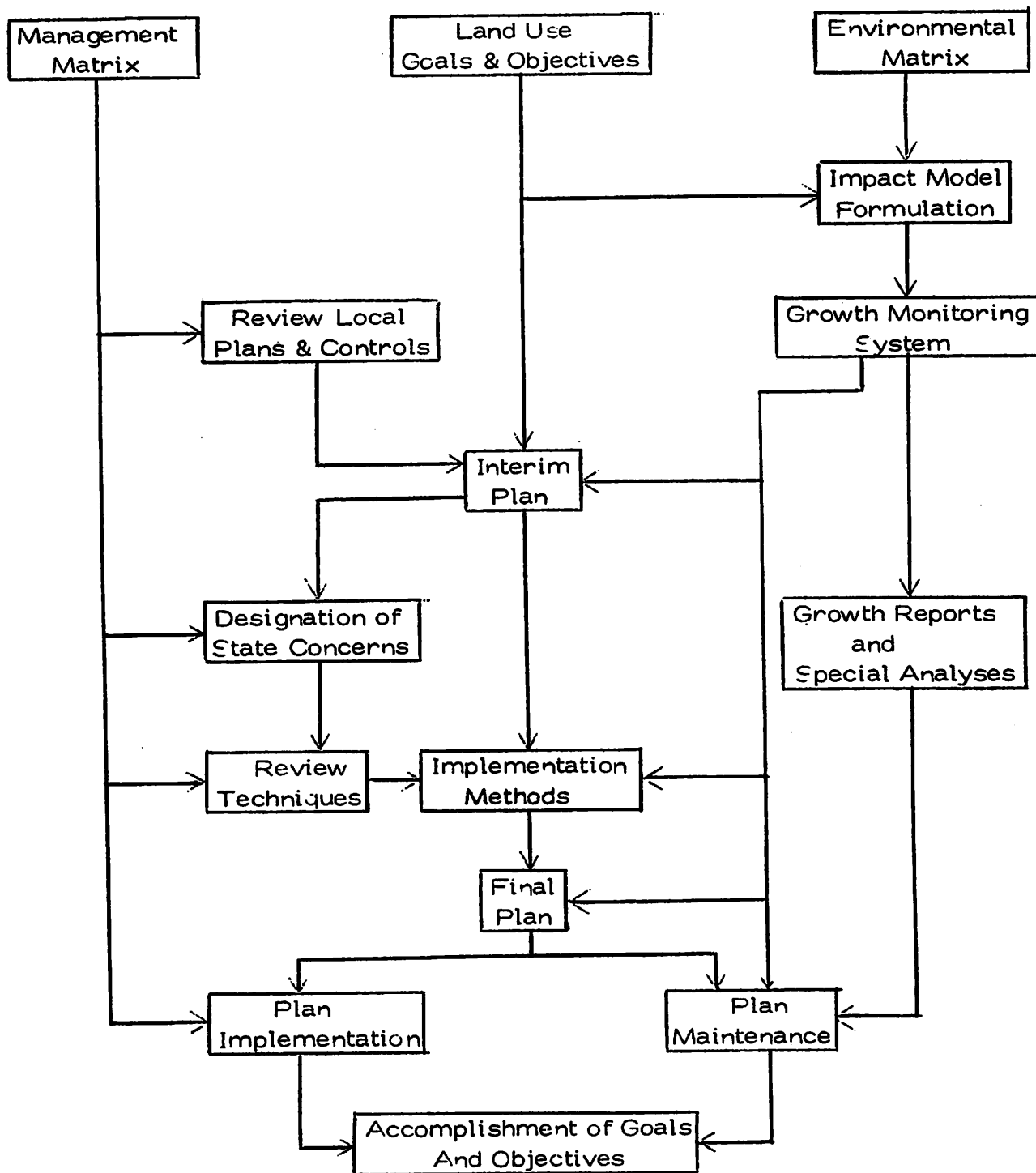
Administration Chart



Minimum Level of Funding for The  
1971-72 Fiscal Year

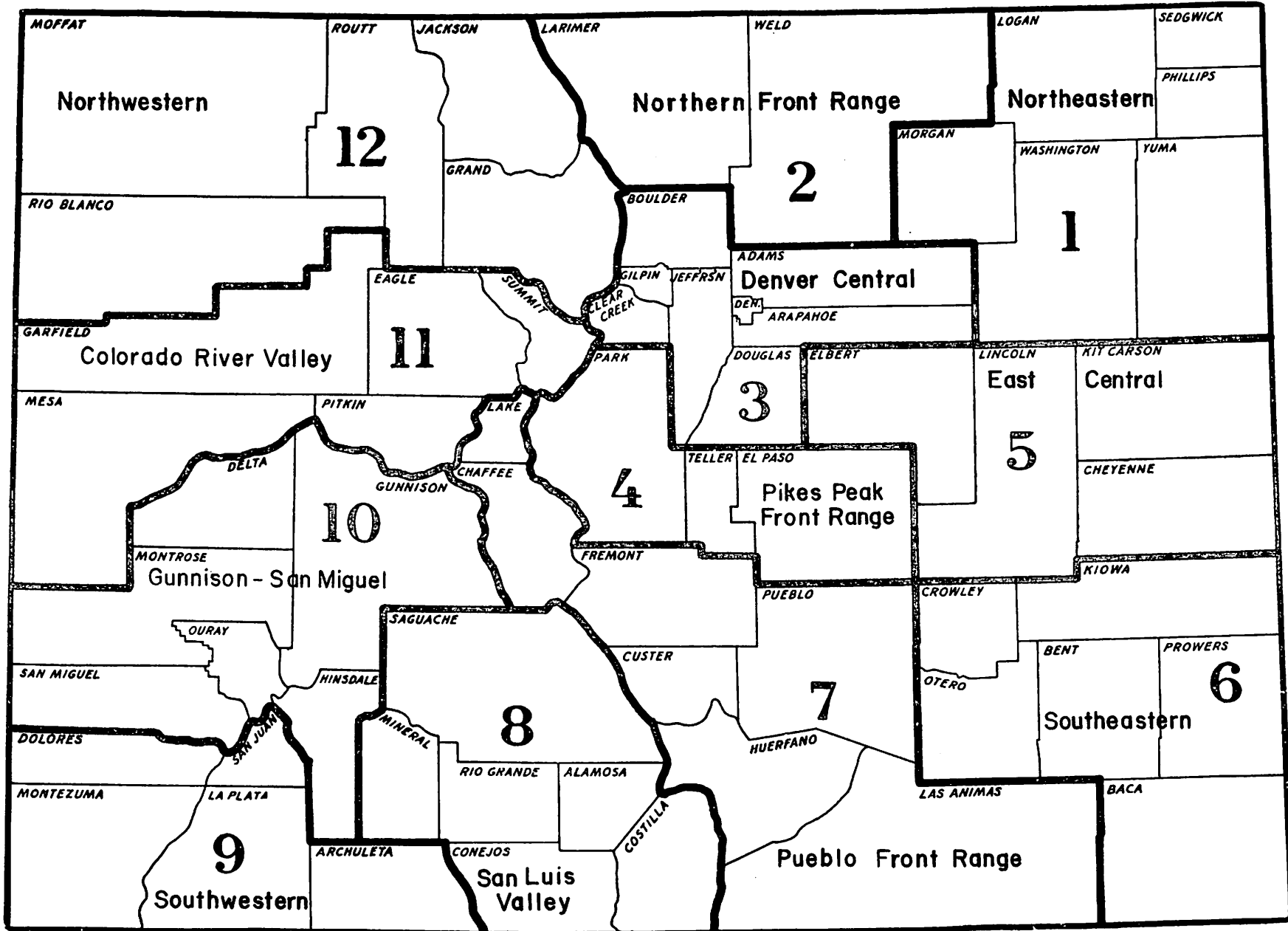
Basic Staff, burden and contingencies	\$ 61,800
Part-time Technicians	15,600
Contract Services	87,000
Travel, Expenses, Reports, Printing	22,600
Official Functions	3,000
Capital Expenditures	10,000
	\$200,000

Work Program Chart





# COLORADO

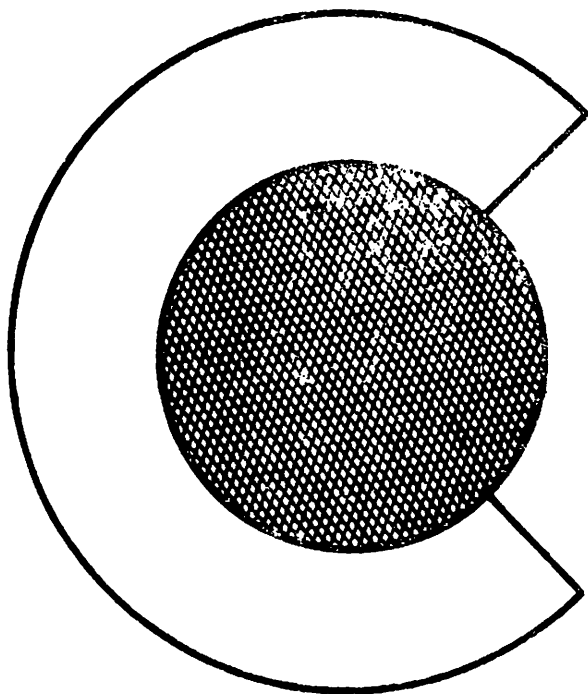


Official Planning Regions  
September 15, 1970

# PART

# III

• SUPPLEMENTAL MATERIAL



PART III  
SUPPLEMENTAL MATERIAL  
SECTION A

The purpose of the Land Use Management Matrix is to document existing land use controls at all levels of government. There is an obvious lack of explicit communication between the different levels of government agencies regarding existing land use controls.

By documenting all existing controls related to land use at the federal, state, and local levels in a composite format, missing links can be determined, their significance evaluated and appropriate recommendations made. The attached example tables illustrate in part the manner in which such a documentation could be made.

These responsibilities should be documented during the first phase of the project. They should be categorized by the type of land use concern and control, the control device, the level of governmental responsibility, and the current agency interface regarding the control.

During the long run or operational phases of the Land Use Commission, evaluation of the effectiveness of the designated responsibilities should be a continuing process.

An illustration of the tasks associated with the development of the Land Use Management Matrix is as follows:

1. Document specific existing land use controls, management agency and area applied to.
2. Array documentation into a composit format.
3. Define missing links and responsibility.
4. Evaluate priorities and Commission responsibilities for action.

EXAMPLE OF LAND USE MANAGEMENT MATRIX

CONCERN	MANAGEMENT ELEMENT	MANAGEMENT AGENCY			AGENCY INTERFACE
		FEDERAL	STATE	LOCAL	
Use Decision	Comprehensive Planning	Planning Grants	Policy Criteria Plan Development	Policy Plan Development	<u>Federal-State</u> Plan Review
		Bureau & Specialties Criteria	Communication Adoption	Communication Adoption	<u>State-Local</u> Plan Review & Updating  <u>Federal-Local</u> Plan Review Regarding Federal Grants
Use Control	Zoning	None	Designate State Areas of Concern & Specifications  Ordinance Formats	Local Zoning Ordinances	<u>State-Local</u> State Areas of concern accounted for in local ordinance
	Mobile Home Ordinance	None	Specifications	Local Ordinance	<u>State-Local</u> Review of Ordinance Re: Minimum Specs.
	Specialized Covenants	For Public Lands	For State Lands	Local Ordinances not in Zoning Ordinance	None

EXAMPLE OF LAND USE MANAGEMENT MATRIX

CONCERN	MANAGEMENT ELEMENT	MANAGEMENT AGENCY			AGENCY INTERFACE
		FEDERAL	STATE	LOCAL	
Development Control	Subdivision Regulations	None	Standards & Specs.	Local Sub Regs.	<u>State-Local</u> Conformance to Minimum Standards
	Specialized Regulations	For Public Lands	For State Lands	Special Regs. when not in Sub. Regs.	None
	Building Codes & Housing Codes	Minimum Standards Where Federal Grants are Involved	Performance Requirements & Minimum Standards	Code Adoption and Enforcement	<u>Federal-Local</u> Where Direct Grants are Involved  <u>Federal-State</u> Where Management Performance Agreements Exist  <u>State-Local</u> Performance Requirements
Official Map	Federal Land Reserve	State Land Reserves & Highways	Local Land Reserves Roads Drainage.		<u>Individual</u> Developed from Plan

## SECTION B

### Environmental Matrix

The Environmental Matrix is intended to aid the Commission in four areas:

1. Identify areas of concern and the forces and constraints affecting those areas .
2. Specify attributes to be represented within land use impact models for use in state and local planning .
3. Identify data items for inclusion in the growth monitoring system .
4. Coordinate in-house and external efforts in analysis of areas of concern .

Matrix examples are included in the following pages .

Develop environmental matrix to assist state and local planning programs . The tasks associated with this process include:

- . Specify resources and concerns .
- . Define particular threats or opportunities related to each resource . Specify the specific attributes of each vehicle which manifest the threats or opportunities .
- . Identify the vehicles by which each threat or opportunity may be realized .
- . Identify the motivations and forces of each vehicle and the forces affecting these motivations .

- . Determine the elements of these forces which may be altered to influence the occurrence of the impact of each identified vehicle.



