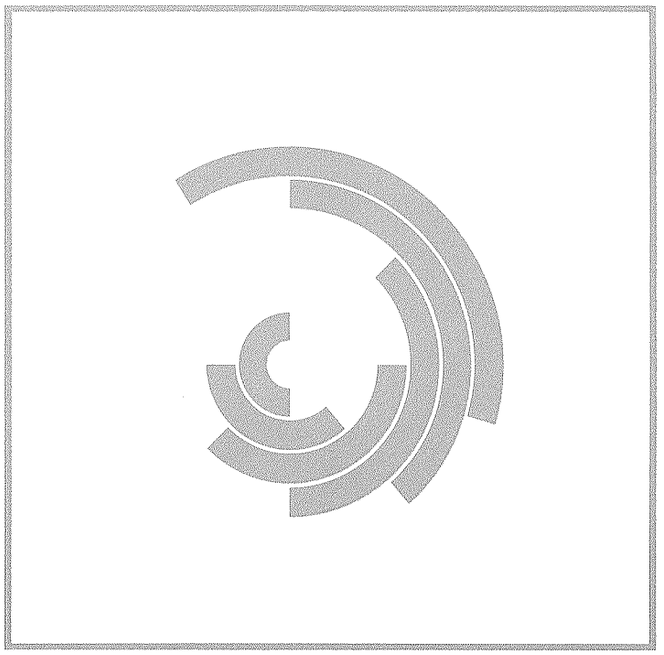
AUSTIN TOMORROW COMPREHENSIVE PLAN



Department of Planning
City of Austin
1980

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Special recognition is due to the members of the Planning Commission and the City Council who adopted the first three chapters of the *Austin Tomorrow Comprehensive Plan* in 1977.

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Mr. Dan H. Davidson
City Manager
City of Austin
P.O. Box 1088
Austin, Texas 78767

Dear Mr. Davidson:

As required by the City Charter, the Planning Commission's recommended draft of a master plan for Austin is hereby submitted to you for forwarding to the City Council. The recommendation consists of three separate elements which, taken in combination, comprise the Commission's draft of the *Austin Tomorrow Comprehensive Plan.*

The first element is the printed draft of four chapters and two appendices. This document has been reviewed by the Austin Tomorrow Ongoing Committee, other major City boards and commissions and City departments. It has also been subject to work sessions and public meetings before the Planning Commission to receive review comments from the general public, the business community, civic and service organizations, and neighborhood groups. The draft has been through several revisions and, in the Commission's opinion, is now ready to be submitted to the City Council.

The second element of our recommendation is an attachment which consists of final revisions to the printed draft. These changes are important to the draft, but in the interest of time and financial considerations, it was decided not to ask City staff to make the changes and reprint and redistribute the entire document. The Commission's recommended plan, therefore, includes the printed draft as modified by Attachment A.

The final element of the Planning Commission's recommendations is a selection of a future development pattern to guide geographic growth decisions by both public and private decision-makers in Austin. The Austin Tomorrow Goals Program provided the basic guidance for evaluating the three alternatives generated by City staff and presented in the document draft.

The Current Trends alternative does not provide the opportunity for accomplishing the major changes for Austin's future that were expressed in the Goals Program. Such concerns as environmental protection, managing growth and restricting urban sprawl cannot be realized under this option.

The Limited Expansion alternative has some characteristics which promote the best efficiency for providing municipal services and facilities. However, the Planning Commission thinks that the number of high density centers necessary to accomplish this option are too numerous and may have potentially undesirable side effects. The potential problems inherent in this alternative outweigh the potential benefits for Austin at this time.

Therefore, the Planning Commission recommends the alternative, Directed Expansion and Inner-City Development. All policy options, ordinance revisions, capital improvements programming, program activities and other development decisions should be consistent with the concepts necessary to implement this alternative. In addition to those provisions an aggressive policy to encourage development of existing vacant land and appropriate redevelopment of underused land within the city must be part of this alternative.

Implementation of this plan would result in the city having characteristics such as the following by 1995:

- Most new residential construction would be low density single family units.
- Most new single family residential construction would occur inside the current city limits and contiguous to the city limits in areas of general municipal service accessibility.
- New apartment construction would occur in various locations both inside and outside the current city.
- Growth would be contiguous to existing development and policies would discourage leapfrog development and urban sprawl.
- The extension of municipal water and wastewater service would be limited to priority growth areas.

- Scattered developments would occur, using septic tanks and small waste treatment plants in outlying areas where municipal systems are not available.
- The growth of urban development along US 183 northwest of the city and US 290 southwest of the city would be reduced.
- Urban development along the north-south IH 35 corridor would be increased.
- The downtown would maintain its status as an active retail, service and cultural center.
- Older neighborhoods would stabilize and remain viable residential areas, not losing population to the suburbs.
- The housing stock within the inner portions of the city would reverse the trend toward deterioration and provide a variety of residential choices.
- Economically and ethnically segregated neighborhoods would tend to diminish as low income families enter the open housing market.
- Busing of school children would be minimized as a larger proportion of our neighborhoods become integrated.
- Commercial development would concentrate in multi-use centers located near major intersections.
- Most of the new industrial development would locate in the FM 1325 area, along Ed Bluestein Boulevard and along Ben White Boulevard.
- The amount of additional urban development in environmentally sensitive areas would diminish.
- Auto transit would continue to be the primary mode of transportation.
- Extensive bus service, and possibly light rail mass transit, would be feasible.

The goals, objectives and policies found in the chapters of the document support the preceding characteristics, the City's commitment to the development of inner-city vacant land and the integration of neighborhoods. In addition, other approaches and methods of implementation should be pursued to encourage revitalization of the existing urban area, such as commitments to Capital Improvement Program activities within the existing city. Other examples include increased emphasis on historic preservation, providing development incentives by lowering fees levied by the City for construction within the city limits, and making optimum use of available federal funds for housing and public facilities.

The Commission recognizes that Austin cannot isolate its planning activities only to its immediate area. The City must be fully committed to participation and leadership in strengthening regional comprehensive planning. The Goals Program participants spoke in strong support of this issue. A regional perspective must be maintained if planning is to be effective.

A commitment to the Directed Expansion and Inner-City Development alternative will allow the benefits of both environmental protection and a broad choice of development opportunities. It will allow for new development at the city's edges and encourage development within the city. It will allow development innovation and promote preservation of desirable existing areas.

The Planning Commission wishes to express its gratitude to the City staff, the Austin Tomorrow Ongoing Committee and the other City boards and commissions for their extensive efforts in the development of this plan.

The Planning Commission believes that the proposed *Austin Tomorrow Comprehensive Plan* as recommended will provide a sound growth management process and a viable set of development strategies.

Respectfully,

Miguel "Mike" Guerrero

Miguel Guerrero, Chairman
City Planning Commission

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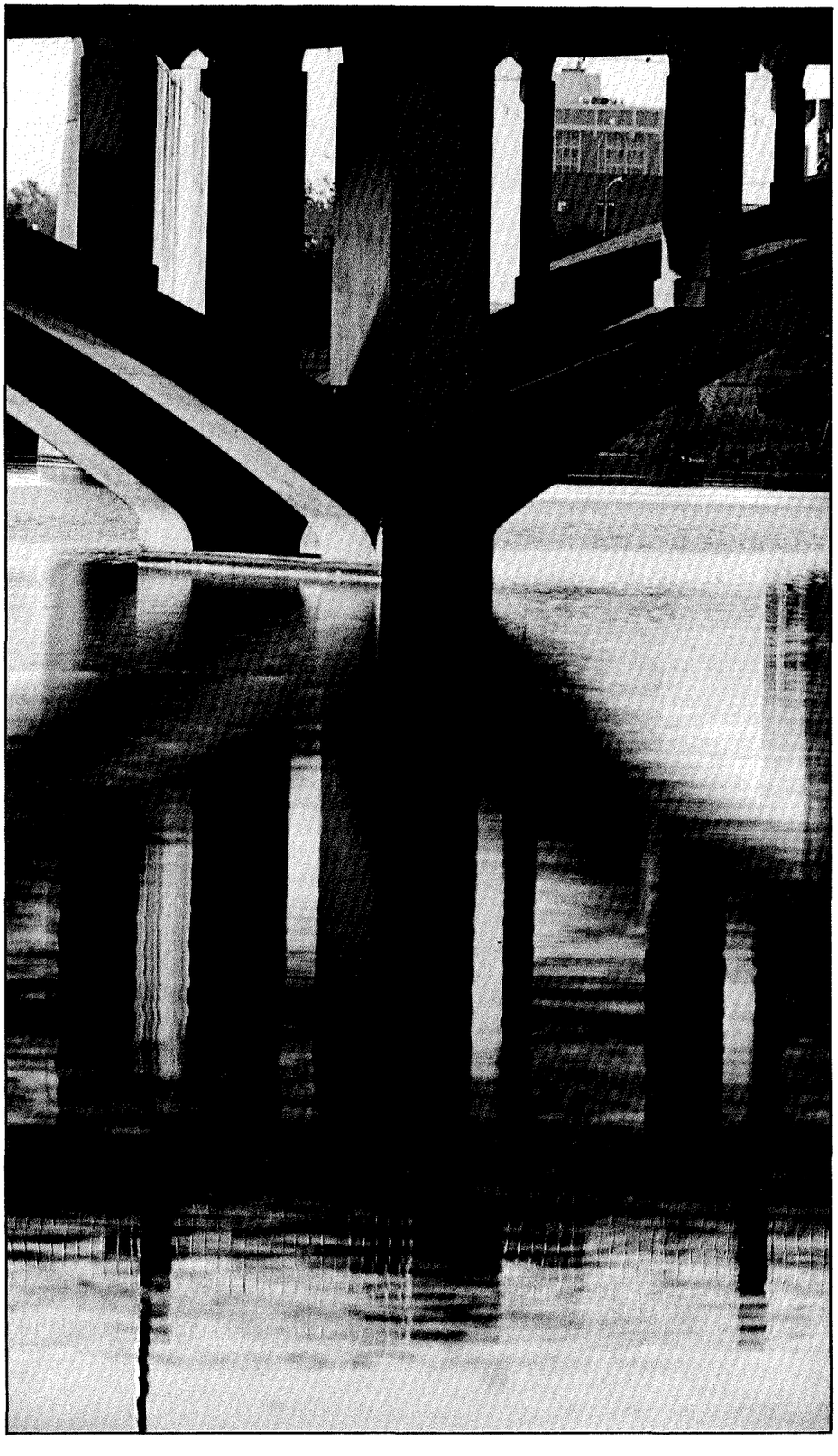


Each city possesses a spirit of its own — a reflection of the collective attitudes and aspirations of its citizens. The history of Austin shows that people here usually viewed their town on the Colorado River as special and distinct, a center of government, education and community in a splendid environmental setting. The outstanding beauty of the capital city is lauded by proud Texans everywhere, and many have chosen its free atmosphere and quieter pace over the competing features of large centers of finance and industry.

The attractions of Austin proved so great in recent years — to business and industry as well as individuals and families — that the 1970 Census identified the city as one of the fastest-growing in the country. A growth pattern had developed in Austin, an upward cycle of more jobs, more people and demand for more services. Meanwhile, citizens became alarmed that rapid economic and population expansion might threaten the special qualities that made Austin so attractive in the first place.

As the city grew at an increasing rate, the pressure of day-to-day decisions in government and business became more intense. Since 1970, numerous groups organized, forming effective lobbies to protect their neighborhoods from commercial encroachment and undesirable forms of redevelopment; the business community continued to support programs to attract clean, job-providing industries; and residents of the university area expanded their participation in government and public affairs in an attempt to preserve the quality of life in Austin. Citizens demonstrated their acute awareness of the effects on the community of daily decisions made by local government or made in the private sector and reviewed by local government.

In the past several years, Austin residents have indicated a strong desire for new ideas in planning and administration in order to support the community's well-known amenities. Evidence of this is seen in increased citizen participation in government decision-making. There is an emphasis on careful examination of priorities, which may be seen as a renewal of public sensitivity to Austin's special nature. There is substantial public support for a comprehensive planning program, organizing the elements and systems of the city to achieve the proper priorities. There is support for jobs and a healthy economy where the environment is not harmed and opportunities to people are equally distributed. People want a strong, effective city government, one that is fiscally responsible and provides maximum opportunity for citizen education and participation.

The Austin Tomorrow program was developed to coordinate new ideas identified by people as they attempted to set priorities and maintain community identity while trying to understand the effects of unexpected growth. The program was designed to revise the city's 1961 *Austin Development Plan* on the basis of sound, updated research and, in particular, goals and priorities of citizens participating in the planning process. The Austin Tomorrow program was developed by city planners, supported by the administration and brought into being by the City Council. It was made effective by the people of Austin who believed it critical that citizens and officials take a more thoughtful look at the long range development of the city.

Austin's *Comprehensive Plan* was selected as the vehicle for this effort because it is the planning tool which indicates how citizens and their government leaders want the community to develop. The plan itself is required by the City Charter, which specifies that one responsibility of the Planning Commission is to "make and amend a master plan for the physical development of the city." The plan is required to contain the Commission's "recommendations for growth, development and beautification of the city." It is to be forwarded by the Commission to the City Manager, who then submits it to the City Council for action. The Charter states further that no physical development in the city can be undertaken or authorized which is in conflict with the master plan unless the plan is duly amended as recommended by the Planning Commission and approved by the City Council.

By definition, such a plan must be comprehensive, general and long range. First, it should encompass all geographical parts of the community and metropolitan area and all elements effecting the city's physical development. Second, it should be a general statement of policies and proposals but should not specify operational details. Finally, the plan should look beyond the pressing day-to-day decisions to the community's greater long range goals.

The preparation of a plan is usually accompanied by research to provide information on the population, economy, existing land use and community objectives. The content of the 1961 *Austin Development Plan* consisted of three technical elements: the future public and private uses of land, necessary community facilities to meet future demands and a street or "circulation" plan. This followed the traditional master plan format. Public and private plans and procedures undertaken are normally reviewed and acted upon for conformance to the master plan.

Other documents used in local planning include the Zoning Ordinance and subdivision regulations. While the 1961 comprehensive plan indicates only broad categories of land use for general areas of the city, the Zoning Ordinance delineates exact boundaries and specifies detailed regulations on the conversion of raw land to developed land. Additional planning tools include the Capital Improvements Program and its accompanying Annual Budget. These financing instruments, and other

special studies, codes, ordinances and policies are guided by the *Comprehensive Plan* so that the plan's objectives may be achieved.

A significant percentage of the city's growth has occurred since the adoption of the 1961 *Austin Development Plan.* A document establishing updated, long-range, general policies was needed for the development of the community in a unified and coordinated way. The Austin Tomorrow program was designed to be executed through several key steps: city planners conducted a thorough research program to develop background information, citizens participated in identifying community objectives through a goals program and planners worked with participating citizens to convert the results of the goals program into the comprehensive plan. The plan will be implemented through the Capital Improvements Program, the Annual Budget and the revision of specific codes, ordinances and policies.

THE RESEARCH PROGRAM

Before revising the *Comprehensive Plan* it was necessary to learn in detail the changes occurring in the Austin area, including the quantity and quality of growth, the location of areas sensitive to development which require protection, municipal services presently available and services required for the future. An understanding of the nature of the changing city was necessary in order to determine reasonable alternatives for the future years.

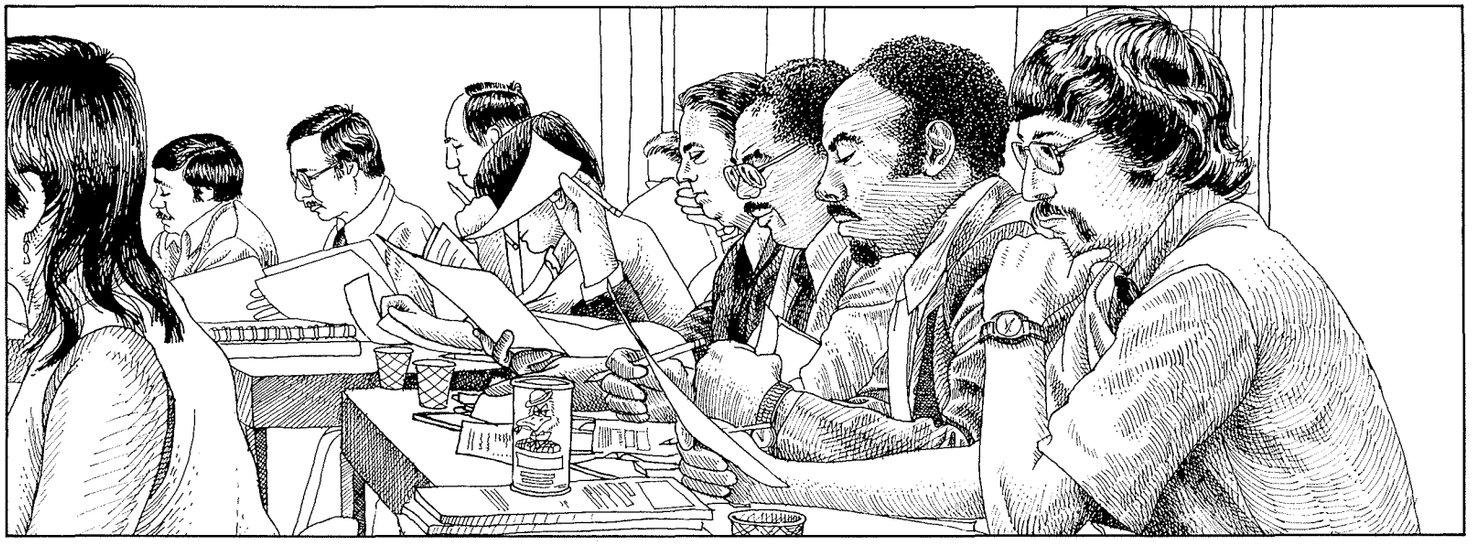
In 1973 the staff of the Planning Department produced the Austin Tomorrow *Interim Report,* summarizing results in eight major areas of study including economics, population, transportation, housing, the city's core area, neighborhoods, environment and land use. Between 1973 and 1975 all of these studies were published as separate documents. They consist of the broadest inventory yet conducted of the objective and factual changes which occurred in Austin between 1961 and 1975. The studies identify trends, such as economic and population shifts; the dilemma of older, established neighborhoods threatened by deterioration; changes and needs of the city's core area; and traffic increase in our rapidly growing community. Housing needs, the condition of Austin's environment and how the land is used are also discussed in detail.

Study of these documents is important to those who would participate in making policy decisions for the future management of the city. For this reason, the researchers who conducted the studies also wrote condensed summaries and were personally available as resources for citizens participating in the Goals Program. They worked closely with committees of the Goals Assembly to provide the expertise necessary for technical accuracy of the final report.

THE GOALS PROGRAM

On May 7, 1975, the citizens of Austin made an important presentation to their elected officials. At a special meeting of the City Council, members of the Austin Tomorrow Goals Assembly delivered the *Goals* report to the Mayor and Council members who had initiated the Goals Program to the newly-elected Mayor and Council. The new Council was the first with the opportunity to implement the Austin Tomorrow goals.

This presentation culminated two years of effort by approximately 3,500



AUSTIN TOMORROW GOALS ZONES

The Austin Tomorrow Goals Zones served as the geographical basis of representation for the Austin Tomorrow Goals Program. To assure broad citizen participation and representation, ten zones were created according to the following criteria:

Zones should be fairly equal in population.

Zone boundaries should recognize established neighborhoods and major natural features, while remaining as geographically compact as possible.

Zone representation should be balanced according to ethnicity, age, sex and occupation.

Goals Assembly members were appointed from each zone according to a statistical profile by the City Council. The Assembly was responsible for guiding the Goals Program and recruiting neighborhood representatives from each zone, who, in turn, organized and encouraged participation in neighborhood meetings. From these open neighborhood meetings the basic material for the *Comprehensive Plan* was taken: statements of problems and goals as perceived and expressed by Austin's citizens.

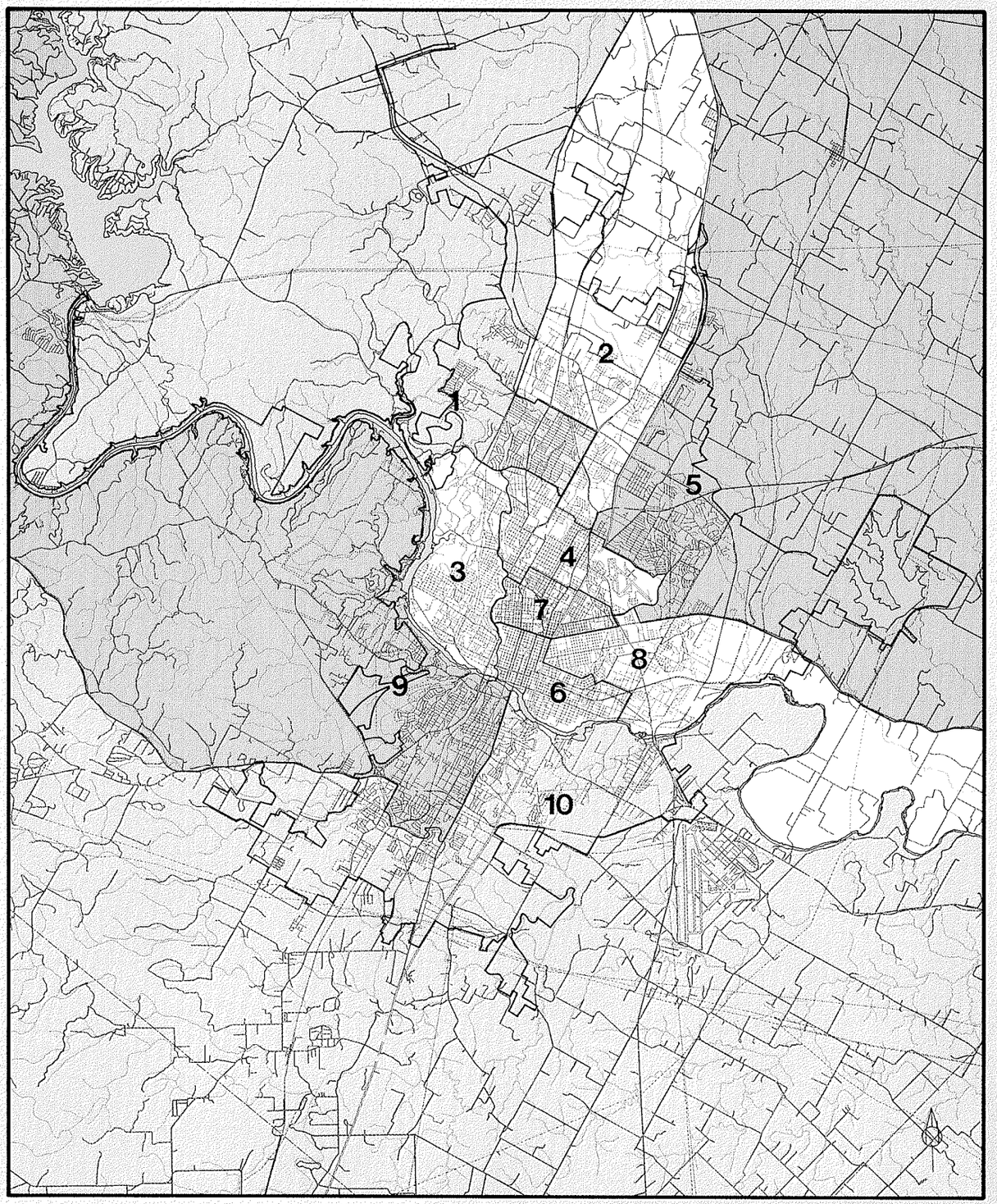


FIGURE 1-1

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

TABLE 1-1: DEMOGRAPHIC CHARACTERISTICS

DEMOGRAPHIC CHARACTERISTICS	GOALS ASSEMBLY	GOALS PROGRAM	CITY-WIDE
OCCUPATION			
Professional	48%	44%	18%
Sales	5%	5%	4%
Blue Collar & Service	5%	5%	21%
Clerical	7%	6%	13%
Student, College	13%	13%	17%
Student, High School	2%	4%	5%
Not in Work Force	20%	23%	22%
ETHNICITY			
Black	9%	6%	10%
Mexican-American	8%	7%	13%
Anglo	83%	83%	76%
Other	0%	4%	1%
SEX			
Male	61%	51%	48%
Female	39%	49%	52%

citizens to learn about the city* and to inform elected officials, in an organized and educated way, about suggested objectives for the city. The report was not a bland statement of support for the status quo, nor a mere cheerleading exercise in civic pride. When the people in the neighborhoods became involved in planning, they called for a shift in priorities in a spirit that was optimistic. These goals could be achieved, they said, and would be the foundation of the new *Comprehensive Plan*.

The City Council had first moved to create the Austin Tomorrow Goals Program in June of 1973. Their action was an innovation in the process of city planning — to involve as many people as possible in charting Austin's future. The traditional method had been for consultants or staff to develop a plan and present it to the community and City Council. Now the people were to be involved in the beginning stages of the process and would themselves identify city goals before any new plan was written. People representing all occupations, ethnic and social backgrounds were to be the driving force of Austin Tomorrow.

The program was carefully organized to encourage participation of a broad cross section of the community. As shown in Figure 1-1, the city was divided into ten geographic zones of approximately equal population. The zones were combinations of census tracts using US Census data for statistical profiles reflecting the occupation, ethnicity, sex and location of people living in each zone.

Meetings to set goals were organized in three phases of increasing citizen participation. In Phase I, the City Council appointed the Goals Assembly. Two hundred fifty citizens were selected according to a statistical profile and with equal representation from each zone. Approximately 170 of these citizens remained active throughout the program. They contributed hundreds of hours recruiting other participants, monitoring and directing the citizen involvement program, leading neighborhood meetings and preparing the Austin Tomorrow goals document.

Five hundred additional participants were recruited in Phase II from the neighborhood zones by members of the Goals Assembly. These neighborhood representatives played a key role in reaching other citizens on a personal and neighborly level. They publicized the program, encouraged their neighbors to take part and helped conduct the Phase III neighborhood meetings.

Phase III was the heart of the Goals Program, offering all residents of Austin the opportunity for involvement in the planning process. It consisted of fifty-six neighborhood meetings during February, March and April of 1974, in which more than 2,800 citizens participated. An important part of this phase of the program was an intensive campaign by Austin Tomorrow workers and City staff to inform the public about this chance to help plan the community. Leaflets and meeting notices were distributed in every neighborhood; school children delivered schedules and painted posters for some of the neighborhood meetings; speeches and slide presentations were presented to seventy-five civic service and church organizations by Planning Department staff; a sixteen-page Austin Tomorrow tabloid was published in all Austin newspapers; a monthly Planning Department Newsletter was mailed to more than 4,000 organizations and individuals; businesses distributed leaflets and government agencies printed meeting times in their employee newsletters; and the newspapers, television and radio stations donated public service announcements for several consecutive months. Thousands of Austin people attended neighborhood meetings, and many thousands more became familiar with the planning issues and procedures important to Austin's future.

*Throughout the *Comprehensive Plan*, City refers to the municipal government; city refers to the geographical area.

Each of the fifty-six meetings was held in a different Austin neighborhood, with at least five meetings in each of the ten zones. At each meeting, citizens worked in small discussion groups of eight or nine people and discussed one of nine topics: housing, neighborhoods, the core area, land use, transportation, economics, population, environment, or health and social services. Each group discussed its topic and by group consensus listed problems and goals in order of priority. Individuals then listed likes and dislikes about Austin, ranked items of concern related to planning and completed a demographic questionnaire. All responses were anonymous.

Approximately 3,500 citizens participated in all three phases. The Planning Department staff compiled the data collected from the participants, using a system that made it possible to trace each goal in every category back to the original statement and the meeting at which it occurred. Each goal statement was assigned a numerical score based upon the priority or rank given a statement and the number of people who ranked it. This scoring system made it possible in the final report to present a summary of the goals identified by citizens and show the relative importance, or priority, of each statement.

The Goals Assembly reconvened when the neighborhood meetings were over in May 1974. For one year the Assembly worked, assisted by Planning Department staff, to discharge its duty as assigned by the City Council. The members adopted rules, elected officers and worked many hours in committees to perform the task of translating the compiled information into the *Goals* report. The document is a statement of the problems and desires of citizens throughout Austin.

Austin Tomorrow goals data was organized by the Assembly into three main sections. The first is the identification of city-wide goals, presenting the broadest summarization of citizen response in the Goals Program. The second section contains topic reports, which include comprehensive reporting of citizens' problems and goals within the nine specific areas of concern. The third major section of the report consists of zone reports including issues of most importance in each of the ten geographic zones. Neither the Assembly nor the staff attempted to modify the basic concepts in the goals statements to make them technically perfect or free from conflicts. What is important is that the document accurately expresses the municipal priorities desired by the people of Austin.

THE AUSTIN TOMORROW ONGOING COMMITTEE

After the City Council received the *Goals* report in May, 1975, it appointed a committee to ensure continued citizen participation in the implementation of the stated goals. Following a plan recommended by the Executive Committee of the Goals Assembly, the makeup of the Ongoing Committee reflected a cross section of the city according to sex, ethnic representation and occupation. All were seasoned veterans of the Goals Assembly. The group included two members from each zone and a chairperson, plus the previous Assembly president and vice-president as ex-officio members.

The purpose of the Ongoing Committee was to help guide City government in the direction of citizens' goals. Its first objective was the official adoption of the *Goals* report by the City Council. The Committee therefore introduced the following resolution at a Council meeting on July 31, 1975.

Be it resolved that the Austin City Council:

I Recognizes the worthy participation by the many

citizens of Austin in the preparation of its *Goals* report;

II Accepts the report in the spirit in which it was presented and endorses it as a policy of the City Council;

III Directs the City Planning Commission and the Planning Department to use the report in the formulation of a master plan; and

IV Directs all City Departments, Boards and Commissions to use the report as a guide in their operations.

This resolution was enthusiastically supported and unanimously adopted by the City Council.

One of the Ongoing Committee's first decisions was to work closely with the City boards, commissions, and other groups which conduct substantial City business, influence Austin's development and play an important part in implementing Austin Tomorrow goals. For this purpose the Committee assigned members to attend meetings and report on the work of the Planning Commission, Parks Board, Charter Revision Committee, Environmental Board, Community Development Commission, Austin Transportation Study Committee and others. The Committee also developed a mechanism for an annual review of the important Capital Improvements Program, which specifies City funding for projects on a five-year plan basis.

In adopting the resolution of July 31, 1975, the City Council once again affirmed its intention that the new *Comprehensive Plan* would be based upon goals identified in the Austin Tomorrow program. One of the Ongoing Committee's key roles was therefore to work on an almost daily basis with the Planning Department staff who were converting the goals into the *Comprehensive Plan.*

TRANSLATING GOALS INTO THE PLAN

In the Summer and Fall of 1975, the City Manager and Planning Director initiated a cooperative plan writing procedure among City departments, with an emphasis on creative participation. Help, ideas and liaison staff were requested from thirty City department directors for work on eight planning elements: Economic Development; Environment; Government and Utility Services; Housing and Neighborhoods; Parks, Open Space, Leisure Facilities; Transportation and Urban Design. The eighth section, Health and Human Services, was included in the Goals recommendations, and is appropriately included in the *Austin Tomorrow Comprehensive Plan* because of the acute need for administrative and coordinative improvements communicated by Austin Tomorrow participants. Presented in Chapter 2, these planning elements are each organized as policies and objectives which lead to the accomplishment of goals identified by Austin Tomorrow participating citizens. Chapter 3 of the plan describes the typical process of urbanization, some of its implications for natural and constructed systems and proposes a neighborhood planning program. Chapter 4 outlines a process for urban growth management and provides a system of priority areas for Austin's future growth.

Members of the Planning Department staff functioned as project directors on each of the planning elements. The initial staff work consisted of ascertaining that the citizens' goals afforded a truly comprehensive base — one which encompassed all geographic parts of the community and all systems effecting the city's physical development. Project directors and staff from the contributing departments translated goals into sets of more specific objectives, and then designed policies for implementation. The process for establishing the comprehensive goals, objectives and policies was designed to produce a composite plan. The sections of Chapter 2 are valid statements alone but are more significant when considered as elements which fit together as a whole. They also relate as closely as possible to the Austin Tomorrow *Goals* report. Differences which appear are due either to restraints in law, technology or the fact that a few *Goals* report statements fall outside the control of City government. Many objectives, goals and policies are found directly in the *Goals* report, while others were expanded with additional information required to make them comprehensive in scope. Throughout the technical process of designing the *Comprehensive Plan,* the Austin Tomorrow Ongoing Committee reviewed all drafts for compatibility, completeness and support of citizens' goals. The objectives and policies were written as much as possible so that their accomplishment is measurable — they are intended to be monitored for progress.

The Urban Growth Management Process

A review of the city-wide goals of the Austin Tomorrow program shows clearly that Austin citizens are concerned about the destructive effects of continued urbanization on the neighborhoods and natural environment of the city and surrounding area. Citizens wish to develop land use patterns which protect neighborhoods, to increase open space and protect natural areas, to develop a zoning ordinance which is environmentally protective, to extend land use control beyond the city limits to environmentally sensitive areas, to control growth in the interest of quality and the environment, to preserve neighborhoods and historic landmarks and to end all forms of environmental pollution.

The growth management process presented in Chapter 4 describes a method of evaluating, influencing and monitoring the development decisions which effect the growth of the city. The purpose of the growth management process is to provide a formal analysis of the relationships among natural and urban resources. It also provides for a formal consideration of

urban sprawl and urban intensification and the resulting costs to society. The growth management process includes guidelines for directing growth away from areas of environmental sensitivity and toward those areas which are naturally more suitable for urban development.

Implementation and Accountability

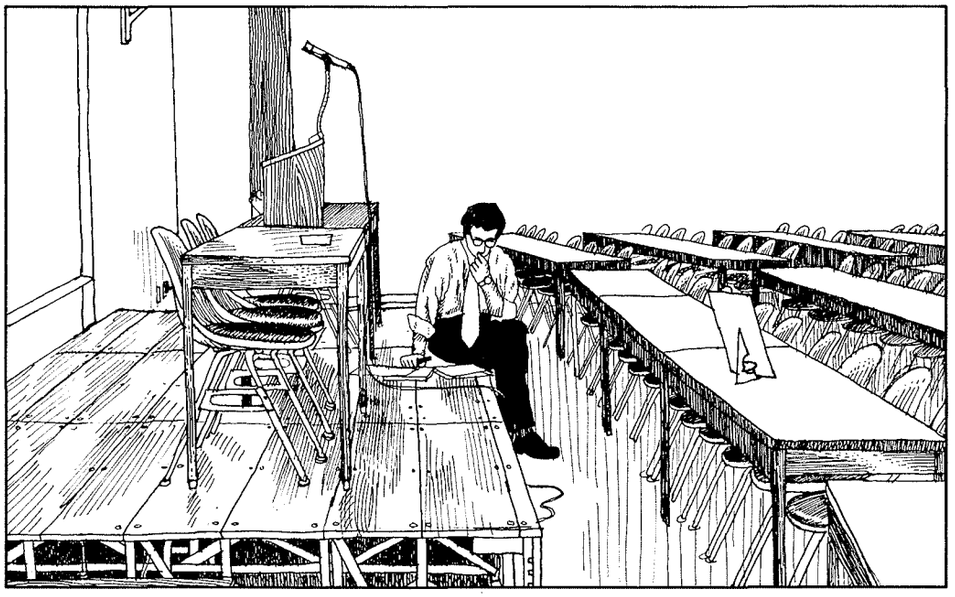
The first drafts of the four chapters of the plan were printed and submitted to the Planning Commission, Citizens Board of Natural Resources and Environmental Quality, Parks Board, Urban Transportation Commission and the Austin Tomorrow Ongoing Committee for review and comment. The plan was then forwarded to citizens' interest groups. After completion of work sessions and meetings by City Boards and Commissions, including additional recommendations, the plan was sent to the City Manager for submission to the City Council. The Council conducted public hearings and considered action on the Austin Tomorrow plan. As before, when citizens contributed in neighborhood meetings prior to the writing of the plan, they had an additional opportunity in public hearings to review it with elected officials.

The *Comprehensive Plan* is a projection into the future, and is necessary for protection of the community's natural and constructed resources, for improvements to meet foreseeable needs and as an expression of the collective will of Austin citizens regarding the future of the community. The future, however, is notoriously unpredictable. Changes may well occur in technology, population, energy supplies, social conditions and attitudes. At the same time, comprehensive plans are often altered, manipulated or ignored. The strength of the Austin Tomorrow program is in its flexibility to accomplish desirable changes while maintaining the priorities built in by citizens and planners. This can only be effected through continued support by citizens and, especially, a clear commitment to implementation by the city's elected leaders and administration.

How, then, will the Comprehensive Plan be implemented? Under the US Constitution, state and federal laws there are means by which the City can act as the major guide to its own development. These include zoning controls within the city limits, subdivision controls within the City's extraterritorial jurisdiction (ETJ), annexation, the Capital Improvements Program, the Annual Budget, City Codes, and the use of federal programs. Issues which do not fall within the City's authority include land use outside Austin's ETJ, and state and federal government activities. The municipal government is responsible for providing a set of guidelines, allowing private decisions to be made in the open market, and letting people use their property according to their constitutional rights and due process of law.