Resource	Threat or Opportunity	Instrument	Relevant Attributes	Controls Related to Attributes
Agricultural Land	Increased Water Costs	Urbanization of Adjacent Lands	Large Landscaped Areas	. Zoning & Subdivision Requirements
			. High Per Capita Res. Water Usage . Priority of Residential Water Usage . Destructive Use of Water	. Water Pricing Policies . Sewer Tax Based on Water Use . Water Prices Based on Net Loss of Water by Use
	Intensification of Agriculture	. Destruction of Water by Chemicals . Increased Water Requirements	. Fertilization of Pest Control Practices . Relate Water Usage & Reclamation to Soil Characteristics	
	Rising Land Ownership & Leasing Costs	Policies Governing Appraisals for Tax	. Value Related to Past Productivity . Indirect Impacts of Sheltered Development . Indirect Impacts of Abatements	
Transportation Costs	Public Agency Policies	. Increased Operating Costs . Limits Market Area . Limits Market Types		

Instrument	Motivation	Forces	Manipulable Elements
Urbanization of Adjacent Lands	Increasing Demand For Peripheral Residential Land	Relatively Low Cost of Rural Land	<ul style="list-style-type: none"> <li>. Tax Sales</li> <li>. Varying Perceptions of Utility</li> <li>. Lack of Competition for Raw Land</li> <li>. Block Ownership</li> <li>. Large Supply of Multi-Use Land</li> </ul>
		High Relative Cost of Urban Land	<ul style="list-style-type: none"> <li>. Competition of Commercial Activities for Residential Land</li> <li>. Existing Services &amp; Facilities Investments in Land</li> </ul>
		Lower Cost of Development	<ul style="list-style-type: none"> <li>. Pre-grading of Land by Agricultural Activity</li> <li>. Lower Service &amp; Facility Standards</li> <li>. Lag in Identification of Consequences of Development</li> <li>. Availability of Necessary Facilities</li> </ul>
		Access of Rural Land to Opportunities	<ul style="list-style-type: none"> <li>. Decentralized Employment &amp; Commercial Development</li> <li>. Corridor &amp; Radial Roads to CBD's.</li> <li>. Perceived Rural Amenities</li> </ul>

Instrument	Motivation	Forces	Manipulable Elements
Urbanization of Adjacent Lands (cont.)	Decreasing Net Revenue of Current Use	. Variation in Value of Crop	. Access to Markets . Management Education . Crop Insurance
		. Increasing Equipment Costs	. Financing Alternatives . Cooperative Programs
		. Water Prices	. Ground Water Control . Water Price Control . Water Use Priorities . Water Reclamation Standards
		. Land Management Costs	. Calculation of Appraised Valuation . Rising Land Lease Costs . Insurance Requirements . Indirect Impacts of Abatements & Under Assessments on other uses

Instrument	Motivation	Forces	Manipulable Elements
Intensification of Agricultural Uses	Cost Per Unit Output of More Intense Use	. Water Costs	. Increased Efficiency or Irrigation
		. Labor Costs	. Mechanical Crop & Livestock Management
		. Land Costs	. Increased Dollar Output Per Acre . More Intense Exploration of Leased or Short-term Land Holdings

## SECTION C

### Land Use - Impact Model System

The purpose of the impact model is to measure the effect of both existing and proposed land use plans or proposals on surrounding uses, municipal services, accessibility and other elements of the environment to illustrate the probable consequences of a decision at any level of government.

Impact models permit the initial effects of a land use change to be estimated by translating land use change into numbers representing the magnitude of the change elements and people, jobs, income, etc. and the extent of other demands, such as fiscal requirements, water resources, drainage patterns and traffic volumes. The purpose of measuring impacts is to relate existing and potential capabilities to the demand expected from alternative land use decisions.

Impact models estimating the initial effects and subsequent impacts are intended to provide an immediate set of evaluation tools useable in land use decisions made at all levels of government.

Guidelines will be developed to indicate the conditions under which more complex impact models should be introduced. Also, such guidelines will specify the types of models which would be desirable within such a system but for which currently available research is inadequate.

The development of an impact model containing such an array of land use-impact relationships serves to provide a functional framework for research into land use considerations significant to the Commission. Also, it provides additional assurance that a greater range of the consequences of land use changes will be studied and evaluated in the day to day decisions affecting land use in Colorado.

The process of developing such a system of impact models includes the following tasks:

- . Identify impacts to be developed on a regular basis as part of the growth monitoring report;
- . Determine from available research the relationships between data in growth monitoring systems and desired information;
- . Develop formalized routines to apply relationships to data;
- . Design and implement sampling techniques to continually check the validity of previous and current information developed from these relationships;
- . Refine relationships;
- . Identify impacts to be developed on a "special" basis due to reasons of cost, discontinuous need-to-know, or stability of the information;
- . Design and refine relationships to create such information (as defined above);
- . Develop criteria with which to identify areas or conditions to which these models should be applied.

## SECTION D

### Growth Monitoring System

The purpose of the Growth Monitoring System (GMS) is to provide accurate and up-to-date information relevant to planning at all levels of government. Specifically, information is needed to aid public administrators and planners in the following:

#### 1. State Planning

Effective state planning requires continuous knowledge of current development and resource patterns in the state and of the effects that changes have on our environment. Such knowledge not only provides for the identification of areas in which resources are threatened, but also helps to identify those areas in which future development is most likely to occur. This, in turn, permits the demands on existing facilities and services to be calculated and aids in the planning and design of new facilities and services.

#### 2. Local Planning

As in state planning, local planning requires continuous knowledge of current development and resource patterns in the community. Estimates of the effects and efficiency of local investments must be based on their interaction with current and projected development as well as local resources, whether

they be water, minerals, developable land or recreational space. Moreover, the vast majority of controls over changes in land utilization are managed by local government. A growth monitoring system provides a mechanism for documenting these controls, the areas to which they apply, and changes in either the controls or the areas.

The data to be included in the growth monitoring system relates to the land; its location, use and estimated capacity for alternative uses. Data relating to individuals, such as names, ages, education levels, income, etc. will not be included in the system.

Three primary considerations govern the selection of sources for the data items identified in Section II:

- a. Maximization of the Validity of the data for its intended uses. This data should be based on suitable definitions, accurately measured, and continuously kept up to date;
- b. Minimization of the Variety of separate data sources required. This is to increase the coordination of responsibilities and to decrease the cost of data acquisition and maintenance.
- c. Compatibility of sources as represented in the data formats, recording units, and operations calendar of each source is required.



There are basically two kinds of data sources upon which a growth monitoring system may be structured.

- a. Special inventories and studies such as resource mapping, metropolitan transportation studies, and local planning programs often provide a great deal of potentially useful data. However, such sources have several distinct disadvantages as data sources for a true monitoring system. First, because of their "special" nature, they are very costly if they are to be conducted periodically to ensure that data is kept current. Second, they provide only a snapshot of the attributes of an area at given points in time and have little capability for indicating the actual nature of change in the intervening periods. Third, each inventory or study generally covers only a subregion of the state rather than the state as a whole, making comparison between regions difficult due to the lack of uniformity in data definitions and geographic recording units.
- b. Operating offices and agencies at the state and local levels, such as county assessors, zoning officers and building inspectors, currently collect much of the planning data identified above on a day-to-day basis as part of their normal operations. Unlike the data collections of

autonomous special surveys and inventories, these collections are made and recorded in a relatively formalized manner across the state. Also, the collection of this data is based on the observation of change, a principle which is in direct accord with the purposes of a growth monitoring model and which greatly reduces the cost of the data. Finally, data collected by such operating agencies is assignable to the geographic levels at which such changes occur, the parcel, thus permitting the analyses of trends at this direct level or any higher level, such as block, school district, municipality or county, desired by the user.

Clearly, the data sources provided by existing operating offices and agencies provide the better base for an efficient growth monitoring system. Of these, the property assessment function provides the single greatest source of data relevant to planning. Data for a great number of parcels in counties with a high development activity rate is currently maintained in accessible, machine readable form. These counties represent roughly 3/4 of the 1970 population and more than 95% of the 1960-1970 population growth. Other counties will soon be similarly endowed as the considerations of efficiency and economy encourage county assessors to utilize the benefit of data processing in their assessment calculation and billing operations. Current studies by the State Tax Commission will, if carried to their

conclusion, ensure the uniform collection, maintenance, and reporting of such data throughout the state. The continuity and uniformity of assessment records renders them suitable for growth monitoring.

Therefore, the growth monitoring system will be structured to make maximum use of such automated property assessment files for those counties in which they currently exist. The data base of the system in these areas will be created directly from the files and maintained by the same documents and procedures used to update the assessor's files. The growth monitoring system will be utilized to produce reports on a regular basis as well as to generate additional specific information on a special basis as the needs for such information arise.

Similar data will be developed for areas lacking automated assessment files. These will be based on existing surveys but will be maintained by the use of formalized documentation of change through such activities as building permits, zoning change applications and subdivision application. A specific procedural requirement should be the adoption of a uniform building permit form applied to all areas of the state.

Preparatory work and educational brochures will be developed. This will include the following tasks:

- Specify ultimate data requirements of the growth monitoring system based upon relationships expressed in the environmental matrix and the land use management system.

*can we have  
uniform statewide  
assessment?*

- . Evaluate planning data resources of county assessment offices and specify the appropriate level of utilization of each office for the growth monitoring system.
- . Document growth and change magnitudes in each county from annual abstract reports.
- . Document and develop statewide geographic data management units for the acquisition, maintenance, analysis and presentation of land use and related data.
- . Develop procedures for the collection, storage and presentation of base year land use and related data for each county.
- . Develop procedures for the acquisition and processing of assessment data to maintain land use information for geographic data management units.
- . Develop procedures for the acquisition and processing of non-assessment data; including construction permits, demolition permits, school enrollment reports and zoning change applications; for geographic data management units.
- . Design reporting forms to record and input non-assessment data into the growth monitoring system.
- . Design growth monitoring reports.

Implementation of growth monitoring system on a statewide basis.

- . Develop, within existing operational data sources (e.g. assessment

offices, building code administration, etc.) geographic data management unit identifiers.

- . Encourage implementation and improvement of operational data sources throughout the state.
- . Aggregate land use and related data into geographic data management units.
- . Maintain land use and related data through developed updating procedure.
- . Generate growth monitoring reports.
- . Evaluate and refine growth monitoring system.

## SECTION E

### Interim State Land Use Planning System and Procedures

The Interim State Land Use Planning System will be developed for hearings and adoption by the Land Use Commission to provide, until the Final System is developed, the basis of policies and programs promoting the wisest use and development of the state's natural and land resources and the most effective expenditure of public and private resources in its implementation. The planning system may identify specific areas of state concern for interim action and provide the support and policy basis for specific actions in these areas by the Commission. Tasks associated with development of the Interim System include:

1. Develop matrix of existing city, town and county land use plans and controls.
2. Develop uniform system of existing land use plan display.
3. Evaluate plan accomplishment versus need.
4. Identify areas of state concern for planning.
5. Develop priority schedule for planning in areas of critical planning need.
6. Identify other planning deficiencies, e.g. inadequate standards relating to hazardous areas, inadequate government interfaces relating to goals and standards, inadequate service capabilities versus anticipated demands.
7. Document findings, hold hearings, and specify review procedures related to adopted plan.

## SECTION F

### Final State Land Use Planning System and Procedures

The Final Land Use Planning System and Procedures will be developed and kept current as a documentation of the development goals and policy of the state for use as an evaluation and decision tool and for review procedures. The plan will also identify specific special areas and uses of state concern, such as conservation and recreation, for hearings and adoption by the Commission. Tasks associated with the development of the final system include:

1. Develop standards and criteria conforming to identified goals and objectives and relating the provision of services to future populations and activities.
2. Describe needs related to identified changes in evolving life styles and technological change.
3. Develop alternative land use plans reflecting considerations such as land consumption and the residual capacities of the land for development, agriculture, recreation and conservation in proportion to the state policy.
4. Document findings, hold hearings and specify review process related to the adopted plan.
5. Development of the detailed information and analysis systems required to implement the above functions.

## SECTION G

### Survey of Land Use Classifications

The following statement of legislative declaration is included in the Colorado Land Use Act:

- (1) . . . . . make new and innovative measures necessary to encourage planned and orderly land use development . . . . .
- (2) In order to provide the leadership necessary to meet the objectives of this article, it is the intention of the general assembly to provide the adoption of a Colorado land use map which will classify all lands in the state into various classifications and will designate those uses which may be made of lands within each classification.

It can be noted by review of Commission policy decisions, that the Commission has responded very positively to these legislative directives. Indeed, new and innovative measures are required to implement inter-governmental planning for two very basic reasons:

1. Existing planning techniques and enabling control legislation are inadequate to cope with contemporary growth rates, industrial technology and emerging life styles.
2. Current experience in other states indicates that levels of government responsibility and areas of direct concern must be woven into a fabric, providing total physical, economic and social coverage.



The typical control device, known as the zoning ordinance, provides only a moderate level of service to counties, cities and towns. It is not a device that is very applicable at the state level .

### Features of the Hawaii Land Use Act

The State of Hawaii has adopted a modified version of zoning by delineating geographic areas of state concern as:

1. Urban districts - those lands that are now in urban use and a sufficient reserve area for foreseeable urban growth;
2. Rural districts - areas of land composed primarily of small forms mixed with very low density residential lots, which may be shown by a minimum density of not more than one house per one-half acre and a minimum lot size of not less than one-half acre;
3. Agricultural districts - those lands with a high capacity for intensive cultivation;
4. Conservation districts - those lands necessary for watershed protection, water supply and flood protection; erosion control; national and state parks; scenic, historic, wildlife, forest and wilderness preserves; conservation of natural ecosystems and lands of excessive slope.

In general, the requirements of local (county) zoning ordinances apply within these "blanket districts" when such regulations impose stricter requirements. The state land use classifications specifies permitted uses in the

agricultural and rural districts by reference to the regulations of the Department of Land and Natural Resources in the conservation district, and by direct reference to county zoning in the urban district.

Changes to any of the four state classification boundaries can be initiated by the Commission, or petitioned for any owner or government agency. Documentation of need for change must be submitted with any petition.

The appropriate county zoning officer is charged with also enforcing the state regulations.

Obviously, the State of Hawaii represents considerably different characteristics than Colorado. There are only five counties, land ownership patterns are unique and agricultural land is limited and represents a basic industry. It has been recorded in written analyses and reported via personal interview by a Colorado Land Use Commission member, that the Hawaii Act is now serving the immediate purpose of stopping "leap-frog" development and resulting costly demands for services. The longer range effects obviously cannot be evaluated in this short time span of operations.

#### Other State Land Use Control Measures

Colorado is the only other state that has adopted comprehensive measures related to statewide land use controls. Other states are employing various techniques representing a response to segments of state areas of concern. Some of these are briefly mentioned in the following comments:

### Washington

- . A Department of Ecology was created which enforces regulations related to solid waste disposal.
- . A bill passed controlling location of nuclear power sites.
- . A bill passed with controls affecting the use of land along the sea coast.

### Oregon

- . A bill passed requiring all counties and municipalities to plan and adopt land use controls by December 31, 1971.  
If any areas do not conform, the Governor shall prescribe planning and land use controls for the area.
- . A bill establishing fourteen regions in the state and providing for councils of governments (COG's) in each region as advisory to local government. At this writing, twelve COG's have been established.

### Maine

- . A bill establishing a commission with powers to regulate the use of land within 500 feet of the shore line; and within 500 feet of public roads in unincorporated areas.

### Massachusetts

- . A bill establishing a commission with land regulatory powers over coastal areas.

New York State

1968 - Establishment of the New York State Urban Development Corporation

In general such agencies could:

1. Acquire land by negotiation and through the exercise of eminent domain;
2. Arrange for site development and construct or contract for the construction of utilities, streets, and other related improvements.
3. Hold land for later use;
4. Sell, lease, or otherwise dispose of land or rights thereto to private developers or public agencies; and
5. Establish local or regional land development agencies.

New York State also has a substantial variety of organizations, agencies, and legislation dealing with planning systems, but not coordinated through a single policy and enforcing agency.

New Jersey (And a number of other states)

Enabling legislation for an official map which can be developed and adopted by local government. This can identify land reservations, rights of way, parks, etc. for future purchase.

When such land reservation is challenged by a request for a building permit to build thereon, the municipality has one year to either purchase the land or remove it from the official map.

## Wisconsin

Considering the use of official map techniques.

### Federal Requirements

Federal agencies are required to comply with Section 102 (2) (c) of the National Environmental Policy Act (NEPA) (P.L. 91-190) which requires preparation of a detailed report on any major federal actions to be taken by a department which may have an effect on the environment. By Executive Order 11514, Section 3(b), March 5, 1970, President Nixon directed the Council on Environmental Quality to issue guidelines to federal agencies for the preparation of such detailed reports, referred to as an "environmental impact statement."

### National Land Use Policy

National land use policy is now being drafted which, if passed, will have national effect. Senate Bill 3354, a bill to amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning, has had two readings in the Senate and is now being reviewed by The Committee on the Interior and Insular Affairs. Other similar legislation is also being drafted. Any such bills adopted by the legislature will require certain specific state land use and planning actions and controls prior to obtaining federal grants and other actions.

Clearly, it is timely that the State of Colorado take action on these matters which concern our own destiny.

#### Land Use Classifications

The Land Use Commission has carefully reviewed the matter of employing statewide land use classifications and specifications as a means of implementing statewide environmental controls. The Commission feels that such measures alone, as employed in the State of Hawaii, are inadequate to cope with the complex land use problems and patterns of the highly accessible State of Colorado.

The Commission, therefore, recommends a policy of land use planning implementation incorporating two basic concepts:

1. To develop a total intergovernmental planning system, responsive to the citizens of Colorado through all levels of government.
2. To establish planning systems development priorities, program, administration, time table and budget requirements.

The Commission proposes to accomplish this in the following manner:

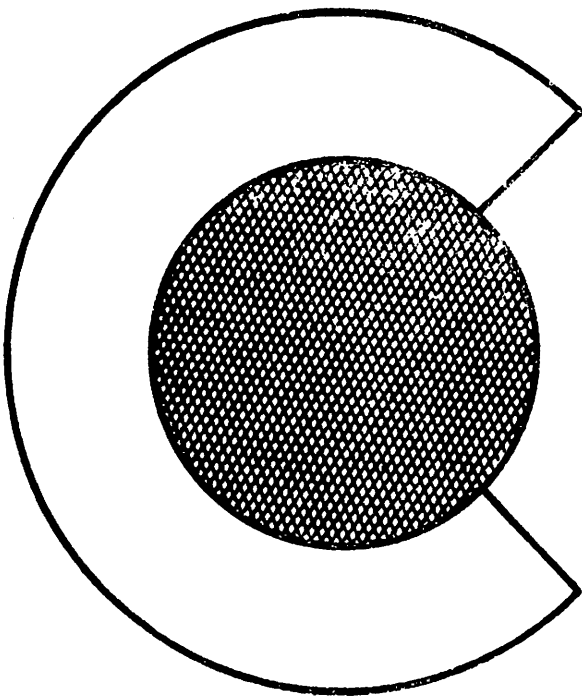
1. Identification of areas of State Concern
2. Identification of areas of Local Concern

# PART

# IV

## APPENDICES

- ENVIRONMENTAL MATRIX
- LAND USE-IMPACT MODEL SYSTEM
- GROWTH MONITORING SYSTEM
- PROTOTYPE STUDIES
- THE COLORADO LAND USE ACT OF 1970 AND  
RECOMMENDED DRAFT REVISIONS FOR 1971



## APPENDIX A

### Environmental Matrix: Purpose and Structure

The identification of resources (natural and man-made) of interest to the Commission must be based on at least three considerations: (1) The degree to which the resource is associated with land use (as either a cause or an effect); (2) The level of adequacy of efforts already oriented to planning and guidance of the resource; (3) The imminence and severity of existing or potential threats to the resource.

The need to screen prospective resources of interest according to these is caused by: The need to deal with important problems as soon as possible; the existing limitations on time, personnel and financial resources; and the necessity of making the Commission and others aware of the areas appropriately within the authority of the Commission.

It is possible that the improvement of other efforts in areas initially selected by the Commission or the identification of further areas of concern would justify the contraction or expansion of areas within the purview of the Commission.

### Development of an Environmental Matrix

The environmental matrix is intended to aid the Commission in four areas:

1. Identify areas of concern and the forces and constraints affecting those areas.



2. Specify attributes to be represented within the prototype land use impact model.
3. Identify data items for inclusion in the prototype land use monitoring system.
4. Coordinate in-house and external resource efforts in analysis of areas of concern.

Earlier efforts of the development of the environmental matrix have been oriented toward its use as a display tool to indicate the variety of linkages between land use causes and effects. The matrix configurations included in the following pages are designed to perform additional purposes. For this reason the matrix has been reorganized into two functional formats.

The first of these two formats provides for recording of information relevant to:

1. The resource of concern;
2. Particular threats or opportunities related to that resource;
3. The vehicles or instrument by which each threat or opportunity may be realized;
4. The specific attributes of each vehicle which pose a threat or opportunity;
5. Controls and criteria relevant to the modification of these attributes to reduce the magnitude of a threat, or realize an opportunity.

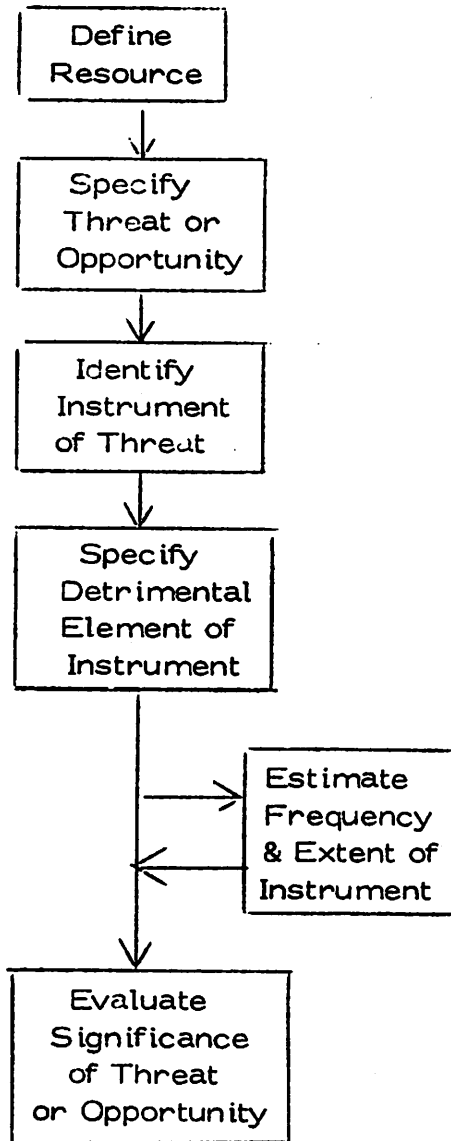
This first format incorporates traditional elements of planning and land use controls and permits contemporization of this approach by application of the second format, which is as follows:

1. The vehicle or instrument identified within the first format;
2. The motivation for the instrument;
3. The forces affecting the presence or lack of motivation for the instrument;
4. The manipulable elements of these forces, by which the timing, location, or nature of land use development may be influenced.

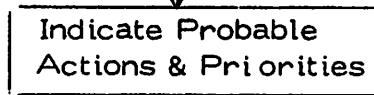
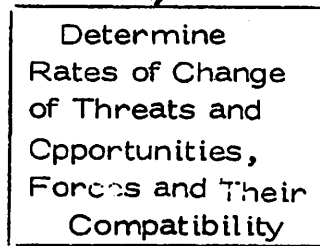
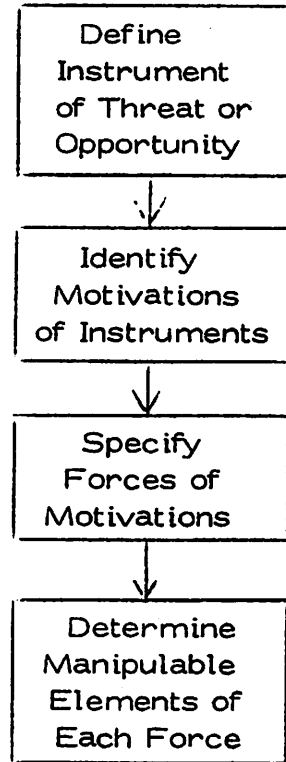
Examination of these elements is intended to provide information concerning the development of various land use activities, which represent the instrument of specific threats or opportunities to our resources, and the range of available methods to influence this development.

Thus, direct use of the two formats may be simply portrayed in the following chart:

I.



II.



Unfortunately, verbal specification of the relationships in these matrices is by itself not a sufficient decision tool. The specific levels of consequences must be determined in terms which will permit comparison of the consequences of alternative decisions for evaluation. Two complementary systems are proposed to perform this function:

1. A land use monitoring system;
2. A land use-impact model system.

The Land Use Monitoring System discussed later in this paper is intended to observe, record, and process changes in land use and their implications (attributes) of the associated activities. This will provide information concerning the current state of land use change characteristics, and the implied land use patterns. To this extent, the monitoring system will provide valuable information regarding our resources and the instruments of potential threats to or opportunities for use of these resources.

The Land Use-Impact Model System (discussed in the following section) is intended to provide quantitative measures of the effects of land use change on the environment. Thus, the significance of land use change and resulting opportunities or threats can be evaluated. Also, the impact of the alternative manipulations intended to influence the forces of these changes can be evaluated.