The *Comprehensive Plan* outlines goals, objectives and policies. The City Council adopted a policy of accountability when it acted on the new plan. This policy provides information to the citizens and the City Council at regular intervals showing progress made in implementing the plan and accomplishing its objectives. Accountability also means that accomplishment of the objectives will be made measurable as much as possible, so that the Council and public can accurately evaluate progress. Each City department or administrative officer responsible for a project should develop criteria that place accomplishment in measurable terms. As a project identified in the *Comprehensive Plan* is developed, performance indicators should be prepared and simultaneously presented as part of the recommendation to the City Council.

There is much that is new to Austin in this document. It is a plan which reflects the collective attitudes and aspirations of Austin citizens and which represents great public support for effective planning. Its future implementation offers continuing opportunities for participation by citizens, and through their participation the *Austin Tomorrow Comprehensive Plan* will support the distinctive spirit and qualities of Austin, Texas.



Goals, Objectives and Policies

Introduction 2

The goals, objectives and policies presented in Chapter 2 are the results of a collaboration between the citizens of Austin and the City staff, between lay people and professional planners. From 1974-1977 citizens from all over Austin participated in determining goals for the city during the Austin Tomorrow Goals Program. Although the City staff provided research and background material, the findings and recommendations are entirely the citizens'. The results were published in 1975 in the *Austin Tomorrow Goals* report and adopted by the City Council as the basis for the *Comprehensive Plan*. Chapter 2 presents the citizens' views in detail.

Discussions among the participants in the Austin Tomorrow Goals Program focused on nine designated topics which were later condensed into eight topics, or sections, of Chapter 2: Urban Design, Economic Development, Environmental Management, Government and Utility Services, Housing and Neighborhoods, Transportation Systems, and Health and Human Services. An introduction precedes each section and summarizes its primary goals. The goals, objectives and policies which follow contain the essence of the citizens' concerns. In this context, goals represent values, or desired results; objectives refer to intermediate stages in the attainment of the goals; and policies are guidelines for action leading to objectives and, ultimately, to goals. Goals, objectives and policies are often followed by brief commentaries for clarification and elaboration.

This chapter is significant because it represents a vision of Austin shared by many citizens. This vision is the foundation for the entire *Comprehensive Plan*, for the discussion of environmental development suitability in Chapter 3, and for the growth management policies that conclude the plan in Chapter 4. As such, it should be the basis for all Planning Commission and City Council decisions concerning the future of Austin.

Urban Design

Introduction

1

Urban design is concerned both with the development and management of the physical environment of Austin. This section represents a concerted effort to recognize the positive qualities of Austin, encourage the enhancement of those qualities and improve the living environment, where necessary. The overall objective is to provide general policy guidelines for development and redevelopment responding to issues related to the "design", "image", "character" and "form" of Austin. These are measurable in terms of quantity and quality and provide a means of cataloguing the current state of the environment, and guiding its future course.

The process which identifies "what Austin is" in terms of the above classifications should enable the public and private sectors of the city to determine what environmental and social qualities need to be retained, enhanced or included in development proposals. The process of urban design should synthesize various interests in the community.

The Urban Design section arises from the Austin Tomorrow Goals Program, and includes major concerns arrived at by community consensus. These represent a starting point which will eventually be expanded to include other concerns of the city as they arise.

The four goals are 1) to encourage development of Austin's urban environment in the manner most compatible with the natural environment; 2) to provide transportation facilities throughout the city which enhance neighborhoods and districts while facilitating safe, efficient movement of vehicles and pedestrians; 3) to encourage quality development of pedestrian facilities by giving greater emphasis to pedestrian environments in development proposals; and 4) to preserve the historical past of Austin by assuring that development and redevelopment proposals consider structures and areas of cultural, historical or architectural value.

GOAL 110.0

ASSURE THAT THE DEVELOPMENT OF THE URBAN ENVIRONMENT IS COMPATIBLE WITH THE UNIQUE NATURAL AND CONSTRUCTED FEATURES OF THE AUSTIN AREA.

The elements of Austin's physical form are generated by individual development actions. The resulting form is a product not necessarily compatible with the environment or reflective of the constructed elements of the community or its values. The concern of this goal is that isolated development proposals be compatible with the development of Austin in terms of form and size.

Objective 111.0

Ensure the compatibility between potential development and the existing natural environment.

Austin's natural environment includes such features as diverse topography; natural vegetation; natural habitats supporting a variety of wildlife; complex natural drainage systems; and stable climatic conditions supportive of the existing natural environment.

It is necessary to determine the type and location of these natural elements that make up the city. These elements are in some instances limited and not replaceable once they are destroyed. The identification and classification of these elements would enable designers or developers to modify their plans in a way that would be more compatible with the natural landscape of the city.

Policy 111.1

Establish special districts based on unique environmental features and apply development standards appropriate to each area.

The City should determine special development districts based on common environmental properties or development constraints. The identification and classification of unique and important features or districts should ensure compatible development based on these properties. Examples of the natural elements within the city that would affect development or establish special district limits are: (1) landscape and open space—wooded areas and other types of open space; (2) views and vistas—vantage points that provide identity and a means of orientation to the community; (3) water areas—natural open spaces such as creeks, streams, and rivers; (4) topography—change in the elevation of the natural landscape; and (5) climatic conditions—temperature, light, precipitation, sun and wind.

Policy 111.2

Protect visually prominent areas and corridors from inappropriate development activities.

Identification, analysis and mapping of the unique visual features and landmarks in the community should be conducted. Visually prominent areas, features and corridors should be delineated and all development and redevelopment proposals should be reviewed to ensure that they preserve and enhance these valuable community assets.

Policy 111.3

Encourage site planning techniques and building form arrangements that are tolerant of natural topographic conditions.

The review process for development proposals should include standards that encourage structural designs which do not require extensive manipulation of the site.

Cut and fill operations which influence surface water runoff should be reduced in order to retain vital topsoil.

Policy 111.4

Encourage development to maximize the use of existing natural vegetation and regulate the removal of significant trees and valuable vegetation.

The City should regulate the removal of trees and vegetation on all City-owned property and review all proposed municipal projects to ensure against the loss of existing natural vegetation.

Policy 111.5

Encourage public and private development to replace significant trees and vegetation removed during construction.

This policy should result in greater care to existing vegetation during a project's physical development in order to maintain as much of the existing natural character of a site as possible.

Policy 111.6

Formulate design techniques and construction guidelines for development in proximity to water resources and floodplains.

This policy should incorporate, combine and clarify existing standards, ordinances and agencies. This will provide optimum development standards suitable to water resource areas and protection of water quality and natural resources during the construction process.

Objective 112.0

Monitor development to ensure a quality environment.

Policy 112.1

Develop urban design capabilities within City planning agencies to actively develop urban design codes, ordinances and policies, and review development proposals to encourage design quality based on public desires.

The Urban Design section of the *Comprehensive Plan* needs to be reinforced with policies and strategies based on a process involving input from the community and organization from the City. Urban designing occurs throughout the community, however inadvertently, and it is an integral part of the planning process. The process needs to be presented, and citizens need to be made aware of urban development and how it affects their lives.

Policy 112.2

Evaluate the effects of development on the image, character and physical characteristics of Austin.

The criteria for review, as they affect Austin's natural and constructed environment, could be based on the following activities:

(1) formulating city-wide design objectives resulting from participation of all sectors of the community, private and public; (2) developing distinct or specific project design objectives and controls in the city-wide context; (3) providing staff for consultation with developers to negotiate potential alternatives; (4) providing staff to coordinate with other affected agencies on special issues; and (5) using special consultants to resolve conflicts.

This process should help determine the impact of development proposals and completed projects by answering these questions:
Will there be a gain or loss of environmental characteristics? Does a real need exist and is the priority valid according to systematic growth policies? What are the costs to the community and who pays?

Policy 112.3

Develop a public information program which promotes recognition and appreciation of those natural, unique and constructed elements considered valuable to the community.

The natural elements and constructed features of the community that promote a feeling of pride and unity should be given special recognition. The attention given to these features would discourage their destruction by insensitive development.

GOAL 120.0

PROTECT AND IMPROVE THE DESIRABLE IMAGE AND CHARACTER OF NEIGHBORHOODS AND DISTRICTS.

Objective 121.0

Assure that development is responsive to the established identity of areas and districts.

Policy 121.1

Establish special design districts within the city.

The requirement for special districts would be based on the existence of some unifying feature of unique interest to the community. Some special design districts could be: areas along major thoroughfares, areas abutting major institutions and open space, major parks and parkways, areas fronting major waterways and tributaries, the Central Business District, areas abutting transportation terminals and major commercial districts.

Policy 121.2

Encourage the use of building materials that respect and improve the integrity of neighborhoods and districts.

New development can enhance and preserve Austin's distinctive qualities if it is designed with consideration for the prevailing design character and effect on the surrounding environment.

Policy 121.3

Encourage a continuing awareness of the long term effects of growth upon the physical form of the city.

The process of urban development results from a complex relationship between public and private decisions over a period of time. Maintaining citizen-government interaction on growth policies should make it possible to choose the physical form of the city based on current needs and trends.

Policy 121.4

Recognize the natural boundaries of separate or distinct districts and promote their harmonious connection.

Visually prominent features such as extremes in topography, water areas, trees and roadways are natural boundaries between districts and neighborhoods. The positive effects of district boundaries should be emphasized in design decisions affecting visually prominent features such as new roadways and large scale landscaping. Connection between districts and facilities should be improved, with special attention given to the possibilities for landscaped pathways that would provide alternative visual experiences as one moves about the city.

Objective 122.0

Ensure that potential development or redevelopment of a specific area is compatible with the image and character of the area or its surroundings.

The objective is to determine which visual characteristics provide a sense of identity and structure to both the city as a whole and its distinct parts. Image and character elements would be classified by a process that would:

(1) determine the existing shape of the city; (2) identify and analyze the size of the existing natural and urban physical elements; (3) analyze the mixture of sizes to determine homogeneity or heterogeneity; (4) determine the density of areas; and (5) determine the shape of the city's sub-areas.

Policy 122.1

Adopt design criteria for proposed development to assess its impact on the image, form and character of the city.

Quality development that enhances the established character of Austin's unique natural and constructed features should be encouraged on a community-wide level. Design criteria would result from a consensus of the community based on a visual survey of the city.

A visual survey would provide the means of identifying the basic components of the city that produce its form, appearance, composition, problems and potential environments. The analysis of the survey would provide insight into possible ways Austin could maximize its resources through the process of urban design.

Application of the analysis should determine which areas of the city need reinforcement in terms of number, quality and type of image elements. Classification of the elements that produce an image for Austin are:

(1) paths—circulation routes; (2) nodes—centers of activities; (3) edges—termination of districts; (4) landmarks—prominent visual features; (5) districts—distinct areas of the city; (6) generators—people attractors; and (7) linkage elements—connections between areas and people.

Policy 122.2

Promote building forms that relate to the size, shape and character of the surrounding development.

Buildings and structures that stand out in excess of their public importance detract from the character of surrounding development. Height and bulk limitations in special districts have been established and successfully incorporated into comprehensive plans in other municipalities.

Policy 122.3

Provide greater flexibility in the zoning process to facilitate design innovation.

Revision of the elements of the Zoning Ordinance which inhibit design potential is essential in achieving high quality design of buildings and subdivisions.

Objective 123.0

Reduce the negative effects of automobile traffic in neighborhood environments.

Policy 123.1

Protect residential areas from excessive levels of noise pollution and physical danger from traffic.

A plan to protect residential areas should be developed that would prevent or discourage heavy, fast and through traffic on residential streets and place such traffic on arterial streets where the impact on residential areas would be less disruptive. The speed and volume of traffic should be limited through various methods: discontinuing streets to divert traffic from a straight line, narrowing intersections and streets in special districts, creating the appearance of narrowing through landscaping techniques, and prohibiting visual access from arterial streets by signs and barriers. These changes should result in residential streets with a predominantly pedestrian, rather than automobile, character.

Policy 123.2

Provide adequate buffering for residential neighborhoods against the effects of high traffic volumes.

When heavy traffic volumes must go through residential areas, adequate care should be taken to ensure against disrupting existing environments as much as possible. Incorporation of landscaping techniques, screening walls, changes in topography and building setbacks all provide substantial buffering against undesirable effects.

GOAL 130.0

IMPROVE THE RELATIONSHIP BETWEEN SURFACE TRANSPORTATION NETWORKS AND THEIR ADJACENT ENVIRONMENTS.

Transportation facilities should be used to unify urban development patterns, be compatible with the hills and valleys and provide access to visually prominent areas and open space. Transportation systems should accommodate the movement of people and join the diverse districts of the city in the most desirable manner.

URBAN DESIGN

Objective 131.0 **Ensure that transportation networks emphasize desirable urban development patterns.**

Transportation systems establish urban patterns and provide organization and a sense of place to the community. These systems should also provide travelers with an awareness of the physical organization of the community.

Policy 131.1 Encourage transportation patterns that reinforce the image and identity of distinct areas and districts.

Policy 131.2 Develop a city-wide plan for street landscaping to indicate the relative importance of streets.

Once the purposes of transportation facilities have been established, street features should be designed to express those purposes and make the entire system understandable to the traveler. A relatively easy element that can be adjusted to the street system is landscaping. A landscaping plan should be developed that indicates the relative importance of streets by the degree of formality of tree planting and the species and size of the trees.

In addition to recognizing differences in transportation functions, the plan would also recognize the width and visual importance of certain streets, the special nature of distinct activities, and the need for screening or buffering of residential uses along streets carrying heavy traffic. Special consideration should be given to certain features such as major intersections, open space and important views in the design of transportation facilities.

Policy 131.3 Develop a city-wide plan for street lighting to facilitate clear, safe and efficient vehicular and pedestrian movement, and aid crime control.

The design and placement of street lighting should reflect the intended use of the facility. Intensity, hue, source, location and placement system should be coordinated with street design and adjacent usages to optimize clarity of function.

Policy 131.4 Improve the ease of movement along transportation systems and support facilities.

Many improvements can be made in street areas and their surroundings to increase the ease and safety of travel. Once such improvements have been made, adequate maintenance is of equal importance. Among the least difficult improvements would be development of a better system of directional signs, instructions, messages, symbols, graphic design and sign placement.

Although trafficway signs should be improved, the purpose and direction of traffic networks should also be made as clear as possible through design of the networks themselves. The roadway should be consistent in width and materials, with channels separated by islands and dividers, where possible, and changes of direction made distinct. At intersections, the differences in importance and function of the intersecting streets should be made visually clear by differences in roadway width, landscaping and lighting.

The number of streets intersecting at any one point should be minimized, and signs and traffic control devices should be adequate to indicate the movements permitted in all traffic lanes. The roadway environment should be simplified and made attractive through

screening of distracting and unsightly elements by landscaping, walls and buildings. The clutter of wires, signs and disordered development should be reduced.

Conflict between unnecessary private signs and street directional signs should be avoided.

Objective 132.0

Ensure the visual quality of transportation networks and their support facilities.

The scope of transportation planning, design and implementation should be expanded to include consideration of types of material used, amount of detail desired and appropriate form needed to convey harmony between the system and its environment.

Policy 132.1

Preserve the visibility of unique areas and other points for orientation.

The ability to see one's destination and other points of orientation while traveling through the city is an important product of the urban pattern.

Design and determination of street placement, the control of land uses and building types along streets should take these special features into account. Views from streets and other public areas should be preserved, created and improved where they include water, open spaces, large buildings or other major features of the city. Entrance views to the city and to districts are of special concern in this respect, as are lateral downhill views that show a panorama or corridor with prominent features.

Policy 132.2

Remove unsightly and cluttering elements from street right-of-way.

Clutter is produced by unplanned elements in street right-of-way. The placement of overhead wires underground should continue at the most rapid pace possible. Every other element in street areas, including public signs, should be examined with a view toward improvement of design and elimination of these unnecessary elements to improve visual clarity.

GOAL 140.0

IMPROVE EXISTING PEDESTRIAN ENVIRONMENTS AND ADEQUATELY PROVIDE FOR PEDESTRIAN AMENITIES IN PROPOSED URBAN DEVELOPMENT.

Pedestrian environments are classified into two systems, movement and non-movement. Movement systems should provide the linking elements between the pedestrian nodes or non-movement systems. Incomplete access to either system causes a feeling of incohesiveness, unsafe pedestrian movement and unclear priority between transportation systems. Policies should be adopted that stabilize and improve the appearance and safety of pedestrian facilities and increase the opportunity for recreation.

Objective 141.0

Assure that new development is responsive to pedestrian needs.

The concern of this objective is to assure that added consideration is given to the pedestrian environment in development or redevelopment proposals.

Policy 141.1

Encourage or require the provision of recreational or open space in private development.

Open space should be provided in large developments, especially in areas of high population and building density. In the downtown area, well designed plazas with public access and good exposure to sunlight serve this function. Some of the recreation needs of occupants in apartment developments should be satisfied on the site itself, or through joint use of space by several properties in the block.

Policy 141.2

Encourage development that provides human scale and interest to pedestrian areas while maintaining an optimum level of safety, security, convenience and comfort.

The design and development of pedestrian environments should be scaled to their surrounding environments. The quantity and quality of pedestrian facilities should also be determined by their location. As the physical, psychological, and visual experience changes from one area to another, so must the pedestrian atmosphere change. Accommodating changes in the environment should not preclude basic concerns such as the reduction of pedestrian-vehicle conflicts. Security can be increased through observation by pedestrians and police. Convenience may be improved by relocating and reallocating pedestrian facilities.

Objective 142.0

Assure the retention of the positive characteristics of pedestrian environments.

Many of the neighborhoods of the city offer pleasant and exciting environments to residents, while others have experienced physical decline and less than full utilization. Ensuring the desired quality and well-being of the community should begin by retaining those characteristics which enhance pedestrian environments. No other single element contributes to the pedestrian environment more than trees.

Policy 142.1

Recognize, protect and reinforce existing pedestrian environments.

Existing pedestrian features should be preserved and integrated with other elements of the urban environment.

The identification of pedestrian elements in neighborhoods makes it possible to utilize them in the design of urban systems. Protecting these environments assures their quality and prevents intrusion upon their space by other systems. Increasing the sense of place in pedestrian environments may be accomplished by using design elements such as different materials, textures and form to enhance the identity and character of the surrounding environments.

Policy 142.2

Develop a community-wide plan that would ensure safe and convenient access to recreational space.

The basic concern of the plan would be to ensure accessibility to recreational space for all citizens. Some space should be within walking distance of every dwelling, and in more densely developed areas some sitting and play space should be available in nearly every area. Larger facilities which accommodate more people should be easily accessible by marked transportation routes, separated walkways and bicycle paths.

Policy 142.3

Provide adequate maintenance for pedestrian areas to encourage their use.

Unsightly facilities caused by lack of maintenance can detract from the enjoyment or prevent utilization of designated areas. A maintenance program should include equal commitment from the public and private sectors of the community to provide or upgrade designated areas.

GOAL 150.0

PRESERVE THOSE ELEMENTS WHICH REFLECT THE VARIED HISTORICAL, ARCHITECTURAL AND CULTURAL INHERITANCE OF AUSTIN.

The preservation of a considerable portion of such landmarks and districts as evidence of the rich inheritance of the city is desirable for public education, enjoyment and general welfare of Austin citizens and the attraction of tourists, with attendant economic benefits.

Objective 151.0

Assure the protection of notable landmarks and areas of historic, architectural or aesthetic value.

Policy 151.1

Expand the City's effort to identify and recognize important structures, sites and districts that represent Austin's heritage and character.

The program of official designation should continue to be developed and implemented to encourage community awareness and expansion of preservation efforts in the future.

Policy 151.2

Review and revise codes which inhibit the preservation, restoration, and use of designated landmarks and areas.

Analyze federal, state, county and City codes, policies or laws which affect the protection, use and preservation of historically designated properties and introduce proposals to increase their effectiveness.

Policy 151.3

Provide incentives for property owners that would encourage use of designated landmarks and areas.

A program for financial, professional or skilled assistance should be adopted and implemented to encourage greater use of landmark properties.

Objective 152.0

Assure the retention of the character of designated historic areas and landmarks.

The guidelines and recommended procedures applied to the restoration of designated landmarks and areas should also apply to development and redevelopment proposals in these areas. The result should be a more compatible development between the existing character of deemed historical areas and new development proposals.

URBAN DESIGN

Policy 152.1	Formulate design guidelines that enhance restoration efforts.	
	Policies which affect access to the property, approach views, signs, traffic patterns and other urban elements	should be investigated, reviewed and implemented to enhance significant historic features.
Policy 152.2	Promote harmony in the visual relationship and physical transition between new and old structures.	
	The design of new buildings that are located near historically designated structures or areas should be	modified to prevent distraction from the importance of these community elements.

Economic Development

2

Introduction

Economic development in Austin should involve the participation of a broad section of citizens, both from the standpoint of determining economic directions, and of enjoying economic benefits. To achieve these ends, four primary issues were developed in the Goals Program: management of urban and economic growth; employment; preservation and improvement of the natural and cultural environment; and municipal fiscal stability. Performance standards for the above goals should be defined. Methods of monitoring, quantifying and reporting the effects of the City's efforts should be developed to assure that these issues are correctly addressed.

GOAL 210.0

AUSTIN'S ECONOMY SHOULD PROVIDE A STABLE, HIGH LEVEL OF EMPLOYMENT AND FULLY UTILIZE HUMAN RESOURCES WHILE MAINTAINING NATURAL AND CULTURAL PRESERVATION.

The objectives and policies presented here conclude that an economic development process is often necessarily one of balancing or trading off goals which are traditionally exclusive. It is necessary, therefore, that the process be conducted in the public sphere with community participation. Municipal governments have traditionally had limited ability to control local economic events. If an urban growth management program is to be used to reach goals of stability, low unemployment and environmental quality, it must have jointly acceptable performances and tests for local economic development.

The following objectives and policies are intended to provide the mechanisms and directions necessary to assure that future economic development is consistent with community values.

Objective 211.0

Develop a municipal economic policy that is consistent with the community's desire to manage growth and its effects.

The City should provide an appropriate forum with adequate information for public examination and continuous review of the issues surrounding the formulation of municipal economic policy. This forum should be broadly representative of the city's population.

Policy 211.1

Evaluate and report on the status and trend of the local economy with particular emphasis given to the impact of existing and proposed municipal policies upon economic growth and stability.

Several private and public organizations are engaged in monitoring relevant local economic variables. Information from these sources should be supplemented where necessary and implications for the local economy determined. City staff should use the best fiscal and economic analysis techniques. National economic events should not be ignored, since they will eventually affect Austin through variations in national demand for locally produced goods and services and through fluctuations in the local money markets. This information should be presented in the public forum.

Policy 211.2

Evaluate the potential impacts of migration, employment and per capita income arising from specific cases of proposed industrial, or more generally, economic growth.

It is very important to examine the characteristics of a potential new firm. The effects on employment, the long run stability of employment, per capita income and interindustry relationships may vary greatly between industries. The short and long run results of acquiring a new industry must be carefully examined if economic health is to be maintained. Consideration should be given to the wage and skill levels of a proposed industry's employees for compatibility with Austin and regional needs.

Policy 211.3

Estimate the fiscal impact on City of Austin facilities and services.

In the case of a large or significant development, at least, an examination of the fiscal impact on the City should be undertaken. Fiscal impact, while important, must be considered in the overall context of economic and environmental effects.

Objective 212.0

Anticipate and control the environmental impact of economic growth.

Recent industrial growth has been characterized by very low levels of direct environmental pollution. Indirectly, however, any increase in economic activity, employment and population leads to pressures affecting the environment, if it is not wisely managed.

Urban growth fueled by economic expansion is expending more and more of the natural features which contribute so greatly to the quality of life in Austin. Air and water pollution are becoming more frequently visible. Residential developments are encroaching upon the most valuable and precarious watersheds and natural areas. Economic growth and prosperity should not be enjoyed at the cost of environmental degradation.

A moderate, healthy rate of economic expansion should be attained without destruction of the many natural features which are so greatly valued. Careful attention should be paid to primary and secondary economic factors through the application of rigorous environmental, economic and fiscal performance criteria. These should permit adequate growth in job opportunities while protecting those community features which make Austin a desirable place to live.

Policy 212.1

Undertake careful assessment of the possible direct and indirect environmental impact of economic development.

A relatively complete understanding of the direct and indirect environmental impacts of economic development is required before the community can intelligently participate in an evaluation of proposed development. It is important, therefore, that the results of such analysis be presented to the public in a straightforward, understandable manner.

Policy 212.2

Design, adopt and enforce standards which would require new industries or businesses to meet specific environmental impact criteria.

Such standards should be quantified to the greatest extent possible and effectively enforced. These standards should be codified in subdivision, zoning and various environmental impact ordinances. It is important that these controls be extended as far as possible outside Austin's city limits to ensure their effectiveness.

Policy 212.3

Environmental impact analysis of economic development should include the effects of the construction required to provide utility and transportation facilities.

Environmental impacts resulting from public facility construction have not in the past been given enough attention. In the future such attention should include an examination of (a) population carrying capacity, (b) location and patterning of service nodes, and the time-distance relationships within the immediate locality and throughout the total urban environment, and (c) the direct destructive or reconstructive impact on the natural and cultural environment.

Objective 213.0 **Encourage full employment of all segments of Austin's population.**

This objective has two aspects. First, the frequency and magnitude of periodic increases in unemployment should be kept as low as possible. The historical immunity of the Austin economy from the employment fluctuations associated with the national business cycle should be maintained. Second, the growth rate of employment opportunities should be high enough to provide jobs for all Austin residents who seek them, but not high enough to stimulate the in-migration of job seekers, or to result in growth which would be damaging to the environment.

Policy 213.1 Evaluate proposed developments in terms of their potential impact on local economic stability.

Industries which tend to maintain the historical insulation of the local economy from the national business cycle should be regarded more favorably than industries which export durable goods to the national market. These are the sort of specific considerations which should be included when evaluating the stabilizing effect of new industry.

Policy 213.2 Attention should also be given to interindustry relationships in assessing the long-term desirability of proposed industries.

Those industries which would create strong interindustry ties in the local economy and which would be very sensitive to the national business cycle would tend to increase cyclical unemployment in the local economy. On the other hand, these industries would also exert strong job-creating forces during periods of national economic resurgence.

Policy 213.3 Occupational requirements of proposed industries should correspond to the occupational characteristics of the local unemployed labor force.

This policy reflects a strong preference to provide jobs for unemployed and underemployed Austin residents rather than to stimulate in-migration. Industries with corresponding requirements should be viewed more favorably than industries which would depend upon in-migration to satisfy their labor requirements.

Policy 213.4

Growth of employment in state agencies should be projected and evaluated in order that the community impact of this growth may be known and incorporated into the formulation of economic development policy.

Employment in state government has been growing at a high rate nationally and in Texas. If this trend continues State government will create many new jobs in Austin in the future. The lack of a centralized personnel management system for State agencies makes evaluation of this growth difficult, but an attempt should be made to continually monitor this vigorous source of growth as well as assess its impacts. The current tendency to decentralize State employment should be evaluated.

Objective 214.0

Reduce the number of economically disadvantaged persons through greater utilization of human resources.

The relative affluence of most Austin citizens often overshadows the persistent problem of inadequate incomes for some. Low incomes are often attributable to insufficient or inappropriate education and skill attainment. Readily accessible educational and job training services should be provided to those in need. This is a more difficult task than is usually assumed. A very substantial undertaking in this area will be required to make a significant impact on unemployment and underemployment resulting from insufficient skill and educational levels.

Policy 214.1

Existing manpower training programs should be continued, expanded and their effectiveness measured.

For instance, the City of Austin administers a federally funded manpower training program designed to provide job training to all eligible applicants in the Austih area. This program should be continued. Additional funding should be sought.

Policy 214.2

Encourage proposed new industries to participate in job training programs and seek greater participation from State agencies.

Participation in job training programs should be considered in evaluating the desirability of proposed developments. Firms which have low skill level entrance requirements should employ and train underskilled, unemployed Austin residents to the greatest extent possible. These programs should be designed to allow employees to increase their job skills.

Policy 214.3

Seek federal and private resources to establish a fund for minority economic development loans. These loans should be supplemented by a business management assistance program.

	Potential minority entrepreneurship should be encouraged by facilitating small business loans. Business	administration assistance could be provided by student volunteers and retired businessmen.
Policy 214.4	Employment services should be made more effective and located in or near low income neighborhoods. Decentralization of all appropriate services should continue. Transportation for the physically and financially	disadvantaged should be improved.
Objective 215.0	**Provide relief from the constraints of low incomes through innovative utilization of existing public resources and services.** Often many persons cannot hope to escape the burden of poverty through skill development, especially the elderly and large families without multiple wage earners. Federal welfare assistance may not prove adequate to provide a standard of living which	facilitates wholesome human development. For these reasons, the City should make every attempt to find underutilized municipal facilities which may be made available in constructive ways to Austin's disadvantaged citizens.
Policy 215.1	Job opportunities for low skill, low income persons should be made easily accessible through inexpensive public and/or private mass transportation. Underskilled persons face many barriers to employment but accessibility is one that can be	resolved with relative ease through the provision of an adequate, inexpensive mass transportation system.
Policy 215.2	Appropriate municipal facilities and properties should be made available for various community purposes. Undeveloped municipal property in low income neighborhoods could be made available for such purposes as community gardens. A community food	marketing cooperative could be established to augment community gardens.
Policy 215.3	The utility rate structure should be made less regressive to cushion the impact of rising fuel costs on disadvantaged persons and to encourage conservation. For a discussion of the utility rate structure see "Government and Utilities", Chapter 2, Section 4.	

Policy 215.4	Utility services should not be terminated for nonpayment in the case of very disadvantaged households. The City should refer such cases to appropriate public and private social organizations and mutually develop	a schedule of extended repayment.
Objective 216.0	**Continue expansion of economic opportunity through the elimination of racial, ethnic and sexual discrimination.**	
Policy 216.1	Continue implementation of the five-year Affirmative Action Plan of the City of Austin. The City's commitment to equal employment opportunity has been reaffirmed through the adoption of policies designed to assure that the municipal government sets a proper example for the community to	follow. The municipal administration should persist in efforts to achieve the goals set forth in the Affirmative Action Plan. The effect of this effort should be monitored.
Policy 216.2	Continue enforcement of the Equal Employment Opportunity Ordinance by the City of Austin. The City has adopted an Equal Employment Opportunity Ordinance designed to further Austin residents' efforts to obtain employment without regard to race, sex, religion, national origin or physical	handicap. This ordinance parallels the Civil Rights Act of 1964, as amended. It recognizes the responsibility of municipal government to prevent illegal discrimination.
Policy 216.3	Assure that appointments to all boards and commissions are representative of the entire community. The general public interest should be adequately represented on boards and commissions.	

Environmental Management

3

Introduction

Within the context of this plan, environmental management refers to the monitoring and regulation of society's impacts on natural physical elements. The environmental features of the Austin area which are deemed to be of public value by the community should be protected by the City.

The application of adequate and proper land use regulations remains the most important single instrument of locally administered environmental protection. The fundamental premise to be incorporated into these regulations is that the urban and suburban development of land should be restricted in areas with limited ability to absorb urbanization without severe environmental degradation, and in instances where plans for development disregard environmental constraints.

GOAL 310.0

PRESERVE LARGE AMOUNTS OF OPEN SPACE AND ASSURE THAT THE MOST SUITABLE NATURAL AREAS ARE SO-RESERVED.

Open space is defined as land which is neither occupied by private lots nor dedicated as public streets. Open space must be defined differently according to its proximity to urbanization. The concept of open space outside the urbanized area includes private lands. Its preservation is aided by a compact urban form and the retardation of urban sprawl. Open space within the city proper must be defined as common land; the term should not refer to undeveloped pockets of private land. The reservation of ample amounts of open space does check, to some extent, gross population densities within the city. This coincidental effect, however, is not considered adequate to place the goal in direct conflict with the density considerations of "Government and Utilities", Chapter 2, Section 4.

Objective 311.0

Discourage development in the areas of greatest environmental or agricultural value.

The determination of high environmental value is dependent on public goals and public opinions. Environmental value may incorporate such features as lush or mature vegetation; particularly mature trees; habitats capable of supporting varied wildlife; interesting geologic features; interesting topographic relief; natural drainage waterways and their environs; water quality; water recharge to aquifers; and the potential for erosion, as in areas of steep slope. Agricultural value refers to the capabilities of the land for field crop use.

Policy 311.1

City policies concerning utility extension and annexation should include the consideration of environmental value.

Consequently, these policies should be used to discourage development in areas of high value while encouraging development in more appropriate locations. Large scale decisions involving creek watersheds or other large areas should, therefore, be influenced.

Policy 311.2

Require impact assessments for all major extensions of utilities and roads.

All extensions of utilities and roads should be analyzed according to their direct and indirect effects on the environment and land use. Public and social benefits must be weighed against public and social costs. This should particularly apply to all Capital Improvements Program projects.

Policy 311.3

Direct utility expansion away from areas of high resource value.

A growth management policy should determine areas in which growth will be facilitated, and areas where growth will be discouraged. This policy should be based, to a large degree, on the preservation of natural resources with high public value.

Policy 311.4

Investigate the use of tax policies to encourage land use of low intensities on certain lands with high environmental value.

In order to delay development of certain important natural areas, the City should consider utilizing some form of tax assessment based more on use value than speculative market value. Tax relief is important because increased taxes due to surrounding, rising market values are a deterrent to the retention of undeveloped land.

Policy 311.5

Create special districts, based on environmental characteristics, and apply appropriate development requirements.

Travis County should be divided into several large districts according to common environmental characteristics or constraints, engineering properties or water resources. Subdivision requirements should vary accordingly from district to district. Special overlay districts have been successfully coupled with subdivision controls in other municipalities. The use of overlay districts for each regulated special constraint provides alternatives, and the concept should be incorporated in subdivision regulations.

Objective 312.0

Place important natural areas in the public domain.

Regulation through use of the City's police power cannot always achieve the public interest and may create too great a burden on private landowners. The acquisition of property in fee simple, or the purchase of certain property rights, such as easements, may be the best alternative.

Policy 312.1

Purchase unique areas in advance of development.

A list of unique areas in Travis County should be developed immediately and maintained. Priorities for acquisition should be established. Plans and programs should be developed. Whenever possible, acquisition of open space, particularly of unique areas, should take place in advance of urban pressure.

Policy 312.2

Preserve unique natural areas through the acquisition of easements.

Easements may be purchased and under certain conditions their dedication may be required. Scenic and conservation easements should be pursued, perhaps concurrently with drainage and utility easements, during the development of subdivision plans. In some cases the City may purchase the development rights attached to property.

Ideally, all such easements acquired should be shown on the recorded subdivision plats. Acquisition after the subdivision is recorded increases the likelihood of error regarding the existence of such easements.

Policy 312.3

Create subdivision controls to lessen the impact of new development on important natural areas.

The subdivision ordinance is the major land use control for new development. Major environmental objectives include: alleviation of flood damage, erosion and poor drainage practices; protection of water quality; protection of natural resources; and the provision of adequate open space.

The control of three important parameters of land use intensity will allow for the application of subdivision controls on a performance standard basis. First, density – the number of dwelling units per acre of land – provides a fairly direct measure of the impact a development will have on utilities, roads, services and social and educational institutions. Less directly, it effects the impact of the development of the natural landscape and hydrological systems. Density standards should be used instead of lot size, thereby encouraging open space and more efficient land planning. Second, open space ratio is that proportion of a site neither occupied by private lots nor dedicated to public right-of-way. A ratio should be established for each new development though the ratio may vary according to the capacities of the natural resources on the site. Flexible development controls with high priority on open space can facilitate the construction of needed housing, while concurrently discouraging development of floodplains, steep slopes and other areas of high public concern. Third, the impervious surface ratio is that portion of a site occupied by all constructions that water does not readily penetrate. This is perhaps the most important measure of land use intensity. It will have direct influence on runoff and flooding, water quality, vegetation, inner-city climate and the natural resources of the site. The subdivision ordinance should encourage the lowest possible ratios of impervious coverage, regardless of density, through comprehensive site planning and innovative design.

Objective 313.0 **Minimize the environmental impact of activities which are indirectly related to new development.**

Policy 313.1 Establish regulations for the cutting of trees and vegetation.

The City should regulate the removal or trimming of trees and vegetation on City property, right-of-way and easements. The City should also consider regulating the removal of trees on privately owned parcels. Any policies or regulations should recognize that redevelopment poses perhaps the greatest threat to urban vegetation. A policy encouraging new planting and replanting would be supportive of this strategy.

Policy 313.2 Improve regulations for all alterations to drainageways.

Creek environments and floodplains should be retained in their natural condition. Specifically, the following controls should be placed on waterways: new structures should meet ordinance requirements in one hundred-year floodplains; only limited modifications should be made for drainage improvements; vegetation should be allowed to flourish within floodplains, except where health or safety are threatened; structures which must span waterways should not impede flood flows; and cutting and filling within the floodplain should be allowed only in extreme circumstances.

Policy 313.3 Regulate grading, cutting and filling.

The primary purpose of regulating these activities is to ensure that subdivision utilities and streets, drainage features and landscaping are not placed on the ground prior to subdivision approval. Regulations, especially near waterways, should be strictly enforced.

Policy 313.4

Control off-road vehicle use on land designated as open space.

Lake Travis and Lake Austin offer good examples of degraded open space: nearly all public beaches are rutted by motor vehicle tracks and littered with trash. Access should be provided to, but not through, parks and common open space. Appropriate control devices should be used.

GOAL 320.0

ASSURE THE SENSITIVITY OF DEVELOPMENT TO ENVIRONMENTAL FEATURES.

The need for municipal control of development stems from the public character of certain land resources. Environmental regulations are primarily concerned with preventing hazards to safety or health, or adverse impacts on important natural resources.

Objective 321.0

Provide sufficient environmental data to enable adequate evaluation of proposed developments.

Information regarding natural features is necessary for the proper evaluation of any construction project. Information should be evaluated for subdivision development, public projects and perhaps even private activities which presently require only building permits or creek permits.

Policy 321.1

Provide more efficient procedures for subdivision applications to assure adequate review of environmental factors.

All pre-applications, preliminary applications, final plats and accompanying materials should be channeled through one City office. A coordinator should assure that all elements of the subdivsion application are reviewed by the appropriate City departments in proper sequence.

Policy 321.2

Prohibit any alterations to development sites prior to the approval of the final subdivision plat.

The Subdivision Ordinance should provide for a thorough review of the design and engineering aspects of development prior to any ground preparation or clearance. This assures that review decisions regarding basic design, transportation, drainage and utilities are neither precluded by premature development activities nor result in costly alterations. Penalties should be considered in cases where grading has occurred prior to submission of the subdivision applications.

Objective 322.0 **Create strong environmental standards for new development.**

This objective will involve investigating new ways of exercising development control. Subdivision regulation is most crucial outside the city limits and within the City's extraterritorial jurisdiction (ETJ) where zoning and other City ordinances are not applicable. Existing enabling legislation should be used to extend the application of the City's current Subdivision Ordinance.

Policy 322.1 Protect floodplains and waterways from development.

Not only does flooding present a hazard to life and property, but floodplains usually support the richest and most varied plant and animal life in the county. City codes and policies should closely regulate residential and commercial development within one hundred-year floodplains considering the unique features of each waterway. Protection afforded by the Creek Ordinance should be continued through revision to the Subdivision Ordinance, or by the designation of a parkway system. Stream buffer zones may be established which do not necessarily coincide with the designated one hundred-year floodplains.

Policy 322.2 Establish development guidelines based on the physical and engineering constraints of the land.

A determination of erosion potential, slope stability, shrink-swell capacity, excavation potential, bearing capacity and septic tank suitability can be derived by analyzing the combined characteristics of soil, geology and slope. The purpose of the guidelines should be to reduce the risk to public safety and the risk of property damage; to prevent uses of land which threaten to increase erosion and water pollution or require unsightly scarring of hillsides; and to check the high government costs of extending services and utilities and of controlling drainage, erosion and water pollution in special areas. Poorly regulated development in areas of high development constraint results in increased remedial expenditures. Some of this cost, particularly that related to drainage, streets and utilities, must be borne by the public. These improvements require specialized engineering and construction practices in areas of high constraint.

Policy 322.3 Provide guidelines for drainage and runoff control that reduce erosion, peak flows and poor water quality.

Flooding, erosion and water pollution are directly related to urbanization and the development process. Adequate regulation is needed to mitigate water pollution caused by urban runoff, to alleviate the excessive runoff volumes and peak flow characteristics of developed areas which cause flooding downstream, and to prevent future remedial public projects which create unsightly and costly alterations to the natural character of waterways. Drainage and runoff regulations should allocate more of the real costs of urbanization to the private sector. In the past, some of these costs have been publicly subsidized in the form of expenditures for expensive remedial drainage projects. Other costs, such as those which pertain to water pollution, have been assumed by no one.

Policy 322.4 Create ample minimum open space requirements for new residential development.

Open space should be provided within a short walk of most dwellings in new developments. Subdivision controls should incorporate such a requirement. Open space may be either dedicated to the public, acquired or remain as common private land. Likewise, it may be either improved for recreational use or left as a natural resource protection area. This policy would also aid in the regulation of density and impervious surfaces.

Policy 322.5

Preserve unique areas and protect certain sensitive areas from the effects of development.

Controls on development should assure that natural assets of highest public value whether geological, hydrological, archaeological or vegetative, remain as open space. These controls should be integrated with open space requirements, coupled perhaps with development incentives. Outright purchase, or purchase of easements in advance of development may be preferable to subsequent dependence on open space requirements in subdivision regulations.

Policy 322.6

Protect vegetation during the development process.

Subdivision controls should incorporate site guidelines designed to preserve wooded vegetation. Street design, the siting of structures and the allocation of open space should accommodate this policy. A minimum of vegetation should be removed in order to control erosion and sedimentation.

Policy 322.7

Strengthen the septic tank ordinance.

The soils in most of Travis County offer severe limitations to the proper functioning of septic tank systems. The use of septic tanks in these areas has long been recognized as a threat to the quality of both surface and ground water. Austin has an obligation to abate water pollution within its regulatory control area. No subdivision application should be approved where plans stipulate the use of septic tank systems in poorly suited areas. The City should permit the use of established or experimental alternative waste treatment systems to determine their suitability for further use.

Policy 322.8

Create development standards based on noise impact and air quality.

This policy primarily involves establishing guidelines for the construction of housing near major traffic arterials, the municipal airport, Bergstrom Air Force Base, and commercial or industrial areas.

Objective 323.0

Establish environmental standards for extending streets and utilities into environmentally sensitive areas.

The extension of all streets and utilities should be coordinated with a growth management policy. Environmental sensitivity should be foremost for all location decisions. Specific location and construction guidelines are necessary to minimize environmental damage.

Policy 323.1

Require the public evaluation of environmental impacts for all utility construction.

The purpose of the environmental impact assessment is to ensure that the direct and indirect impacts of utility extension are considered. These assessments need not follow National Environmental Policy Act (NEPA) guidelines nor be extensive and costly. The assessments should consider the relative merits and drawbacks of projects and alternatives. City departments, boards and commissions should have the opportunity to review and comment. These assessments should be required of all major Capital Improvements Program projects.

Policy 323.2

Reduce cutting and filling for highway construction.

The newly constructed Loop 360, west of Austin, serves as an example of extensive hillside scarring which must be avoided in the future. Public improvements of this sort greatly detract from the natural beauty of the hill country.

Policy 323.3

Keep the impervious coverage of land at a minimum.

Impervious surfaces are those portions of a site occupied by all constructions that water does not readily penetrate.

Guidelines should be incorporated in the Subdivision Ordinance which regulate the allowable coverage by impervious surfaces. The subdivision controls should encourage the lowest possible ratios of impervious coverage, regardless of density, through use of comprehensive site planning and innovative design. Holding ponds and other water retention facilities may also be required to reduce runoff to a volume and quality more closely resembling that which would exist under natural conditions.

GOAL 330.0

PROTECT AND IMPROVE THE WATER QUALITY OF TRAVIS COUNTY'S CREEKS, LAKES AND AQUIFERS.

The quality of numerous water resources in and near Austin has already been seriously endangered by the process of urbanization. The city should strive to protect its nearby water resources in order to maintain a healthy water supply and prevent expensive treatment prior to public use, to maintain the excellent recreational utility of the nearby lakes and springs and to maintain the quality of water resources.

The City should actively pursue these goals through comprehensive utilization of pertinent state-enabling legislation. Included is Section 21.357 of the Texas Water Code, which enables the development of plans for controlling and decreasing pollution or potential pollution from generalized discharges of waste which are not traceable to a specific source, such as storm sewer discharges and urban runoff from rainwater.

Objective 331.0 **Improve the quality of water runoff and lessen peak discharge.**

Most of Austin's water pollution is due to rain runoff from urban areas. Control of runoff includes the reduction of peak surface discharges, and will help to alleviate water quality problems and diminish erosion and flooding. Controls should also reduce the need for channel improvements and improve the appearance of waterways.

Policy 331.1 Minimize the impervious coverage of land by construction.

Policy 331.2 Develop alternatives for the treatment of drainage from extensive pavement.

Pavement collects residues which normally wash into streams during rainstorms. Some treatment facilities should be included in the installation of all large areas of pavement. In some areas this procedure may also be extended to public streets. Grease traps will not cleanse runoff water, but may remove a large portion of organic and inorganic oils. The addition of settlement basins would further remove sediment.

Policy 331.3 Encourage ponding and other forms of runoff retention in drainage plans for new development.

Various methods of runoff retention allow sediment to settle, thereby improving creek water quality; reduce surface flow speed, thereby reducing erosion; and allow runoff to reach drainageways gradually thereby reducing flood potential. All development plans should consider the need for runoff retention.

Policy 331.4 Assure that development in the more environmentally sensitive watersheds meets water quality and drainage standards.

Development will result in permanent alteration of the water quality and drainage characteristics of a waterway. This should be minimized and confined to as few drainage areas as possible. Ideally, urban development should be considered in new watersheds only after those closer to the city are fully developed. In addition, certain waterways may be deemed more valuable than others. Barton Creek and certain tributaries of Onion Creek, for example, supply most of the recharge water to the Edwards aquifer in Travis County.

Policy 331.5 Require erosion and sediment control during construction.

Soil loss and stream siltation are often severe during construction activities. Numerous inexpensive procedures can minimize this damage. Each construction project should have an effective erosion and sediment control plan, and inspections of the site should ensure that it is followed.

Objective 332.0 **Improve the collection and disposal of wastewater.**

Wastewater has always been a threat to water quality. The best possible methods for collection and treatment should be utilized.

Policy 332.1 Prohibit the use of septic tank systems in areas where soil, topography or kindred factors are not favorable.

Policy 332.2 Consider the use of new alternative methods of sewage disposal for individual residential units in unsewered areas.

Policy 332.3 Discourage the discharge of sewage effluent into waterways.

The effects of a proliferation of package treatment plants on the environments of Travis County's creeks could be profound unless effluent is retained for irrigation of open space. The City should oppose all applications for package treatment plant permits which allow discharge into creeks and waterways, and the City should ensure that all new developments which will depend on package plants reserve adequate open space for irrigation.

Policy 332.4 Provide improved treatment for Austin's municipal sewage.

Tertiary treatment will improve the quality of effluent from Austin's secondary treatment facilities.

Policy 332.5 Avoid placing sewer lines in creekbeds.

Creekbeds and their environs have traditionally been considered the most cost-effective routes for wastewater collection lines due to gravity flow. Some infiltration and exfiltration is to be expected of all sewage pipes, though the amount is highly dependent on the care exercised during construction. Sewage lines in creekbeds greatly aggravate the problems of infiltration and exfiltration. The proximity of sewage flow to creek flow, with the accompanying potential for exchange, should be avoided whenever possible. Alternate routes should be sought.

Where creeks are used for recreation, or feed into a water supply, the costs of alternative location should be compared with the costs of replacing the recreational facility and the costs of additional water treatment.

Objective 333.0 **Investigate alternative methods of sewage collection and treatment and employ the best combination of sewage systems obtainable for all areas of Travis County.**

Travis County offers a diverse assortment of terrain, geology and soils. The characteristics individual residential treatment systems, small private sewage collection and treatment systems, including the alternatives to septic tank systems, and the extension of large municipal systems should be thoroughly analyzed. The physical conditions of each newly developing area should then be evaluated to determine the appropriate system.

Policy 333.1

Assure that wastewater house service lines are well constructed and that installation is strictly inspected.

Surveys have indicated that faulty residential service lines are responsible for the majority of sewer infiltration problems. High quality materials and careful construction should be required and installation of the lines should be monitored.

Policy 333.2

Strengthen the enforcement of the Industrial Waste Ordinance.

The Industrial Waste Ordinance establishes essential, but rather ambitious controls on the discharge of abnormal or toxic wastes to either the sanitary sewer system or the storm sewer system. Adequate staff is needed to ensure that all appropriate establishments apply for permits, that monitoring is accomplished and that surcharges are judiciously applied.

GOAL 340.0

IMPROVE THE MANAGEMENT OF SOLID WASTE.

The City should seek the most environmentally sound and feasible methods of waste disposal.

Objective 341.0

Begin planning for the resource recovery of waste.

The City should seek a cost-efficient program of solid waste recovery. Waste recovery programs need not be financially self-sufficient. The costs should be weighed against the alternate economic costs of land disposal plus the environmental and social costs of additional landfills.

Policy 341.1

Create programs to salvage and recycle waste collected by the City.

The City should determine which types of waste can be marketed or reused and which methods are most appropriate for extracting these items.

Policy 341.2

Consider the conversion of wastes to useable by-products such as compost, or utilize waste for fuel.

Processes to convert waste into useable by-products need investigation as alternative means of disposal. When considering financial viability, the cost of production minus the revenue from the products should be compared with the alternative cost of complete land disposal plus environmental costs.

Some alternative waste disposal systems seek to recover the heat potential of waste for fuel. These merit investigation and should be attempted with the prior removal of as many non-combustibles as possible.

Policy 341.3 — Discourage the sale of non-returnable containers.

A similar strategy has been undertaken in the state of Oregon. It is usually accomplished by requiring deposits on all glass and metal containers of certain types.

Objective 342.0 — **Locate landfills properly and employ only the most environmentally sound designs and disposal methods.**

The city will always need landfills; regardless of the success of waste resource programs, there will always be elements of residue which cannot be utilized. The City must strive to maintain the best possible operating procedures and utilize the best fill and site designs which should, as a consequence, improve the public image of landfills.

Policy 342.1 — Landfill sites should be selected with full consideration of geologic characteristics and the preservation of surface and ground water quality.

Policy 342.2 — Landfill sites should be managed and finished according to long range plans which determine the ultimate use of the land.

GOAL 350.0 — **ABATE NOISE DISTURBANCES.**

Noise is a growing concern to Austin residents.

Objective 351.0 — **Reduce transportation related noise.**

Practically all noise problems in Austin are related to transportation, and the major proportion of the city's total environmental noise is generated by road traffic.

Policy 351.1 — Minimize road vehicle noise.

Many of the motorcycles, automobiles and trucks operating in Austin emit excessive noise. In all cases, proper muffling installed by individual operators can remedy the problem. Vehicle owners should be required to make this investment in muffling equipment, and monitoring should be more frequent than the yearly safety inspection. Specific noise standards for each class of vehicle should be established and enforced.

Policy 351.2

Improve the design of residential areas relative to major arterials, and promote the use of buffers along major traffic routes.

Major arterials should be planned and designed in advance of development. Buffer strips of open space and vegetation should be encouraged along these major roads. The width of the buffer strip should be related to the anticipated traffic noise and to the adjacent land use.

Policy 351.3

Restrict further residential development near Robert Mueller Airport and Bergstrom Air Force Base.

According to HUD guidelines, about one dwelling unit of every eight in Travis County in 1970 was situated in a high airport noise area. Additional residential development should be limited within these zones.

Objective 352.0

Regulate noise from stationary sources.

Though not as pervasive as traffic generated noise, sound from stationary sites can create a persistent annoyance to those who reside or work nearby. Generally, however, noise from stationary sources is much easier to monitor and regulate.

Policy 352.1

Limit construction and repair work to particular daylight hours.

Prohibition of nighttime construction and repair activities is especially important when applied to public works projects and other activities which are located in residential areas. Emergencies, of course, create exceptions. Time limitations on noisy activity is perhaps the easiest and simplest way of reducing noise annoyance.

Policy 352.2

Set specific noise performance standards for industry.

Noise is perhaps the easiest industrial performance standard to understand and monitor. Stringent noise standards should ensure that new industry provides adequate planning for, and investment in, noise reduction features.

Policy 352.3

Control the location of noisy commercial establishments relative to residential areas.

	Certain commercial enterprises, such as discotheques, nightclubs, gas stations, car washes and establishments which utilize loud speakers, have very	significant local noise impact. Consider expanding existing ordinances and developing a new noise ordinance.
Policy 352.4	Control the measurable level of noise at the property line. All noise originating from a particular property should not exceed established intensity levels. The standards	may vary according to zoning, adjacent land uses and time of day.
Objective 353.0	**Encourage acoustic considerations in residential construction.** As opposed to control of outside sources of noise, residential acoustical features attempt to lessen noise disturbances as they impact the home environment. These features work well to absorb noises from air	conditioning and appliances inside the home. Acoustical controls are especially needed for houses that are adjacent to streets with high traffic volumes.
Polcicy 353.1	Improve noise insulation and noise reduction features in the building codes. The presence of pervasive urban noise and the prevalence of noisy home appliances justifies public concern for reasonable acoustical features in new	housing. Many related aspects such as air conditioning, plumbing and wall construction are already regulated.
Policy 353.2	Improve noise control features in multi-unit housing. Due to the proximity of residences and common walls, noise problems are most crucial in multi-unit structures. Consequently, requirements for noise reduction	features should be more stringent for these than for detached housing.
GOAL 360.0	**ABATE AIR POLLUTION.** Air pollution is a concern to many Austin citizens. The automobile is recognized as the major source of air	pollution in the city.
Objective 361.0	**Reduce the use of automobiles.** Since automobiles are the major source of air pollution in Austin, the reduction of total motor vehicle miles traveled per day would be the most effective way to	mitigate the problem. It is necessary to create acceptable alternatives to the use of automobiles.

Policy 361.1

Upgrade the service and convenience of public transportation.

In order to substantially effect automobile usage, the transit system must attract many "choice" riders, those who have automobiles available as an alternate transportation mode. "Choice" riders use the transit system only if the services of the system are attractive relative to automobile use, or if they are motivated by social or environmental concerns. The services of the public transit system must be improved to allow riders to arrive approximately at their destination quickly and directly. The probability of improving public transit enough to make it attractive relative to the automobile is slight, however, regardless of public expenditure.

Policy 361.2

Facilitate pedestrian and bicycle movement.

Many Austinites are discouraged from walking and bicycling due to the lack of safe, convenient routes. Safety and access for bicyclists and pedestrians are usually secured at the cost of a certain amount of motor vehicle convenience. Continuous routes with protected crossings at busy streets are needed throughout the city.

Policy 361.3

Provide incentives for car pooling.

Car pooling for work-related trips has been endorsed nationally as an energy conservation measure. Reduced automobile use, particularly during peak traffic hours, should result. Parking incentives, especially at places of employment, may prove to be most effective.

Objective 362.0

Reduce point-source air emissions.

Industrial sources of air pollution are relatively minor in Austin. Electric power production is a significant source of air emissions which will have a greater impact if, and when, fuels other than natural gas are used.

Policy 362.1

Create air emission performance standards for point-sources.

Air performance standards may perhaps be implemented most effectively through ordinances or contractual agreements between the City and private industries.

Policy 362.2

Control dust emissions related to construction activities.

Construction practices which minimize dust emissions should be required of all projects. These procedures coincide with those used for erosion control and include the incremental removal of minimum amounts of vegetation and existing cover, temporary planting for ground cover and sprinkling. The utilization of these practices should be checked at the times of other regular inspections.

Policy 362.3

Discourage the incineration of waste.

	Until waste recovery is perfected, landfilling remains the most appropriate method of residential and commercial waste disposal. The use of incinerators for	volumetric reduction of wastes results in a poor trade-off for air pollutants. Small incinerators tend to be the most inefficient.
Policy 362.4	Place new power plants outside the urbanized area. Power plants are a significant source of air emissions in Austin. New plants designed to burn fuel other than	the relatively clean natural gas will have a much greater negative impact on air quality.
GOAL 370.0	**ABATE LIGHT POLLUTION.**	
Objective 371.0	**Restrict the use of high intensity lighting and obtrusive flashing lights except where essential for public safety or emergency situations.**	
Policy 371.1	Devise standards for the use of display lighting.	
Policy 371.2	Devise standards for glare and reflection near major traffic arterials.	

Government and Utility Services

4

Introduction

This section of the *Comprehensive Plan* coordinates government and utility service policies with the overall goals of environmental preservation and growth management. Government services and utility service policies effect the quality of the environment and land use planning. The basic municipal utilities of wastewater and solid waste collection, electricity and water service can be provided within a framework of preserving Austin's natural environment, managing urban growth and reducing urban sprawl.

A long range water and wastewater plan is seen as a major tool for pursuing these goals. Annexation and taxation are also viewed within the context of growth management, land use planning and the equitable distribution of municipal costs. Other services such as libraries, fire protection, auditorium and coliseum facilities should continue to be provided at high levels and periodically updated.

GOAL 410.0	**PROVIDE UTILITY SERVICES IN THE MOST EFFICIENT AND EQUITABLE MANNER CONSISTENT WITH SOUND ENVIRONMENTAL AND GROWTH MANAGEMENT POLICIES.**	
	Three major concerns relate to the direct environmental effects of utility construction and operations:	energy and resource conservation, growth management and reduced sprawl.
Objective 411.0	**Minimize environmental damage in the construction and operation of utility facilities.**	
Policy 411.1	Minimize the odor at wastewater treatment facilities and minimize the damage to water quality from wastewater treatment plant effluent.	
	Municipal wastewater treatment facilities should incorporate new methods beyond secondary treatment	as downstream uses change, such as the change from non-contact recreation to swimming.
Policy 411.2	Reduce the overflow of sewage from wastewater mains during periods of peak flow through replacement or relief of overloaded lines and lift stations.	
Policy 411.3	Implement programs to eliminate storm water infiltration into older, existing wastewater systems.	
Policy 411.4	Minimize damage to creekbeds from sewer line placement through improved procedures, including restoration and placement of lines away from the creek.	
Policy 411.5	Locate and construct power plants, electric substations, utility lines, water and wastewater treatment plants and other utility facilities in a manner compatible with surrounding land uses, presenting as little visual confusion as possible.	
	One method of lessening the visual impact of utility facilities would be to encourage the underground	placement of utility lines within subdivisions, taking into consideration vegetation and terrain.

Policy 411.6	Ensure that regulations on privately owned sewage disposal systems and septic tanks provide for their effective, non-polluting operation.	
	Most of Travis County is either not suitable or only moderately suitable for septic tanks. Septic tanks	should be prohibited in areas which have unsuitable geology or topography.
Policy 411.7	Oppose the proliferation of independent water and wastewater utility districts.	
	The Texas Water Quality Board recognizes the benefit of a single, regionalized wastewater collection and treatment system. The City should oppose independent utility district formation where municipal wastewater service can be made available in the future. If there is	a demonstrated need for earlier development, interim use of package plants could be permitted with specifications approved by the City. Collection systems should be built to specifications which would permit connection to the City's wastewater collection system.
Objective 412.0	**Actively pursue programs to promote energy and resource conservation.**	
Policy 412.1	Evaluate electric rate structure changes as a means of promoting energy conservation.	
	Electric rate making includes the allocation of production costs to customers and the stabilization of electric loads to maintain low average per kilowatt hour cost. Further reference can be made to Policy 412.5. Under the current rate structure, the per unit charge for electricity decreases as the amount of electricity	consumed increases. Economies-of-scale and higher charges for peak use also effect per unit charges. Consideration should be given to lowering per kilowatt hour charges for low volume users within particular user groups to encourage energy conservation.
Policy 412.2	Discourage the use of lighted outdoor displays and signs which consume an excessive amount of electricity.	
	Some lessening of electricity demand, and thereby electric generating fuel, could be realized through	minimizing lighted outdoor signs. Restrict the total electric demand of new signs.
Policy 412.3	Evaluate building codes and technology on a continual basis to improve heating and cooling efficiency.	
Policy 412.4	Undertake public education programs to encourage more efficient use of heating, lighting,	

air-conditioning systems and household appliances.

Policy 412.5

Encourage more even electric use between peak and off-peak times.

Previous policies relating to electric consumption were aimed at reducing energy and fuel consumption through reduction in total kilowatt hour electric usage. A major portion of the cost of providing electricity is the cost of the generating facilities. These must be constructed to meet peak demand. A reduction of off-peak usage without a reduction in peak usage would thus require large per kilowatt hour expenditures for the provision of electricity.

In order to reduce the capital expenditure required for the operation of the electric utility it is necessary to reduce the peak demand for electricity.

Policy 412.6

Continue to investigate the cost, resource conservation potential and environmental hazard of alternative electric generation fuel sources.

Policy 412.7

Continue to investigate the feasibility of alternatives for the disposal of solid waste.

Currently Austin's solid waste is disposed of in sanitary landfills. It is recommended that portions of solid waste be recovered for the recycling of metals and minerals, the burning of waste materials as electric energy fuel or the use of solid waste for soil conditioning.

Objective 413.0

Promote a compact, contiguous and planned urban form using utility service to guide growth.

The patterns of growth can significantly affect the quality of the natural landscape and the cost of providing the many municipal services needed for the maintenance of the community. The sequence of development and its resulting pattern have direct bearing on the cost of providing utility services.

The most efficient pattern of development for the provision of municipal services is one that is compact, with minimum distances required to provide services from central locations. This applies to the distribution of water, collection of wastewater, transmission of electricity, garbage collection, police and fire service. Requirements for transportation rights-of-way are minimized in a compact urban configuration through reduced travel distances. The compact and contiguous form would also minimize the encroachment of new development into environmentally sensitive areas. Development location can be directed by planning the extension of municipal facilities and encouraging full development in areas which are already served by newly extended facilities before additional extensions are made.

Policy 413.1

Develop a phased, long range program of water and wastewater services to promote compact, contiguous and planned growth.

	Since development decisions are often made well in advance of actual construction, a long range utility extension program addressing the location of major water and wastewater facilities should be prepared	and adopted by the City Council. This would be used as a guide for the Capital Improvements Program. It would coordinate, at the policy level, water, wastewater and other facility expansion plans.
Policy 413.2	Coordinate government service facility plans to assure uniform and concurrent extension of all services.	
Policy 413.3	Discourage the use of septic tanks in favor of the centralized municipal wastewater system. Septic tank regulations should be used to reduce environmental health hazards, minimize damage to water	sources and promote development within the wastewater service area of the City of Austin.
Policy 413.4	Discourage additional urban development in City-owned water districts or districts supplied with City water unless the areas will also be provided with municipal wastewater service. Areas which are outside the city and are served with municipal water should be limited by the carrying capacity of their existing water system unless they are	part of an overall, combined water and wastewater plan. This would help to redirect development to appropriate areas within Austin.
Policy 413.5	Continue higher rates for out-of-city water service. In addition to reflecting the cost of water service outside the city, policies for out-of-city services should discourage non-contiguous growth and development	beyond areas of combined City utility service availability, including wastewater.
Policy 413.6	Institute higher water and wastewater service tap fees for out-of-city service than for service within the city. Tap fees should be used to divert growth to areas of complete municipal utility service.	
Policy 413.7	Annex those areas which can most economically be served from existing and proposed wastewater service.	

	This will encourage the development of areas proposed for water and wastewater service extension as other City services are provided upon annexation. It	will also reduce the speculative benefit of holding land off the market.
Policy 413.8	Require that construction of private water distribution and wastewater collection systems complies with specifications necessary for later connection to the City's system.	
	The long range service boundary for water and sewer service would replace the current, two-mile extraterritorial jurisdiction boundary in determining a subdivision's requirements for water and wastewater collection systems. The requirement that water and sewer	systems comply with City specifications would prepare the subdivision for later inclusion into the City system, and would discourage premature development before City facilities become available.
Policy 413.9	Consider extending the present one hundred foot distance within which connection to the City of Austin wastewater system is mandatory for new development.	
	This would reduce septic tank development on the edge of the city where municipal wastewater service will become available within a reasonable time. This	requirement would be waived where the local collection system cannot accommodate the added service.
Policy 413.10	Minimize the cost to the City of connection to water and wastewater service if service is needed prior to the Capital Improvements Program schedule.	
Policy 413.11	Limit the use of lift stations which transport sewage from a drainage area which is not served by municipal wastewater service unless such use is determined to be consistent with growth management objectives.	
Policy 413.12	Encourage the development of currently undeveloped portions of the city where utility service is already available, taking into consideration local environmental and neighborhood constraints.	

GOAL 420.0	**PROVIDE EFFICIENT GOVERNMENT SERVICES TO ALL CITIZENS OF THE COMMUNITY.**
Objective 421.0	**Continue to provide a high level of fire protection to the citizens of Austin.**
Policy 421.1	Continue to respond to innovations in fire service to further minimize property damage and loss of life.
Policy 421.2	Continue to provide equitable fire service to all areas of the city.
Policy 421.3	Periodically update the Fire Protection Plan to specify locations and guidelines in the provision of fire service.
Policy 421.4	Investigate the feasibility of a joint City/County fire protection system. There has been considerable urban development in recent years outside of Austin in rural portions of Travis County. Most of these are now served by volunteer fire departments. Consideration should be given to a cooperative program of fire protection for areas outside the city, provided each area covers its full costs for that service.
Objective 422.0	**Continue to provide a high level of library service to citizens in all areas of Austin.**
Policy 422.1	Periodically update the Library Plan to provide adequate central, regional and neighborhood library facilities.
Policy 422.2	Consider a joint City/County library system. In order to provide superior library service to the entire region, a metropolitan library system should be considered, provided that Travis County pays its proportional share of the costs.

Objective 423.0	**Continue to provide municipal facilities for major cultural events.**	
Policy 423.1	Maintain auditorium and coliseum facilities for municipal activities.	
Policy 423.2	Investigate the need for new or improved facilities for major cultural events.	
Objective 424.0	**Locate municipal offices and service yards to provide maximum service to the public.**	
Policy 424.1	Continue to consolidate the location of the main offices of municipal departments.	
	The central offices of municipal departments should continue to be consolidated to promote efficient interdepartmental operations and to provide a single	central location where all municipal staff services are available and other city government and public business can be conducted.
Policy 424.2	Provide regional or neighborhood municipal office centers for selected government business.	
Policy 424.3	Develop a public facility plan to coordinate municipal service yard operations and designate municipal office locations.	
Objective 425.0	**Correct existing deficiencies in utility service to neighborhoods.**	
	Existing neighborhoods should receive highest priority in the long range program of utility improvements and	in the preparation of the Capital Improvements Program.
GOAL 430.0	**COORDINATE THE EXTENSION OF MUNICIPAL SERVICE, LAND USE CONTROL AND MUNICIPAL TAXING AUTHORITY THROUGH A LONG RANGE PLAN WHICH SETS PRIORITIES FOR ANNEXATION.**	

Objective 431.0 **Establish a plan for annual annexations which promotes sound development and fairly distributes the cost of municipal services.**

An annexation plan which is coordinated with a utility extension and facility plan should link the provision of municipal services with the *ad valorem* tax revenues needed to pay for those services, and extend land use and development controls. Three main categories of land surrounding the city may be annexed: residential land or undeveloped land with the potential for residential development; industrial and large scale commercial areas; and areas of environmental concern.

Policy 431.1 Annex areas which will be provided with government services and utilities through coordinated municipal utility and service extension plans and the Capital Improvements Program.

Residents outside Austin receive the benefit of many City services, such as major park and library facilities, the airport, auditorium facilities and cultural and recreational programs. The additional benefits of police and fire protection and City sanitation service would become available upon annexation.

In most instances, the annexation and development of land depends on the extension of water and wastewater service. The general areas to be served by overall facility plans would be considered prior to annexation. Annexation and extension of water and wastewater mains would be coordinated through the Capital Improvements Program.

Annexation of desired development locations would encourage more rapid subdivision within those areas, provide for utility main extensions, more rapidly return *ad valorem* fiscal benefits and utility revenues, and extend land use and building quality regulations.

Policy 431.2 Continue to annex major industrial and commercial areas on the periphery of the city.

Based on the municipal services provided, there is little difference between industry and commerce located within or on the periphery of the city. Both benefit from a stable, sound community from which to attract labor and customers. In order for both industry and commerce to share equally in the cost of maintaining the city, they should be included in the *ad valorem* tax base.

Policy 431.3 Consider annexation of those areas of natural environmental sensitivity.

Areas of particular natural environmental sensitivity should be annexed and designated for environmental conservation. Detailed performance standards for development should be applied to prevent their degradation. Large developments would be required to meet currently available municipal services, including water and sewer facilities.

GOAL 440.0 **ASSURE QUALITY DEVELOPMENT THROUGH EQUITABLE TAX POLICIES.**

Objective 441.0 **Promote quality development through tax policies.**

Policy 441.1 Support the enactment of state-enabling legislation to permit property tax incentives for historic structures.

One method to preserve historic structures and prevent the property's conversion to more intensive use is to reduce the cost to the owner of the historic structure through lower property taxes.

Policy 441.2 Investigate the feasibility of legislation which would permit tax incentives to promote renovation of deteriorated structures.

Increased property value and resulting higher taxes often deter the owners of deteriorating structures from renovating their homes, even when financing is available through public programs. Special legislation should be investigated that might permit a delay in tax reappraisal where increased taxes deter housing rehabilitation.

Policy 441.3 Stabilize taxes on residential property in older neighborhoods through improved zoning controls.

In many older neighborhoods undergoing some transition in land use, the potential or residential land for higher intensity use increases land value. This, in turn, increases property taxes. Speculative increases can be minimized by protecting neighborhoods through improved zoning controls, as discussed in Policy 411.2.

Objective 442.0 **Support fiscal policies which aid the poor.**

Policy 442.1 Continue to provide property tax exemptions for the elderly.

There is currently a five thousand property tax exemption for homesteaded residential property of persons age sixty-five and over, as permitted by state law.

Policy 442.2 Encourage state legislation which would give property tax relief to low income persons.

The Goals Program suggests tax relief for low income persons. The burden of property taxes falls heaviest on low income and fixed income persons. Current legislation does not allow for any relief to particular groups of persons other than the elderly. Other states have adopted procedures whereby property taxes which exceed a given percentage of a person's income, either in total or according to a graduated scale, are refunded. The City should support State adoption of such a circuit breaker property tax approach.

Objective 443.0 **Continue to investigate alternate sources of revenue to augment municipal funds.**

Federal, state and other funding sources should be actively pursued to aid the City in providing services and facilities. General revenue sharing, Housing and Community Development funds and other sources can supplement standard municipal funds from sales and *ad valorem* taxes, utility revenues and user charges for municipal services.

Housing and Neighborhoods

5

Introduction

This section is designed to provide a coordinated strategy to assure a quality residential environment for all of the residents of Austin. The overall objective of this topic area coincides with a long-standing national housing goal determined by Congress to provide a decent home and suitable living environment for every household. The strategy used consists of two interrelated parts, and each part is aimed at the achievement of a basic housing goal.

The first of these goals concentrates on the assurance of the quality of the housing and neighborhoods in the city, while the second goal is directed at the provision of housing stock of sufficient quality and at such a cost that adequate housing is available to each resident of the city. These two interrelated goals, if not approached with a series of very carefully articulated and coordinated policies and programs, may become mutually exclusive. A balance between the quality and the cost of the housing available to the residents of the city is critical for the effective implementation of the following policy guidelines.

GOAL 510.0 **IMPROVE HOUSING AND NEIGHBORHOOD QUALITY**

The quality of the city's housing and neighborhoods, including older, centrally located neighborhoods, is important to the well-being of every resident in the community. The city has a considerable number of policies, programs and controls that have impact on various aspects of the quality of residential areas. The coordination of these diverse efforts, as well as the maximization of their effectiveness, is imperative to the achievement of quality housing and neighborhoods. It is also essential that programs directed at the improvement of neighborhood quality be tailored to the specific needs of the residents in the neighborhood.

Objective 511.0 **Assure the continued identity and improve the quality of Austin's existing residential neighborhoods.**

Policy 511.1 Develop and implement specific, detailed plans tailored to the needs of each neighborhood.

The boundaries of the individual neighborhood units that compose the city should be defined, and City policy relating to the location of arterial streets and all other public facilities and services should recognize these boundaries.

Policy 511.2 Protect existing neighborhoods from the intrusion of higher intensity land uses.

The Zoning Ordinance should provide protection for single-family neighborhoods, especially those experiencing redevelopment pressure. The Ordinance should effectively deal with the negative results of traffic and parking problems, privacy intrusions, bright lighting, signs and other detrimental products of high intensity land uses. Higher intensity land uses in older centrally located neighborhoods have had a deteriorating effect upon neighborhood cohesion, character, security and safety. Neighborhood preservation should be the ultimate goal in the concept and administration of the Zoning Ordinance.

Policy 511.3 Increase of the power of neighborhood residents in decisions affecting the neighborhood.

Citizen participation in the planning process is essential. Associations representing each neighborhood in the city should be encouraged and citizen input on zoning changes and other public policy should be sought and used.

Policy 511.4 Expand notification for proposed zoning changes.

The number of area residents who are notified of a proposed zoning change should be increased. Renters should also be notified by the most practical means available.

Objective 512.0 **Continue controls over the condition of existing housing.**

The Housing Code is the most important control available to the City to maintain housing quality and to prevent the deterioration of the existing housing stock. Extensive code enforcement could help the city avoid large scale clearance, rebuilding or rehabilitation.

Policy 512.1 Increase the effectiveness of the Housing Code and the Code Enforcement Program.