Resource	Threat or Opportunity	Instrument	Relevant Attributes	Controls Related to Attributes	
Natural Vegetation	Intensive	<ul style="list-style-type: none"> <li>. Public Park Lands</li> <li>. Public Use Rights</li> </ul>	<ul style="list-style-type: none"> <li>. Vandalism</li> <li>. Litter</li> </ul>	<ul style="list-style-type: none"> <li>. Educational Programs</li> <li>. Policing Programs</li> </ul>	
	Recreational Use of Natural Resources	<ul style="list-style-type: none"> <li>. Legacy of Vehicular Access to Public &amp; Private Lands</li> <li>. Growth of Recreation Demand</li> <li>. Increased Long-term Recreation Demands</li> <li>. Increased Use of Recreational Vehicles</li> </ul>	<ul style="list-style-type: none"> <li>. Soil Erosion</li> </ul>	<ul style="list-style-type: none"> <li>. Delineation &amp; Maintenance of Off-limits Areas</li> </ul>	
			<ul style="list-style-type: none"> <li>. Pollution</li> </ul>	<ul style="list-style-type: none"> <li>. Posting of Areas Contributing Pollutants</li> <li>. Construction of "Natural" Treatment Facilities</li> </ul>	
			<ul style="list-style-type: none"> <li>. Congestion of Accessible Areas</li> </ul>	<ul style="list-style-type: none"> <li>. Fee Structures</li> <li>. Highway Locations &amp; Design</li> <li>. Use Restrictions</li> </ul>	
			<ul style="list-style-type: none"> <li>. Grazing</li> <li>. Timbering</li> </ul>	<ul style="list-style-type: none"> <li>. Exhaustion of Vegetative Resiliency</li> </ul>	<ul style="list-style-type: none"> <li>. Relate Use Standards to Resource Capabilities</li> <li>. Develop Proximate Ecologically Supporting Uses.</li> </ul>
	Alteration of Air & Water	<ul style="list-style-type: none"> <li>. Mining</li> </ul>	<ul style="list-style-type: none"> <li>. Destruction of Ground Cover</li> <li>. Destruction of Topsoil</li> <li>. Mineral Seepage</li> <li>. Altered Surface Water Patterns</li> </ul>	<ul style="list-style-type: none"> <li>. Performance Standards</li> <li>. Past Performance Standards</li> </ul>	
			<ul style="list-style-type: none"> <li>. Urban-like Development</li> </ul>	<ul style="list-style-type: none"> <li>. Stream Pollution</li> <li>. Ground Water Pollution</li> <li>. Air Pollutants</li> </ul>	<ul style="list-style-type: none"> <li>. Monitoring &amp; Control of Treatment Quality and Discharge Characteristics</li> <li>. Performance Standards</li> </ul>
				<ul style="list-style-type: none"> <li>. Roads &amp; Highways</li> </ul>	<ul style="list-style-type: none"> <li>. Air Pollution</li> </ul>

Instruments	Motivation	Forces	Manipulable Elements
Public Lands	Increasing Recreation Demands	Local Population Growth	
		Increasing Transient Usage	<ul style="list-style-type: none"> <li>. Advertising</li> <li>. Provision of Accommodations</li> <li>. Inter-regional access</li> <li>. Intra-regional access</li> </ul>
		Increasing Leisure Time	
Public Use Rights	Increasing Recreation Demands	See Above	
		Private Ownership of Suitable Lands	<ul style="list-style-type: none"> <li>. Sale of Public (BLM) Lands to Private</li> <li>. Large Scale Speculative Acquisition of Mountain Lands</li> </ul>
	Relatively Low Cost of Use Rights		
Vehicular Access Through Natural Areas	Growth of Recreational Vehicles	. Increased Affluence	
		. Multiple Usage (Work & Play)	. Separate Registration for Recreational Use
	Existing Roads & Trails Throughout Natural & Semi-Natural Areas	. Past Mining, Timbering, & Settlement Activity	<ul style="list-style-type: none"> <li>. Closing of Roads</li> <li>. Limit Access from Roads</li> </ul>
		. Current Mining, Timbering, Activity	<ul style="list-style-type: none"> <li>. Limit Road Use Rights</li> <li>. Require Closing of Roads Following Current Activity</li> </ul>
	<ul style="list-style-type: none"> <li>. Fire Access Roads</li> <li>. Power Lines</li> </ul>	<ul style="list-style-type: none"> <li>. Limit to Emergency &amp; Official Use.</li> </ul>	

Instrument	Motivation	Forces	Manipulable Elements
<p>Increased Long-Term Recreation Demands</p>	<p>Increasing Total Demand  Relatively Lower Costs of Camping</p>	<p>Costs  Availability of Developed Accommodations</p>	<ul style="list-style-type: none"> <li>. Fees &amp; Capacity</li> <li>. Location of Land Available for Developed Accommodations</li> <li>. Costs of Developed Accommodations</li> <li>. Capacity of Developed Accommodations</li> </ul>
<p>Urban-Like Rural Development</p>	<p>Provision of Services to Users of Public Recreation Facilities</p>	<p>Access to High-use Public Facilities Afforded to Private Interests</p> <p>Development of Public Facilities Near Existing Concentrations</p>	<ul style="list-style-type: none"> <li>. Control Use of Land Proximate to Public Areas</li> <li>. Purchase &amp; Selective Sale or Lease of Adjacent Lands</li> <li>. Orient Public Investments to Reinforce Existing Activity Areas</li> </ul>

## APPENDIX B

### Land Use - Impact Model System

The purpose of the impact model is to translate the characteristics of both existing and proposed land use alternatives into measures of their environmental effects. The application of the impact model and related submodels will provide comparative information relevant to the decisions implied in the design and refinement of the Environmental Matrix and the Land Use Management Matrix.

The list of proposed submodels is oriented toward the development of measures of two types of consequences of land use decisions:

1. Initial effects
2. Impacts

The initial effects of a land use change may be estimated by direct translation of the change into estimates of the magnitude of specific elements (people, jobs, income, etc.) of the change and the nature and extent of the demands which may be expected from these elements.

The impacts of change require information relevant to other elements of the environment, such as fiscal capacity, water resources, etc. The purpose of measuring impacts is to relate existing and potential supplies to the demand expected from alternative land use decisions.

Impact models estimating the initial effects and subsequent impacts are intended to provide an immediate set of tools for the proper evaluation of the



majority of land use decisions required at all levels of governments throughout Colorado.

Continued model development will extend the range of modeled effects and impact in two directions:

1. More Specific models will be developed to provide clearer discernment of variations in the consequences of alternative land uses and to permit the application of this model system to a greater variety of uses (e.g. ski area development as well as suburbanization).
2. Guidelines will be developed to indicate the conditions under which more complex submodels would be introduced to the model system. Also, these guidelines will specify the types of models which would be desirable within such a system but for which currently available research is inadequate.

The development of an impact model containing such an array of land use-impact relationships serves to provide a functional framework for research into land use considerations significant to the Land Use Commission. Also, it provides additional assurance that a greater range of the consequences of land use changes will be studied and evaluated.

## PROPOSED MODELS

### INITIAL EFFECTS

#### 1. Land Conversion

Amount from use "A" to use "B"

Subsequent amounts in uses "A" and "B"

#### 2. Population and Housing Change

*Housing*      *create office*

Net change in total persons in analysis area

Net change by income class in analysis area

Net change in student population in analysis area

#### 3. Modification of Public Revenue Base

*need in base*

*C.B. taxing District  
of cards*

Observed or estimated change in assessed value of land

*not in area*

Observed or estimated change in assessed value of land improvements

Observed or estimated change in assessed value of personal property

Observed or estimated change in actual value of taxes and fees

Anticipated directions and rates of change in values

#### 4. Water Demands

Estimated water use requirements

Water quality requirements of new use

Estimated water destruction

Type of destruction

Volume of destruction

#### 5. Sewage Considerations

Estimated volume of discharge

Composition of discharge

Location of discharge

6. Drainage

Storm frequency

Estimated future run off.

7. Employment *State Employment*

Direct employment

Total

By Occupation

Location

IMPACTS

✓ 1. Relate Altered Revenue Base to Identified Fiscal Demands

*Key area for study*

By jurisdictional unit

*for Marble Metro. District*

. By specified time interval

✓ 2. Relate Change in Student Population to Costs

- . Factor change in students by local per student costs
- . Assign change in students to current facilities and programs
- . Estimate costs of required facility and program expansion

3. Relate Water Demands to Existing and Potential Supplies

- . Residual capacity of current water sources and treatment facilities
- . Cost of necessary expansion to exploit or expand capacity
- . Impact of increased demand on water source and treatment quality

- . Cost of necessary improvements to maintain or increase quality
- . Depletion of flow reserves
- . Depletion of stock reserves
- . Destruction of natural impoundment and conveyance elements

4. Relate sewage requirements to capabilities

- . Sewage volume and composition vs. current plant capacity
- . Cost of extending plant capacity to accommodate anticipated demands
- . Impact of increased volume and of composition on quality of processing
- . Subsequent effects of outflow on water pollution
- . Cost of necessary improvements to maintain or increase quality of treatment
- . Impact of resultant water pollution levels on wildlife and vegetation
- . Effect of new pollutants on costs of treatment of polluted water for reuse by existing or potential activities.

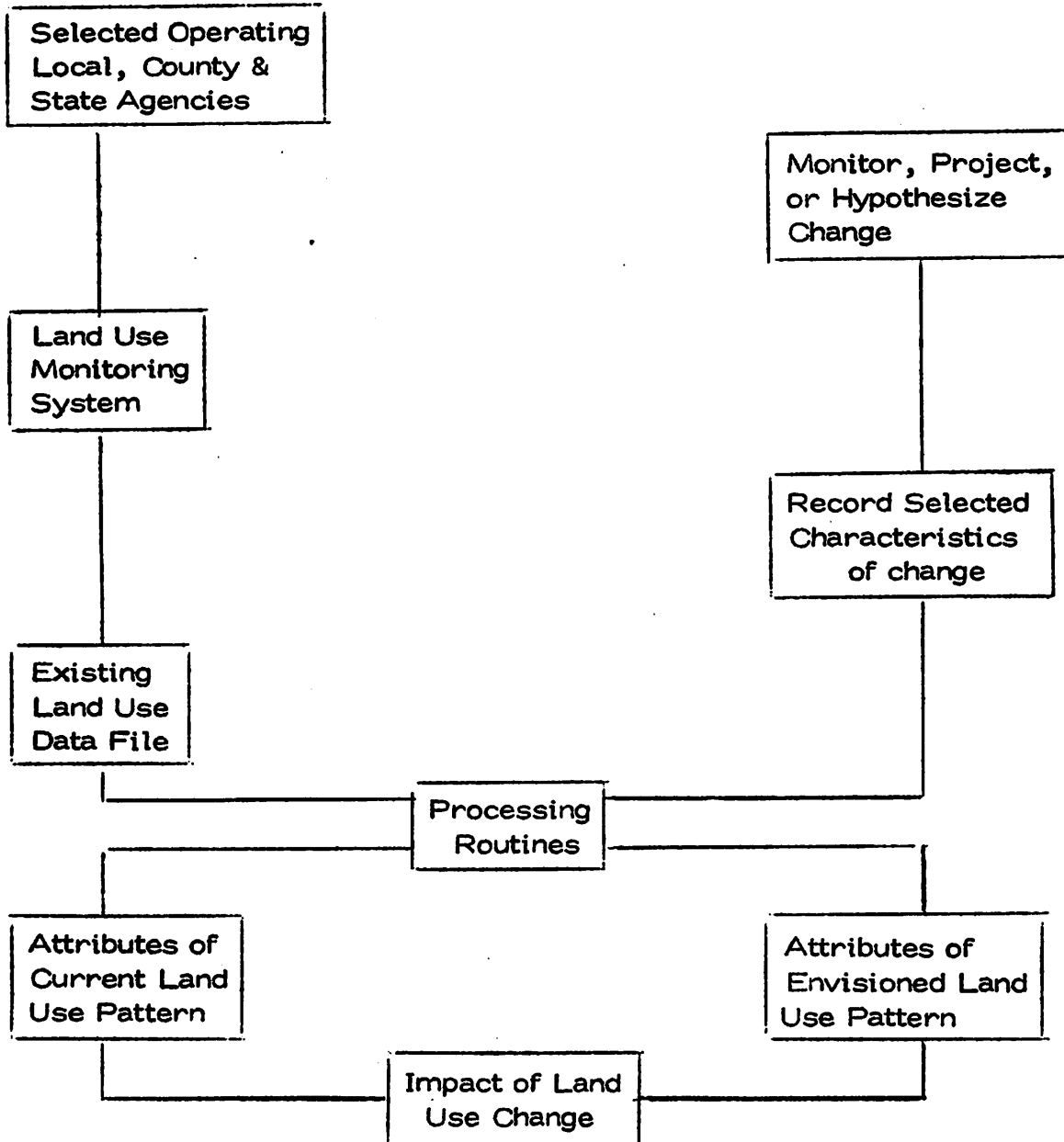
5. Impact of drainage on right of way requirements.

- . Quantification of Land Use plans
- . Anticipated storm return frequencies
- . Documentation of rainfall potentials for an area from U. S. records
- . Translate standards into natural drainage way requirements

## 6. Impacts of Employment Change

- Secondary employment estimates
- Labor force composition

### General Form of Land Use -- Impact Model System



It is suggested that, as the environmental matrix is constructed, available resources be exploited to develop quantitative representations of the relationships between the elements of the matrix. These relationships will then be incorporated in the design of a model system composed of a string of descriptive models.

The following are illustrations of the information developed by impact study of present and planned developments in El Paso County on water, sewer and drainage needs.