The Housing Code of Austin conforms to the specifications delineated in the national Uniform Building Code prepared by the International Conference of Building Officials, as modified by the Building Standards Commission. The Code is revised on an annual basis: recent additional requirements include insulation and double wall construction. Revision increases the code's effectiveness and should be continued.

The Minimum Housing Code Enforcement Program is conducted on a city-wide basis by licensed inspectors from the Building Inspection Department through a systematic windshield survey. Complete inspections for possible condemnation are made only on vacant units or as the result of complaints. Information indicating vacant housing units should be made available to the Building Inspection Department to enhance the effectiveness of the Code Enforcement Program.

Policy 512.2 Require strict compliance with the Code Enforcement Program, especially in the case of substandard rental property.

The use of Certificates of Occupancy, through a program such as Rental Licensing, can provide a realistic mechanism for periodic evaluation of the effects of deterioration upon the stock of rental housing in the city, as well as a useful tool for arresting deterioration. The City would thus be given control over the condition of rental property in the community.

Policy 512.3 Develop a Housing Information System to monitor housing conditions, supply and deterioration trends, and to evaluate the effectiveness of housing programs.

A continuing source of up-to-date information regarding housing condition is essential for meeting city-wide housing needs. Adequate funds should be provided to maintain a continuous survey and review of housing characteristics and their effect on residents. Such surveys would provide a basis for determining program target areas and for assessing the impact of programs on the city's housing supply.

Objective 513.0 **Provide incentives for the maintenance of the existing housing stock.**

The City can encourage housing maintenance through tax reforms: alleviating the burden of property taxation would encourage the preservation of older neighborhoods. Local effort should be directed toward modifying state and federal legislation to relieve some of the negative impacts of the property tax.

Policy 513.1

Investigate the possibility of enacting legislation to permit a delay in the re-evaluation of improvements for property tax purposes in cases of rehabilitation or code compliance.

Action should be taken to keep taxes from discouraging home improvements, for example, delayed reassessment after rehabilitation for code compliance could be allowed.

Policy 513.2

Research the possibility of taxing property on the basis of its actual use rather than its potential market value.

Older, centrally located single-family neighborhoods often experience redevelopment pressures as higher intensity land uses enter the neighborhood, and property market values rise. Tax assessments now increase according to market value, burdening the single-family, owner-occupant in the neighborhood. This process often contributes to housing deterioration.

Policy 513.3

Continue rental assistance for low income families to encourage the rehabilitation of substandard units.

The building standards outlined in the regulations for the Department of Housing and Urban Development's Housing Assistance Payments Program provide incentives for landlords of substandard housing to rehabilitate their units according to code standards.

Continuation of this program should be encouraged.

Objective 514.0

Assure the availability of funding to low income families for housing maintenance and rehabilitation.

Presently, in many areas of the city, residential structures are being rehabilitated through the normal workings of the private market. In other areas, lending institutions will extend loans only for short terms and at high interest rates, making it financially difficult to undertake rehabilitation. This problem is complicated by the inability of low-income homeowners to assume the financial burden of extensive rehabilitation costs.

Policy 514.1

Increase the scope of the Housing Rehabilitation Program which provides for low-income households residing in substandard housing.

The Housing Rehabilitation Program, funded through the Housing and Community Development Block Grant, provides loans or grants to rehabilitate substandard units for low-income households. The criteria that should be used in the selection of rehabilitation target areas include: concentrations of owner-occupied units with serious housing deficiencies; areas where rehabilitation will complement recent public improvements; and areas which afford convenient temporary relocation.

Rehabilitation funding should be a combination of loans and grants, with the proportion of funding that is a grant based upon the income of the household.

Policy 514.2

Establish a self-help program for housing maintenance in low-income neighborhoods.

A self-help program of housing repair should be directed at preventive maintenance in lower income neighborhoods which are in early stages of decline or deterioration. Such a program, through the provision of building materials, tools, technical guidance and inspection services, could effectively increase the concern of the residents for the preservation and quality of their neighborhood.

Policy 514.3

Establish a revolving fund to guarantee high risk rehabilitation loans below market interest rates to encourage the availability of rehabilitation funding from private financial institutions.

Private capital for home improvement loans can be made more available to lower income homeowners if the loans can be insured against default. A revolving fund should insure local financial institutions against capital losses on loans to low-income homeowners. The revolving fund to guarantee rehabilitation loans should produce available funds from private institutions of up to ten times the amount commited to the revolving fund.

To assure the quality of the rehabilitation funded under this program these loans should be accompanied by an inspection requirement.

Objective 515.0

Assure that all new residential development maintains a high level of housing and neighborhood quality.

The most important tools available to the City to maintain high quality in new residential construction are the Subdivision Ordinance and the Housing Code. The following policies are directed at assuring the effectiveness of these controls.

Policy 515.1

Strengthen the controls over the design and construction of new subdivisions.

Strong, flexible controls over new development are indispensable to the quality of new residential areas. Subdivision controls should encourage street designs that minimize through traffic, permanently protecting the character of the neighborhood, while providing for safe, efficient traffic circulation. Controls should properly locate neighborhood facilities, public parks and open spaces, and give adequate protection to important natural vegetation and environmentally unique areas. The performance of the subdivision design should be paramount, and flexibility should be incorporated into controls regarding street widths, lot arrangements and sizes. Flexible, effectively administered controls should permit designs for new subdivisions to respond to unique environmental conditions and engineering constraints.

Policy 515.2

Continue to provide strict controls over the quality of new housing through revision of the Building Code.

The Building Code currently in use by the City is patterned after the Uniform Building Code prepared by the International Conference of Building Officials. The building standards defined in this Code conform, with few exceptions, to Federal Housing Administration building standards. The Code is revised at two-year intervals to allow for flexibility and responsiveness to modern construction technology. This policy should be continued, with particular attention given to the durability and privacy of new multi-family structures. Revisions to the Building Code to improve the quality of new construction must be carefully balanced against the need to reduce housing construction costs. It is imperative that the performance of an improved material, design, or building technique be considered in light of the cost of utilization.

Policy 515.3

Provide incentives and research toward improved design, construction and financing of new housing.

The City administration should develop housing programs and continue research of housing and subdivision design. The Building Code and Subdivision Ordinance should be readily modified to incorporate new design, layout and construction techniques.

GOAL 520.0

INCREASE THE AVAILABILITY OF HOUSING FOR LOW AND MODERATE INCOME HOUSEHOLDS IN AN INTEGRATED SETTING.

Housing availability pertains to the number of vacant housing units on the market for rent or sale, as well as to the cost and condition of these units. Although the level of housing availability depends on a number of complex market forces, fair municipal policies and assistance are required to assure sufficient, standard quality housing for lower income families. The goal is to provide decent housing for all residents of Austin.

Objective 521.0

Reduce neighborhood segregation.

The negative impact of racial and economic segregation upon the availability of housing to minority and low-income households cannot be over-emphasized. The following policies are directed at the reduction of housing segregation to increase the accessibility of standard quality housing at the lowest possible cost to lower income and minority households.

Policy 521.1

Adopt and enforce a Fair Housing Program.

The City should seek enactment of a Fair Housing Ordinance. Effective enforcement of this ordinance by the Human Relations Commission will be the decisive factor in assuring housing availability at fair prices to minority households.

Policy 521.2

Continue to require strict compliance with a Fair Housing Program in the case of publicly assisted housing.

	The Freedom of Choice Plan adopted by the Board of Commissioners of the Austin Public Housing Authority should be continued. The Housing Authority should also continue a policy of constructing lower density, scattered housing in diverse areas of the city in an effort to promote housing integration.	The Department of Housing and Urban Development's Rental Assistance Payments Program, as well as other housing assistance programs administered by the Housing Authority, should include the development and implementation of a comprehensive Equal Opportunity Housing Plan.
Policy 521.3	Improve the financial mobility of low-income households. The stabilization of employment, increased manpower, job training and the elimination of job discrimination	are important elements of this policy.
Objective 522.0	**Provide assistance to increase the availability of standard quality housing to low-income families.** The federal government is the source of funding for the most important housing assistance programs in Austin. The amount of funding, as well as the implementation policies for many federally designed programs, are determined on a national level. Recent federal legislation has, however, given cities more control over the direction and intensity of local housing	assistance, most notably through the Housing and Community Development Act of 1974. Continuing categorical federal assistance programs often require City initiative for the procurement of funding. The following policies relate to the efforts required of the City to establish an effective housing assistance strategy.
Policy 522.1	Encourage federal rental assistance payments to low-income families. The newly initiated Department of Housing and Urban Development's Rental Assistance Payments Program provides opportunities for rental subsidied to low income households. The Public Housing Authority of	Austin, as the operating agency for the Program, should make every effort to seek increased funding in subsequent program years.
Policy 522.2	Expedite the construction of new public housing. The City should encourage funding for new public housing. Current priorities have been retarded due to federal policies and difficulties in site acquisition; the Department of Housing and Urban Development is	now giving priority to new public housing construction in those states with effective state finance agencies. The City should support the establishment of a State Housing Finance Agency in Texas.
Policy 522.3	Encourage federal home ownership assistance to lower income families. The number of categorical federal programs assisting lower income families to own their homes was reduced by the initiation of the Housing and Community Development Block Grant. Homeownership subsidies	initiated by the City for lower income households could include interest rate reduction subsidies, extended loan terms, mortgage indemnification, or interest deductability subsidies funded through the block grant.

Policy 522.4

Direct rehabilitation efforts toward preserving the supply of standard housing available to low income families.

A significant number of substandard, but salvageable, houses are demolished each year. For some of these, rehabilitation through private financing to meet Building Code specifications would result in higher-than-competitive rents. For others, demolition is the result of public property acquisition for rights-of-way. If such houses could be publicly acquired, relocated and repaired, they could then be sold to lower income families through such programs as Urban Homesteading, or rented as public housing through the Austin Public Housing Authority.

Objective 523.0

Reduce the cost and increase the production of new housing for lower and moderate income families.

The tools available to the City for increasing the production of low cost housing are limited, but a coordinated, comprehensive use of the policies and programs that are available could help alleviate the problem. Increased production of marketable new housing for moderate income households also increases the effectiveness of the filtering process which allows older units to become available to low income families.

Policy 523.1

Research and encourage construction methods, materials and housing design which reduce housing costs.

The City should research construction design techniques and building materials which reduce housing costs. The Zoning and Subdivision Ordinances and Building Codes should be readily modified in response to innovations.

Policy 523.2

Expand research into the federal assistance available for the financing of low and moderate income housing construction.

Many federal programs are underused because the City or program sponsor must actively pursue the federal funding source. The City should assume the responsibility of publicizing program availability as well as counseling and coordinating the efforts of program sponsors and operating agencies.

Policy 523.3

Lower the cost of land for residential construction.

Numerous City policies, most notably those relating to subdivision, annexation and utility extension, have a direct and marked impact upon the cost of developable land. Encouraging the use of planned unit developments or cluster housing techniques densities can effectively reduce land costs per unit. The application of the Zoning and Subdivision Ordinances should be sensitive to their impacts on residential land costs and the feasibility of lower income housing construction. Municipal land use controls must be designed with consideration for the over-all housing needs of the community.

Parks, Open Space and Leisure Facilities Introduction

6

The citizens of Austin are aware of the need for parks and open space in which to pursue their leisure interests. It should be the responsibility of the City of Austin through the Parks and Recreation Department to provide for park land acquisition, facilities and programs to meet these needs. It should also be the responsibility of the City to maintain and manage recreational land in an economical and adequate manner.

It will be necessary to define future, as well as current, recreational interests and needs, and derive standards on which to base long range programs. Communication and cooperation among various agencies, boards, commissions and groups will be needed in order to assure a balanced program for open space, parks and leisure facilities.

GOAL 610.0 **PROVIDE ADEQUATE PARK LAND AND OPEN SPACE TO MEET THE NEEDS OF AUSTIN'S CITIZENS.**

Areas should be provided for the development of leisure-oriented facilities as well as the preservation of Austin's unique character.

Objective 611.0 **Prepare a parks and recreation master plan for the city.**

Policy 611.1 Develop a set of size and service area standards to guide the City in securing park and open space areas.

Standards for park land and open space should meet or surpass those set by the National Recreation and Park Association.

Policy 611.2 Discourage the building of non-leisure facilities in park land.

Park land, because of its visibility, accessibility and availability, is a prime target for the construction of facilities which could more appropriately be placed elsewhere.

Objective 612.0 **Expand programs to secure adequate park land and open space to meet a plan adopted by the City of Austin.**

Policy 612.1 Encourage private donations of funds or lands.

The City of Austin should establish a foundation to facilitate donations of land to the City for park and/or open space needs. The benefits of land donation as a tax incentive should be publicized and the creation of land trusts for park purposes should be encouraged.

Policy 612.2 Establish new agreements, as needed, and reevaluate existing agreements between all independent school districts and the City of Austin with reference to the purchase and use of school grounds as possible park sites.

PARKS, OPEN SPACE AND LEISURE FACILITIES

Policy 612.3	Continue to develop a program of advance land acquisition by the City prior to development and before the escalation of land costs.	
Policy 612.4	Consider revision of the Subdivision Ordinance to require developers to dedicate park land, or monies in lieu of land, for all new subdivisions.	
Policy 612.5	Define and acquire easements for open space and/or recreational use prior to land development as an alternative to fee simple purchase or dedication.	
Policy 612.6	Consider revising the Zoning Ordinance to include an agricultural zoning classification. The purpose of this policy is to permit the annexation of agriculturally used land and to retard the escalation	of the price of land so that tax values will still permit agricultural use.
Policy 612.7	Zone all creek floodplains in conformance with a master drainage plan.	
Policy 612.8	Evaluate all publicly owned lands that are not in current use or identified for future use for their potential as public open space.	
Policy 612.9	Examine all lands currently used as municipal open space, but not currently owned by the City, for feasibility of purchase.	
Policy 612.10	Determine the potential use of land through leasing and the potential that might be available under a leasing option. The use of purchase options for land acquisition should also be determined.	

Policy 612.11	Seek the procurement of land and facilities through life estates.	
Policy 612.12	Classify all future park land acquisitions as dedicated park land in order to ensure permanent classification.	
Policy 612.13	Extend "Lake" zoning to Lake Austin and areas along Town Lake that are not currently covered by such a zoning classification.	
Policy 612.14	Provide more public park space along Lake Austin.	
Policy 612.15	Develop agreements with other public agencies for the joint acquisition, development and staffing of park sites throughout Travis County.	
Policy 612.16	Actively encourage private park and open space development.	
Policy 612.17	Where feasible, use drainage easements as public open space with appropriate access.	
Objective 613.0	**Identify and preserve areas of unique natural beauty, significant habitats of flora and fauna, and areas of historical, geological and archaeological significance.**	
Policy 613.1	Identify and preserve natural areas, especially along creeks, for minimal development and use. The purpose of this policy is to prevent the destruction of the natural character of an area through overuse by the public. The City will work with various public	and private environmental and conservation groups in identifying those areas that need protection, including those already identified by the Audubon Society.

Policy 613.2	Educate citizens concerning the need for protection and preservation of the natural environment by providing opportunities for participation in activities which enhance appreciation of Austin's environment and natural resources.	
	Maintain and improve satellite programs through provision of group transportation and operation of outdoor	recreation programming.
Policy 613.3	Preserve historically, geologically and archaeologically significant trails and buildings in park-like settings.	
	Encourage the use of historical buildings for public purposes.	
Policy 613.4	Establish a program for re-naturalizing areas within parks and open space where desirable and feasible.	
Policy 613.5	Protect and retain existing plant material as part of overall landscape designs.	
GOAL 620.0	**IMPROVE DESIGN CRITERIA AND EVALUATION PROCEDURES TO ACCOMPLISH A HIGH QUALITY PARK SYSTEM.**	
Objective 621.0	**Establish design criteria for park facilities and programming.**	
Policy 621.1	Develop a design review process with all pertinent City departments for parking, roads and other facilities related to parks.	
Policy 621.2	Continue to observe established guidelines concerning the use of porous and non-porous surfaces and resulting drainage runoff.	

Policy 621.3	Designate appropriate buffer areas between park development and surrounding land uses.	
	Park land and open space should function as buffers between such installations as athletic fields and picnic	areas, and surrounding neighborhoods.
Policy 621.4	Coordinate planning activities to provide a hike and bike trail system throughout the city within open space, parks and street corridors.	
Policy 621.5	Acquire and develop park land adjacent to new thoroughfares, where feasible.	
	When street development is expanded to include provision of adjacent park-like corridors the right-of-way of	unused streets can be utilized as park land.
Policy 621.6	Continue to use natural materials in parks and open space designs.	
	All planning for new park facilities should include strong energy saving designs in order to minimize the	use of energy and protect the environment.
Policy 621.7	Establish guidelines on the general use and maintenance of landscaping within the Central Business District.	
Policy 621.8	Design all future recreation facilities for multi-purpose use, where appropriate.	
	In particular, all new golf courses and recreation centers should be designed as multi-use facilities. For example, the design of golf courses could incorporate	a trail system along the perimeter, or areas within the course might be preserved for their natural beauty or for their environmental importance.
Policy 621.9	Provide necessary public restroom facilities at all public parks and open spaces.	
Objective 622.0	**Consider the mobility-impaired population of Austin in all planning and construction phases.**	

PARKS, OPEN SPACE AND LEISURE FACILITIES

Policy 622.1	Determine and identify the needs of the mobility-impaired population of Austin with respect to facilities and transportation related to leisure.	
Policy 622.2	Upgrade, where feasible, existing recreational facilities to be barrier-free for handicapped citizens.	
Policy 622.3	Advocate the revision of Texas Senate Bill #111 so that facilities may be provided for the handicapped without drastically altering the natural environment.	
	Often, hike and bike trails are by necessity unable to accommodate the handicapped without injuring the environment we are trying to protect. Some means	should be provided for such accommodations without requiring waivers.
Objective 623.0	**Consider the aesthetic setting of Austin in the planning and development of parks, open space and municipal projects.**	
Policy 623.1	Provide for review by the Parks and Recreation Department of City projects that affect open space and the appearance of the city.	
	The Parks and Recreation Department should advise and prepare landscape plans for other City of Austin	departments to provide for more attractive City facilities.
Policy 623.2	Develop a municipal street tree planting and landscaping program.	
	Traffic median and street landscaping should be provided. The City should encourage native plantings and	landscaping by both public and private concerns.
Objective 624.0	**Utilize citizen participation to evaluate programs and facilities related to parks, open space and leisure activities.**	
Policy 624.1	Continue to consult advisory boards and neighborhood associations for their input into the	

	operation and development of park land and facilities.	
Policy 624.2	Develop a public awareness program to educate the public and keep them informed of services provided by the Parks and Recreation Department.	
	The City should develop slide presentations, brochures and other media presentations to assist in the public	awareness program of the Parks and Recreation Department.
GOAL 630.0	**PROVIDE LEISURE FACILITIES AND RECREATIONAL PROGRAMS TO BEST MEET THE NEEDS OF AUSTIN CITIZENS.**	
Objective 631.0	**Provide athletic facilities to fulfill the leisure needs of Austin citizens.**	
Policy 631.1	Continue to provide equal athletic facilities throughout the city, in keeping with a parks and recreation master plan.	
	Athletic facilities should be designed for multiple uses.	
Objective 632.0	**Provide facilities and programs for senior citizens so that their increased leisure time can be used to maintain mental and physical health.**	
Policy 632.1	Adapt existing facilities to accommodate physical activities for senior citizens.	
	Construct park facilities for seniors such as covered areas for passive activities, and adjust fee structures,	where applicable.
Policy 632.2	Develop multi-purpose senior activity centers which meet the needs and interests of participants.	
	Help improve the economic position of the elderly through such agencies as the Community Workshop Market, the Community Workshop Senior Guild and the Texas Employment Commission.	A center should be provided primarily for the use of elderly people in a centralized location. Branch centers can coordinate with the main center in various neighborhood recreation facilities throughout the city.

Policy 632.3	Cooperate with private organizations whose facilities can be used by seniors in neighborhoods where no other public facilities are provided.
Policy 632.4	Improve transportation systems for the elderly to and from leisure-oriented facilities. This would be implemented in conjunction with the Urban Transportation Department.
Objective 633.0	**Ensure the accessibility of recreational and leisure facilities.**
Policy 633.1	Advocate the amendment of state statutes to permit the use of school buses for youth recreation during after-school hours.
Policy 633.2	Develop a mobile recreational system to meet the needs of homebound individuals in areas where leisure services are currently inaccessible.
Objective 634.0	**Develop facilities so that citizens in all sections of the city have the opportunity to participate in cultural and fine arts activities.**
Policy 634.1	Promote the arts by maintaining interrelationships among independent art groups in the city.
Policy 634.2	Provide a centrally located, City-owned cultural arts center.
Policy 634.3	Provide areas designed and programmed for the cultural arts in neighborhood community facilities.

Policy 634.4	Expand and improve outdoor performing and exhibit facilities. These should include both permanent and mobile facilities.	
Policy 634.5	Plan, design and construct additional performance areas in district parks or in conjunction with recreation centers.	
Policy 634.6	Construct or expand facilities for community-wide special events to be held outdoors. Such facilities would provide for Aqua Festival, Yule Fest and ethnic celebrations.	
Objective 635.0	**Maintain and develop facilities to allow interpretations of the culture, heritage and natural phenomena of the community.**	
Policy 635.1	Continue to evaluate, develop, maintain and improve museums within the community. Potential projects include: construction of educational buildings for class use in conjunction with museums; museum programs in neighborhoods; acquisition of	mobile vehicles; and permanent satellite museum facilities, and services.
GOAL 640.0	**IMPROVE MAINTENANCE PROGRAMS FOR PARKS, OPEN SPACE AREAS AND LEISURE FACILITIES.**	
Objective 641.0	**Continue efficient maintenance of parks and public open space.**	
Policy 641.1	Establish varying levels of maintenance in parks, open spaces and creeks to meet the planned use of an area. A strong recognition and re-evaluation of maintenance levels within parks and open spaces should be under-	taken in light of present energy needs, budgetary cut-backs and increases in publicly-owned lands.

Policy 641.2	Provide maintenance to repair and replace recreational equipment and facilities within parks.
Policy 641.3	Establish forestry programs for maintenance and care of existing and newly planted trees in public areas. Design all facilities to meet federal safety standards to protect both the public and staff.
Policy 641.4	Develop guidelines concerning the maintenance, access and development of easements, or other non-City public areas. This could include the construction and maintenance of public trails or similar facilities on private land.
Policy 641.5	Enact an ordinance which authorizes City monitoring of easements and right-of-way maintenance by private property owners.
Objective 642.0	**Ensure adequate revenue for the operation of parks, open space and leisure facilities.**
Policy 642.1	Evaluate fees so that no segment of the community is deprived of basic recreational services due to inability to pay.
Policy 642.2	Actively seek non-City funding to supplement current and future service.
Policy 642.3	Continue to investigate revenue sources such as concessions at City facilities on City land.
Objective 643.0	**Provide for the security and safe use of all park facilities by the general public.** Design all facilities to meet federal safety standards to protect both the public and staff.

Transportation Systems

7

Introduction

This section coordinates transportation system policy with the overall goals of urban design improvement, neighborhood protection, environmental protection and urban growth management. It reflects increased concern for safe and efficient public transit systems and non-motorized travel modes, rather than continued dependency on the automobile as the primary means of travel. Inherent in this shift of emphasis is the need for basic transportation for mobility-impaired individuals, and for compatibility between the transportation system and adjacent land uses. A change in priorities should also help to reduce transportation related noises and have a positive effect on air quality.

Policies have been developed to complement each other; no policy, objective or goal should compete against another. The intent of each is to provide a framework from which to build a transportation system that is responsive to the present needs of the Austin community and that will remain responsive to future needs. A Comprehensive Transportation Plan for the location, size and development of physical transportation elements will be produced by the Austin Transportation Study Office. Upon completion, this plan will be adopted as an integral part of the *Austin Tomorrow Comprehensive Plan.*

Adequate air transportation facilities and the efficient movement of goods and services within the urban area are also discussed in this section. Standards, criteria and guidelines are suggested by many objectives and policies, and these should be based on definitive research and realistically attainable values.

GOAL 710.0	**DEVELOP A BALANCED, SAFE AND EFFICIENT SURFACE TRANSPORTATION SYSTEM.**
Objective 711.0	**Encourage the development and use of public transportation systems.**
Policy 711.1	Establish an effective, public transportation circulation system within the core area and other major activity centers which integrates with the city-wide transportation system.
Policy 711.2	Promote services and increase passenger amenities to encourage mass transit use, especially for commuter trips during peak hours.
Policy 711.3	Establish a low or pre-paid fare structure for mass transit in order to increase ridership.
Policy 711.4	Develop an intra-city transit system serving all parts of the metropolitan area. The system should consist of high intensity service which connects major activity centers with less intense feeder and line-haul service which, in turn, joins residential areas with the high intensity services. It should also reflect due regard for the system's development potential.
Policy 711.5	Develop transit service programs tailored to the needs of existing and potential users, including, but not limited to, the use of braille, bilingual and culturally-oriented transit information and special shopping and recreation service programs.
Policy 711.6	Develop high intensity travel corridors by integrating various infrastructure elements and restricting high density development to these corridors.

Policy 711.7	Develop core area transit terminal facilities joining inter-city bus and rail passenger service with mass transit system routes, feeder services, taxi services, bikeways and pedestrianways.
Policy 711.8	Develop terminal and transfer facilities at strategic locations throughout the City for intra-city transit, taxi, bicycle, pedestrian and parking facilities.
Policy 711.9	Establish streets, lanes or access ramps where low occupancy vehicles are restricted during specified periods of particular days.
Policy 711.10	Improve city-wide taxi service by ensuring twenty-four-hour service, minimizing response time and encouraging multiple passenger fare structures.
Policy 711.11	Establish taxi fares that will provide sufficient revenues for the operators yet not be burdensome to the user.
Objective 712.0	**Establish and expand the planning, funding, implementation and operation of a multi-modal transportation system, including transitways, roadways, bikeways and pedestrianways.** Provide funding to monitor all elements of the transportation system on a regular basis.
Policy 712.1	Develop and implement management programs that promote operationally compatible multi-modal transportation corridors.
Policy 712.2	Establish partial or total auto-free zones in conjunction with other efforts to maintain or increase the level of accessibility to the zones.

Policy 712.3	Improve the safety and security of all transportation facilities and users through educational programs and appropriate facility design.	
Policy 712.4	Modify the design of hazardous drain inlets and remove obstacles to ensure both pedestrians, including mobility-impaired persons, and cyclists of safe passage.	
Policy 712.5	Annually evaluate the implementation and operation of the multi-modal transportation system with one- and five-year programs.	
Policy 712.6	Develop and refine the entire transportation system so that it anticipates, and is consistent with, long range plans, including land use, housing, environmental and social service objectives. Short term strategies should be utilized to accommodate variations in life style and preference.	
Policy 712.7	Develop travel corridors which feature long and short term coordination of transportation and land use improvements and which are consistent with community transportation objectives, modal choices and movement patterns.	
	Provide economic and/or other incentives to concentrate high and medium density development along designated transportation service corridors. The	corridors should be designed to accommodate and anticipate the changing mix of transportation modes.
Policy 712.8	Develop mechanisms to plan, implement and operate multiple use right-of-way.	
Policy 712.9	Identify a system of transportation corridors based on movement characteristics.	

Policy 712.10	Implement an effective and efficient management program to guide existing transportation elements into a multi-modal system.	
Policy 712.11	Construct or modify bridges to provide for the safe movement of all transportation modes.	
Policy 712.12	Protect or eliminate all roadway and railway at-grade crossings at major streets and protect crossings at other streets. Discourage at-grade crossing in new developments.	
Objective 713.0	**Develop a safe, effective network of bicycle and pedestrian facilities.**	
Policy 713.1	Develop a comprehensive, all-weather pedestrain network alongside vehicular routes and in space reserved exclusively for pedestrian movements, including, but not limited to, alleys.	
Policy 713.2	Establish a comprehensive set of standards which will govern the degree of separation between pedestrian and vehicular movement. Provide concourses, skyways or pedestrian bridges, where warranted, at intersections, mid-block and	building locations.
Policy 713.3	Provide pedestrianways in all new areas by means of public use easements, where appropriate. Require public use easements by combining pedestrian, utility and drainage facilities between lots in subdivisions. This would provide public passageways through subdivisions, where children might otherwise	be required to go around unusually long blocks or move along heavily traveled streets to reach parks, greenbelts or other areas of interest.
Policy 713.4	Improve pedestrian safety and access along major streets and intersections. This could be accomplished through the use of specially phased, pedestrian-activated traffic control signals and	

	other traffic control devices. There should be a maximum separation between the pedestrianway and roadway, while avoiding major obstacles, such as trees.
Policy 713.5	Provide pedestrian amenities and increase the comfort and convenience of pedestrianways, especially in centers of activity.
Policy 713.6	Develop a community-wide bikeway network based on a comprehensive plan which includes, where appropriate, hard surface bike trails along linear parks and creeks.
Policy 713.7	Improve the channelization of bicycle and motor vehicular movement along streets and at major intersections.
Policy 713.8	Establish very strict standards governing the parking of vehicles in on-street bicycle facilities.
Policy 713.9	Develop a community-wide bikeway network based on a comprehensive plan which includes hard surface bike trails along linear parks and creeks, bikeway facilities in high traffic volume areas and in all new developments.
Policy 713.10	Encourage a single, state-wide bicycle identification (licensing) system.
Policy 713.11	Expand safety and educational programs dealing with non-motorized transportation.
Policy 713.12	Establish a comprehensive set of standards which will govern the degree of separation between pedestrian and vehicle movement.

TRANSPORTATION SYSTEMS

Objective 714.0	**Encourage the efficient use of roadways and other existing transportation elements.**
Policy 714.1	Develop an active program designed to encourage and assist businesses and institutions in developing and implementing incentives for the use of mass transit, car pooling, or other ride-sharing vehicles and non-motorized transportation.
Policy 714.2	Encourage staggered working hours within the core area and other major activity centers.
Policy 714.3	Improve traffic flow through the use of synchronized traffic signals, land controls, surveillance systems, one-way streets and left turn lanes.
Policy 714.4	Restrict on-street parking after taking into consideration traffic flow, adjacent land uses, available traffic routes and alternative transportation.
Policy 714.5	Uniformly enforce all laws and regulations pertaining to traffic operations.
Policy 714.6	Minimize utility interference with the use of transportation ways. Minimize the use of streets in construction related activities.
Policy 714.7	Design and develop circulation patterns in the core area to de-emphasize through traffic.
Policy 714.8	Develop a comprehensive parking plan and policy based on desired land use and transportation relationships.

	This would include special consideration of the parking requirements of historical areas and reservation of the most accessible parking spaces for vehicles with high occupancy.	
Policy 714.9	Establish parking allocations as one of several means of supporting the multi-modal use of the transportation system. Provide fringe parking areas for activity centers, as appropriate.	
Policy 714.10	Establish a workable set of guidelines for exemptions from parking regulations.	
Policy 714.11	Regulate access along roadways. Driveways and medians should be designed to maintain the operational characteristics of a roadway. Minimize the number of intersections and curb cuts.	Coordinate driveway design with on-site traffic operations.
Policy 714.12	Provide emergency service vehicles with improved routing and better control systems to minimize response time and ensure safe operation.	
Policy 714.13	Establish a maintenance program for bike, pedestrian, transit and road facilities. The maintenance program should include, but not be limited to, paving, curbing, drainage systems, signing,	marking and signalization.
Policy 714.14	Pave all unpaved streets.	
Policy 714.15	Develop user-oriented marketing programs that encourage the efficient use of various transportation modes.	
Objective 715.0	**Improve basic transportation for all mobility-impaired individuals.**	

Policy 715.1	Coordinate special transportation service programs and funding for maximum efficiency and effectiveness.	
Policy 715.2	Develop barrier-free pedestrianways with specific provisions for ramps and crosswalks.	
Policy 715.3	Provide adequate pedestrian signal time to allow mobility-impaired persons to safely negotiate selected street intersections.	
Policy 715.4	Provide for mass transit or alternative services for mobility-impaired individuals. Remove operational and physical barriers to mass transit services. The special requirements of privately operated transportation services will require legal	arrangements. Provide special demand-responsive taxi services.
Policy 715.5	Reserve appropriate parking space for the mobility-impaired in public parking facilities.	
Policy 715.6	Require all public use buildings to be made physically accessible to mobility-impaired persons.	
GOAL 720.0	**ENSURE THAT THE DESIGN AND USE OF THE TRANSPORTATION SYSTEM ENHANCES AND MAINTAINS THE ENVIRONMENTAL QUALITY OF THE METROPOLITAN AREA.** Support the passage and enforcement of stricter state motor vehicle, air and noise pollution inspection laws.	
Objective 721.0	**Maintain acceptable noise standards.**	
Policy 721.1	Develop appropriate noise standards for each classification of transportation and include noise considerations in the design, operation and maintenance of transportation facilities.	

Policy 721.2	Within the city, limit the operation of motor freight vehicles to designated truck routes.
Policy 721.3	Use various means of buffering sound to reduce noise impacts on areas adjacent to transportation facilities. These might include building setbacks, added building insulation, berms and foliage.
Policy 721.4	Control the location and design of land uses so that noise-producing transportation facilities are not located near land uses which require a quiet setting. For example, hospitals, schools or neighborhoods should not be located adjacent to airport runway approach zones, rail yards or interstate highways.
Policy 721.5	Vigorously enforce noise regulations. Allow the operation of only those vehicles which conform to established noise guidelines.
Objective 722.0	**Maintain and enforce acceptable air quality standards.**
Policy 722.1	Develop appropriate air standards for each classification of transportation route and include air considerations in the design, operation and maintenance of these facilities.
Policy 722.2	Allow the operation of only those vehicles which conform to established emissions guidelines.
Policy 722.3	Control emissions from indirect, transportation related sources.

Policy 722.4	Regulate the number of vehicle miles traveled within the urban area by encouraging more efficient location of services and open space.
Objective 723.0	**Improve the control of transportation related storm water runoff.**
Policy 723.1	Use special pavement materials, street curb design and other methods to reduce water runoff and creek pollution.
GOAL 730.0	**ENHANCE THE RELATIONSHIP BETWEEN THE TRANSPORTATION SYSTEM AND ADJACENT LAND USES.**
Objective 731.0	**Ensure the functional compatibility of the transportation system and adjacent land uses.**
	Develop and apply urban street design criteria which are consistent with the land uses they serve.
	Delineation of roadway edges should be compatible with the roadway's functional requirements and the character of adjacent land uses.
	Access between the transportation facility and the adjacent land use should not destroy the character of either.
	Additional right-of-way or setbacks may be desirable along transportation routes.
	Acquire right-of-way, as appropriate, through dedication or purchase based on the requirements of the route.
	Require dedication of additional right-of-way, if needed, concurrent with land use changes.
Policy 731.1	Require a study of the impact of significant changes in land use or transportation in order to ensure compatibility.
Policy 731.2	Prevent interference with sight distances along transportation routes.
Policy 731.3	The location and appearance of traffic control devices should be coordinated, wherever possible.

Policy 731.4	Install efficient and economical street lighting to promote the safety of traveled ways while not detracting from adjacent areas.
Policy 731.5	Use buffer zones, where appropriate, to ensure the compatibility of transportation and adjacent areas.
Policy 731.6	Through proper location and design, ensure that the development of major transportation routes produces minimum negative impact on neighborhoods.
Policy 731.7	Develop physically identifiable areas for separate transportation functions to minimize conflicts with activities on adjacent land.
Objective 732.0	**Ensure aesthetic compatibility among transportation facilities and adjacent land uses.**
Policy 732.1	Design bridges and overpasses to enhance surrounding environmental features. Develop designs based on anticipated short term needs which are also adaptable to long term requirements.
Policy 732.2	Develop landscaping and tree planting programs to enhance efficient vehicular and pedestrian movement.
Policy 732.3	Encourage the enhancement of the overall appearance of transportation routes.
Policy 732.4	Develop beautification and buffering performance standards for all parking facilities.

Policy 732.5	Design and locate street lighting and other transportation support devices so that transportation safety and nearby aesthetic features are mutually enhanced.
GOAL 740.0	**PROVIDE ADEQUATE AIR TRANSPORTATION FACILITIES.**
Objective 741.0	**Provide safe, efficient and convenient movement of people and freight via air carriers and general aviation.**
Policy 741.1	Coordinate all metropolitan surface and air transporation operations.
Policy 741.2	Develop an airport master plan for short, medium and long range periods, and update it at regular intervals. Explore ways to obtain origin and destination information about trips to and from the airport.
Policy 741.3	Implement master plan phasing to provide for adequate airline terminal facilities, aircraft sales and service facilities, as well as runway, taxiway and navigational aids.
Policy 741.4	Establish an airport impact district subject to special zoning and policies to provide for environmental and land use compatibility.
Policy 741.5	Set user charges to offset the operating and capital costs of the airport.
Policy 741.6	Provide adequate vehicular parking for airport facilities.

Policy 741.7	Improve airport freight and loading facilities.	
GOAL 750.0	**ENCOURAGE THE EFFICIENT MOVEMENT OF GOODS AND SERVICES BY SURFACE TRANSPORTATION WITHIN THE URBAN AREA.**	
Objective 751.0	**Encourage coordination between all public and private agencies involved in the movement of goods and services.**	
Policy 751.1	Develop a goods and services movement plan.	
Policy 751.2	Encourage a single rail and trucking terminal. This terminal should be accessible to both railway and roadway systems to reduce freight and rail movement within the city.	Encourage the development of a piggyback operation ramp and terminal to facilitate the exchange of goods between transportation modes.
Policy 751.3	Encourage a single, package express facility for bus companies.	
Policy 751.4	Encourage joint delivery services where there is a concentration of retail stores, such as service oriented businesses.	
Objective 752.0	**Encourage efficiency in the use of roads for goods movement and the transportation system, as a whole.**	
Policy 752.1	Prohibit parking for pick-up or delivery except in specified loading zones, and prohibit parking in areas reserved for deliveries.	
Policy 752.2	Establish districts where deliveries can be made only during specific hours.	

Policy 752.3	Where alleys are available in commercial areas, restrict their use to deliveries, only.
Policy 752.4	Require off street loading docks.
Objective 753.0	**Encourage efficiency in the use of railroads for goods movement and in the transportation system, as a whole.**
Policy 753.1	Encourage the establishment of a single rail yard.
Policy 753.2	Create special rail freight zones, as appropriate.
Policy 753.3	Eliminate or regulate the spotting of rail cars within street right-of-way.

Health and Human Services

8

Introduction

In the course of the Austin Tomorrow Goals Program it became clear that the citizens of Austin perceived the provision of health and human services as a responsibility of the City equal to the provision of the more traditional services such as physical planning, transportation and parks. In order to guide the City's efforts, the Goals Assembly offered specific suggestions concerning the City's future commitment to the provision of social services. On the basis of these recommendations, the City has accelerated its efforts to provide health and human services for Austin's citizens.

Because the City presently operates without the benefit of a comprehensive human services policy, such a policy is needed as the basis for program and project planning.

The human services master plan should be written to develop long range human service policies and principles. It should acknowledge the intent of the City to sustain, through delivery systems, general support services as well as individualized services to persons with special or emergency needs. These principles should be expressed in terms of goals such as:

(1) Minimum life support - Ensure that no person is without such basic necessities as food, clothing, health and mental health care, or constitutionally-guaranteed legal rights.

(2) Transcending the welfare cycle - Ensure educational, employment and other special opportunities for disadvantaged persons to further self-reliance.

(3) Problem prevention - Deter the growth of problem conditions at the individual and community level through education, preventive physical and mental health programs, recreation, safety programs, rodent control, crime prevention and other preventive programs.

(4) Universal support services - Provide family and societal support services in response to new problems created by urbanization and technological advances. These include health, education, child care, counseling and assistance for the aging, youth, and unemployed, rehabilitation services and other support rehabilitation services.

(5) Enrichment - Encourage personal development and community enrichment through cultural, educational and recreational programs.

In support of the five goals listed, human resources development policy should include the following processes:

(1) Planning – Integrate existing and future City of Austin human service activities into a purposeful, systematic and timely scheme to meet expressed community needs in a sympathetic and efficient manner. Continue to investigate workable, innovative human services for Austin.

(2) Coordination – Coordinate City of Austin human service activities with those of other service organizations.

(3) Technical assistance – Offer educational and other support services to City of Austin departments and contract agencies, as well as other public agencies, where appropriate.

(4) Monitoring and evaluation – Develop a monitoring and evaluation system to determine the efficiency, effectiveness, impact and contract compliance of projects.

Human services goals will be achieved through a comprehensive human service delivery system. The thirteen following services are components of the present City system. This is not, however, a complete inventory of the services which could be provided.

(1) Consumer protection and education
(2) Cultural enrichment and development
(3) Employment and economic development
(4) Equal opportunity
(5) Financial and emergency assistance
(6) Food and nutrition
(7) Physical health maintenance and care
(8) Informal and supplementary education
(9) Individual and family life counseling
(10) Recreation and social development
(11) Mental health maintenance and care
(12) Public protection
(13) Justice and safety

It is important to bear in mind that what is presented here is not a final, definitive statement regarding social policies or programs for Austin. It represents, instead, a framework within which the City may begin the important task of developing its social planning capability.

The national trend toward social planning has been paralleled by the growing involvement of the City of Austin in health and human service planning. In 1951, a verbal agreement was made between Travis County and the City of Austin regarding hospital and welfare responsibility. The County accepted responsibility for welfare, and the City agreed to support Brackenridge Hospital. Although an unofficial policy, this agreement represents an attempt at social planning and coordination. Since this initial effort several studies have documented the need for the further development of such efforts.

In 1975 the Austin-Travis County Community Council prepared *Priorities for Human Services* which pointed to the need for a comprehensive social plan for Austin. The study stated: "For many years, public and voluntary agencies have determined funding priorities without an established plan or policies. If people services are to become a viable system, improved planning and financing must be established." Additionally, the committee discovered that some agencies had never compared the services they provided with actual community needs.

The City's traditional approach to human services delivery has been reactive. The assistance of the municipal government was seen as a last resort, and due to changing economic, social and political trends, resources were limited and fluctuating. The recommendations of the Austin Tomorrow participants and the priority study area aimed at making the local government's approach more anticipatory.

Citizens demand, as the Austin Tomorrow Program demonstrates, that human services effectively and adequately meet community needs. Austin citizens feel that planning is necessary in order to assure that these needs are met.

All citizens benefit from comprehensively planned services. The problems resulting from inadequate and inequitably distributed human services, although often associated with certain geographic or economic factors, affect all residents regardless of income, residence or social position. Research indicates that poor health care, abbreviated education and suppressed legal rights have both direct and indirect impacts on the economy, the crime rate and the quality of neighborhoods. Inadequate prenatal care increases the probability of brain damage to infants who, in turn, usually require public subsidies for special education and rehabilitation. The head of a household who cannot gain employment due to lack of education, inadequate job training or job discrimination may resort to unlawful means of acquiring food and clothing for the family. If apprehended, such a person's legal defense and possible incarceration will be at public expense.

The demands of a highly technical society and its accompanying social pressures have created the need for social services which can provide assistance in meeting education, health and public protection needs. New problems have developed. For example, a growing population of elderly people and young children whose parents work require services seldom needed before. As society changes and solutions are found to old problems, new problems emerge which must be addressed.

Thus, social services have expanded to include health, education, housing, counseling, senior citizens, the young and the unemployed, among many others. In an effort to portray the new, broad support role of social services, these are being referred to as human services. They have become a public utility, which, along

with water, electricity and other urban services, are provided to citizens as a right on a non-prejudicial basis. Generalizing from the recommendations of the Goals Assembly, several points become clear.

(1) Citizens demand that local government take an active stance with regard to human services. They no longer accept the reactive approach which the Goals Assembly characterized as piecemeal and crisis-oriented. In practical terms this calls for a policy statement by the City Council expressing commitment to upgrading and expanding the City of Austin's involvement in human services. It also implies increased reliance on needs-assessments, program evaluation, and increased coordination to ensure the maximum effectiveness of operating programs.

(2) The Goals Assembly supports the concept of providing human services as a public utility or service.

(3) The concern for improving program effectiveness and funding efficiency led to a preference for prevention strategies in place of maintenance or curative programs. This substantiates the need for research into delivery and intervention schemes for long range results. Programs based on such preventive strategies may not be attractive in terms of immediate benefits: they may be more expensive initially, they do not show quick results and the results are difficult to measure. However, the long range benefits are very appealing: they address and improve human conditions at their source and they are less expensive, overall.

(4) Service delivery is emphasized instead of physical construction. The former strategy of getting things on the ground quickly is no longer necessary. Human service providers have achieved visibility and are receiving neighborhood input. More importantly, most of the crises have been addressed and more thoughtful planning may be undertaken. In specific terms, human services should be financed out of the City's operating budget. In most instances, existing buildings can be modified to house human services programs. This is consistent with recommendations in other sections of the *Comprehensive Plan* to preserve and recycle old buildings and rejuvenate existing neighborhoods.

The preceding discussion of human services is intended to broaden perception of the scope of human services as both a public utility and a special service for particular groups. Based on this common understanding, a more specific statement defining the City of Austin's involvement in human services delivery can be made.

GOAL 810.0 **IMPROVE THE PLANNING, MANAGEMENT, FUNDING AND DELIVERY OF HEALTH AND HUMAN SERVICES WITHIN THE CITY OF AUSTIN.**

Objective 811.0 **Develop a comprehensive social policy to guide the development of a comprehensive local health and human services delivery system.**

A comprehensive social policy which defines areas of responsibility between the various governmental entities and which develops interagency mechanisms for implementation is essential.

Policy 811.1 Establish a system for integrated, comprehensive health and human service planning.

The planning process will (1) define and establish priorities of need, (2) define the level of provision of specific services, (3) provide an in-depth, comprehensive needs assessment, and (4) develop integrated and comprehensive services. These services should be designed to reinforce each other with minimal duplication of effort.

Policy 811.2

Establish a system for effective, uniform monitoring and evaluation of health and human services programs.

Specific goals and objectives can be established for each service program. Regular and periodic monitoring may then indicate what progress is being made toward achieving the stated goals and objectives. Continuous evaluation must ultimately assess whether the program achieves the established goals in an effective manner.

Policy 811.3

Establish a system for developing financial arrangements among local funding agencies for the provision of services.

Considerations must be given to the development of new and innovative funding arrangements which will expand the abilities of funding agencies and which will also aid in identifying equitable levels of responsibility.

Policy 811.4

Establish an effective information and referral procedure.

Effective information and referral services are essential for achieving the maximum use of the human services delivery system. Community awareness of these services is essential in meeting the needs of potential service recipients.

Policy 811.5

Establish an information system designed to provide comprehensive, updated information on community needs and on the health and human services currently being provided.

Effective planning efforts must be based upon accurate information regarding the groups toward which planning efforts are directed. The information which is incorporated into, and interpreted by, the system must be valid, reliable and regularly collected so that trends and changes may be observed.

Policy 811.6

Establish a mechanism for obtaining citizen participation in planning both the long range and project level of human services.

All planning efforts must incorporate those priorities, needs or preferences which are expressed by the citizens for whom the services are to be provided. Citizens must be involved in formulating the overall goals and objectives of the human service delivery system, as well as in decisions concerning specific project plans designed to implement these goals.

Objective 812.0

Expand the City's effort to deliver health and human services.

Attention must be given to ensuring that all current and future efforts in the delivery of health and human services seek to eliminate problems and impediments which have been identified.

Policy 812.1	Eliminate duplication of effort in the provision of City-funded health and human services.	
	The health and human service delivery system should assure that each service is planned for and	implemented so that all needs are met and no services are duplicated.
Policy 812.2	Coordinate activities of all public and private agencies and departments involved in the delivery of health and human services.	
	The planning and provision of health and human services must be coordinated with the planning and provision of physical facilities which directly influence their effectiveness. Such physical facilities are provided through capital improvement programming, economic	and housing programs, transportation planning and annual budgeting. While coordination between public agencies and private organizations is imperative in the delivery of social services, the City must not neglect its responsibility for the provision of physical facilities.
Policy 812.3	Reduce barriers to the maximum use of health and human services.	
	Examples of barriers include extreme costs, language problems, hours of operation, location of services and transportation access. A coordinated and simplified	procedure to determine eligibility for public and private service should be implemented.
Objective 813.0	**Begin immediately to address the specific problems and to consider the specific recommendations which were identified by the Goals Assembly concerning current health and human service programs.**	
Policy 813.1	Improve mental health services.	
	Provide for community education programs which will increase public awareness and understanding of the causes and opportunities for the treatment of mental illness and mental retardation.	Incorporate halfway houses, employment training programs and individualized care into mental health treatment.
	Implement emergency mental health care services at Brackenridge Hospital and at other locations throughout Austin, as needed.	Emphasize integration of the mentally ill and retarded into the community.
Policy 813.2	Improve safety and law enforcement programs.	
	Assure equitable law enforcement practices.	Provide higher salaries for police.
	Improve the relations between police, youth and the community, in general.	Provide psychological and health care services for all persons suffering from drug and alcohol related problems.
	Provide police officers with community awareness training.	

Policy 813.3	Expand services to dependent groups. Ensure that the elderly, young, indigent and handicapped have access to such essential services as food, clothing, safety, health, housing, transportation, recreation and companionship.	Provide outreach workers for home-bound individuals requiring assistance.
Policy 813.4	Improve emergency health care. Improve emergency ambulance service. Expand emergency room service at Brackenridge	Hospital. Supplement this service in neighborhood clinics.
Policy 813.5	Expand education-related programs. Provide full-time medical personnel at each school. Encourage the improvement of drug abuse and sex education programs by cooperating with the school district, City, County and private agencies.	Encourage the multiple use of school facilities as community centers by making them available at night and on weekends.
Policy 813.6	Expand family planning, prenatal programs and venereal disease control. Provide family planning, prenatal education and medical services through the neighborhood clinics to anyone needing these services.	Increase the accessibility of abortion services at Brackenridge Hospital.
Policy 813.7	Enforce rodent and animal control laws. Expand rodent and insect control programs. Enforce leash laws; encourage low-cost pet neutering.	
Policy 813.8	Expand child care services. The comprehensive human services delivery system should include city-wide, twenty-four-hour child and	infant care programs.

Development Suitability

Introduction 3

Austin is expanding rapidly. The Department of Planning estimates that by the year 2000 the City will provide municipal services to over half a million people. Accommodating such a population can be costly in terms of environmental quality, urban character and fiscal integrity.

The participants of the Austin Tomorrow Goals Program were concerned about the increasing pressures of urbanization on the city's resources. Chapter 3 of the *Comprehensive Plan* is a response to this concern. Citizens felt that a growth management policy should be based upon a thorough understanding of the special resources in and around Austin and the relationship of these resources to the processes of urbanization.

Because the qualities that attract people to Austin are often those that are most threatened as the city grows, Chapter 3 concentrates on the development suitability of the Austin area. Environmental indicators are mapped to show the location of environmentally fragile land; the procedure also reveals the most suitable locations for Austin's future growth.

Chapter 3 discusses the city's urban resources. Comparisons are drawn between the continuation of recent urban trends toward sprawling residential, commercial and industrial development and a shift toward a more contained urban form. By emphasizing development within the city limits, growth could be deflected from environmentally sensitive areas to the east and west, allowing more efficient provision of municipal services.

Austin's neighborhoods are considered the city's primary resource, and the chapter recommends a larger role for neighborhood associations in city planning. In keeping with the citizen participation theme established in the Austin Tomorrow Goals Program and Chapters 1 and 2 of this plan, Chapter 3 recognizes that neighborhood residents most directly experience the problems of increasing urbanization, and outlines ways in which community values can continue to be part of the planning process.

This chapter on development suitability is an essential precedent to the growth management system presented in Chapter 4. An understanding of the many valuable resources in the Austin area and the trends that might lead to their destruction is necessary before the responsible growth management policy can be presented. On the basis of such an understanding the concerns of the Austin Tomorrow Goals Program can be kept to a minimum, and Austin can continue to offer its distinctive combination of environmental, cultural and economic advantages.

THE SUBURBANIZATION PROCESS

The most notable change in American cities in the last century has been the movement of social and economic activity away from the central city. Innovations in production and transportation have tended to weaken the attraction of the urban center and also to increase the land requirements of many industries. For example, trucks have generally replaced railroads as the main carriers of raw materials and finished goods, and thus many industries are no longer required to be near rail terminals. As automobile ownership has increased, workers no longer have to rely on the proximity of public transportation systems to employment centers. Higher taxes, the rising cost of urban land, pollution and congestion in the central city have accelerated the dispersion of industries with extensive land requirements toward the urban periphery. The result has been the rapid, continuing decentralization of American cities and the expansion of suburbs and supporting commercial activities.

In Austin, residential suburbs are linked to central employment centers by major streets along which commercial activities have developed. The construction of major highways, such as IH-35, US-290, US-183, Ed Bluestein Boulevard, Loop 360 and Ben White Boulevard has considerably improved access to the urban fringe by reducing travel time for the commuter. Increased purchasing power has rapidly shifted from the older neighborhoods near the center of the city to the residential suburbs, and merchandising innovations, notably shopping centers and shopping malls, have shifted the focus of commercial activities from the central business district to the suburbs.

The decentralization of Austin, although slow at the outset, has gained momentum in recent years. Rising land costs, the search for environmental amenities and access to the countryside and industrial and commercial location on the city's fringe are a few factors which have propelled the suburbs further and further away from the central city. Suburban industry and commerce have become, in turn, significant generators for employment and further residential growth, thereby creating the demand for expansion of the expressway, street and arterial system. This circular process has reinforced the continued expansion of low density residential and high intensity commercial activities around the edges of the city. At the same time, automobile traffic generated by new suburbanization has often required the construction and expansion of freeways and arterial streets through older, more central residential areas. Higher traffic volumes often encourage more intensive land uses which can adversely affect the stability and residential character of inner-city neighborhoods.

Implications of Suburbanization for Natural Resources

Projection of current growth trends to 1995 indicates the continued expansion of low density residential and high intensity commercial land uses around the eges of Austin and the eventual encroachment of these uses upon very sensitive resources. Topographical, geological, or water quality features make some of these areas unsuitable for urban development.

Undisturbed, the natural resources and processes which occur in and around Austin serve to protect and preserve the public well-being. Most significantly, these resources and processes provide protection from flooding and degradation of water quality. As urban land uses replace the natural features which support the hydrologic cycle, the ability of these features to cleanse and moderate the flow of water is progressively decreased. The encroachment of urban and suburban land uses into a hydrologic system or watershed results in increased stream peak flow leading to increased flooding, channel erosion and sedimentation. The surface flow of water is increased by impervious surfaces, and subsequently, infiltration into the soil and underlying bedrock is reduced. This results in less cleansing action, greater pollution, decreased spring and stream flow during dry periods, and a general lowering of water quality. These effects can be observed in Austin's urbanized creeks. Shoal and Waller Creeks are the most severely affected since their watersheds are almost fully developed. Other creeks around the city's fringe exhibit varying degrees of disturbance.

The hydrologic system is composed of many elements, all of which interact to determine how the system performs. The quality and quantity of water in Austin's lakes and streams depends upon the natural processes which occur throughout their watersheds. The proctection of life and property from flooding also depends upon the preservation of these processes. It is important, therefore, to identify significant elements of the hydrologic system and to consider the relative importance of each. This permits community or public values to be associated with the various resource elements, and consequently, an assessment of relative public cost or loss may be made where there is a threat of destruction or degradation of these resources. Table 3-1 and its accompanying illustration demonstrate the relationships between selected resource elements, the hydrologic cycle, the public value of preservation, the typical impact of urbanization and the public costs of degradation.

Implications of Suburbanization for Urban Resources

Continuation of present suburbanization and land use intensification trends will have a significant effect on Austin's urban resources as well as

on natural resources around Austin. Land use may be said to intensify as its impacts become more pronounced, and as economic investment increases. Resources which are vulnerable to the impacts of intensification include waterways, neighborhoods, parks, open spaces, historic structures and historic sites.

The intensification of economic activities in central neighborhoods has often resulted in the demolition of useful structures, some of historic significance. Higher tax assessments result from increased commercial potential, and thus older, less productive structures are often replaced by new parking garages, drive-in services and apartments.

The expansion of Austin's street and expressway system has caused significant erosion of residential stability in the central city. Older, central neighborhoods have experienced increased automobile traffic and conversions to higher intensity land uses, such as office and commercial. Often this renders such neighborhoods less desirable for residential use, and many residents who can afford to move have relocated in new neighborhoods around the urban fringe. If left uncontrolled, the effects of suburbanization will spread slowly outward, progressively involving those areas which were, only a few years ago, at the edge of urban expansion. Table 3-2 and its illustration show the relationships among urban resources and urban intensification.

Implications of Suburbanization for Municipal Facilities and Services

Between 1960 and 1975 the area of the city of Austin increased from fifty-five square miles to 108 square miles, as shown in Figure 3-1. If current growth and annexation trends continue, the city will have expanded to 175 square miles by 1995.

The city of Austin includes almost all of the urban population in Travis County. In 1975, 300,000 persons, or 84 percent, lived within the city limits; 38,000 persons, or 11 percent lived within two miles of the city; and 19,000 persons, or 5 percent, lived in rural and resort areas. Most of the urban population just outside the city receives water and electricity from the City of Austin in addition to enjoying the use of municipal facilities such as parks and libraries, which are located within the city.

The current pattern of growth has extended the city and other urban development primarily north and south along the IH-35 axis. Significant growth also occurs in northwesterly and southwesterly directions, while expansion of the urban area to the east and west has been limited.

Most of the services provided by the City of Austin require the use of physical installations such as libraries, fire stations, power plants, water and wastewater treatment plants and parks. In addition to these facilities, the city has a network of roads to transport people and goods; water and wastewater pipes to distribute water and collect sewage; electric utility lines to distribute electric power; and drainageways to prevent flooding, stagnant water and soil erosion. There are also public facilities for education, health care, police protection, garbage collection, government administration and private enterprises such as natural gas distribution and telephone service. To a great extent, these elements determine the form of the city, and conversely, the form of the city affects how efficiently these services can be provided.

Austin and the surrounding region face continued suburbanization. Scattered development would result in a significantly larger area of urbanized development around the city and it is likely that an increased number of municipalities and non-incorporated developments will appear. The result of such fragmented regional growth is seen in many of the cities of the northeast where levels of public services have decreased and central cities have found themselves unable to sustain minimum public services and balanced municipal budgets. The City must retain its regional perspective toward the future growth of the entire area to assure, to the greatest degree possible, a more orderly pattern of development. Utilities and services should be extended on a coordinated basis to those areas where growth is relatively most suitable.

Urban growth increases the demand for municipal facilities and services. The Austin Tomorrow Goals Program urged that the City provide these services in a manner which discourages sprawl and retains the natural and urban environment to the greatest extent possible. At the same time, however, the City was encouraged to provide its services to citizens efficiently and economically.

A large proportion of public service costs are incurred by the maintenance and operation of existing systems. These costs include replacement and renovation of buildings, replacement or upgrading of water and sewer treatment facilities, replacement of old water and sewer lines, improvements and maintenance to power plants and the repaving of streets and highways. Other expenditures are required for improvements to accommodate changes in public preferences, such as increasing the number of parks and recreational facilities, or improving the transportation system to encourage greater use of mass transit.

Some costs are determined primarily by the size of the population to be served, and other costs are affected primarily by the geographic pattern of development and difficulty of installation. Population size influences the cost of such items as power generation and water and wastewater treatment. Examples of costs affected by land use patterns are water distribution, wastewater collection, drainage and fire protection. Engineering constraints such as difficult soil conditions and steep slopes increase the cost of facility installation.

In addition to savings that can be realized from planned development and the reduction of urban sprawl, other savings can be accomplished by encouraging development in natural service areas. Each of these service areas requires some independent pipeline network to serve water and wastewater needs. Currently, the City provides municipal water service to ten pressure zones and wastewater collection service to eighteen watersheds. Different geologic and topographic conditions in each service area influence infrastructure costs. The cost per foot of laying pipeline, for example, is slightly higher in the rock soils to the west of Austin than in other areas.

A significant factor in the high cost of utility service is the uncertain location of growth and attempts to serve all possible areas of urban expansion. This uncertainty has resulted in the construction of facilities which are underutilized for a significant period of time after construction. The matching of need and construction, through the phased extension of utilities to meet needs as they arise, will do much to lessen excess capacity costs.

Savings can be realized by planning development to reduce urban sprawl. Utilities and services should be extended on a coordinated basis to those areas contiguous to the city where growth is most suitable. A more compact and planned urban community can render the goal of efficient provision of public services compatible with the goal of preserving Austin's urban resources.

DEVELOPMENT SUITABILITY FACTORS: NATURAL ENVIRONMENT

The intent of this section of the *Comprehensive Plan* is to identify the natural suitability of land resource elements for urbanization in the Austin area. Suitability must be measured in terms of the impact of development on the community's valuable resources. The goals identified by the community give primary emphasis to the preservation of open spaces, natural areas, creek environments and water quality. In order to direct new urban development in a fashion consistent with these goals, various types of basic environmental information must be coordinated for analyzing development suitability.

The environmental resource maps of the Austin area were developed in order to compile ecological information relevant to the urbanization process. Generalized reproductions of these maps, accompanied by their descriptions, present the following data: (1) slopes in excess of 15 percent grade, Figure 3-2; (2) environmental geology, Figure 3-3; (3) lands of prime agricultural capacity, Figure 3-4; (4) floodplains and areas of special importance for water quality, Figure 3-5; (5) soil limitations for septic tank use, Figure 3-6; and (6) a synthesis map of major environmental factors, Figure 3-7. The maps illustrate the geographic occurrence of significant limiting or constraining factors to land development, and combinations of these factors indicate great potential for environmental impact.

Each limiting factor will be associated with a set of performance principles and standards for urban develoment in Chapter 4, and these standards should be incorporated into ordinances and regulations which affect land development. The standards should require compensation for, or mitigation of, the environmental and social costs incurred by development in areas with one or more limiting factor. Urban development should occur in sensitive or essentially unsuitable areas only if sufficient precautions are taken to protect the community resources threatened by the development. An inevitable result of overlapping limiting factors will be to make development in sensitive or valuable natural areas more expensive than in other areas.

The Environmental Development Limitations map, Figure 3-7, summarizes the natural resources in the Austin area which warrant public protection and the hazards which deserve public attention. The extension of public facilities, therefore, should be directed toward the regions with fewest limitations; development regulations should facilitate future urbanization of these areas. Further public investment for the extension or improvement of public facilities in areas with major limitations should be avoided. A large version of this map with 1975 land use is provided in the back of this plan.

The information used to compile the environmental resource maps was taken primarily from two sources. *The Soil Survey of Travis County, Texas* was published in June, 1974, by the US Department of Agricultural, Soil Conservation Service, in cooperation with the Texas Agricultural Experiment Station. It provided the data for mapping prime agricultural lands and areas with severe soil limitations for septic tank filter fields. The *Soil Survey of Travis County* includes a thorough analysis of soil properties and soil maps of Travis County. Maps delineating slope and environmental geology were derived from the manuscript, *Environmental Geology of the Austin Area, Texas,* developed by the Bureau of Economic Geology, the University of Texas at Austin. These maps are necessarily generalized and are intended for large scale planning purposes.

Environmental Mapping Program Prototype

In the Spring of 1975 the City of Austin initiated a comprehensive study of the ninety-square mile Lake Austin watershed from Tom Miller Dam to Mansfield Dam, as shown in Figure 3-8.

The *Lake Austin Growth Management Plan* recommended management and site planning guidelines

based on percent of slope, physiographic features and development zones. This rather complex package of development guidelines included provisions for the cutting and filling of land, the maximum extent of clearing and grading, maximum impervious surface ratios, a septic tank licensing system, special building foundation requirements and policies concerning the extension of public facilities. The plan generated a mapping methodology of environmental analysis which can be used at the site plan level, and which should be extended to other areas around Austin.

The *Lake Austin Growth Management Plan* began with the compilation and mapping of environmental and cultural data. These environmental maps included information concerning soils, geology, slopes, topographic features, vegetation, and surface and ground water hydrology. This information was combined into synthesis maps as the major elements of the environmental analysis.

The two most important maps in the development of management principles and site planning guidelines are those which depict physiographic features and development zones. A physiographic features map depicts a topographic classification of the Lake Austin watershed. The watershed is further divided into development zones, limited development zones, and conservation zones, each with very different planning principles. These maps and futher information concerning Lake Austin are available from the Department of Planning, City of Austin.

DEVELOPMENT SUITABILITY FACTORS: URBAN ENVIRONMENT

The intent of this section is to consider traditional land use categories in light of the goals expressed in Chapter 2, and to evaluate certain urban resources identified by citizens as important to their environment. These include residential neighborhoods, commercial and industrial districts, parks, greenbelts and historic structures. Citizens expressed the desire to protect residential neighborhoods from the detrimental effects of increased traffic, incompatible land uses, noise and glare, and to preserve Austin's water quality and waterway environments.

Residential Districts

Neighborhoods make up Austin's primary urban resource. Each has different physical and social characteristics, and in order to plan effectively for their individual needs it is necessary to know and understand these characteristics. Generally, neighborhoods can be classified into three groups: Stable Residential Districts, Residential Conservation Districts and Community Development Districts.

These residential classifications follow a general trend from the newest to the oldest residential areas in the city. Stable Residential Districts include recently constructed housing and stable, older neighborhoods, while Residential Conservation Districts and Community Development Districts are typically the older, inner-city neighborhoods undergoing exposure to redevelopment pressures. Residential areas experience constant change, which sometimes is positive, but more often such change causes neighborhood quality to deteriorate. It will be necessary to modify the classifications of some neighborhoods depending on the effectiveness of citizens' groups, the private sector and municipal government in preserving them. The data that has been used by the Department of Planning of the City of Austin to classify the city's neighborhoods should also prove to be an effective tool for monitoring preservation efforts. Figure 3-9, Neighborhood District Boundaries, identifies the types and locations of Austin's residential districts.

Stable Residential Districts

The Stable Residential District classification is assigned to a neighborhood if its housing is in good condition, if it is predominantly owner-occupied and single-family, and if rents and property values tend to be moderate to high. New subdivisions, new neighborhoods within the city and older neighborhoods not yet experiencing redevelopment pressures fall within this designation. To assure stability, new neighborhoods within the city receive all municipal services and public facilities upon construction. Annexed areas receive municipal services such as police and fire protection, refuse collection, parks and recreational facilities, libraries and other public facilities and services commensurate with the rest of the city.

Municipal efforts in Stable Residential Districts should be directed toward preservation. Compatible development near newly developing and fully developed neighborhoods should be assured. Performance zoning is suggested to prevent or arrest the encroachment of higher intensity land uses from the borders or fringes of neighborhoods. As in all neighborhood districts, through traffic should be routed along boundaries. Special attention must be given to the location of arterial streets relative to older, inner-city neighborhoods where through traffic is likely to increase. Adequate maintenance of municipal facilities and services is also necessary to preserve the residential character of Stable Residential Districts.

Residential Conservation Districts

Older areas experiencing redevelopment pressures but maintaining neighborhood vitality and cohesion are designated as Residential Conservation Districts. Typically, the housing stock in Residential Conservation Districts is older, but of sound original construction. Some housing deterioration may be present, but the level of deterioration has probably not reached a state of dilapidation. The housing is typically single-family, but some units may have been converted

to multi-family rental structures or replaced by higher intensity land uses. Property values and contract rents tend to be moderate, with a high incidence of renters, although most of the units are still owner-occupied.

Municipal efforts in Residential Conservation Districts will be directed at conservation and revitalization. Paramount among City policies in these areas will be zoning protection. Zoning should effectively negate the adverse impacts of higher intensity land uses upon the character of older residential neighborhoods.

Action should also be taken to prevent increased property taxes from discouraging home improvements. Higher intensity land uses in transitional neighborhoods often increase the potential market value of the residential property, thus increasing the property tax burden of the single-family, owner-occupants who are often elderly people on fixed incomes. The City should seek modification of State property tax laws to alleviate the negative impacts of the property tax for land-owners in older neighborhoods. Other municipal efforts in conservation areas should include maintenance of municipal facilities, streets and other infrastructure systems and the assurance of adequate municipal services. To conserve neighborhood character and arrest the transition from single-family residential to more intensive land uses, active resident participation in decisions affecting the neighborhood is indispensable.

Housing programs in Residential Conservation Districts should include effective code enforcement programs to assure adequate housing maintenance. Home improvement loans are sometimes not readily available for the maintenance of older, single-family homes in transitional neighborhoods. For that reason a loan indemnification program should be considered to assist homeowners in obtaining funds for home improvements. A rental supplement program permitting slightly increased market rents can also provide property owners with both the incentive and financial means to adequately maintain rental property.

Community Development Districts

Neighborhoods have been designated Community Development Districts if their housing stock is older, often of inadequate original construction, and if there is a high incidence of substandard housing, some dilapidation and a high incidence of low-income households. Property values and rents tend to be moderate to low, and units are occupied by more renters than property owners.

Municipal efforts in Community Development Districts should include physical improvement programs and expansion of social services. Capital intensive programs should provide for adequate streets, sidewalks, drainage and utility systems commensurate with those in other areas of the city. A comprehensive housing assistance strategy should be developed with the participation of area residents, and housing assistance programs should feature rehabilitation loans and grants as well as rental subsidies. Encouraging the construction of new, low-cost housing both for homeownership and for public housing should also be a part of such a program. Intensive efforts must be made to elicit the interest and cooperation of the local business community and neighborhood residents to involve as many resources as possible in the process of revitalizing Community Development Districts.

Municipal policy, as previously outlined in the discussion of Residential Conservation Districts, is also vital to the proper redevelopment of Community Development Districts. Adequate zoning protection is imperative, as is the assurance that property taxation will not discourage neighborhood improvements.

Neighborhood Planning Process

The citizens of Austin have indicated their desire for increased neighborhood participation in municipal decision making processes. The following discussion outlines the role that citizens can share in the development and implementation of detailed neighborhood plans. The Clarksville neighborhood planning process is suggested as the model to be followed.

Plan Development

The development of a neighborhood plan can occur in four stages. The preliminary study stage involves collection of the background information that will be required to understand the physical and social needs of an area. This phase will require active participation of citizens' groups, as well as City staff. A review of approved projects is also important to familiarize the participating groups with public and private commitments in the area. Basic understanding of zoning, subdivision, variances, notification, public hearings and contracts is critical at this stage.

The second stage in the planning process is the evaluation stage, involving the establishment of neighborhood goals and objectives, design priorities and an assessment of the potential impact of proposed changes. The most important group participating in this phase of plan development will be the neighborhood residents and land owners who will have a major role in determining goals, objectives and priorities for the area. City staff, including representatives of all affected City departments, should fill an advisory role and assess municipal programs, policies and projects in relationship to work done by neighborhood residents.

The generation of design and policy proposals is the third stage in the planning process. During this phase, interaction between the neighborhood residents, land owners

and City staff is important. Design and policy proposals will be evaluated and their impact upon the physical, social and historic elements of the community will be jointly assessed.

After alternative plan concepts have been evaluated and a neighborhood plan has been chosen, the fourth stage coordinates neighborhood desires with city-wide needs. During this phase the fiscal impact of the neighborhood plan is reviewed and funding priorities are assigned, regulatory measures and municipal policies are assessed and comments are sought from participants regarding the impact of the plan on the neighborhood and on the city. A final proposal would then be agreed upon and the plan submitted to City boards and commissions and to the City Council for review and adoption.

Neighborhood Role In Plan Implementation

Neighborhood residents should not limit their role to the adoption of their neighborhood plan. The neighborhood organization will continue to be notified of all proposed zoning changes, public facility improvements, subdivision applications, within and annexations contiguous to the neighborhood. Opportunities for review and comment will be available on all issues. Recommendations for projects to be included in the Capital Improvements Program pertaining to neighborhoods will be actively sought.

Commercial Districts

The development and distribution of commercial areas in Austin is a response to numerous economic and technological factors, including the increasing personal income of the population, the distribution of residential suburbs and, especially, the use of the automobile as the primary transportation mode. Each of Austin's commercial areas, such as the Central Business District, commercial strips and commercial centers reflect the typical urban development patterns of most major American cities.

Central Business District

Austin's central city, or core area, has a unique concentration of varied resource elements. It still exhibits vitality and convenience with its diversified commercial activity, historic structures, creeks, parks and stable sources of employment. When the Central Business District (CBD) is revitalized, current trends such as increased automobile traffic, higher intensity land use, increases in land value and higher taxes, neighborhood disintegration and environmental degradation must be addressed.

Strictly defined, the Central Business District comprises a major portion of the one-square mile grid of existing streets which made up the original plan of the city. Early in Austin's history the CBD was the only commercial center, the dominant location for business activity and for the production and exchange of goods. The CBD is the traditional heart of Austin, but it is no longer the city's major retail center. A redefinition of the CBD should include adjacent commercial and residential areas, expanding the zone of interaction between this core and the rest of Austin.

The reasons for the decline of the commercial importance of the CBD are typical of other major cities: loss of the residential base in the immediate CBD area and inability of the CBD to attract customers due to inadequate shopping conveniences. Regional shopping centers offer the amenities the CBD lacks, including sufficient parking and a wide selection of goods in a variety of closely arranged stores.

There is a need for a comprehensive effort to redevelop and restructure the CBD. Public improvement programs can provide catalysts for private development leading to the establishment of the amenities necessary for the renewal of the CBD as a living, working and shopping environment. Public projects scheduled through the Capital Improvements Program should improve traffic circulation and parking, improve utility service, resolve flooding problems, provide pedestrian amenities and encourage cultural and entertainment activities in the CBD. City policies and capital programs should also be designed to coordinate automobile, public and non-motorized transportation to improve both access to, and circulation within, the CBD.