EXAMPLE

**DATA INPUT BY TRAFFIC DISTRICT (LOCAL ANALYSIS AREA)  
1964 AND 1990**

T. D.	Yr.	Popula- tion	Dwelling Units			Gross Acres	Residential			Commer- cial	Indus- trial	Public & SP	Parks & Rec.	Milli- tary	Streets & Roads	Developed		Open	
			SF	MF	Total		SF	MF	Total							Total	%	Total	%
1	'64	518	-	-	182	30.3	13.2	.3	13.5	4.4	.2	-	-	-	5.6	23.7	78.2	6.6	21.8
	'90	548	12	-	194	"	14.7	.3	15.0	4.4	.2	-	-	-	5.6	25.2	83.2	5.1	16.8
2	'64	319	-	-	106	42.2	13.4	-	13.8	.7	.2	-	-	-	19.3	33.6	79.6	8.6	21.4
	'90	428	84	-	140	"	19.1	-	19.1	.7	.2	-	-	-	19.3	39.3	93.1	2.9	6.9
3	'64	302	-	-	121	85.3	11.1	1.3	12.4	8.9	5.9	7.8	-	-	13.5	48.5	56.9	36.8	43.1
	'90	663	-	135	256	"	11.1	8.8	19.9	23.8	-	7.8	-	-	13.5	65.0	76.3	20.3	23.3
4	'64	374	-	-	81	74.0	9.7	.5	10.2	.1	4.8	7.9	-	-	16.0	39.0	52.7	35.0	47.3
	'90	422	-	18	99	"	9.7	1.3	11.2	.1	28.8	-	-	-	16.0	56.2	15.1	17.8	29.1
5	'64	398	-	-	169	38.2	17.7	1.0	18.7	.1	.4	-	-	-	17.2	36.4	45.3	1.8	4.7
	'90	466*	-	31	195*	"	16.8	2.7	19.5	1.0	.4	-	-	-	17.2	38.1	99.7	.1	.3
6	'64	361	-	-	156	40.0	13.6	1.7	15.3	2.8	.2	.1	-	-	17.6	36.0	98.0	4.0	10.0
	'90	409	-	18	174	"	13.6	2.7	16.3	5.8	.2	.1	-	-	17.6	40.0	100.0	.0	.0
7	'64	200	-	-	48	24.8	5.4	1.4	6.8	.1	.9	7.1	-	-	9.0	23.9	96.4	.9	3.6
	'90	218	-	7	55	"	5.4	1.8	7.2	.1	.9	7.1	-	-	9.0	24.3	98.0	.5	2.0

Note: A Traffic District is a geographic area developed by planning departments to assemble land use data for computer use, as defined in the Federal Highway Act of 1962. It provides a convenient device for measuring change in land use and people in local planning.

EXAMPLE

# LAND USE ALLOCATIONS 1964-1990 BY TRAFFIC DISTRICT (LOCAL ANALYSIS AREA)

YEAR	POPULATION	GROSS ACRES	DWELLING UNITS		RESIDENTIAL LAND			COMMERCIAL	INDUSTRIAL	PUBLIC & S.P.	PARKS & RECREATION	MIL	STREETS & ROADS	DEVELOPED		OPEN	
			SF	MF	SF	MF	TOTAL							TOTAL	%	TOTAL	%
<b>TD no. 1</b>																	
1964	518	30.3	0.0	0.0	132.9	13.2	0.3	13.5	4.4	0.2	0.0	0.0	5.6	23.7	78.20	6.6	21.20
1968	523	30.3	1.8	0.0	133.3	13.4	0.3	13.7	4.4	0.2	0.0	0.0	5.6	23.9	78.97	6.4	21.03
1970	525	30.3	2.8	0.0	134.8	13.5	0.3	13.8	4.4	0.2	0.0	0.0	5.6	24.0	79.35	6.3	20.65
1975	531	30.3	5.1	0.0	137.1	13.8	0.3	14.1	4.4	0.2	0.0	0.0	5.6	24.3	80.32	6.0	19.68
1980	536	30.3	7.4	0.0	139.4	14.1	0.3	14.4	4.4	0.2	0.0	0.0	5.6	24.6	81.28	5.7	18.72
1985	542	30.3	9.7	0.0	141.7	14.4	0.3	14.7	4.4	0.2	0.0	0.0	5.6	24.9	82.24	5.4	17.76
1990	548	30.3	12.0	0.0	144.0	14.7	0.3	15.0	4.4	0.2	0.0	0.0	5.6	25.2	83.20	5.1	16.80
<b>TD no. 2</b>																	
1964	319	42.2	0.0	0.0	106.0	13.4	0.0	13.4	0.7	0.2	0.0	0.0	19.3	33.6	79.60	8.6	20.40
1968	336	42.2	5.2	0.0	111.2	14.3	0.0	14.3	0.7	0.2	0.0	0.0	19.3	34.5	81.68	7.7	19.32
1970	344	42.2	7.8	0.0	113.8	14.7	0.0	14.7	0.7	0.2	0.0	0.0	19.3	34.9	82.72	7.3	17.28
1975	365	42.2	14.4	0.0	120.4	15.3	0.0	15.8	0.7	0.2	0.0	0.0	19.3	36.0	85.31	6.2	14.69
1980	386	42.2	20.9	0.0	125.9	16.9	0.0	16.9	0.7	0.2	0.0	0.0	19.3	37.1	87.91	5.1	12.09
1985	407	42.2	27.5	0.0	133.5	18.0	0.0	18.0	0.7	0.2	0.0	0.0	19.3	38.2	90.50	4.0	9.50
1990	428	42.2	34.0	0.0	140.0	19.1	0.0	19.1	0.7	0.2	0.0	0.0	19.3	39.3	93.10	2.9	6.90
<b>TD no. 3</b>																	
1964	302	85.3	0.0	0.0	121.0	11.1	1.3	12.4	8.9	5.9	7.8	0.0	13.5	48.5	56.90	36.8	43.10
1968	358	85.3	0.0	20.8	141.8	11.1	2.4	13.6	11.2	5.0	7.8	0.0	13.5	51.0	59.87	34.3	40.13
1970	385	85.3	0.0	31.2	152.2	11.1	3.0	14.1	12.3	4.5	7.8	0.0	13.5	52.3	61.35	33.0	38.65
1975	455	85.3	0.0	57.1	178.1	11.1	4.3	15.6	15.2	3.4	7.8	0.0	13.5	55.5	65.07	29.8	34.93
1980	524	85.3	0.0	83.1	204.1	11.1	5.7	17.0	18.1	2.3	7.8	0.0	13.5	58.7	68.78	26.6	31.22
1985	594	85.3	0.0	109.0	230.0	11.1	7.1	18.5	20.9	1.1	7.8	0.0	13.5	61.8	72.49	23.5	27.51
1990	663	85.3	0.0	135.0	256.0	11.1	8.5	19.9	23.8	0.0	7.8	0.0	13.5	65.0	76.20	20.3	23.80
<b>TD no. 4</b>																	
1964	374	74.0	0.0	0.0	81.0	9.7	0.5	10.2	0.1	4.8	7.9	0.0	16.0	39.0	52.70	35.0	47.30
1968	381	74.0	0.0	2.8	83.8	9.7	0.7	10.4	0.1	8.5	6.7	0.0	16.0	41.6	56.27	32.4	43.73
1970	385	74.0	0.0	4.2	85.2	9.7	0.7	10.4	0.1	10.4	6.1	0.0	16.0	43.0	58.05	31.0	41.95
1975	394	74.0	0.0	7.6	88.6	9.7	0.9	10.6	0.1	15.0	4.6	0.0	16.0	46.3	62.52	27.7	37.48
1980	404	74.0	0.0	11.1	92.1	9.7	1.1	10.8	0.1	19.6	3.0	0.0	16.0	49.6	66.98	24.4	33.02
1985	413	74.0	0.0	14.5	95.5	9.7	1.3	11.0	0.1	24.3	1.5	0.0	16.0	52.9	71.44	21.1	28.56
1990	422	74.0	0.0	18.0	99.0	9.7	1.5	11.2	0.1	28.9	0.0	0.0	16.0	56.2	75.90	17.8	24.10



EXAMPLE

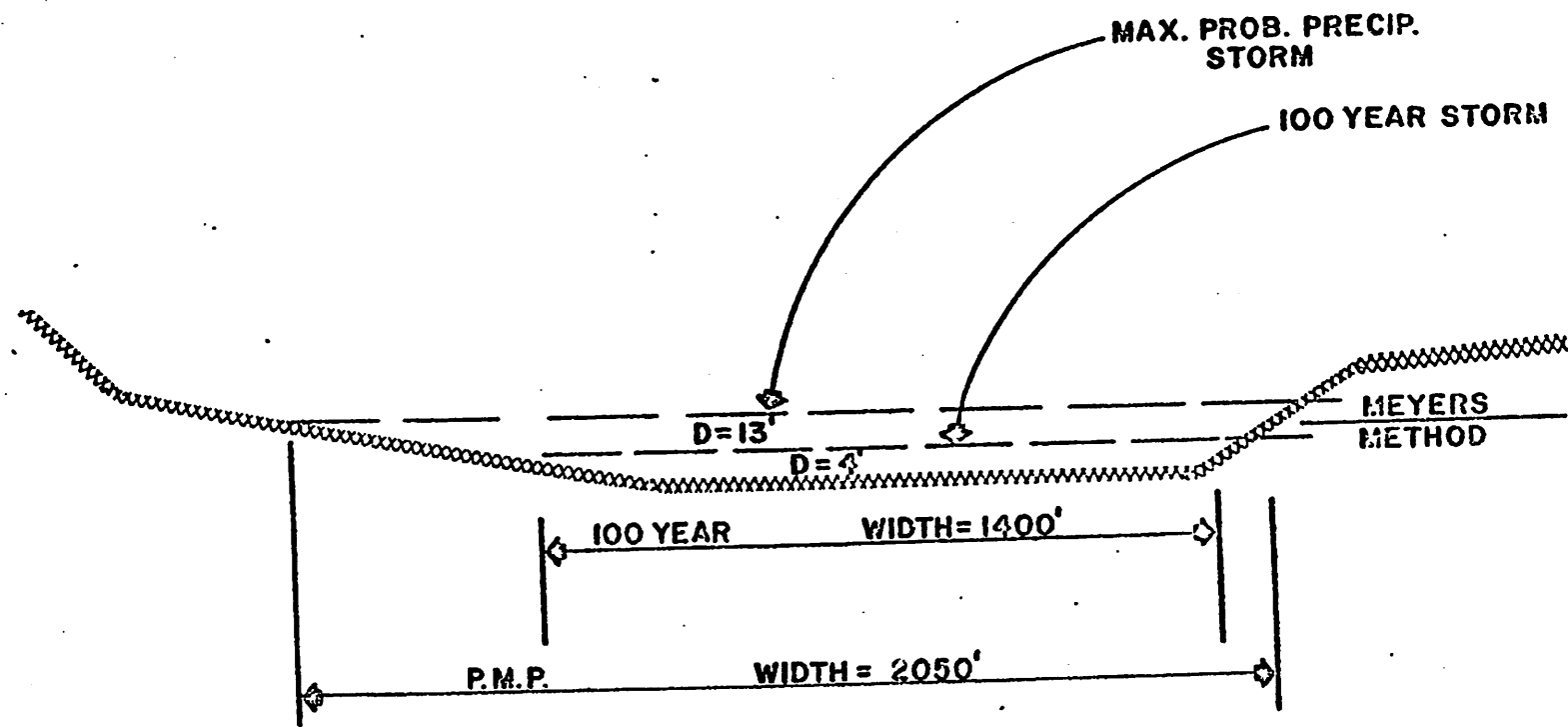
**WATER AND SEWAGE TREATMENT REQUIREMENTS BY TRAFFIC DISTRICT 1964-1990**

TD	WATER REQUIRED GPD							SEWAGE TREATMENT REQUIRED GPD						
	1964	1968	1970	1975	1980	1985	1990	1964	1968	1970	1975	1980	1985	1990
1**	99849	100657	101061	104724	108445	112223	116059**	50639	51009	51193	54308	57481	60711	63999
2**	57624	60559	62026	67520	73224	79137	85259**	27319	28061	29332	32334	36546	49468	44599
3**	99274	101763	103007	125891	144470	163742	183709**	59219	66432	70038	81327	93310	105988	117359
4**	82162	85635	87372	93684	100990	106587	113177**	45249	47585	48753	53643	58626	63702	68869
5**	70649	72757	73311	78579	83479	88509	93669**	32839	33953	34510	38036	41693	45481	49399
6**	69262	71477	72505	77251	82029	86889	91842**	34949	36463	37220	41019	44910	48894	52969
7**	43212	43697	43939	4558.44	50722**	22969	23191	23302	24617	25966	27351	28769		
8**	133424	139817	143013	155231	167884	180972	194494**	62139	65229	66773	74863	83387	92346	101739
9**	19487	19474	19467	19450	19433	19416	19399**	19469	19459	19453	19440	19426	19413	19399
10**	43387	43387	43387	44512	45637	46762	47887**	21889	21889	21889	23014	24139	25264	26389
11**	48762	49220	49449	51004	52530	54028	55497**	29390	30066	30405	32234	34035	35807	37549

1964-1990 LAND USE CHANGE BY BASIN

DRAINAGE Basin	TOTAL	1964	1990	AREA	% OF
	AREA	DEVELOPED	DEVELOPED	CHANGE	TOTAL CHANGE
	MEASUREMENTS IN SQUARE MILES				
WOODMOOR	13.5	1.2	5.8	4.6	6.10
JACKSON CREEK	10.8	0.3	0.5	0.2	.28
SMITH CREEK	6.5	0.8	2.3	1.5	1.99
MONUMENT BRANCH	3.9	0.6	0.8	0.2	.27
BLACK SQUIRREL CREEK	12.0	0.9	1.9	1.0	1.32
ELKHORN	4.1	2.3	3.1	0.8	1.06
KETTLE CREEK	18.0	1.9	7.9	6.0	7.96
PINE CREEK	10.4	1.0	2.6	1.6	2.12
COTTONWOOD CREEK	18.9	0.1	3.1	3.0	3.98
PULPIT ROCK	2.2	0	0.7	0.7	.93
NORTH AUSTIN BLUFFS	0.9	0.1	0.1	0	0
SOUTH AUSTIN BLUFFS	0.8	0.1	0.4	0.3	.40
NORTH SHOOKS RUN	10.6	0.6	7.6	7.0	9.28
ROSWELL	1.8	0.9	1.3	0.4	.53
COLORADO SPRINGS	9.8	7.6	9.4	1.8	2.38
CASCADE	0.8	0.5	0.7	0.2	.27
EVERGREEN	0.5	0.2	0.4	0.2	.27
PROSPECT LAKE	7.4	2.2	6.5	4.3	5.70
SAND CREEK	53.8	0.9	10.8	9.9	13.13
PETERSON	11.5	3.8	6.6	2.8	3.71
LITTLE JOHNSON	10.5	1.6	5.8	4.2	5.57
BIG JOHNSON	8.7	0.5	2.8	2.3	3.05
JIMMY CAMP CREEK	80.7	0.23	0.6	0.37	.49
EAST FOUNTAIN	4.8	0.18	0.2	0.02	.03
CALHAN RESERVOIR	7.7	0	0	0	0
INTERCHANGE	0.3	0	0.2	0.2	.27
<b>GRAND TOTALS</b>	<b>719.3</b>	<b>46.85</b>	<b>122.2</b>	<b>75.35</b>	<b>100%</b>





**TYPICAL SECTION  
SAND CREEK**

1" = 400' HORIZONTAL  
1" = 40' VERTICAL

## APPENDIX C

### Growth Monitoring System

#### Introduction

The following discussion presents the design of the Growth Monitoring System including necessary data items, data sources, procedures and development.