The residential use of land is important to the revitalization of the CBD. Municipal efforts to attract people to the central city should include programs to upgrade facilities and services which are conducive to a residential environment. Examples of capital programs or City policies that can be directed toward increasing housing opportunities in the CBD include: tax incentives for historically significant buildings, construction of public facilities such as parks, hike and bike trails, street lighting and pedestrian amenities; the location of some public or federally subsidized housing within and adjacent to the CBD; and preservation of nearby neighborhoods.

The revitalization of the CBD needs to be supported by ordinances to ensure that development is compatible with both the existing environment and the need for change, including height controls that protect or enhance significant vistas, historic preservation, improved sign requirements, design standards and neighborhood preservation.

Commercial Strip Districts

Strip commercial districts traditionally form along highways and major streets. This appeals basically to two types of businesses: those related to impulse buying and convenience purchasing, such as gas stations and quick service drive-ins, and those related to specialized activities which depend largely on signs to attract customers, such as discount stores, furniture marts and restaurants. These businesses do not

depend upon pedestrian traffic and many of them rely on visual exposure from a vehicle to attract customers.

Strip commercial development is a common urban process which offers the traveler a variety of options for purchasing goods without deviation from a commonly traveled route. This kind of development offers the individual entrepreneur the opportunity to develop a private business at a minimal cost and on an independent basis. However, strip commercial districts have been severely criticized because they foster problems such as numerous driveways on narrow lots, poorly designed parking facilities and numerous, confusing signs.

Many mechanisms are available for improving the function and appearance of strip commercial development. Regulations requiring service or frontage roads, adequate lot widths, off-street parking, increased building setbacks, coordinated driveway use, sign control, landscaping and screening should be implemented. Limitations to the number of curb cuts on a major arterial street should be considered to minimize traffic hazards, and the primary criteria for the spacing of such curb cuts should be based upon the existing and projected volume of traffic as well as on the speed of traffic. Driveway spacing should encourage land owners to coordinate their plans and reduce the number of signs that would normally be installed. Ideally, a service or frontage road should be provided adjacent to an arterial street to assure both access to the commercial development and traffic safety.

A low density residential neighborhood can often be found adjacent to a commercial strip. Although the commercial strip is usually located between the neighborhood and the arterial street, the traffic, visual and noise intrusions generated by the commercial activity can have a deteriorating effect upon the residential property. It is important, therefore, to control the amount and type of commercial zoning within an area anticipated for residential development. Overzoning can needlessly place pressure on adjacent property owners to convert residential property to more intensive uses. Revised standards for building setbacks at the rear of commercial development, limits on the amount of impervious cover, landscaping, modification of signs and consideration of noise standards will help ease the conflicts between commercial and residential land uses.

Commercial Centers

The development of shopping centers, like the development of the commercial strip, is a product of the predominance of automobile transportation. The shopping center is an effective solution to many of the problems caused by commercial strips. The center reduces the amount of shopping oriented vehicular traffic on public thoroughfares, providing one-stop shopping opportunities with convenient parking.

Shopping centers are typically located at the intersections of major streets to take advantage of exposure to potential customers. Internal traffic circulation is provided within the shopping center, facilitating access to and from the center and lessening vehicular movement through the intersection.

The development of shopping centers under the planned unit development concept could also provide advantages to small businesses which could not otherwise afford to develop or locate in a center and would prefer location in a commercial strip. Under the planned unit development concept, a common parking area and individual parcels could be sold to various owners, or the land could be left in one parcel and individual buildings or parts of buildings could be sold under the condominium arrangement. The small investor would benefit from the improved merchandizing arrangements available in shopping centers.

Considering the advantages of shopping centers over commercial strips, centers should be established along major arterials in newly developing areas. The location of new centers should be based upon market criteria. Appropriate placement of shopping centers would reduce the economic pressure to intensify land use along busy streets.

Industrial Districts

The location of industrial development in the Austin area has depended mainly on land costs, property taxes, topography, transportation facilities, utilities and municipal land use regulations in the form of zoning and master plan designations. The industrial hub of Austin in the nineteenth century was the Central Business District because the transportation technology of that era dictated a central location. Innovations in transportation technology have eliminated the need for such a location. Now, industrial location in the suburbs is frequent.

Impacts of Industrial Location

Since industries in Austin are significant employment centers, they have an important impact on the future growth pattern of the community. Dispersed industrial locations will result in criss-cross driving patterns, creating a demand for larger and more extensive streets and expressways. The location of industrial employment centers on the urban periphery has reinforced the trend toward residential sprawl.

Direct, negative environmental impacts from industrial development have been quite limited in the Austin area. Industries have generally avoided the least suitable areas for development while residential and commercial developments have encroached into less than suitable locations. The adverse effects of noise, vibration, air and water pollution, glare, radiation, fire and explosion hazard most commonly associated

with industry have also not characterized the industries which have located in Austin. To date, indirect effects such as neighborhood traffic problems have been generally avoided by the distance between industrial and residential areas.

Controlling Impacts

The direct and indirect impacts of industrial location can be controlled through zoning performance standards and principles within Austin's incorporated area. Industries which desire to locate in predominantly residential areas should meet appropriate performance standards recommended in the *Comprehensive Plan*. Control of storm water runoff, sedimentation, night lighting, glare, signs, traffic, noise and air and water emissions should be based on quantitative regulations. Industries locating in less suitable environments should be subject to more stringent performance standards depending upon which natural or urban resource would be affected by such locations.

Areas to the north and south of the city, within the environmentally suitable development corridor, include large amounts of land which satisfy most industrial site requirements. Industries should be encouraged to locate in integrated, planned activity centers which might also include residential and commercial land uses.

Historic Structures and Districts

Historic structures and districts should be recognized and preserved in order to promote the general welfare, education and recreational pleasure of the public. The criteria for historic designation currently includes but is not limited to the following: historic sites, areas or structures identified with the lives of historic persons or events, and structures or areas that embody distinguishing architectural characteristics.

Regulations should be designed to prevent the destruction of, or encroachment upon, historic areas or structures and to encourage uses which lead to their continuance, conservation and improvement. These regulations should also prevent the creation of adverse influences and assure that new structures and uses will be in keeping with the historic character to be preserved and enhanced.

Waterways and Floodplains

As watersheds become urbanized they are generally covered with impervious surfaces. Structures, parking lots and streets prevent the cleansing infiltration of rainfall into the soil and underlying bedrock. Water runoff is channeled into urban creeks via gutters and storm sewers and the result has been increased peak flow volumes, more frequent and severe flooding, erosion, property damage, loss of life, and loss of water quality. Floodplains are inherently unsuitable for residential, commercial and industrial urban land uses. All one hundred-year floodplains, as identified by the United States Geological Survey (USGS), should be designated as natural features and encroachment into these should be limited. The minimum standard for acceptable development within floodplains should not increase the risk or likelihood of property damage, loss of life or serious stream bed alteration.

Parks, Greenbelts and Open Spaces

Public parks, greenbelts and open spaces serve an important function in the city. They offer the urban resident recreation and relief from an intense urban environment and provide a moderating, buffering influence. To assure the continuation of these positive effects, natural areas should be protected by standards which prohibit their conversion to more intense land uses. Open spaces which are located in the center of Austin or on its periphery should be considered for public purchase, particularly when accompanied by the purchase of easements or development rights. As urban growth occurs these natural areas will experience increasing pressure to be converted into urban uses; their protection should be assured before such pressures increase.

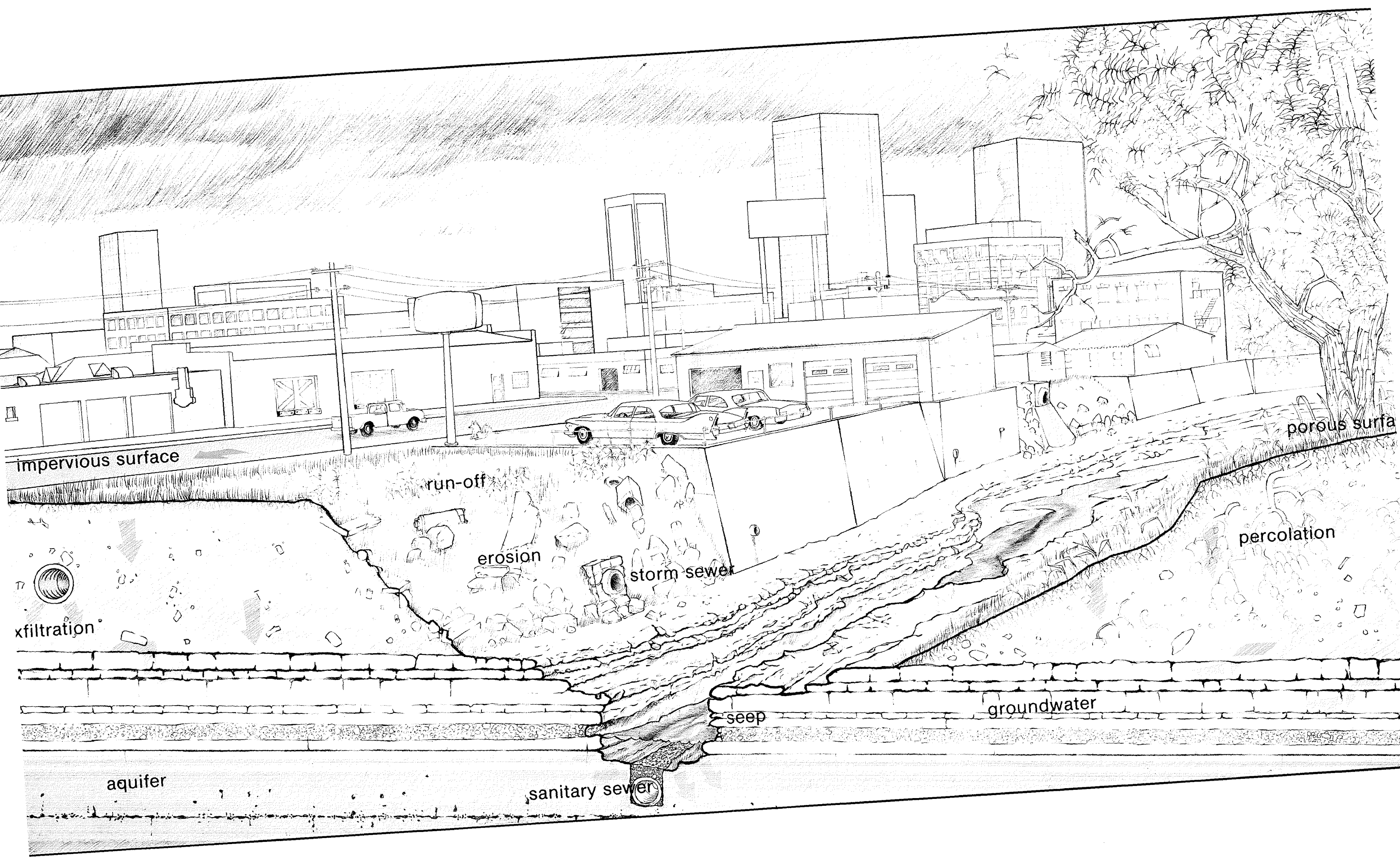
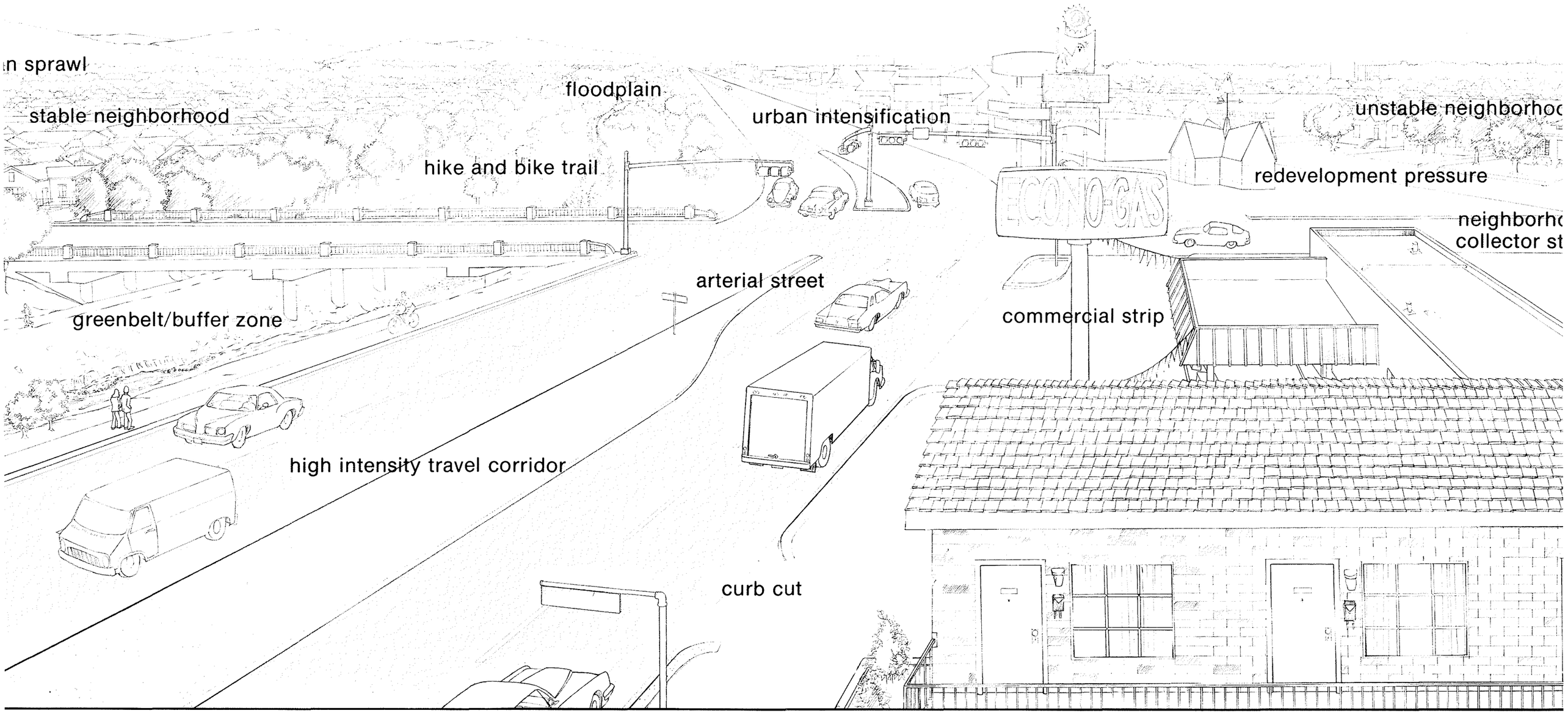

impervious surface
run-off
erosion
storm sewer
porous surfa
percolation
xfiltration
groundwater
seep
aquifer
sanitary sewer

TABLE 3-1: NATURAL RESOURCES AND URBANIZATION

RESOURCE	VALUE TO SOCIETY AND ROLE IN HYDROLOGIC CYCLE	TYPICAL IMPACT OR URBANIZATION	COSTS TO SOCIETY
Soils	Soils absorb and slow runoff and provide an essential medium for vegetation.	Removal of soils by grading, cutting and excavation increases erosion and sedimentation and impairs revegetation. Urbanization pre-empts agricultural land use.	Increased flooding is caused by greater runoff velocity and volume. Aquifer recharge is decreased as infiltration decreases. Sedimentation from erosion impairs the storage capacity and aggravates the flood damage potential of waterways and lakes.
Vegetation	Trees and plants absorb rain, reducing erosion potential; roots absorb rainfall and fix soil; plants in floodplains slow flood velocity; and plants on slopes slow drainage and aid soil absorption. Leaves absorb air pollutants.	Vegetation cover is greatly reduced and replaced by paving, structures and exposed soil.	Loss of vegetation increases stream velocity and peak flow, flooding, erosion and sedimentation. The cleansing capacity of the air is reduced; aesthetic benefits and weather protection are lost.
Slopes	Slopes provide drainageways from highlands to water courses.	Cutting and filling for structure sites reduces vegetation cover and increases impervious surfaces.	Slope erosion may undermine roadways and structures; sedimentation clogs waterways; and flood damage increases as a result of greater peak flow and sedimentation.
Floodplains	Floodplains provide storage capacity for flood waters; soil and vegetation in floodplains absorb water; and aquifer recharge occurs in floodplains.	Structures and landfills in floodplains reduce storage capacity and increase flood heights.	Property damage and loss of life are more frequent and extensive because of residential construction in floodplains. Expensive, remedial flood control measures are often required, resulting in greater flood potential downstream. Prime open spaces for recreation are lost.
Aquifer Recharge Zones	Surface water enters aquifers through aquifer recharge zones. The quality of ground water depends on the amount of surface water pollution in watersheds which supply recharge zones.	Porous ground cover is replaced by impervious surfaces and sedimentation of fractures and fissures may block the entrance of surface water into aquifers. The quality of the water entering aquifers is degraded by urban runoff.	The quantity and quality of groundwater decreases; spring and stream flow in dry periods lessens; springs used for recreation may become polluted.
Springs	Springs are exposed points of aquifers where groundwater enters the surface flow system. Springs supply water to vegetation during dry periods and have great recreational value.	Some springs are capped; some are restored or protected. Spring water may be contaminated by urban runoff.	The recreational value of springs may be threatened by pollution; unusual vegetation communities supported by springs may be destroyed.
Streams and Creeks	Streams and creeks collect and channel runoff from smaller tributaries into rivers and lakes They support corridors of dense vegetation and provide wildlife habitat.	Streams may be channelized, filled or placed in culverts; peak flow increases; base flow is reduced. Banks erode from greater velocity and volume; adjacent trees fall. Nutrients, turbidity and algae increase; septic tanks and leaking sewer lines increase pathogens. Flash flooding is more likely.	Property damage and loss of life are more frequent and severe; water quality is greatly degraded; and expensive remedial flood control projects are required. The recreational potential of waterways is diminished or lost.
Lakes	Lakes store rain and permit evaporation; some aquifer recharge occurs. In Austin, lakes are the main source of drinking water and provide opportunities for water contact recreation.	Water quality is greatly decreased. Nutrient enrichment, algae growth, oxygen depletion and sedimentation occur. Increased demand for shoreline development results in loss of public access.	The potential for water contact sports is reduced or lost. Remedial cleansing measures are required and less diverse aquatic life can be supported. Purification costs to supply potable water increase.

TABLE 3-2: URBAN RESOURCES AND SUBURBANIZATION

RESOURCE	VALUE TO SOCIETY AND ROLE IN URBAN STRUCTURE	TYPICAL IMPACT OF SUBURBANIZATION	COSTS TO SOCIETY
Recent Suburban Neighborhoods	These provide new housing stock and a high quality residential environment.	Higher traffic volumes and spot conversions to higher intensity commercial and residential uses eventually degrade neighborhoods.	Expansion of the transportation network degrades the environment of central neighborhoods. Low density development rapidly consumes rural land on the fringe. The public costs of providing utility service increase.
Stable Urban Neighborhoods	These provide the best residential environments. They preserve community values and facilities.	More intense uses intrude, such as apartments, spot and strip commercialization along transportation corridors; air and noise pollution reach higher levels; danger increases. Higher taxes are a response to increased economic potential.	The best residential environments are gradually lost; satisfaction and sense of community decreases; the incentive is created for outward migration, reinforcing urban sprawl.
Unstable Urban Neighborhoods	These provide middle and low income housing stock; many historic structures are found in these neighborhoods; the value of residences decreases with conversion and deterioration.	Commercial uses and higher densities are extensive; traffic congestion increases physical danger; taxes become higher as commercial uses expand.	Wholesome residential environments are lost; out-migration of older, more affluent residents increases; density and utility costs increase, as do the costs of traffic control and crime prevention; and aesthetic structures are lost.
Deteriorating Urban Neighborhoods	These usually provide housing for low-income families; their value as residential and commercial property greatly diminishes.	The transportation network becomes overloaded; utility system improvements receive low priority; conversion to industrial uses and transportation terminals is common; physical danger increases.	The cost of social and community redevelopment and crime prevention greatly increases; life and property are lost through crime. Other social costs are associated with unwholesome living environments.
Historic Structures	These embody local history and culture and provide a sense of unique community identity and aesthetic value.	Economic pressures arising from increased commercial potential result in conversion to more intense land uses.	Aesthetic and cultural resources are lost; potential alternative uses are sacrificed. The community's sense of the past and its historic perspective are lost.
Waterways and Springs	Creeks channel runoff and provide natural greenbelts and pedestrian corridors. Springs maintain creek flow during dry periods and provide great water recreation opportunities.	As watersheds are urbanized, water quality decreases; flooding, erosion and pollution increase; creek and spring flow is diminished during dry periods; springs may be capped or dry up from increased impervious surfaces in recharge zones; public access to waterways is reduced.	Recreational and aesthetic value are lost. The public must assume the costs of flood and erosion control, and the cost of replacing lost recreational land.
Parks, Greenbelts and Open Spaces	These provide recreation and relief from the urban environment; natural vegetation moderates harsh weather; parks and greenbelts provide pedestrian corridors and provide natural buffers between incompatible land uses.	Parks are over-used; private open spaces are developed; greenbelts are likely to be preserved and developed for recreation; more intense uses may encroach upon parks and greenbelts; pressure mounts to put streets and expressways through or near parks and open spaces.	The aesthetic and cultural character of parks is lost; the urban environment becomes harsher; incompatible land uses are more frequently juxtaposed. The public pays the price of new parkland acquisitic to assure public access to greenbelts and open spaces.


n sprawl
stable neighborhood
floodplain
hike and bike trail
urban intensification
unstable neighborhoo
redevelopment pressure
ECONO-GAS
neighborho
collector st
arterial street
greenbelt/buffer zone
commercial strip
high intensity travel corridor
curb cut

AUSTIN CITY LIMITS

Figure 3-1 illustrates Austin's geographic expansion since 1960. In that year the city covered 35,711 acres, or 55.80 square miles. In 1970 253,539 people lived in Austin, and the city contained 52,091 acres, or 81.39 square miles. By 1977 the city had grown to include 77,523 acres, or 121.13 square miles and 321,900 persons.

1960

1970

1977

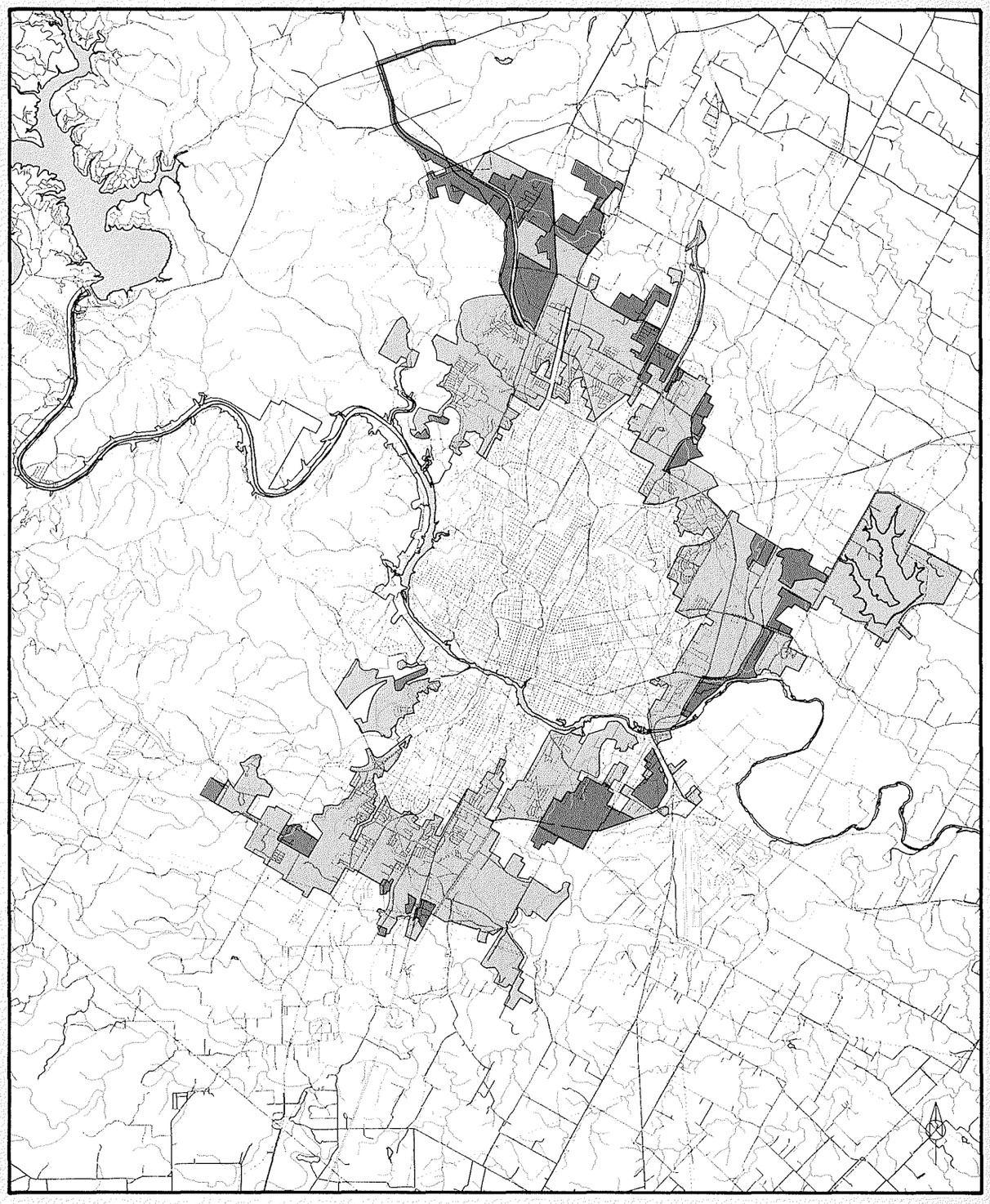


FIGURE 3-1

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

SLOPES

Slopes in excess of 15 percent grade represent a major limiting factor for urban development and comprise only 6.7 percent of the mapped data area. They are found primarily in the Hill Country west of the Balcones fault, usually occurring on the limestone, marl and dolomite units of the Glen Rose and Walnut formations. Extensive cutting and filling are often required prior to development and road placement, but cutting and filling in this area usually result in enduring scars on the land. Loop 360 provides a good example of the massive earth moving necessary for the construction of a major thoroughfare in this severe topography. Even minor residential streets, which may follow hill contours, must be cut into the sides of slopes. The cutting and filling of roadbeds tends to increase the slope immediately above and below the road, aggravating the difficulty of driveway access to streets. Steep slopes greatly increase the cost of street and utility construction, storm drainage, and water and wastewater service, particularly in areas of hard limestone bedrock. The erosion potential of unprotected slopes also increases with the gradient, leading to increased sedimentation in streams and lakes.

SLOPES GREATER THAN
15 PERCENT GRADIENT

SLOPES LESS THAN
15 PERCENT GRADIENT

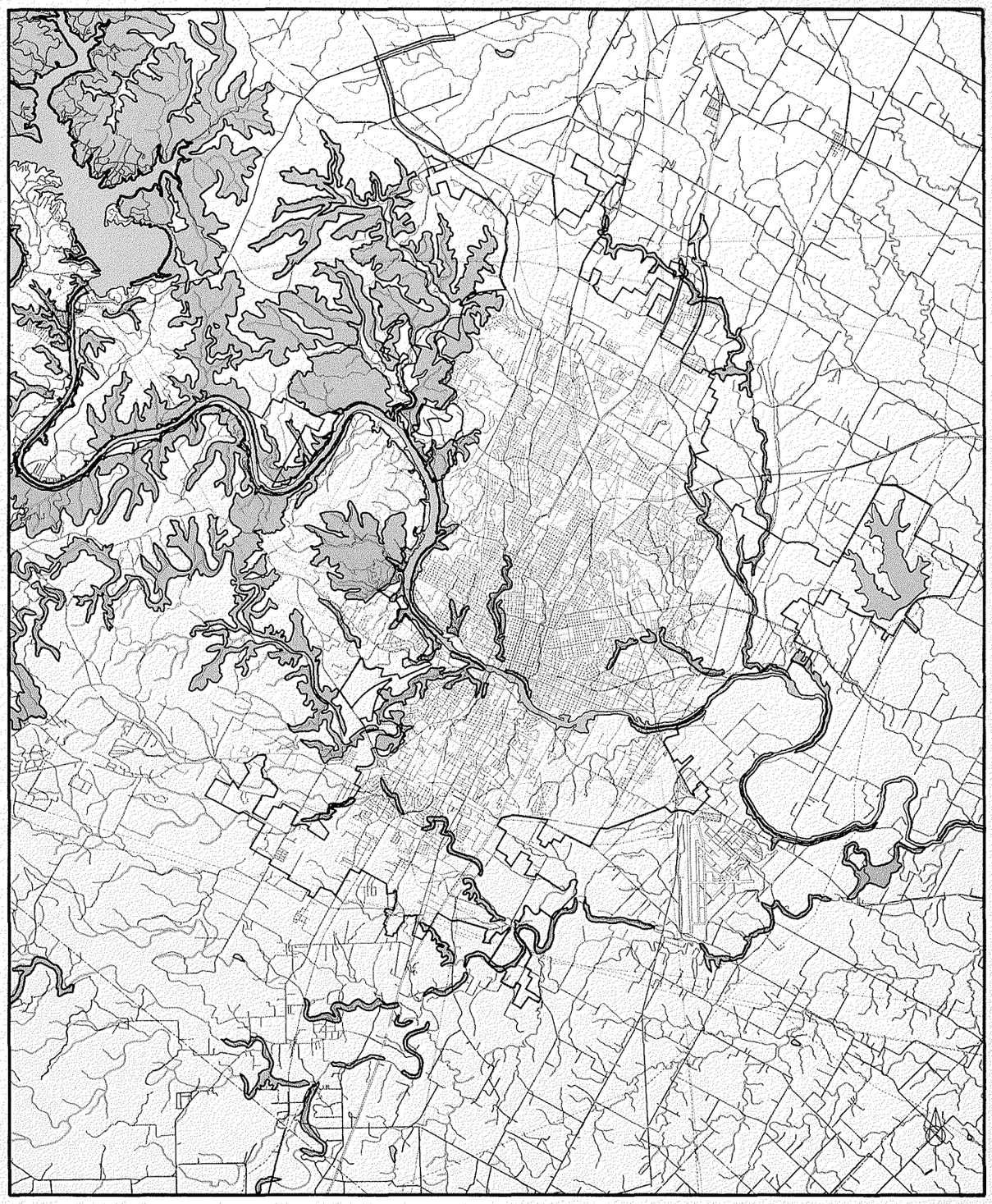
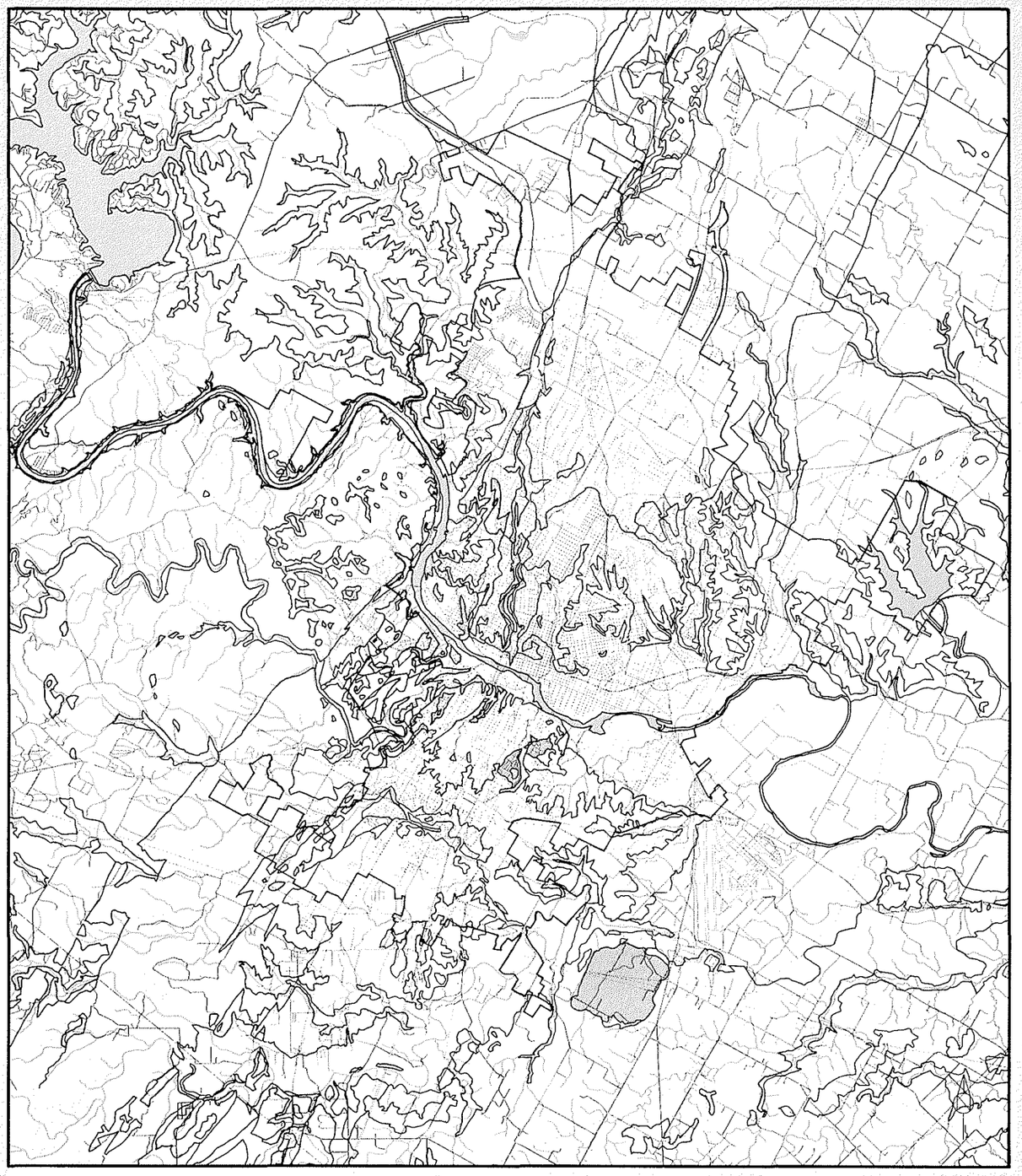


FIGURE 3-2

Department of Planning
City of Austin, Texas, 1976

Generalized from
Unpublished Materials
Bureau of Economic Geology
University of Texas at Austin

ENVIRONMENTAL GEOLOGY



CLAY

Clay geologic units cover about 28 percent of the data area, including most of eastern Travis County, and they represent a major limiting factor for urban development. The clay units consist mainly of the Taylor and Navarro formations, but also include small areas of the Del Rio and Eagle Ford formations. The topography of these clay units is usually gentle; where steep slopes do occur they are unstable and erode easily. Though excavation potential is good, clay presents very significant problems for structures. Poor bearing capacity and high shrink-swell potential require special foundation construction techniques to avoid later structural damage. Large structures may require deep foundation pilings, and control of surrounding ground moisture may be necessary for both large and small structures. Increased construction costs result from these requirements. Roads tend to warm, expand and crack over clay soils. Underground utility lines need protection against stresses that might cause rupture and corrosion potential is very high for unprotected steel pipes.

TERRACE AND ALLUVIUM DEPOSITS

The terrace and alluvium deposits of the Colorado River and its tributaries occur in scattered areas and comprise about 20 percent of the data area. These deposits are composed of sands, gravels and clayey alluvium. Some of these, particulary the alluvium units, are easily excavated; slope stability is moderate to low. Bearing capacity and shrink-swell potential are also low to moderate. These areas are the source of the sand and gravel used as local construction materials. From an engineering standpoint, terrace and alluvium deposits pose few limitations to urban development.

MIXED LIMESTONE AND DOLOMITE

This substrate lies primarily to the west of Austin and extends through the Hill Country, covering about 30 percent of the data area. West of the Balcones fault this assemblage is comprised of the Glen Rose formation and of smaller, scattered exposures of the Georgetown formation east of the fault. These units consist of alternating layers of hard to soft limestone and dolomite, marly limestone and marl. From an engineering standpoint they pose a moderate limiting factor for urban development. Excavation is often difficult and blasting is required to penetrate the harder limestone units. Consequently, the construction of utilities, streets or deep foundations is generally expensive. Sink holes, crevices, cavities, joints and seeps are fairly common and ground water is vulnerable to contact with runoff. The steep slopes associated with this assemblage compound development problems, but slope stability is high except when fill material is used, bearing capacity is good and shrink-swell problems are minimal.

SOFT LIMESTONE

This assemblage occurs primarily along a north/south linear corridor between the clays to east and the harder limestone to the west. About 14 percent of the data area is soft limestone, composed mainly of the Austin Chalk group, but also including the Commanche Peak formation and the Bee Cave member of the Walnut formation. These offer very few limitations to urbanization. Slope stability and bearing capacity are moderately high. The Austin Chalk does not present shrink-swell problems, although some of the soils overlying it do have high shrink-swell potential. Most of these soils are less than two feet deep; some, however, may be as deep as four feet. Excavation potential is relatively good. Slope gradients are usually less than 5 percent. Soft limestone poses few problems for the construction of structures, roads and utilities.