#### Purpose and Consideration

The growth monitoring system to be designed by the L.U.C. is intended to provide accurate and up-to-date information relevant to planning at all levels of government. In order to accomplish this at a reasonable cost, such a system should be integrated to existing operations which generate the data from which such information may be prepared. The selection of operations to be utilized must be based upon consideration of the relevance and reliability of the data which they generate and the feasibility of relating these data to data obtained from other sources.

#### Data Source

The data acquisition, storage and maintenance operations of county assessor offices are well suited to the provision of important planning data for much of the state. Moreover, the availability of these data on a parcel by parcel basis permits great flexibility in relating assessment data to data from other sources as well as to the geographical requirements of specific studies.

Chart 1

	1960 Population	1970 Population	Net Change
<u>Level One Counties</u>			
Arapahoe	113,426	159,986	46,560
Denver	493,887	512,691	18,804
El Paso	143,742	228,572	84,830
<u>Total Level One</u>	<u>751,055</u>	<u>901,249</u>	<u>150,194</u>
<u>Level Two Counties</u>			
Adams	120,296	185,405	65,109
Boulder	74,254	130,003	55,749
Clear Creek	2,793	4,668	1,875
Jefferson	127,520	235,057	107,537
Mesa	50,715	52,598	1,883
Montrose	18,286	17,876	- 410
Weld	72,344	89,086	16,742
<u>Total Level Two</u>	<u>466,208</u>	<u>714,693</u>	<u>248,485</u>
<u>Level Three Counties</u>			
All Others	536,684	562,234	25,550
<u>State Total</u>	<u>1,753,947</u>	<u>2,178,176</u>	<u>424,229</u>

Fortunately, while the condition of data available in assessor's offices is not uniform for all counties, the relative suitability of data available from each county is directly and quite strongly related to the variety of land use and the rate of land use change in the county. Thus, those areas of the state which have the greatest need of an efficient monitoring system generally have the most suitable materials from which it may be constructed. To illustrate this relationship, Colorado counties may be grouped as levels within a three tier hierarchy. The counties classed as each level are indicated in Chart 1. The accompanying U.S. census population figures are intended to represent the extent of development and the relative rates of land use change in each of these levels.

Level one counties - the highest level is that of counties which have already accomplished the three step process of (1) selecting data to be maintained within an active and truly accessible file; (2) formalizing the specific operations by which these files are developed and maintained; (3) and implementing these within the routine operations of the assessor's office. The principle tasks and local contributions of the L.U.C. to counties already at this level are (1) a careful examination of the data and their representation in the file; and (2) of extending the existing system to include the proper utilization of its potential for the observation and planning of growth and change.

Level two counties - the second level of the hierarchy contains those counties which have begun but not yet completed the process of upgrading their operations to provide for the availability of such data. Because these

counties, like those at the first level, have undertaken this process for the purpose of improving the accounting functions of normal assessment operations, they have, generally, achieved only the computerization of the limited quantity of data relevant to the preparation of required tax commission reports and notices. Therefore, while these files include much data relevant to planning, these counties have not yet undertaken to include many of the data now routinely maintained by level one counties. Accordingly, the efforts of the L.U.C. in identifying appropriate data for future inclusion in these files will be more significant in aiding level two counties.

Level three counties - level three includes counties which have as yet not begun the development of procedures to store and maintain assessment data in a form suitable for growth monitoring or for planning on other than a special study basis. In these counties, the L.U.C. must develop other monitoring methods (discussed below) and, provide guidance, through the tax commission, to the assessor's office to ensure that its operations, as they evolve in the future, will provide for the efficient development of a system useful for planning as well as normal assessment functions.

#### Data Requirements of Growth Monitoring System

The data necessary to a suitable growth monitoring system must include at least the following characteristics of land and its use:

- (1) Location, as either a described analysis area, or an identifiable sub area which may be aggregated with others to form described analysis areas, or preferably both.



*Generalized*

- (2) Land Use, describing the principle use or uses of the land.
- (3) Area, the extensiveness of the land use.
- (4) Improvements to the land, the type, size and use of structures and other facilities at that location.
- (5) Number of dwelling units at that location.
- (6) Restrictions, legal and natural influences affecting potential use of the land at that location.
- (7) Economic worth, the market value of the land and/or activity at that location.
- (8) Change, the direction and extent of an alteration in any of these characteristics.
- (9) Trends, the cumulative effects of change, through time or across a larger area.

Additional data, including the following, is also desirable:

- (1) Age, the age of activities or facilities at a location.
- (2) Condition, the level at which existing facilities are maintained.
- (3) Intensity of use, the number of users related to the activity at this location.

Data Accessibility by type of county

Chart 2 indicates, for level one and two counties, the types of data generally available for use in a Growth Monitoring System.

Chart 2

Data Item	Level One Counties	Level Two Counties
Location		
County	X	X
Taxing Area	X	X
Transportation District	X	
Transportation Zone	X	
Parcel Number	X	X
Abstract Code	X	X
Land Area	X	X
Land Value	X	X
Improvement (use code)	X	X
Design-Construction Grade	X	X
Year Built	X	X
Improvement Value	X	X
Number of Dwelling Units		X
Floor Area	X	X
Number of Stories	X	
Zoning Class of Land	X	
Business Code	X	X
Personal Property		
Type	X	
Quantity	X	
Age	X	(Con't)

Chart 2, Con't:

Data Item	Level One Counties	Level Two Counties
Personal Property, con't.		
Original Cost	X	
Replacement Cost New	X	
Replacement Cost New, Less Dep.	X	X
Condition	X	

Procedures for Data Acquisition and Resources

Because level one and two counties are, by definition, limited to those which make active use of data processing for the storage and maintenance of records which include data relevant to planning as well as assessment functions, the inclusion of much of these data in a growth monitoring system is a relatively straight forward matter. The base file will be represented by either the existing assessor's active file or will be created as a subset of that file. Therefore, updates generated within the assessor's office will be made to that file through the normal assessment file update processes.

In level three counties, much the same array of data (with the exception of transportation districts and zone, parcel number, and zoning class) is available. However, the fact that the data exist only on manually manipulated file cards, rather than in machine readable form makes the utilization of the data on anything but a special basis infeasible. For this reason, it is proposed that other operations provide data inputs for growth monitoring in these areas until the capabilities of the assessor's office may appropriately be extended. Potential

sources for the creation of the initial data base include: (1) Inventories; (2) existing local inventories, plans and ordinances; (3) reports of state and federal agencies, including BLM, Forest Service, Soil Conservation Agriculture Stabilization, Department of Mines and GF&P; and (4) air photo interpretation. As in the high activity areas, the data base created from these sources would initially relate to small areas, rather than to specific parcels.

Two operations are proposed to data so developed in level three counties with formalized observation and reporting systems. These are based on the administration of building permits and local zoning ordinances. Much valuable information concerning the location, type and extent of changes in land use and land use influences may be monitored at the local, regional and state levels by proper use of these tools. Because standardization is an important element in the efficiency of utilizing these sources beyond the local level, a single form containing much of the information necessary for the maintenance of this approach is sorely needed. Obviously, any form adopted for such use should be developed for maximum compatibility with forms now in use, as well as with the categories anticipated in assessment based data sources. A similar recording form would be developed for zoning change actions; indicating the location and area of the change, current zoning, proposed zoning, current use and proposed use.

The assumption that the number of level one and two counties will continue to grow is reasonable for several reasons. First among these

is the fact that the data requirements of this system are tied quite closely to the normal assessment function. Thus, as the assessors of existing and emerging high activity areas are forced, by consideration of efficiency and economy, to utilize data processing procedures rather than less flexible manual methods the data acquired, stored and maintained by their offices becomes more accessible for other applications such as growth monitoring. Secondly, the assessors of counties currently without data processing are also confronted by much greater difficulty in meeting the growing demands for increasing numbers of tax related reports and special analyses which only data processing can adequately produce within the stringent time requirements of the assessment calendar. Finally, the state tax commission is currently conducting two studies, which, if carried through to their conclusion, will each ensure the collection and maintenance in every county of all data identified in Chart 2 on a continual basis.

## APPENDIX D

### PROTOTYPE STUDIES

Four prototype studies are currently being conducted by the Land Use Commission. The purpose of these studies is not to develop immediate plans or controls for individual subareas of the state, but rather, to provide for adequate testing and evaluation of tools which are being developed for use in planning for the entire state. The prototype studies are located in El Paso County, Weld County, Mesa County and Pitkin County. In each county, the prototype work to date has been concerned principally with the selection of sources and procedures for an operational growth monitoring system and the relationships between this system and the information requirements of state, regional and local planning.

*Prototype  
of growth*

The El Paso County prototype is intended to examine the benefits of basing a growth monitoring system on a computerized (Level 1) county assessment system incorporating a significant amount of planning data. A major portion of the system under study is a data file initially developed by copying selected data from the Assessor's Real and Personal Property files and subsequently maintained by periodic computer updates, utilizing machine readable records created by the Assessor in the process of maintaining his own files. Thus, a major portion of the data to be maintained for the monitoring of land use change may be developed and

maintained within the structure of existing operations. Additional data representing other man-made features and the natural environment will be introduced to this file, either directly by use of the parcel number or small area identifiers or generally, through aerial descriptors such as zoning classifications, traffic districts and taxing jurisdictions which are also maintained in the file for each parcel. Much of this data indicated in the illustrated cards and forms is also already available as a result of current and recent transportation, housing and facility studies conducted for the area.

Because of the practical problems of attempting to develop and analyze a data base representing all the desired attributes of every parcel within the county and because the purpose of these prototypes is an intensive study of a process rather than an extensive application of an unstudied process, a sample of the county is used in the development of these systems.

A 100% sample of one or a few defined small areas selected to provide examples of the land use patterns and trends exhibited by the parent county.

The use of selected small areas offers several distinct operational, as well as conceptual, advantages including the ability to select specific types of land use patterns for more intensive study in the time available than would be possible utilizing a small sample of a much larger area.





El Paso County

1970 LAND USE DATA BASED ON REAL ESTATE FILES

TD	GROSS ACRES	RESIDENTIAL			COMMER-	INDUST-	PUB +	PARKS
		S.FAM	MULTI	TOTAL	CIAL	RIAL	S.P.	+ REC
164	1190.1	302.5	2.9	305.4	24.1	0.0	0.0	16.2
165	398.9	.9	12.9	13.8	32.3	0.0	0.0	162.4
166	127.3	31.9	2.1	34.1	13.3	0.0	0.0	20.9
175	920.0	0.0	0.0	0.0	40.0	0.0	0.0	6.9
176	1340.0	0.0	0.0	0.0	0.0	0.0	.9	4.2
	MIL	STREETS	DEVELOPED		OPEN		POPUL-	DUS
	+ RDS						ATION	
		TOTAL	P	TOTAL	P			
164	0.0	98.9	329.6	27.7	745.4	62.6	6131.	1947.
165	0.0	4.8	46.1	14.0	181.0	45.4	997.	373.
166	0.0	14.2	47.3	37.2	44.9	35.3	1680.	580.
175	0.0	12.0	40.0	4.3	861.1	93.6	0.	0.
176	0.0	.3	.9	.1	1333.7	99.5	0.	0.