HARD LIMESTONE AND DOLOMITE

Consistently hard bedrock is located northwest and southwest of Austin and consists mainly of the Edwards formation, but includes the Buda formation and the Bull Creek member of the Walnut formation. This assemblage presents a moderate limiting factor for urban development: excavation is difficult and blasting is usually required; utility construction, landscaping and foundation excavation are expensive; sink holes, crevices, cavities, joints and related seeps and springs are common. Slope stability and bearing capacity are good, however, and shrink-swell problems are minimal.

ALTERED VOLCANIC TUFF AND BASALT

This assemblage occupies less than three square miles, or 0.4 percent, of the data area. The altered tuff, although interbedded with Austin Chalk, has engineering properties very similar to the clay units. The hard basalt, covering only about 0.3 square miles, covers too small an area to be significant for planning purposes. Due to its small size the assemblage represents only a moderate limiting factor for urban development.

FIGURE 3-3

Department of Planning
City of Austin, Texas, 1976

Generalized from
Unpublished Materials
Bureau of Economic Geology
University of Texas at Austin

PRIME AGRICULTURAL LAND

Agricultural capability in the data area as defined by the US Soil Conservation Service and the *Soil Survey of Travis County, Texas* generally indicates suitability for field crops. Soils in capability Class I are well suited for agricultural use with few limitations. Class II soils have only moderate restrictions which apply to either the choice of plants or to conservation practices. Class III soils have severe limitations for agricultural use and Class IV soils have very severe limitations. The next four classes, V, VI, VII and VIII, are progressively less suitable for agricultural use and are not considered suitable for cultivation. Because of their high agricultural value Class I and II soils are considered a limiting factor for urbanization. Nearly all of the best agricultural lands in Travis County, Class I and II soils, are found east of the Balcones fault zone. The majority of these soils are on the clay, terrace and alluvium geologic units in the eastern half of the county. Most of the soils east of IH-35 are of Classes I, II, III and IV and are more or less suitable for cultivation. Nearly all of the soils west of the Balcones fault zone are of Classes V, VI and VII, unsuitable for cultivation.

SOILS OF AGRICULTURAL CAPABILITY CLASSES I AND II

SOILS LESS SUITED TO FIELD CROP USE

SOIL DATA DOES NOT EXIST FOR AREAS OUTSIDE OF TRAVIS COUNTY

SOILS INFLUENCED BY URBANIZATION: TOO VARIABLE FOR ACCURATE CLASSIFICATION

FIGURE 3-4

Department of Planning
City of Austin, Texas, 1976

Generalized from
Soil Survey of Travis County
US Department of Agriculture
Soil Conservation Service

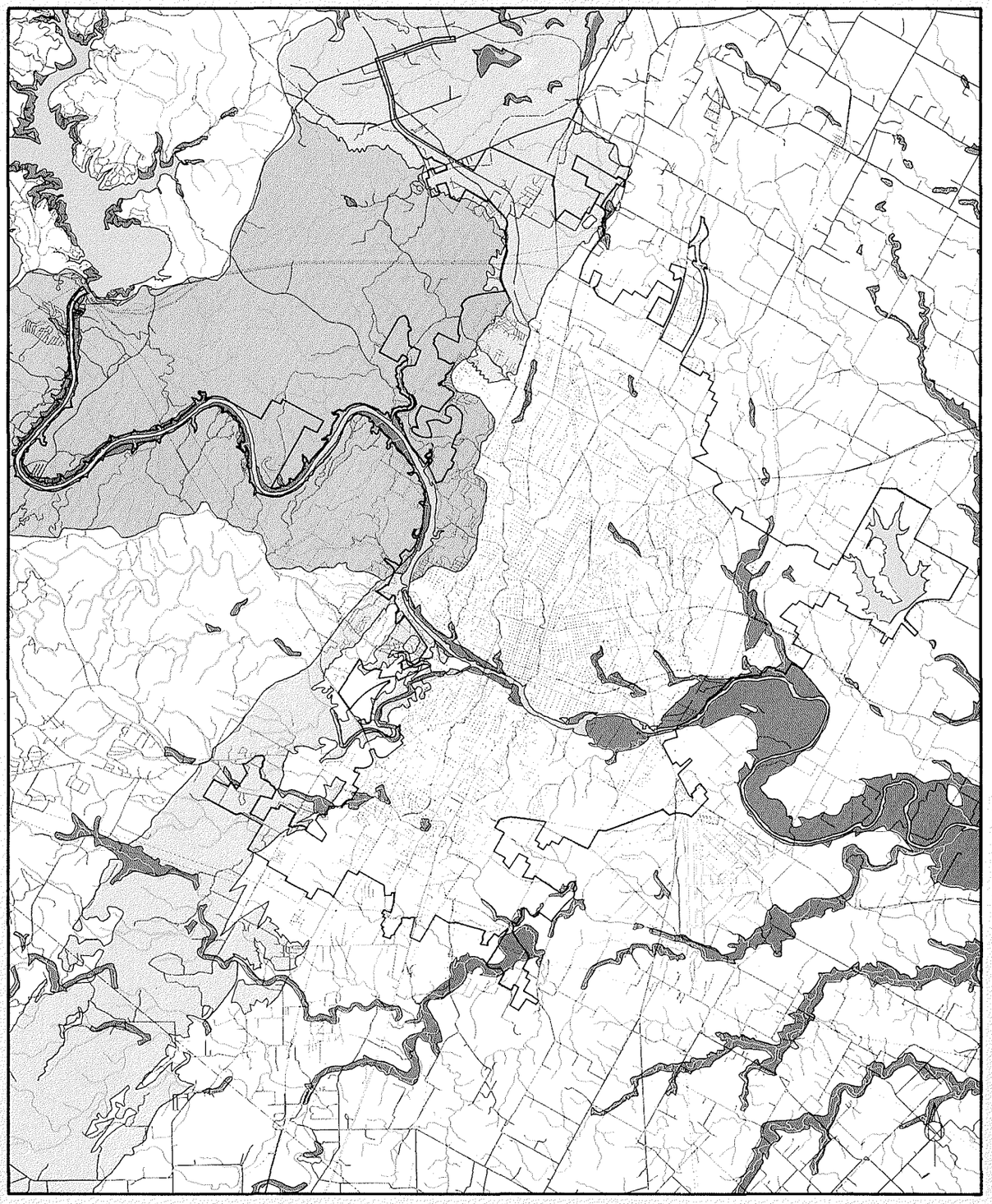
Base Map by
Bureau of Economic Geology
University of Texas at Austin

WATER QUALITY AND WATER HAZARD AREAS

Flood hazard areas are now frequently defined as the land within 100-year flood plains. A generalized delineation of 100-year flood plains is presented here. Only large flood plains with widths of 500 feet or greater, or flood plains extending at least 250 feet beyond lake shores, are shown. Although all the creeks in the county periodically flood, the most extensive flooding occurs on the low relief topography east of the Balcones escarpment. The flood plain of the Colorado River east and southeast of Austin contains the dominant flood hazard in the county. Because of danger to life and property, flood hazard areas represent a severe limiting factor for urban development.

The exposed Edwards formation defines the Edwards aquifer recharge zone, which includes the watersheds of Barton and Dellana Creeks as well as the tributaries of Onion Creek in, and west of, the Balcones fault zone. These watersheds provide the water source for Barton Springs which flows from the Edwards formation. The Edwards aquifer has no ability to cleanse recharge water, so the quality of its water and the water in Barton Springs is directly dependent on the quality of water in these creeks, which is, in turn, dependent on the quality of the runoff in their contributing watersheds. Pollution from urban runoff or malfunctioning septic tank systems may enter the creeks which cross the recharge area in the Balcones fault zone. The polluted water rapidly infiltrates into the Edwards aquifer through the cracks, fissures and cavities prevalent in the creek beds throughout the zone. The danger of pollution from urban development in the Edwards aquifer recharge zone poses a serious limitation to development in the Barton Creek watershed and parts of the watersheds of Onion Creek and its tributaries.

Lake Austin, and Town Lake immediately downstream, are the sources of Austin's potable water supply. Most of the water in Lake Austin comes from Lake Travis where proliferation of septic tank systems and increased runoff from impervious surfaces are slowly degrading the lake's water quality. The likelihood of pollution in Lake Austin from increased urbanization in its watershed constitutes a serious limitation for urban development.



EDWARDS AQUIFER RECHARGE ZONES

EDWARDS AQUIFER RECHARGE WATERSHEDS

LAKE AUSTIN WATERSHED

LARGE FLOODPRONE AREAS

OTHER LAND AREA

FIGURE 3-5

Department of Planning
City of Austin, Texas, 1976

Generalized from
1) Bureau of Economic Geology
University of Texas at Austin
2) Texas Water Development Board
3) Texas Water Quality Board
4) US Geological Survey
Water Resources Division
5) US Army Corps of Engineers

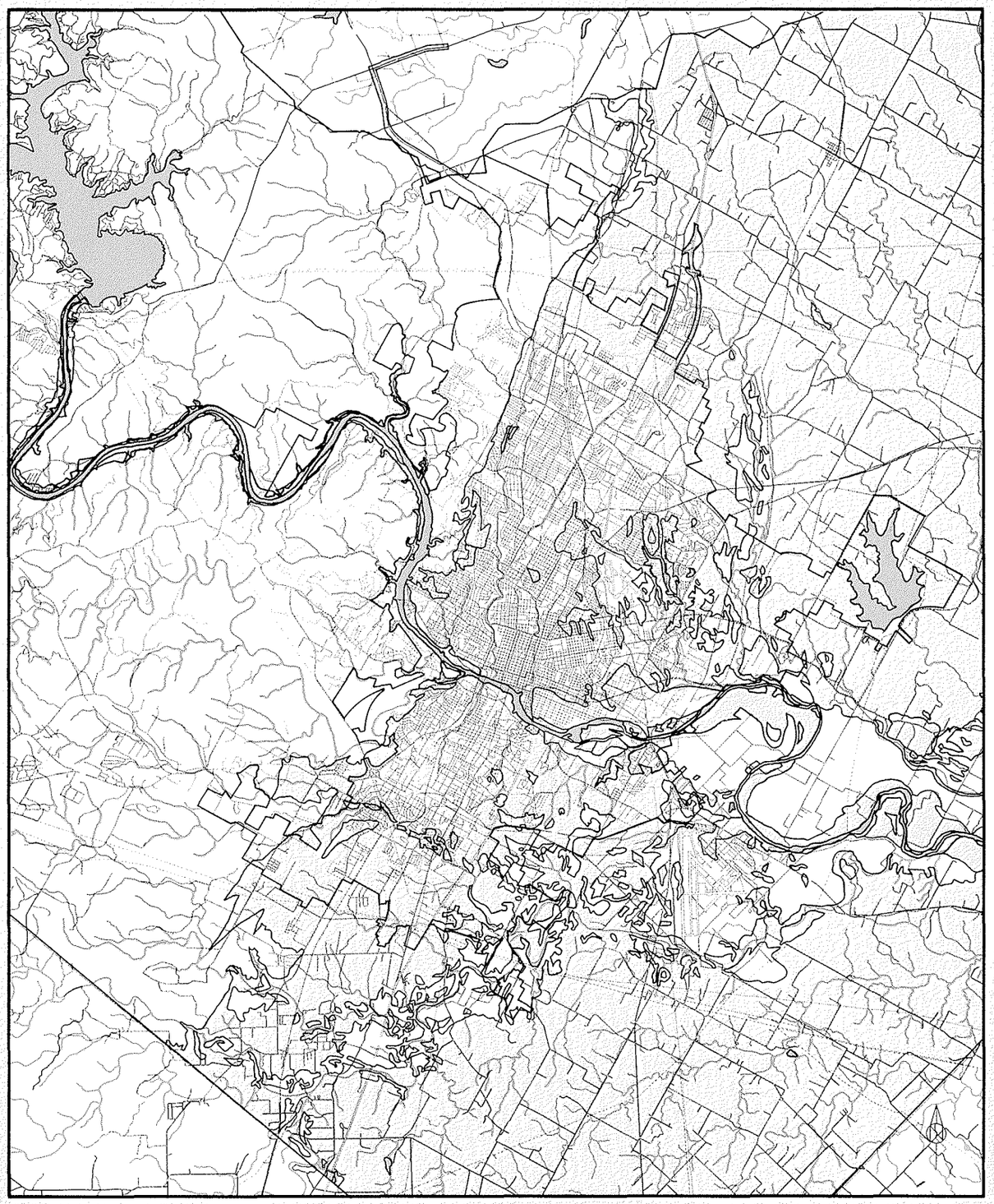
SOIL LIMITATIONS FOR SEPTIC TANK FILTER FIELDS

The US Soil Conservation Service's *Soil Survey of Travis County, Texas* provides a determination of soil limitations for septic tank filter fields. Most of the soils in the data area are severely limited for filter field use according to two distinct classifications. The first includes impervious soils which are found primarily in eastern Travis County over clay substrate. Their impermeable character frequently prevents adequate percolation, and in such cases effluent may surface, become an odor nuisance and perhaps flow into a watercourse. The problem is greatly aggravated in wet weather when clay soils are saturated, pre-empting their ability to absorb septic tank effluent.

Due to the high probability of filter field failure, clay soils should be considered a major limitation for any urban development which must rely on septic tank systems for waste treatment. Better septic tank system design with larger filter fields may alleviate many problems and lessen the threat to the quality of surface water.

The second limitation includes the shallow, rocky soils over limestone found in the western part of Travis County. Where bedrock forms a consolidated impervious layer beneath the soil, septic tank effluent may surface at the nearest outcropping, and the steep slopes common in this area aggravate the problem of surfacing effluent. In many cases the bedrock has numerous cracks, fissures and sinkholes which store and transmit water in the Glen Rose and Edwards aquifers. Septic tank effluent which is not absorbed by the shallow soils may enter these aquifers.

Septic tank system development on shallow soils over limestone bedrock poses a serious threat to the quality of both surface and ground water. Consequently, limitations for septic tanks in these areas are extremely severe. Many septic tank systems only appear to function properly due to the infiltration of effluent into the crevices of the limestone and dolomite substrate where the probability of mixing with groundwater is very high.



NONE OR SLIGHT

MODERATE

SEVERE: POOR PERMEABILITY

SEVERE: SHALLOW SOILS WITH FRACTURED LIMESTONE OR DOLOMITE BEDROCK

SOIL DATA DOES NOT EXIST FOR AREAS OUTSIDE OF TRAVIS COUNTY

FIGURE 3-6

Department of Planning
City of Austin, Texas, 1976

Generalized from
Soil Survey of Travis County
US Department of Agriculture
Soil Conservaton Service, and
Unpublished Materials
Bureau of Economic Geology
University of Texas at Austin

ENVIRONMENTAL DEVELOPMENT LIMITATIONS

The Environmental Development Limitations map was synthesized from the major limiting factors shown in the specific environmental resource maps. These factors, or major limitations, were graphically combined in a series of overlays: areas of clay substrate; flood hazard areas; three special water quality areas, the Lake Austin and Barton Creek watersheds and their recharge zones, plus the recharge contribution zone for the Edwards aquifer; prime agricultural soils; and slopes greater than fifteen percent grade.

The combination of these factors show areas which, from a environmental standpoint, are most appropriate for urban expansion, and areas which are least appropriate. The coincidence of the fewest number of limiting factors indicates the most suitable locations for growth. As shown, the best paths for further urban development are to the north and south of Austin, approximately parallel to IH-35. To the west, major environmental constraints are extensive, including steep slopes and water quality restrictions. To the east, clay soils, prime agricultural lands and wide floodplains predominate. Urban development, therefore, is least suitable to the east and west of Austin.

Several qualifications apply to the use of the map. First, lands of significantly different character may be shaded the same color. A darkly shaded area west of Austin will probably represent the combination of steep slopes and storm water runoff entering a valuable water resource. An identically shaded area east of Austin is likely to indicate the combination of prime agricultural soils and clay bedrock. Second, significant differences in resources value may be represented by similar shading. No system of weighting was applied to the limitations; they were all valued equally. Finally, the Environmental Development Limitations map is designed as an aid to large scale planning decisions, only, such as the derivation of a growth corridor of best environmental suitability and a system of priority areas for future urban growth.

LIMITATIONS ARE GENERALLY ABSENT

ONE LIMITATION

TWO LIMITATIONS

THREE LIMITATIONS

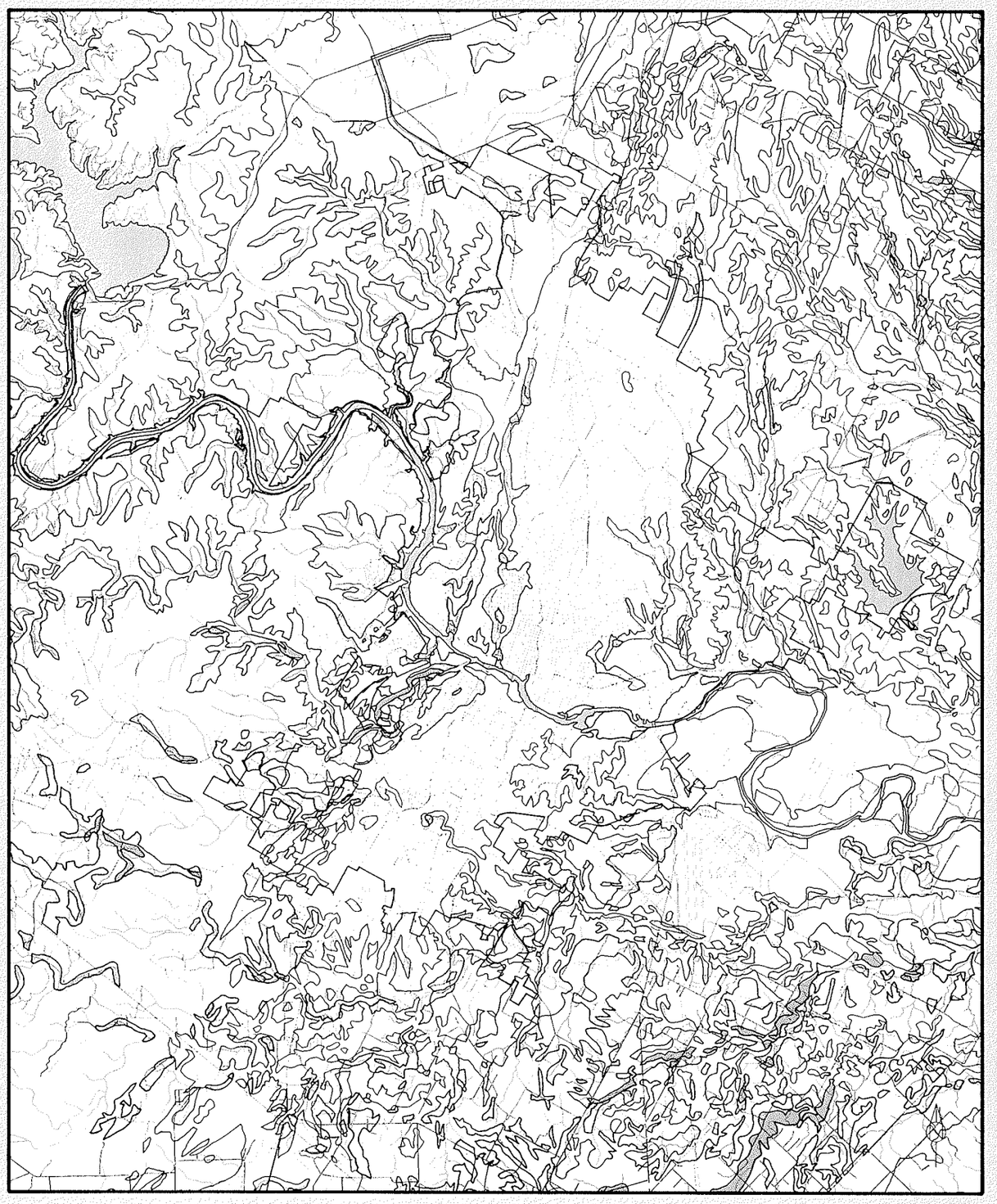


FIGURE 3-7

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

LAKE AUSTIN GROWTH MANAGEMENT STUDY BOUNDARY

In 1974, the City Council of Austin authorized the preparation of a plan for the ninety-two-square mile watershed of Lake Austin and its tributaries. Located west of Austin in the Texas hill country, most of the study area is outside the city's corporate boundaries, but within its five-mile extraterritorial jurisdiction. The lake front itself is within the city limits, as the city boundary extends along the 504.9-foot topographic line from Tom Miller Dam to Mansfield Dam.

Lake Austin is approximately twenty-two miles long, with forty-four miles of lake front. It is one of the seven Highland Lakes reservoirs on the Colorado River in central Texas and is the principal source of drinking water for the city of Austin. The *Lake Austin Growth Management Plan* was authorized because of the lake region's resource value, its proximity to Austin, and because of its vulnerability to the consequences of unplanned growth.

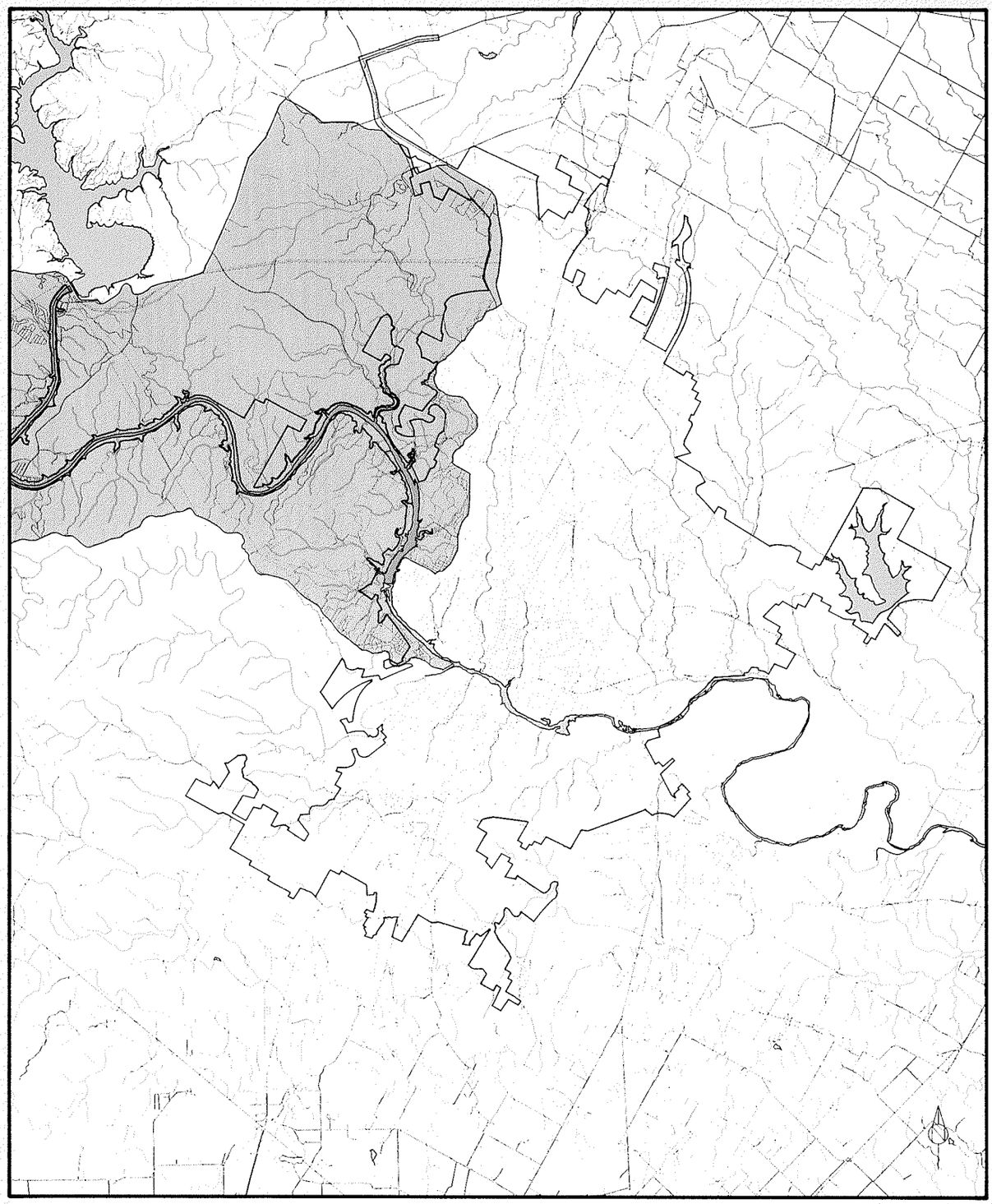


FIGURE 3-8

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

NEIGHBORHOOD DISTRICT BOUNDARIES

Neighborhood District Boundaries have been designated to allow the City to plan according to the physical and social characteristics and needs of each neighborhood. Municipal efforts should be directed toward preserving and strengthening Austin's neighborhoods. The residential classifications presented here generally range from the newest to the oldest areas of Austin.

STABLE RESIDENTIAL DISTRICTS

Stable Residential Districts contain housing that is in good condition supported by adequate public facilities. Occupants tend to be single family property owners rather than renters, and rents and property values tend to be moderate to high. Little pressure to redevelop has yet reached these districts.

RESIDENTIAL CONSERVATION DISTRICTS

Residential Conservation Districts typically contain sound, older housing stock. Most residents own their single family house, although there may be rental and multi-family structures and some redevelopment to more intense land uses within the neighborhood. Property values and rents are generally moderate.

COMMUNITY DEVELOPMENT DISTRICTS

Community Development Districts have older housing stock, some of which is substandard and dilapidating, and public facilities which often need maintenance. Property values and rents are moderate to low, and units are occupied by more renters than owners.

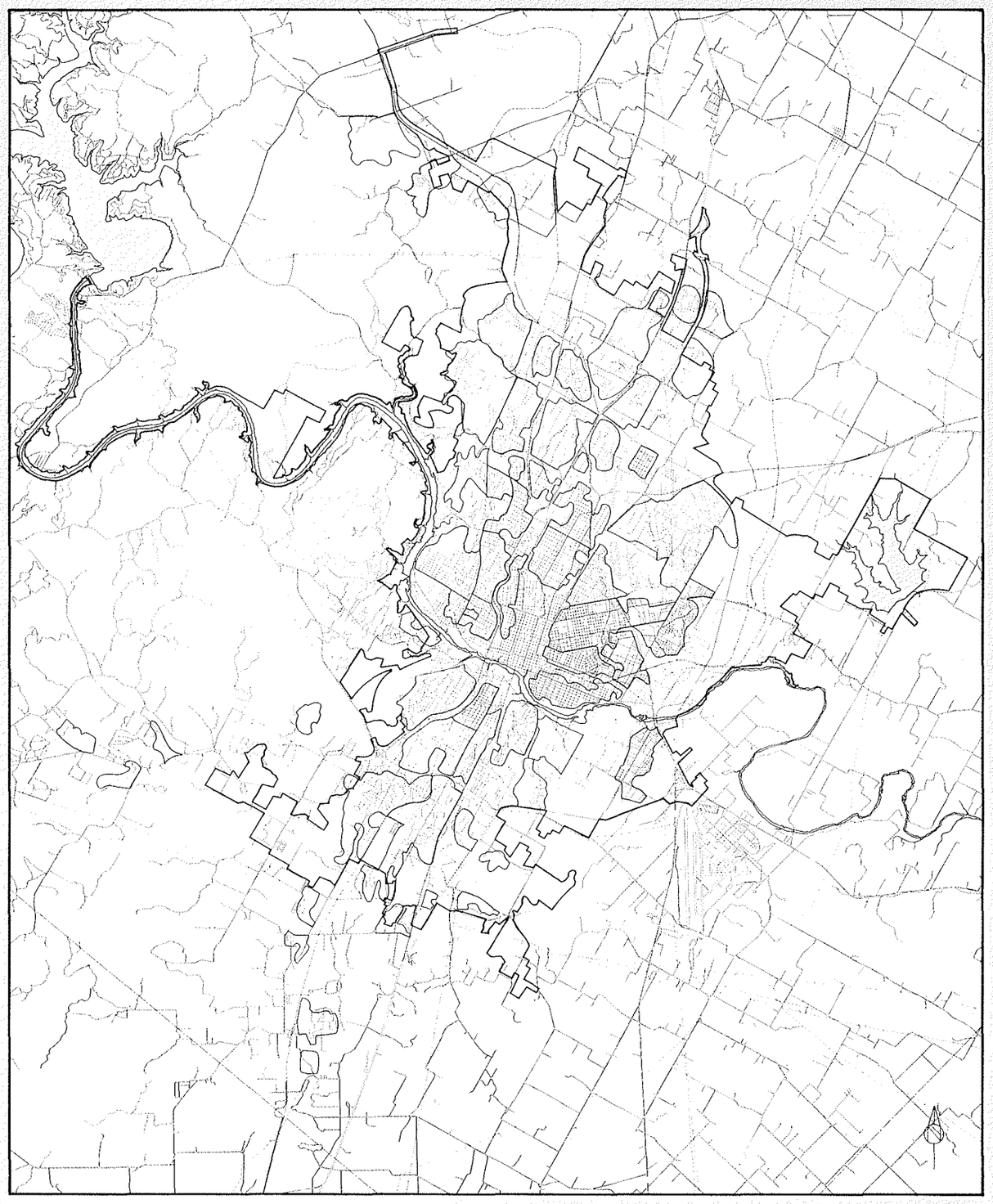


FIGURE 3-9

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

Growth Management

Introduction 4

One of the dominant concerns in Chapter 2, Goals, Objectives and Policies, is that the plan include a growth management process to influence urban development in the direction of citizens' goals. Chapter 4 is the culmination of these concerns and staff research. It establishes a policy of review and evaluation to guide new development toward the most naturally suitable locations and away from areas of environmental sensitivity.

With the end of the Austin Tomorrow Goals Program and the publication of *Goals* report, the Austin Tomorrow Ongoing Committee and the Planning Commission assumed major responsibility for public review of the plan writing process. In light of that responsibility they evaluated three alternative growth patterns and projected their characteristics, comparing them to the urban characteristics implicit in Chapter 2. The recommendations of both groups was a fourth growth pattern which, in their estimation, best fulfills the intent of the *Comprehensive Plan.* The map of land use within Austin's 1975 city limits with the composite of environmental development limitations was used by both groups to determine which pattern of future land use would be most compatible with expressed community values. A large version of this map is included in the back of this document.

The system of priority areas for urban development supports the growth pattern and provides a mechanism for managing growth according to the citizens' concerns. Priorities are based upon the concept of development suitability and the revitalization of central Austin. By strengthening the city's core and providing incentives for development within the city limits and the environmentally suitable Growth Corridor, it is felt that natural resources can be protected and municipal service provision can be made more efficient. Chapter 4 discusses and ranks Growth Areas according to their development suitability, and establishes principles for growth in each area. A large fold-out map of these areas is provided in the back of this document.

Implementation of the plan depends upon cooperation among policy makers, City staff, and citizens with the dedication and foresight of those who originally participated in the Austin Tomorrow Goals Program. Chapter 4 concludes with a public review, monitoring and evaluation schedule to measure progress toward the selected growth pattern, citizens' goals and the plan. This *Comprehensive Plan*, therefore, is not a product, but a part of a process in which the public will continue to be included.

THE GROWTH PATTERN: THE SELECTION PROCESS

The growth alternatives which were publically reviewed by the Austin Tomorrow Ongoing Committee (ATOC) and the Planning Commission were (1) Current Trends, (2) Redistribution, or growth based upon development suitability and (3) Limited Expansion, or redistribution and compaction of growth into high density nodes within the central city. Descriptions of these alternatives in terms of the geographical distribution of projected growth, population density and distribution, land use and other characteristics are available from the Department of Planning, City of Austin.

Both ATOC and the Planning Commission determined Current Trends to be unacceptable, since this alternative would not allow realization of many goals of the Austin Tomorrow Goals Program such as providing adequate open space, protecting environmentally sensitive areas and managing growth.

They determined that the Redistribution alternative meets many of the citizens' desires, although it stops short of providing for the full range of goals expressed, such as a more compact city form and an efficient public transportation system.

ATOC and the Planning Commission further concluded that although the Limited Expansion alternative meets many of the aims of the Goals Program, the proposal would encourage a greater amount of high intensity development than now seems desirable for Austin, given the city's lack of experience and exposure to the density concentrations proposed in this alternative. Although Limited Expansion was believed to promote efficient provision of municipal services, the potentially undesirable side effects of high density centers appeared to outweigh possible benefits.

The selected growth pattern combines the desired characteristics of both the Redistribution and Limited Expansion alternatives. The Planning Commission labeled this Directed Expansion and Inner-City Development, including the policy guidelines found in Redistribution, plus two additional elements. The City should promote development of underutilized, inner-city land and redevelopment of particular areas to provide increased residential choices consistent with the preservation of existing neighborhoods. Various housing types and densities throughout the city should be included. The City should also participate in a limited number of experimental high intensity development centers as proposed in the third alternative growth pattern, Limited Expansion. ATOC noted that a few such developments were currently planned around Austin. The City staff was advised, as part of the growth management process, to closely monitor such projects' impacts on housing availability, environmental quality, traffic generation, transit effectiveness, social conditions, utility demand, energy consumption and land use.

The growth pattern, Directed Expansion and Inner-City Development, was selected to further urban development that is sound and consistent with the Goals Program and a healthy, vital economy. All policy options, ordinance revisions, capital improvements programming and development decisions should facilitate implementation of this pattern.

ATOC and the Planning Commission agreed that the goals, objectives and policies found in Chapter 2 support the urban characteristics of Directed Expansion and Inner-City Development. This growth pattern incorporates growth management features common to both the Redistribution and Limited Expansion alternatives, recognizing an environmentally preferable direction for urban growth. Figures 4-1 and 4-2 illustrate the physical interpretation of the growth pattern.

Directed Expansion and Inner-City Development will allow for environmental protection as well as a broad choice of development opportunities throughout the city. Revitalization of the Core Area and preservation of neighborhoods should also result from implementation of Directed Expansion and Inner-City Development.

GOALS COMPATIBILITY

Directed Expansion and Inner-City Development was selected as the best physical interpretation of the goals and objectives in Chapter 2 of this plan. The statements below discuss the compatibility of the goals with the characteristics of the selected pattern for growth.

Environmental Suitability

Figure 4-1, Generalized Development Constraints, demonstrates that the plan encourages growth in the environmentally suitable areas available. The plan discourges urbanization outside the Corridor where severe problems, such as those associated with slopes, soils, engineering properties, water quality, noise and other hazards generally occur.

Transportation Considerations

The goals in Chapter 2 place high priority on an efficient public transportation system and express particular interest in developing a mass transit system. The Growth Corridor is already well served by prominent transportation facilities. North-south travel in the Corridor is now, and will continue to be, better served than east-west travel. The alignment of urban and suburban development in the Corridor offers the best chance for the feasible use of a rapid transit system in the near future. Coincidentally, the proposed mass transit spine, which has been under consideration by the Austin Transportation Study Committee, would be located along the center of the Corridor.

Infrastructure and Construction Costs

Outside the Corridor the cost of constructing buildings, utilities, road systems and other public facilities increases significantly due to engineering constraints, steep slopes and topographic features. The environmental cost may be greater still. Within the Corridor, infrastructure service could be phased incrementally. The gross density of a service area could remain high, yet environmental cost would be relatively low. Outside the Corridor, extension of utilities through constraining features to reach isolated developments would be relatively inefficient. It is also more costly to provide adequate fire and police protection in these areas.

Low and Moderate Cost Housing Opportunities

The Corridor contains new constraints for construction. Special foundations and exceptional construction practices are generally unwarranted. As indicated, utilities and transportation can be supplied at minimum costs. Growth to the north and south should enhance the availability of low and moderate cost housing.

Annexation

With the adopted growth pattern, new residential, commercial and industrial growth can be annexed in contiguous segments without skipping large vacant areas. This is seldom possible west of the Corridor, where development often occurs in isolated clusters.

Reduced Racial Segregation

Current development trends tend to reinforce the city's present east-west socio-ethnic division. Emphasis on development in a north-south corridor would tend to reduce this locational division for new housing.

Industrial Location

Growth along IH-35 and the Growth Corridor coincides with existing industrial locations such as Westinghouse, IBM and John Roberts, Inc. Many good industrial sites can be found to the north and south near MoPac Railroad and IH-35.

Regional Growth Trends

Expansion of neighboring municipalities such as Georgetown, San Marcos and Round Rock is expected to continue in the Corridor.

Amenities

This Corridor parallels the Balcones Escarpment and its scenic amenities. Live oak trees thrive on the Austin Chalk formation, the predominate bedrock of the area. The potential for shade trees and revegetation is much higher than on the limestone terrain west of the Corridor.

Open Space and Urban Sprawl

The urban form provided by the Corridor gives the greatest assurance that suburban neighborhoods will remain bordered by land of a rural character on the east and west rather than engulfed by expanding urban sprawl. The proximity of each residence to open space is enhanced. The threat to water resources is also much lower.

Greenbelts and Parks

Numerous creeks cut across the Corridor, providing greenbelt opportunities. Natural features provide buffer zones for potential high density residential, industrial or commercial land uses.