El Paso County

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PROGRAM READ(INPUT,OUTPUT,TAPE5=INPUT,TAPE6=OUTPUT)
000003 DIMENSION I(25),LAP(5),IMRAY(7),VALND(7,500),VALMP(7,500), DU(2)
1,SQFT(7,500),IZID(500),LINE(200),GROSS(500),TDU(3,500),DUS(3),PARK
000003 IS(500)
INTEGER KD,ZERO,BLK,AZ,BB,BZ,FZ,GB,GZ,HB,MD,MZ,OB,RB,RZ,SA,SB
000003 1,SP,SS,TH,TC,WZ,ZZ,MB,TWO,THREE,TF,FR,FV,TNTY,TNTO,TTT,THF,BLKS,ON
1E,NOT,CU
000003 DATA KD/1H+/,ZERO/1H0/,BLK/1H /,AZ/2HAZ/,BB/2HBB/,BZ/2HBZ/,FZ/2HFZ
1/,GB/2HGB /,GZ/2HGZ/,HB/2HBB/,MD/2HMD/,MZ/2HMZ/,OB/2HOB/,RB/2HR /,R
000003 IZ/2HIZ/,SA/2HSA/,SB/2HSB/,SP/2HSP/,SS/2HSS/,TB/2HTB/,TC/2HTC/,WZ/2
1HWZ/,ZZ/2HZZ/,MB/2HMB /,TWO/2H02/,THREE/2H03/,TF/2H24/,FR/2H04/,FV/
12H15/,INTY/2H20/,TNTO/2H21/,TTT/2H23/,THF/2H35/,BLKS/2H /,ONE/2H0
000003 1/,DCT/1H./,CU/2HCU/
WRITE (6,32) KD,ZERO,BLK,AZ,BB,BZ,FZ,GB,GZ,HB,MD,MZ,OB,RB,RZ,SA,SB
000003 1,SP,SS,TB,TC,WZ,ZZ,MB,TWO,THREE,TF,FR,FV,TNTY,TNTO,TTT,THF,BLKS,ON
1E,CU
000117 32 FORMAT(1X,A10)
000117 IM=7
000120 DO 2007 K=1,IM
000122 2007 IMPRAY(K)=0
000125 TOTDL=0.
000126 TMPL=0.
000127 STRT=0.
000130 ACRES=0.
000131 VLN=0.
000132 VIMP=0.
000133 DUS(1)=0.
000134 DUS(2)=0.
000135 DUS(3)=0.
000136 ASQFT=0.
000137 DO 2008 ID=1,500
000140 TDU(1,ID)=0.
000142 TDU(2,ID)=0.
000144 TDU(3,ID)=0.
000146 IZID(ID)=0.
000147 DO 2008 K=1,IM
000151 SQFT(K,ID)=0.
000154 VALNC(K,ID)=0.
000156 2008 VALMP(K,ID)=0.
000164 DO 2108 J=1,5
000165 2108 READ (5,2109) ID,GROSS(ID),PARKS(ID)
000200 2109 FORMAT(I5,2F10.1)
000200 N=N+1
C READ REAL PROPERTY CARDS
000201 5 DO 6 J=1,22
000203 6 I(J)=0
000206 READ (5,20) TAXD,(I(J),J=3,9),KODE,(I(J),J=11,16),BASE,(I(J),J=18,
000243 122),IFLAG
20 FORMAT(2X,A3,I5,I2,I3,I4,I2,3X,I2,I7,A2,I1,I3,I7,I3,I7,I3,A1,I6,1X
000243 1,I2,A2,3I3)
000243 N=N+1
000245 IF(IFLAG.GT.0) GO TO 2050
000247 TOTDL=TOTDU+I(14)
C CONSOLIDATE AND CONVERT IMPROVEMENT CODES
000251 IF(KODE.EQ.RB.OR.KODE.EQ.ONE.OR.KODE.EQ.TWO.OR.KODE.EQ.TC.OR.KODE.
000302 1EQ.THREE.OR.KODE.EQ.TF) 3001,3003
3001 I(10)=1

```

PORTION OF  
GROWTH MONITORING  
PROGRAM

Also, the following considerations of creating the necessary data base are best met by the use of selected small areas:

The sample land use data base may be readily developed from existing automated and non-automated assessment files and (where desired) local field inspection;

Data concerning off-site elements (such as schools, treatment facilities, natural features, etc.) affecting each parcel may be efficiently related to the appropriate parcels.

For these reasons, a sample area has been selected for analysis.

The product of this approach will be data describing the conditions and changes within the small area and the effects of changes on that area and on the remainder of the region.

The initial results of the El Paso County prototype indicate that it is a very efficient method of growth monitoring, capable of providing significant data for local, as well as regional, planning purposes. The table presented below illustrates, for five traffic districts (TD), the output of a computer program written to process selected assessment data.

In Weld and Mesa Counties the prototype study is intended to examine the problems and potentials of automated assessment files in Level 2 counties, in which the range of available planning data is more limited and the procedures less developed. The relative data capabilities of

El Paso County (Level 1) and Weld and Mesa Counties (Level 2) are indicated in the data accessibility chart contained in Appendix C.

The specific data items currently available in Weld County and expected to be made available in the current reconfiguration of the Mesa County files are indicated in the following chart.

The data set necessary to an efficient accounting system is now accommodated by the assessor's file. (Though parcel numbers have not yet been assigned in Weld County, provision has been made for their inclusion to the file.)

Data Items

Schedule Number  
 Parcel Number  
 Land Use Code  
 Tax Area  
 Date Last Update  
 Reception Number  
 Name of Owner  
 "In Care of" Name

Data Items

Taxpayers Address  
 Acres  
 Land Value (Current)  
 Land Value (Old)  
 Imp. Value (Current)  
 Imp. Value (Old)  
 Legal Description

*needed  
 to avoid double  
 counting*

Efforts by the State Tax Commission toward automated appraisal, will, at least in the near future, be oriented to computerization of the replacement cost manual. If this should occur, the available data set specified above may be expanded to accommodate the input requirements of that approach.

Further, data items necessary to the direct assessment functions of appraisal and accounting include more than 90 percent of the data required for preparation of the suggested internal and external reports. The only special items being zoning class and rural land class; both items that may quite likely be selected for input to an appraisal process such as the Tax Commission is now considering. Thus, by creating and maintaining the files necessary for an automated appraisal and accounting system, the assessor makes available the data required for a valuable range of operational and planning information.

For the data set discussed above, the data input requirements relating to existing files will fall into two categories: unique and common. The category of unique data includes the specific lot and improvement data recorded by the appraiser in the field. Such data can be developed and properly stored and utilized only by direct reference to specific parcels or structures. Common data, however, consists of items which may be determined without reference to specific properties but which may be utilized to qualify properties or characteristics of parcels or groups of parcels. Zoning category designations, traffic zone areas, census tracts, and tax districts are examples of such areas.

Generally, unique data must be input to the system by individually coding and merging the specific values associated with each parcel. Thus, the process of upgrading the existing real estate file would involve the creation of separate input records for each property schedule from a

parcel related source document such as the appraiser's grid card.

Common data, however, may be input to the system by much different techniques. Since they generally apply not to specific individual parcels, but to larger geographic areas comprising aggregations of many parcels, various methodologies may be applied to:

1. Describe these areas
2. Identify the schedules related to properties in these areas
3. Assign the common attributes of each area to these parcels.

Such a process may be executed once to develop a complete data base or it may be executed on request for the insertion of special-use data items.

Among the considerations affecting the selection and organization of data to be included in an automated file are the following:

1. Data Source
2. Data Stability
3. Data Applications
4. Data Access Groups (application and maintenance)

The direct source of data to the file is the RER (Real Estate Record) coding form either as currently used by Weld County or in an extended form to include the additional items under consideration. This is true of all normal operations on the file, although the data may be coded to this form from appraisal cards, taxpayer's statements, reception sheets, or a variety of other monitoring opportunities utilized by the assessor's office.

Thus, each data item relevant to each property should be accessible through the RER update.

Stability - The relative frequency with which the value of each data item may be expected to change, requiring a change in the data file, is also an important consideration.

The most frequent action on the file should be the annual reappraisal of all properties in the file to assure that all assessments are made on current appraisals determined by the most recently developed parameters. Thus, since only a number of parcels equal to approximately 20 percent of the total file is transferred or split annually, reappraisal will likely represent the greatest demand on file access capabilities. Moreover, the appraisal and reappraisal function, particularly as it is currently envisioned by the State Tax Commission, will require the largest number of data items from the file as input to the calculation of appraised values.

The Pitkin County Prototype involves the development of data sources and maintenance procedures for a "Level 3" county (i.e. a non-automated assessment file). Because of the lack of readily accessible planning data in the assessment file it is necessary to identify or develop other sources of such data, having adequately formalized procedures to insure accuracy in the maintenance process. Building permit and zoning change applications and subdivision submissions are existing sources which may be further developed to provide for growth monitoring within such counties. Some study of these sources in Pitkin County has already been accomplished.

This work indicates that the procedures by which the data is gathered and recorded are adequate but that, as in many of the rural counties, the areal extent of the coverage is quite inadequate. In Pitkin County, only incorporated areas and the currently zoned areas of the county are monitored for building permits and, of course, zoning applications. Thus, the growth of major portions of the county, particularly along traffic corridors and in areas of the greatest potential for conservation, is not represented within these files. Such areas of informational deficiency must be identified and current operations extended in a manner which will provide complete coverage of changes in the utilization of the land in Colorado.

An associated work element has been the preliminary evaluation of referral standards to be utilized by local government in determining whether individual private development proposals should be forwarded to the Land Use Commission for review. Data provided on development activity report forms (F. W. Dodge reports), which are submitted to the Bureau of the Census, with copies to the State Planning Office, indicate that the standards currently under consideration by the Commission would result in referrals of no private development proposals in the past six years except Snowmass at Aspen and Aspen Wildcat. This is due to the scattered nature of development outside of Aspen and the lack of coverage in the unzoned areas.



# An Act

(Senate Bill No. 11. By Senators Schieffelin, Anderson, Armstrong, Bermingham, Chance, Enstrom, L. Fowler, Jackson, MacManus, Minister, Saunders, Shoemaker, Stockton, Strickland, Taylor, Williams, and H. Fowler; also Representatives Bryant, Byerly, Cooper, Dameron, Edmonds, Fentress, Fuhr, Gustafson, Johnson, Koster, Lamm, Moore, Carroll, Sack, Strahle, and Bain.)

CONCERNING THE ESTABLISHMENT OF A COLORADO LAND USE COMMISSION AND PROVIDING FOR THE POWERS AND DUTIES THEREOF AND MAKING AN APPROPRIATION THEREFOR.

*Be it enacted by the General Assembly of the State of Colorado:*

Section 1. Chapter 106, Colorado Revised Statutes 1963, is amended BY THE ADDITION OF A NEW ARTICLE to read:

## ARTICLE 4

### Colorado Land Use Act

106-4-1. **Legislative declaration—short title.**—(1) The general assembly finds and declares that the rapid growth and development of the state and the resulting demands on its land resources make new and innovative measures necessary to encourage planned and orderly land use development; to provide for the needs of agriculture, forestry, industry, business, residential communities, and recreation in future growth; to encourage uses of land and other natural resources which are in accordance with their character and adaptability; to conserve soil, water, and forest resources; to protect the beauty of the landscape; and to promote the efficient and economical use of public resources. The general assembly further finds and declares that there is an increasing mutuality of interest and responsibility between the various levels of government in the state which calls for coordinate and unified policies in planning for growth and development in the interests of order and economy, and that the most effective means of attaining the objects set forth in this article is the adoption of the statewide system of land use.

(2) In order to provide the leadership necessary to meet the objectives of this article, it is the intention of the general assembly to provide the adoption of a Colorado land use map which will classify all lands in the state into various classifications and will designate those uses which may be made of lands within each classification.

(3) This article may be cited as the "Colorado Land Use Act".

**106-4-2. Establishment of commission.**—(1) (a) There is hereby established, within the office of the governor, the Colorado land use commission, hereinafter called the "commission". The commission shall consist of seven members who shall be appointed in the manner and shall serve for terms as set forth in this section. The commission shall assume its duties June 1, 1970, and all terms of commission members shall commence on that date.

(b) Five members shall be appointed by the governor, including one from each of the congressional districts and one at large, at least one of whom must reside west of the continental divide, but no more than three members shall be from any one major political party. The terms of office of the members appointed under this paragraph (b) shall be five years, except that of the members appointed to take office on June 1, 1970, one shall be appointed for a one-year term, one shall be appointed for a two-year term, one shall be appointed for a three-year term, one shall be appointed for a four-year term, and one shall be appointed for a five-year term. Any vacancies shall be filled by appointment of the governor for the unexpired term.

(c) The governor shall also appoint two members who shall serve at his pleasure.

(2) The commission shall elect a chairman from among its members. The members shall receive no compensation for their service on the commission but shall be reimbursed for their actual and necessary expenses incurred in the performance of their duties.

(3) The commission shall utilize the staff of the state planning office to assist in the performance of its duties. The departments and agencies of state government shall make available to the commission such data, facilities, and personnel as are necessary for it to perform its duties. The commission may receive and utilize gifts and any funds from federal or other governmental agencies. It shall adopt rules for its conduct and maintain a record of its activities, accomplishments, and recommendations to the governor and to the general assembly.

(4) Four members of the general assembly shall be appointed as an advisory committee to the commission to serve from June 1, 1970, to December 1, 1970. Two members shall be appointed by the speaker of the house of representatives, one member from each of the two major political parties; and two members shall be appointed by the president of the senate, one member from each of the two major political parties.

**106-4-3. Duties of the commission.**—(1) (a) The commission shall develop and submit to the governor and the general assembly, recommendations for adopting a land use map based upon land use classifications. Such recommendations shall be submitted no later than December 1, 1970.

(b) The commission shall hold such public hearings in various locations throughout the state as it deems necessary to formulate its recommendations.

(c) The recommendations may include, but shall not be limited to, the division of the state into geographical planning districts, together with the regulations for their implementation, to guide the growth and settlement of the state and to assure the best and wisest use of the state's land now and in the future.

(2) The commission shall consider, among other things, trends of

urbanization; the protection of the natural environment; the meeting of recreation and leisure-time needs; the provision of supportive public facilities and services; the development of housing; the preservation of green belts, open space areas, and flood plains; the creation of new towns and new growth areas; and the conservation and use of natural resources and agricultural land.

(3) (a) The commission shall initiate and conduct on a continuing basis a surveillance of the ecological systems of the state, including:

(b) The conduct of studies, conferences, seminars, investigations, surveys, research, and analyses;

(c) The establishment of a system of collecting and receiving information on all necessary factors of the natural ecological systems of the state;

(d) The evaluation of the interrelationship and mutual dependencies of the natural ecological systems and the urban-industrial-recreational man-made systems;

(e) The conduct of examinations and analyses of alternative land uses in the state with the purpose of identifying and increasing the understanding of the major economic, social, aesthetic, and ecological effects of such alternative uses and of improving the state of the art of such studies and analyses, and thereby enhancing and improving the ability to make decisions with regard to the management and the use of the lands of the state;

(f) The encouragement of the use of natural ecologic criteria for the design of present and proposed uses of the air, water, land, and space of the state; and

(g) Engaging in such other studies and investigations as may be required to carry out the purposes of this article.

**106-4-4. State land use plan.**—(1) In conjunction with the state planning office, the commission shall prepare a state land use plan which shall be utilized in adopting the land use map and which shall promote the wisest use and development of the state's natural and land resources in the present and in the future, and which shall assure the most effective expenditure of public and private resources in its implementation. In the development of the plan, the commission shall consider all relevant information on the past, present, and anticipated settlement and development of the state. The commission's concerns should include, but shall not be limited to, the location and timing of residential development; industrial and commercial development; transportation facilities; recreation facilities; educational and cultural facilities; water and sewer lines and treatment stations; and other public services and facilities required for the maintenance and support of human settlements. The plan shall also be concerned with the conservation and management of the state's natural resources, and the preservation of its ecologic systems.

(2) In the preparation of the plan, the commission shall solicit the views and advice of local government officials, regional and local planners, businessmen, and other interested persons, and shall take into account those regional and local plans presently in existence.

**Section 2. Appropriation.**—In addition to any other appropriation, there is hereby appropriated out of any moneys in the state treasury not otherwise appropriated, for the fiscal year beginning July 1, 1970, to the office of the coordinator of state planning, the sum of sixty-two thousand

dollars (\$62,000), or so much thereof as may be necessary, for the administration and implementation of this act.

**Section 3. Safety clause.**—The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

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Mark A. Hogan  
PRESIDENT OF THE  
SENATE

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John D. Vanderhoof  
SPEAKER OF THE HOUSE  
OF REPRESENTATIVES

---

Comfort W. Shaw  
SECRETARY OF  
THE SENATE

---

Lorraine F. Lombardi  
CHIEF CLERK OF THE HOUSE  
OF REPRESENTATIVES

APPROVED \_\_\_\_\_

---

John A. Love  
GOVERNOR OF THE STATE OF COLORADO

APPENDIX E  
(continued)

Recommended Revisions to the Colorado Land Use Act

Re: Senate Bill No. 11 - 1970

A. Page 1 - 106-4-1 (2)

(2) .....of this article, The Colorado General Assembly authorizes the Colorado Land Use Commission to develop, hold hearings, adopt, operate and maintain state land use plans and related implementation techniques.

B. Page 2 - 107-4-2 (3)

(3) The Commission is authorized to utilize its own staff and/or contract services in the performance of its duties. The .....

C. Page 2 - 106-4-3 Duties of the Commission

Insert new (2) - Change existing (2) to (3).

- a. The Commission shall develop, hold hearings and adopt an Interim Land Use Plan and a Final Land Use Plan and Procedures to maintain and implement the Plans. The adopted plans and procedures shall be the basis for guiding the use and development of land in the State of Colorado; guiding the investment of public funds relating to the use or conservation of land for any purpose; and for guiding the development of the services, utilities, transportation, communication and other such land use related programs and projects.

b. The Interim Plan shall be completed by July 1, 1972, and shall take into account all existing plans, policies and procedures at the local, state and federal levels, and recommend action where deficiencies exist.

c. The Final Plan and Updating Procedures shall be completed by July 1, 1973, and shall take into account all the planning procedures and system elements defined in the Colorado Land Use Act of 1970. These plans shall become the basis for planning review procedures and for the adoption of a land use map based on the following two major classifications:

- . Areas of state concern; and
- . Areas of local concern.

d. Areas of State Concern

(1) The Commission is authorized to designate selected geographic areas of the state as areas of critical planning need, and to require local governmental units within these designated areas to develop or improve and adopt land use plans, maps and controls within specified time limits. Also, the Commission is authorized to allocate state planning aid funds, procured for this purpose by the General Assembly, to such designated areas.

(2) The Commission is authorized to review all proposed local, state and federal governmental land use plans and controls, or proposals which will affect land use in the state regarding their compliance to adopted state land use plans and procedures. Such review shall apply to all levels of government.

(3) The Commission is authorized to review and develop impact studies for major development proposals in the state which fall into the following classifications:

- . Development of new towns;
- . Major land development proposals or recreation facilities in excess of any one or more of the following: 640 acres; 2,000 dwelling units; 1,000 parking spaces; 300,000 square feet (non-residential) floor space; and 200,000 gallons per day water use or sewage effluent.

Plans and proposals submitted to county and municipal government which fall into any of the above categories shall be submitted to the Commission by the governmental unit for review. The Commission shall make such review comments within twenty (20) days of receipt of said plans or proposals. Such review and authority shall commence as defined in Item e below.

All review comments shall be made in writing to the originating agency, with copies to the Governor's office and the affected municipality. Review shall be advisory in nature, except where it has been determined that adopted minimum standards have not been met, or where a proposal is in conflict with adopted state plans and procedures. Where said deficiencies exist, the Commission shall have the authority to prevent the issuance of a building or construction permit until the conflict has been resolved.

- (4) The Commission is authorized to develop, hold hearings, adopt and enforce additional land utilization standards related to the use of and preservation of natural resources and environmental quality in the State of Colorado.
- (5) The Commission shall have the authority to develop, hold hearings and adopt performance standards and criteria regarding land development and natural drainage ways and flood plains and set forth the local government responsibilities and administrative requirements associated therewith.
- (6) The Commission shall have the authority to map, specify permitted uses, hold hearings and adopt, conservation



and recreation areas, and access ways.

e. Effective dates of Commission authority related to Areas of State Concern

(1) Authority to designate Areas of Critical Planning Need

shall become effective July 1, 1971, (see Item d (1))

(2) Authority to review proposed public and private development plans, as defined in Items d (2) and (3), shall become effective January 1, 1972. Upon the adoption of the Interim Plan review shall be advisory, except where it has been determined that adopted minimum standards have not been met, or where a proposal is in conflict with adopted state planning recommendations. Where said deficiencies exist, the Commission shall have the authority to prevent the issuance of a building or construction permit by the appropriate government agency until the conflict has been resolved.

(3) Authority to develop, hold hearings and adopt plans, standards and criteria as defined in Items d (4), (5) and (6) shall become effective upon adoption of the Interim Land Use Plan.

f. Areas of Local Concern

(1) All units of local government shall prepare, adopt and maintain land use plans and controls as required; and, that state and regional land use determinations shall be included in the local plans and processes.

(2) All units of local government shall adopt, or include in existing controls, minimum state development standards, as appropriate, such as subdivision regulations, drainage

standards and other applicable standards as may be adopted by the Land Use Commission.

- (3) All cities, towns and counties shall be participating members of a regional planning agency in their respective planning region as shown on the attached map showing twelve (12) planning regions. Such regional planning agencies shall be formed by September 1, 1971, and shall include as its members one duly elected official from each city, town or county in the region. That each said regional planning commission shall be the agency responsible for developing regional land use plans and aiding municipalities in developing plans and adopting land use controls.

g. Effective dates of requirements in Areas of Local Concern

- (1) Responsibility to perform local planning as required and transmit plans and controls to the Commission as defined in Section C. f. (1), shall become effective July 1, 1971.
- (2) The requirement to adopt or include minimum state development standards, as appropriate, in local controls as defined in Section C. f. (2), shall become effective January 1, 1972.
- (3) Time requirements for Section C. f. (3) are as specified in that section.

D. Page 3 - 106-4-4 State Land Use Plan - (1)

- (1) Delete Lines 1-6

In the development of the interim and final state land use plans, the Commission shall consider .....

(2) In the preparation of the plans, the Commission shall solicit the views and advice of state and local government officials ....

E. Page 3 - Section 2. Appropriation

(a) In addition to any other appropriation .....

(b) For the fiscal year 1971-72 beginning July 1, 1971, there is hereby appropriated to the Colorado Land Use Commission the sum of two hundred thousand dollars (\$200,000) for the administration and implementation of this Act.

AN ACT ESTABLISHING A STATE-LOCAL GOVERNMENT  
PLANNING AID FUND AND PROVIDING FOR THE ADMINISTRATION  
AND ALLOCATION THEREOF.

Section 1: Short title - State-Local Government Planning  
Aid Fund Act.

Section 2: Legislative declaration.

(1) The General Assembly finds and declares that the rapid growth and development of the state has resulted in demands for land use planning in cities, towns, counties and regions throughout the state. That said units of government may not be financially able to adequately plan for the demands of such growth.

(2) In order to provide for necessary planning assistance to units of local government it is the intention of the General Assembly to establish a state-local government planning aid fund to insure adequate land use planning in the State of Colorado regardless of local financial constraints.

(3) This article may be cited as the "Colorado Planning Aid Fund Act".

Section 3: Allocation of Funds

(1) Planning aid funds shall be allocated on a cost sharing basis of 1/3 local funds, and 2/3 state planning aid funds.

(2) Planning aid funds shall be provided to only those cities, towns, counties and regions designated by the Colorado Land Use Commission as areas of critical planning need as defined in the Colorado Land

Use Act as revised in 1971, and for which the Land Use Commission has determined that such funds are necessary.

(3) All planning aid funds shall be allocated on the basis of a specific work program which has been reviewed and approved by the Colorado Land Use Commission prior to any allocation of funds.

#### Section 4: Method of Payment and Review

(1) The Land Use Commission shall review the progress of all work programs on a monthly basis according to procedures prescribed by the Commission. Payments shall be made to the government unit involved on the basis of the percentage work completed as prescribed by the Commission.

(2) The state-local planning aid fund shall be administered by the Colorado Land Use Commission and make payments according to invoices approved by the Land Use Commission.

(3) The state-local planning aid fund may receive and utilize gifts, grants and any other funds from federal or other governmental agencies in addition to the funds specifically appropriated by the State of Colorado for this purpose.

#### Section 5: Appropriation

In addition to any other appropriations, gifts and grants, there is hereby appropriated out of any monies in the state treasury, for the fiscal year beginning July 1, 1971, to the Colorado Land Use Commission the sum of one hundred fifty thousand dollars (\$150,000).

Section 6: Safety Clause

The General Assembly hereby finds, determines, and declares that this Act is necessary for the immediate preservation of the public peace, health and safety.

AN ACT CONCERNING THE MANDATORY ADOPTION OF SUBDIVISION  
REGULATIONS, BY JANUARY 1, 1972, IN ACCORDANCE WITH  
CHAPTER 106-2-34 COLORADO REVISED STATUTES 1963  
BY ALL COUNTIES

AN ACT CONCERNING THE MANDATORY ADOPTION OF SUBDIVISION  
REGULATIONS IN ACCORDANCE WITH CHAPTER 106 - 2 - 34  
COLORADO REVISED STATUTES 1963 BY ALL COUNTIES

SUBDIVISION REGULATIONS ADOPTION ACT

Section 1: Short Title - Subdivision Regulations Adoption Act

Section 2: Purpose of Act

Section 3: Adoption of subdivision regulations - All counties must adopt subdivision regulations in accordance with Chapter 106-2-34, Colorado Revised Statutes, 1963 by January 1, 1972.

Section 4: Assistance by (State Planning Office) (Colorado Land Use Commission) - The (State Planning Office) (Colorado Land Use Commission) shall aid and assist such counties in preparation of such subdivision regulations.

Section 5: Basic requirements to be included - The subdivision regulations to be adopted by all counties must include data, survey, analysis, studies, plans and designs of the following factors:

- a. property survey and ownership
- b. site characteristic and analysis including:
  1. topography
  2. geology and soils
  3. natural features as streams, lakes, tree mass, flora, etc.
- c. plat showing layout or plan of development
- d. storm drainage plan and design



- e. utilities plan and designs including:
  - 1. sanitary sewer system
  - 2. water system
  - 3. other utilities
- f. streets and road plan and design

Section 6: Requirements for subdivision approval - The subdivisions regulations to be adopted by the counties shall require that the subdivider prepare and submit all data, surveys, analysis, studies, plans and designs concerning the basic factors outlined in this act. And no subdivision shall be approved until such data, surveys, and analysis, studies, plans and designs have been submitted, reviewed and found to meet all sound planning and engineering requirements of the county.

Section 7: Model ordinance - The (State Planning Office) (Colorado Land Use Commission) shall review all applicable state standards governing subdivisions and establish a model ordinance to serve as a guideline for all counties.

Section 8: (State Planning Office) (Colorado Land Use Commission) Review-- All major (subdivisions) developments which exceed 640 acres or which require a new water or sanitary sewer system or will provide employment for more than 500 employees or will provide more than 300,000 square feet of commercial space, shall be submitted to the (SPO) ( LUC ) for review. The (SPO) ( LUC ) shall submit its recommendation to the county within 15 days.