TABLE 4-1: URBAN CHARACTERISTICS, DIRECTED EXPANSION AND INNER-CITY DEVELOPMENT

The objectives of implementing Directed Expansion and Inner-City Development include achievement of the following urban characteristics by 1995.

Most new residential construction would be low density single-family units.

Most new single-family residential construction would occur inside and contiguous to Austin's 1977 incorporated area, where municipal services are generally accessible.

New apartment construction would occur in various locations both inside and outside the 1977 incorporated area.

Growth would be contiguous to existing development and municipal policies would discourage leapfrog development and urban sprawl.

The extension of municipal water and wastewater service would be provided according to priority growth area policies.

Scattered developments utilizing septic tank systems and small waste treatment plants would occur in outlying areas where municipal systems are not readily available.

Urban development along the north-south IH-35 corridor would be increased.

The Core Area, including the Central Business District, would reassert its status as an active retail, service, residential and cultural center.

Older neighborhoods would stabilize and remain attractive as residential areas, rather than losing population to the suburbs.

The trend toward deterioration of the housing stock within the inner portions of the city would be reversed, providing a variety of residential choices.

Economically and ethnically segregated neighborhoods would tend to diminish as low income families enter the housing market.

Busing of school children would be minimized as a larger proportion of the city's neighborhoods become integrated.

Commercial development would concentrate in multi-use centers near major intersections.

Most new industrial development would locate in the FM-1325 area, along Ed Bluestein Boulevard and along Ben White Boulevard.

Urban development in environmentally sensitive areas would diminish.

The automobile would continue to be the primary mode of transportation.

Extensive bus service, and possibly light rail mass transit, would be more feasible.

GROWTH MANAGEMENT: GROWTH AREAS

The adopted growth pattern, Directed Expansion and Inner-City Development, provides the basis for establishing a ranking of Growth Areas for urban development. This section designates land resources in and around Austin according to their development suitability in terms of the *Comprehensive Plan*. Priorities for development in Growth Areas derive principally from the concepts of environmental development suitability and revitalization of the inner-city. For implementation of the adopted growth pattern, municipal services and utilities should be guided by specific recommendations and proposed developments should consider the criteria presented for each area in Tables 4-2 through 4-7.

Growth Area designations are intended as a growth management technique to emphasize development suitability and more efficient utilization of land in the central city. If the Planning Commission, in considering specific proposed developments, finds that the development suitability of a tract is incompatible with the Growth Area to which it is assigned, it shall redesignate the tract appropriately, subject to approval of the City Council. The principles and programs delineated for each Growth Area are guidelines for municipal investments and decisions. Implementation of the selected urban pattern and the goals and objectives of Chapter 2 will ultimately require translation of these guidelines into specific ordinances. A comprehensive approach to growth management will be necessary to assure that the various branches of municipal government work together to promote the transition from present trends to Directed Expansion and Inner-City Development.

PRIORITY GROWTH AREAS: I, II, AND III

As shown in Figure 4-2, Growth Areas, combined development constraints define a corridor of best environmental suitability for urban expansion. This includes Priority Areas I, II and III, and is referred to as the Growth Corridor extending through Austin to the north and south. Priority Areas are defined as those areas of best environmental suitability for Austin's future growth.

The boundaries of the Growth Corridor shown in Figure 4-2 were designated in order to facilitate growth management decisions. The central part of the western boundary of the Corridor and a small portion of the eastern boundary are determined by Austin's 1977 city limit line. Further north and south, the western boundary is determined by the first occurrence of the waterbearing Edwards limestone. The northern part of the eastern boundary delineates the geological division between chalk bedrock and deep clays. With one exception, the remainder of the eastern Corridor boundary is determined by the ridgeline separating the Walnut Creek and Onion Creek watersheds from much less developmentally suitable drainage basins to the east. The singular exception is the eastern boundary segment which coincides with the Bergstrom Air Force Base Ldn-65 noise zone as determined in 1976.

OTHER AREAS: IV AND V

The first three Priority Areas define a desirable urban growth pattern consistent with an environmentally oriented growth management plan. Several other areas with comparatively severe environmental constraints to development, however, are already experiencing high levels of development activity to which the City and State have made commitments for the provision of infrastructure. Existing and scheduled public facilities serving these areas include:

Wastewater

The Crosstown Tunnel; the Bull Creek Interceptor, terminating at Spicewood Springs Road; Bull Creek Lateral Line A; the Williamson Creek Interceptor; the Barton Creek Interceptor, terminating near Loop 360; and the Dry Creek Interceptor;

Water Distribution

The Spicewood Springs Reservoir; the US-183 and McNeil Road Reservoir; the Eberhart Reservoir and several large transmission mains, including the North Austin Transmission Main and the Southwest Austin Transmission Main;

Transportation

Loop 360; MoPac Boulevard; US-183; US-290; SH-71; Spicewood Springs Road; William Cannon Drive and Bee Caves Road;

Fire Protection

The Northwest Austin Fire Station and the Southwest Austin Fire Station.

In order to assure orderly, regulated growth, these areas will be included in the City's growth pattern, although their priority for City facilities and services will be lower than that for land inside the environmentally suitable Corridor. All five areas are shown in Figure 4-2.

GENERALIZED DEVELOPMENT CONSTRAINTS

Major development constraints are illustrated here in schematic form. As shown, they were derived from the series of Environmental Development Limitations maps presented in Chapter 3, and they begin to define an environmentally preferable direction for Austin's urban expansion.

To the west of Austin are steep slopes, the Lake Austin watershed, the Barton Creek watershed and the recharge zones of the Edwards aquifer. To the east are clay soils with high shrink-swell characteristics, prime agricultural soils, extensive floodplains and the Bergstrom Air Force Base noise zones. In between lies the north-south Growth Corridor.

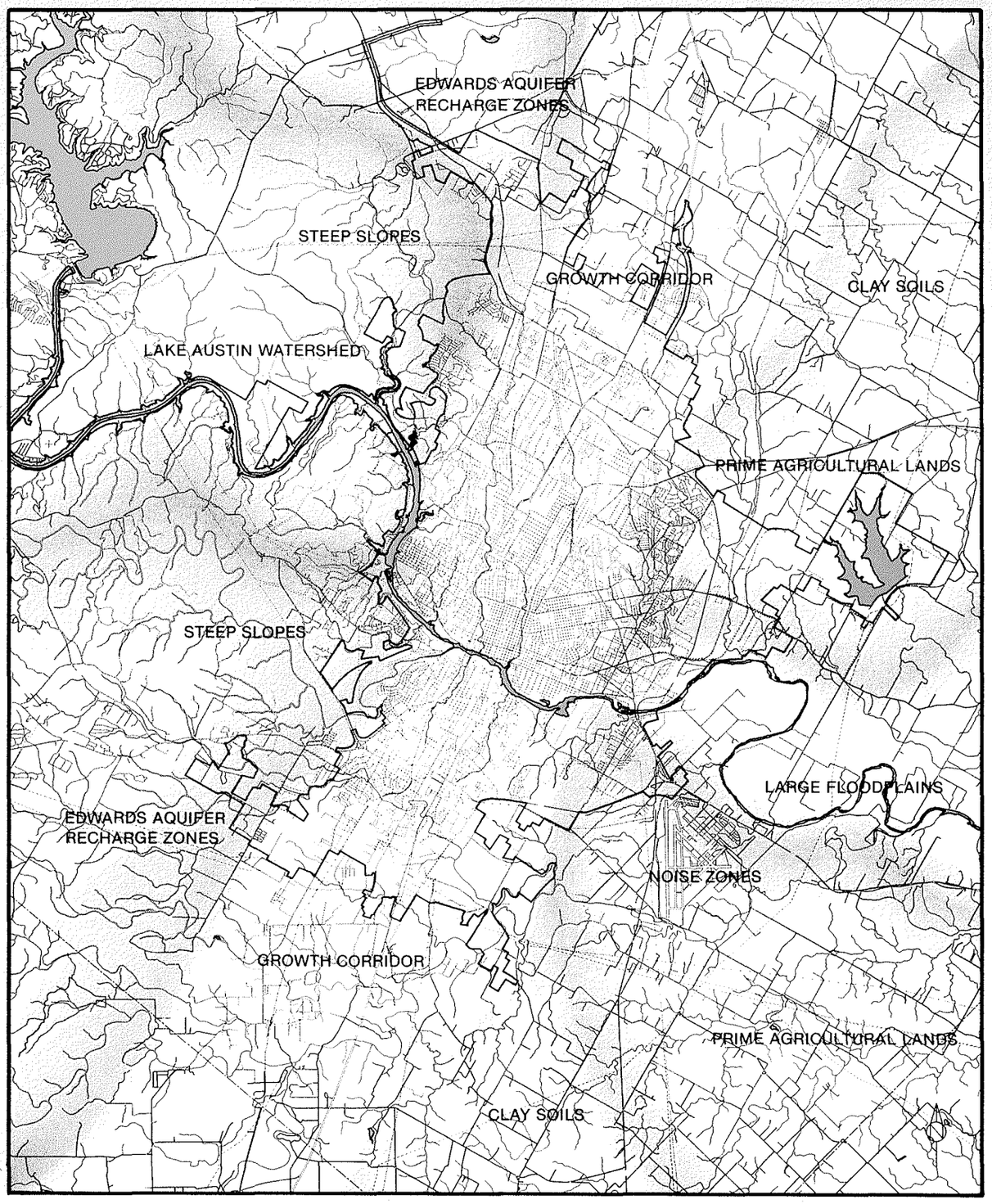


FIGURE 4-1

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

GROWTH AREAS

owth Areas provide the City with a mechanism ror managing urban growth according to the dominant themes in the *Comprehensive Plan,* particularly environmental development suitability and the preservation and revitalization of central Austin. Citizens' goals are reflected in the specific principles and guidelines which are recommended for each Area in Chapter 4 of the *Comprehensive Plan.* Municipal decisions concerning public and private development should be made according to the following priorities.

PRIORITY AREA I

Growth in central Austin has highest priority because redevelopment of underutilized tracts and development of vacant land here would reduce urban sprawl and make the provision of government services and utilities more efficient. The boundaries of Priority Area I generally encompass the Central Business District and surrounding residential and commercial neighborhoods.

PRIORITY AREA II

Priority Area II includes land which is outside of Priority Area I but within Austin's 1977 incorporated area, where municipal services and utilities are currently available. New growth on undeveloped or underutilized land within the city would further discourage urban sprawl and strengthen central Austin. However, existing sidential neighborhoods should be adequately otected from the potential detrimental effects of iew development.

PRIORITY AREA III

Priority Area III includes north-south corridors of land outside Priority Areas I and II which are environmentally suitable for development. Priority Area III provides room for Austin's urban expansion while diverting growth from more sensitive regions to the west and east, thus promoting many of the goals and objectives of the *Comprehensive Plan.* Priority Areas I, II and III are referred to as the Growth Corridor, the most suitable location for Austin's future growth.

AREA IV

Area IV consists of several separate parts located in the hills along the western fringe of Austin, principally along US-183 and US-290. Although these areas are environmentally fragile they are experiencing considerable growth to which the State and City have made commitments for the provision of utilities and roads.

AREA V

rea V includes land outside of Areas I, II, III, and It is deemed least suitable for Austin's future owth because of its distance from the city and its poor environmental suitability for development. Growth in this area would continue current trends toward urban sprawl, and would not conform to the goals and objectives of the *Comprehensive Plan.*

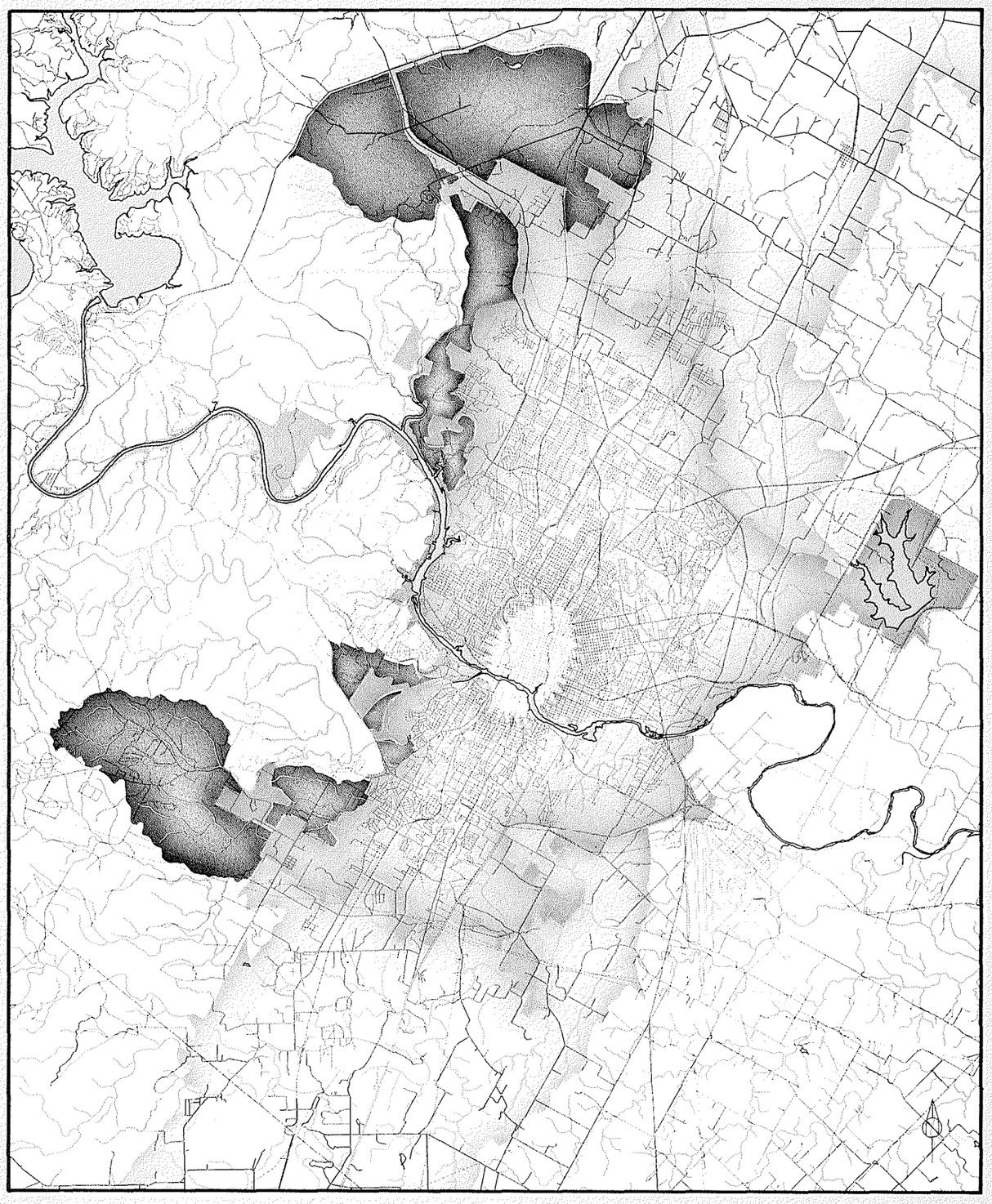


FIGURE 4-2

Department of Planning
City of Austin, Texas, 1976

Base Map by
Bureau of Economic Geology
University of Texas at Austin

TABLE 4-2: DEVELOPMENT PRINCIPLES, PRIORITY AREA I

As shown in Figure 4-2, Growth Areas, highest priority for public investment is assigned to the center, or Core Area of the city. Assignment of this priority is a response to the goals' emphasis on inner-city redevelopment and its accompanying urban benefits. More efficient urban transportation, neighborhood preservation, increased open space, more efficient provision of utilities and government services, increased housing opportunities within the city and environmental protection depend upon preservation and revitalization of the inner-city. Municipal policies and investments designed to preserve and revive the Core Area should provide incentives for more intensive and efficient use of undeveloped and underutilized inner-city land resources. The following principles promote development in Priority Area I.

Designation of Capital Improvements Program (CIP) funds for specific projects, such as:

- Correction of street, drainage and bridge deficiences
- More efficient, convenient parking facilities
- Mass transit, pedestrian malls and bicycle paths
- Utility improvements to facilitate revitalization

Maximum use of federal funds available for Core Area revitalization, such as:

- Housing and Community Development Block Grants
- Economic Development Administration funds

Expansion and improvement of public services, such as:

- Refuse collection
- Police protection
- Transportation
- Initiation of an economic development program to facilitate public and private development activity

Improved planning and coordination by City of Austin, State of Texas and University of Texas to include:

- Historic preservation
- Services to promote inner-city residency
- Designation of very high intensity residential areas
- Improved appearance through landscaping and sign control
- Neighborhood preservation

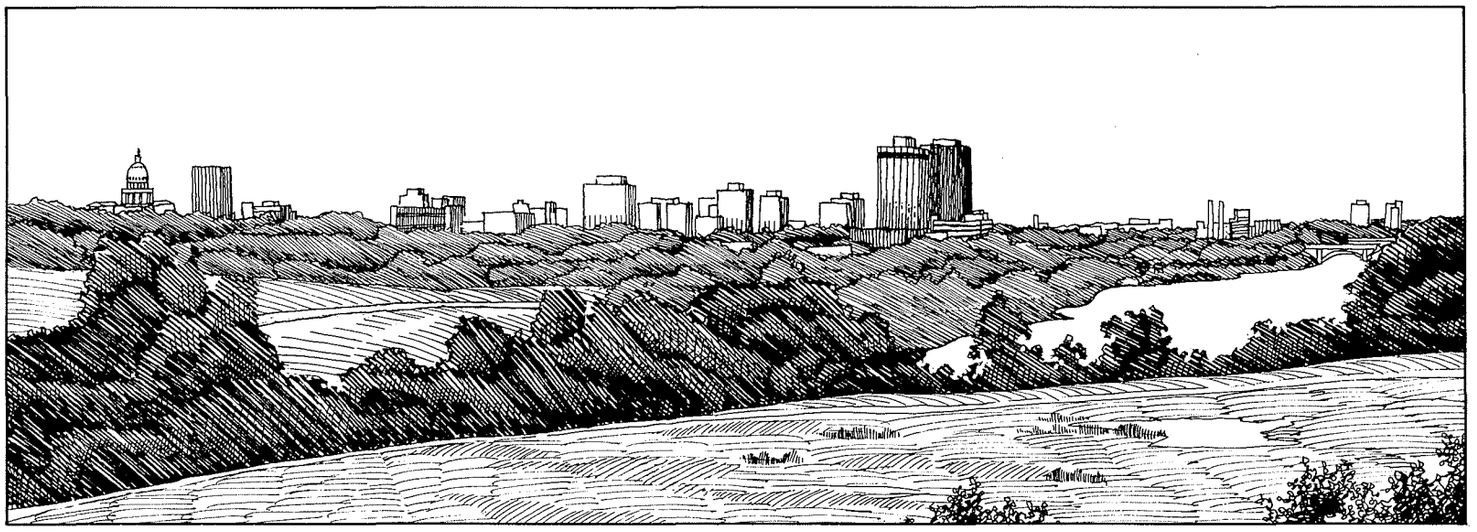


TABLE 4-3: DEVELOPMENT PRINCIPLES, PRIORITY AREA II

Land in Austin which is outside the Core Area but within the 1977 incorporated area receives second highest priority for urban development. The use of undeveloped and underutilized land within the city for new residential and commercial growth should relieve the pressure of urban sprawl at the city's periphery, thus promoting many of the goals and objectives in Chapter 2. Such development should not, however, proceed to the detriment of existing residential neighborhoods or public open space. The following principles direct growth in Priority Area II.

Allocation of Capital Improvements Program funds for projects which improve municipal services and facilities in already developed areas

Extension of municipal utilities, services and facilities to promote the use of undeveloped and underutilized land and to correct environmental problems

Emphasis on planning and coordination activities which include:

- Encouraging Planned Unit Devlopments to increase flexibility in developing troublesome tracts and to increase the proximity of residences to employment centers
- Revising zoning regulations to promote the development of vacant land
- Neighborhood planning
- Sale or lease of surplus State and City land for private development

Encouraging industrial location in appropriate areas

Designation of multi-family residential areas

TABLE 4-4: DEVELOPMENT PRINCIPLES, PRIORITY AREA III

Priority Area III includes that land outside Austin's 1977 incorporated area with fewest environmental constraints. The north-south Corridor of development suitability provides an avenue for future expansion which protects sensitive natural regions, principally those along the western fringe of the present urbanized area. The following principles direct growth into Priority Area III.

Annexation and provision of necessary municipal services to that part of Priority Area III immediately adjacent to Austin's 1977 incorporated area, including:

- Discouraging package treatment plants and private water systems in favor of connection to the City's water and wastewater system, and careful monitoring of systems which are permitted
- Prohibition of septic tank systems for subdivision development where soil, geologic, slope and other factors are not suitable for their use

Development incentives to encourage growth within the Corridor, especially contiguous to Austin's 1977 incorporated area and the Walnut Creek and Onion Creek watersheds, including:

- CIP projects scheduled to facilitate suitable development in Priority Area III
- Acquisition by the City of sites for public facilities and protected or preserved natural areas in advance of development

Environmental considerations, such as:

- Minimization of impervious surface coverage
- Storm runoff retention measures
- Controlled cutting and filling of land
- Controlled and minimized erosion and sedimentation from construction activities

TABLE 4-5: DEVELOPMENT PRINCIPLES, AREA IV

Area IV contains the plateau region surrounding US-183 northwest of central Austin. This relatively flat limestone terrain has proven attractive to homebuyers. Land within Travis County south and west of US-183 lies within the Bull Creek watershed, while land within Travis County east of US-183 drains into Walnut Creek; the northern section drains toward Brushy Creek, a tributary of the Brazos River. Most of the area can be served by one of several wastewater interceptors. The tributary valleys north of Lake Austin and east of Loop 360 are also part of Area IV. Loop 360 facilitates transportation access to these generally steep valleys. The region can be readily served by the Bull Creek Wastewater Interceptor and Austin's municipal water system which extends into the area. These valleys are already almost surrounded by Austin's incorporated area on three sides. In the Upper Williamson Creek watershed of Area IV, a wastewater collector will soon extend most of the length of Williamson Creek to Oak Hill. A water distribution main from the Ullrich Treatment Plant to the Davis Lane Reservoir will facilitate service to this region. US-290 and SH-71 provide major transportation access to Area IV. Sunset Valley, a small incorporated town, occupies a portion of this watershed which limits Austin's actions within that town's ETJ.

New subdivision development contingent upon connection to the City's water and wastewater system

If provided, municipal infrastructure, such as water and wastewater, available on a cost-sharing basis between the City and the developer

An impact analysis conducted as the basis of each major City infrastructure or annexation decision

A Development Guidelines Manual with standards addressing particular conditions in Area IV

City investigation of the feasibility of applying the following growth management tools: transferable development rights, taxing modifications and the public purchase of development rights

Consideration of the recommended performance principles for new development in Area IV which are presented in Table 4-7

TABLE 4-6: DEVELOPMENT PRINCIPLES, AREA V

Area V lies outside of the Growth Corridor and Area IV. In terms of attaining the goals and objectives of the plan, land of this designation is least desirable for urban expansion. Because of its distance from Austin's 1977 city limits and its poor environmental suitability, growth in this area would not conform to the intent of the *Comprehensive Plan*. In order to direct growth into the recommended Corridor strict performance principles should be enforced in this region. Standards and regulations should be adopted to support the principles which apply to Area V.

Ordinance amendments to assure that septic tank systems and package treatment plants do not contribute to the degradation of ground and surface waters

The City will not spend any funds on infrastructure in this area.

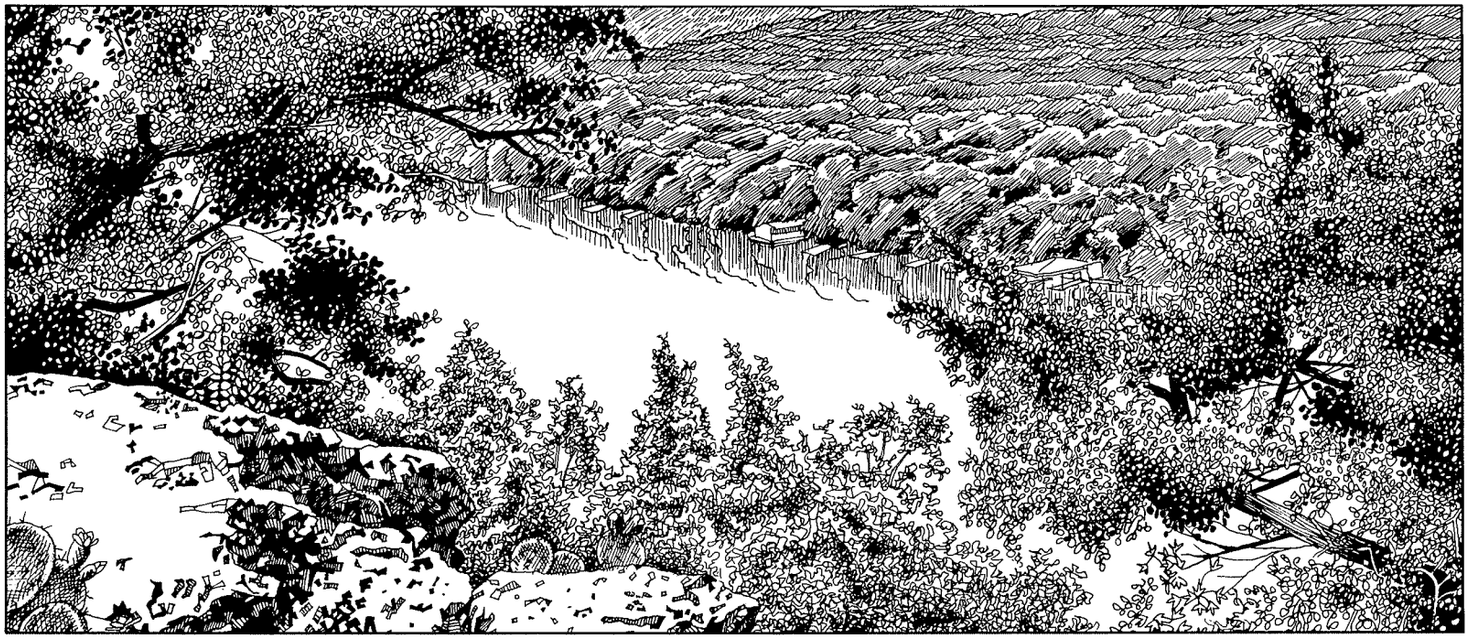
Promulgation of a Development Guidelines Manual with standards appropriate to Area V

City investigation of the feasibility of applying the following growth management tools: transferable development rights, taxing modifications and the public purchase of development rights

Conformance of new development to the performance principles for Area V which are presented in Table 4-7

TABLE 4-7: LIMITING FACTORS AND RELATED PERFORMANCE PRINCIPLES FOR AREAS IV AND V

LIMITING FACTORS	PERFORMANCE PRINCIPLES
Steep Slopes	Development activities on slopes greater than 15 percent should not increase erosion, flooding or water pollution nor require unsightly scarring of hillsides.
Clay Soils and Bedrock	Development on clay soils and bedrock should include measures to ensure that the physical properties inherent in these materials do not result in foundation damage, erosion and slope collapse, drainage problems, corrosion or rupturing of buried pipes, or the surfacing of septic tank effluent.
Floodplains	Any development or alteration proposed for a floodplain should not result in an increase in flood height, a reduction in watershed storage capacity, greater flood potential downstream, increased risk of loss of life or increased potential for extensive property damage from flooding.
Prime Agricultural Lands	Development on prime agricultural lands should be designed to minimize the amount of land permanently removed from cultivation and should not result in drainage or erosion problems for adjacent cultivated land.
Contribution Zone for Edwards Aquifer Recharge	Development in this zone should not contribute to any increase in pollution of surface or groundwater above that expected to occur in the natural, undisturbed state. Impervious surfaces in the zone should be minimized in order to permit storm runoff infiltration to the aquifer. In addition, new development and utility construction within this zone should consider the principles and standards promulgated in the Texas Water Resources Department's Board Order for the Edwards Underground Reservoir.
Lake Austin Watershed	Development and utility construction in this watershed should consider the *Lake Austin Growth Management Plan* and should not result in the deterioration of water quality in Lake Austin. Ordinances should be adopted or amended in consideration of the development criteria in the *Lake Austin Growth Management Plan.*



MONITORING AND REVISION

Throughout the development of the *Comprehensive Plan* the need for accountability has been a recurring theme. Consequently, the plan provides for the careful and stringent assessment of the progress made toward its implementation. This section describes a system of appraisal of how well the plan's goals have been achieved and of the impact of the growth management process upon the city.

Monitoring and evaluation processes are usually hampered by insufficient data. This is sometimes due to the subjective nature of certain goals and objectives or to the intangible quality of certain features that might indicate progress toward implementation. In other cases, the collection and organization of indicative information may be prohibitively expensive or difficult to obtain. This section seeks to provide the means by which the effects of the plan on the character of the city and on the provision of municipal services may be measured. It does not attempt to quantify subjective assessments of conditions.

Reporting

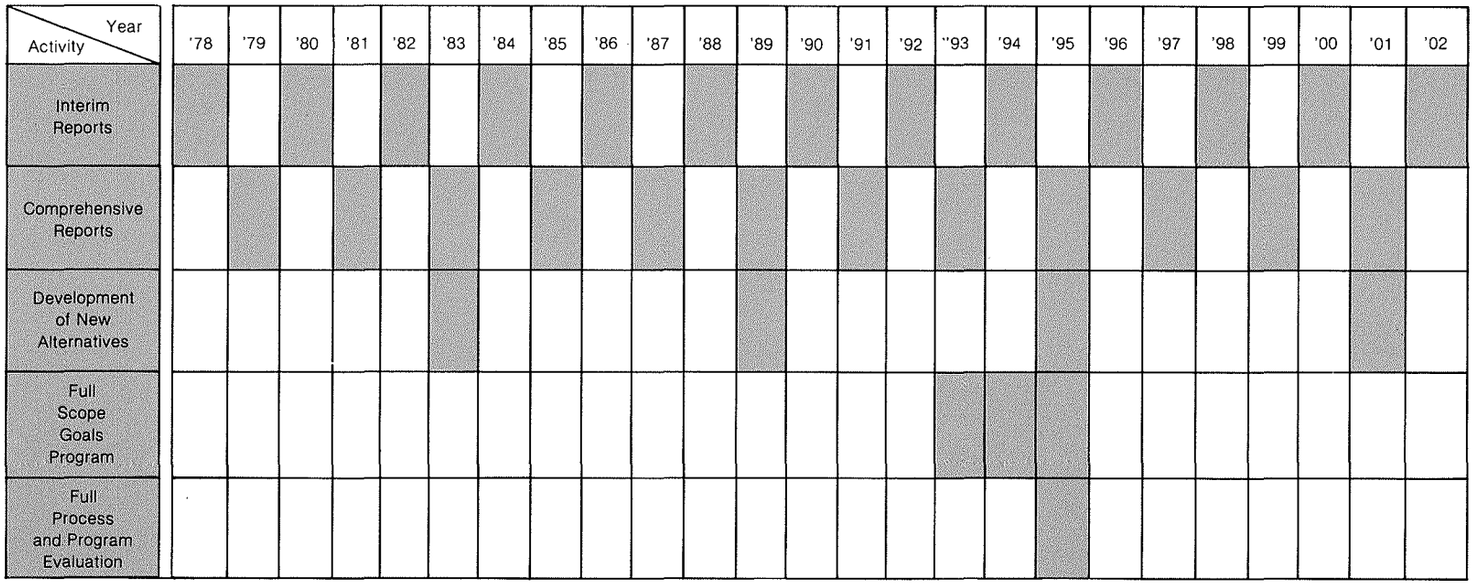
The Schedule of Growth Management Activities, Table 4-8, illustrates repetitive monitoring activities. The mainstay of the program will be a series of evaluative reports which are designed to help Austin's municipal government monitor and adjust its own performance and allow interested citizens to keep track of its progress.

During even-numbered years, beginning in 1978, all appropriate City departments and agencies will be responsible for preparing interim reports for review by the Planning Commission and the primary citizens' board charged with comprehensive planning. The reports will describe each department's function in relation to the *Comprehensive Plan.* Interim reports will also contain (1) descriptions of the indicators selected for monitoring and (2) descriptions of how the indicators will be collected, organized and evaluated.

During odd-numbered years, beginning in 1979, the Planning Department will have the responsibility of preparing and presenting to the Planning Commission and the primary citizens' board charged with comprehensive planning, a comprehensive report on the implementation of the plan. The comprehensive report will consist of two sections.

The first section will be a compilation of statements from all appropriate City departments and agencies. These statements shall specify (1) the progress toward achieving the goals of the plan, as substantiated by recorded indicators and/or subjective evaluation; (2) the impact of the plan on the provision of City services and on the functions of all related City departments; and (3) the programs and policies of the City which are specifically intended to achieve a goal or objective of the plan.

TABLE 4-8: SCHEDULE OF GROWTH MANAGEMENT ACTIVITIES



The second section will be an evaluation of the economic and land use impacts of the *Comprehensive Plan.* It will review changes in land use, growth patterns, demography and the provision of capital improvements.

Re-evaluation

As indicated by the time schedule diagram, Table 4-8, the *Comprehensive Plan* and growth management system will be reviewed and re-evaluated every six years. To facilitate the review, the Planning Department will generate at least three alternative growth sketches for the city. The alternatives should consider the social, demographic, physical and economic impacts of growth on the city.

The plan is based on the goals and objectives of the Austin Tomorrow Goals Program. Another such program should fully redefine citizens' goals after fifteen years, using the scope and detail of the original Austin Tomorrow Goals Program as a model. This schedule will allow three years of goals identification, to be completed by the end of the third standard six-year cycle of plan review. This third cycle should include re-identification of goals, development of new alternative growth options and a full re-evaluation of the existing growth management process.

Neighborhood Planning

Prior to the next Goals Program the monitoring and revision process will depend on neighborhood planning to refine and modify results of the Austin Tomorrow Goals Program. The primary objective of neighborhood planning will be the development of specific plans tailored to the needs of each neighborhood. The program will be based on the premise of joint planning, or plans developed through the mutual cooperation of City staff and neighborhood residents. The resulting plans are intended to serve as guides for City decisions concerning housing, land use, zoning, transportation and other City facilities and services.

CAPITAL IMPROVEMENTS PROGRAMMING

The Capital Improvements Program, or CIP, is the scheduling and coordination of public facility construction. The purpose of the CIP is the provision of adequate public services in conformance with the community goals and objectives established in the *Comprehensive Plan.*

Capital Improvements and Induced Development

Decisions concerning the location, capacity and timing of capital improvements constitute perhaps the single most important element in a program of urban growth management. The pace, pattern and fiscal impact of urban development depend, to a great extent, upon the provision of required public facilities, especially highways, major streets and sewers. Urban development is made easier by public facility construction. Such development, however, can have serious adverse effects upon natural and urban environments. In Austin, the spread of low density residential suburbs into areas which are relatively unsuitable for urbanization has been encouraged by the presence of highways, major streets and sewers. Provision of these facilities, partially or entirely at public cost, has increased the supply of economically developable land. At the same time, demand for this land has also increased as a result of easier transportation access. If urbanization is to be successfully directed to the most environmentally suitable locations and adverse impacts kept to a minimum, the Capital Improvements Program must include a procedure for evaluating development and the associated effects induced by facility construction.

Evaluating the Effects of Capital Improvements

A systematic procedure for evaluating the Capital Improvements Program and its possible land use ramifications should include (1) a survey of existing land use, environmental and cultural characteristics; (2) an estimate of the supply of economically developable land and the impact the capital improvement will have on this supply; (3) an estimate of the demand for development of various kinds and the effect the proposed facility will have on that demand in terms of amenities, access and cost, and (4) an estimate of the consequences of expected land use changes in terms of natural and urban resources.

The results of this evaluation should be compared with the community goals and objectives listed in Chapter 2 and with relevant neighborhood plans. The Planning Commission, with assistance from the primary citizens' board charged with comprehensive planning, should provide recommendations to the City Council for the development of CIP priorities.

Controlling the Impacts of Land Uses Through Facility Design

Land development and subsequent environmental changes can be significantly controlled by guiding new development toward the most suitable environmental locations. Capacity, financing, access to and timing of capital projects can minimize adverse effects. For example, entrances to and exits from high speed arterials can be designed to limit access to sensitive environmental resources. Sewer lines may be withheld from the upper reaches of watersheds until contiguous portions are fully developed, discouraging leap-frog activity. Water, sewer and transportation facilities can be directed toward the most environmentally suitable growth areas and withheld from the most unsuitable. The use of capital increment

fees, or charges, can reduce the public costs of capital improvements by allocating facility costs to developers. Land acquisition by the City is a very effective method of controlling land use impacts and could be particularly important when capital facilities must be located in or near natural features with great recreational potential. Land acquired for an airport, expressway or energy facility should include buffer zones for such nuisances as noise and dust.

Recapitulation of Capital Improvement Policies

The following capital improvement policies are summarized from Chapter 2. These policies reflect the community's goals and objectives concerning the adequate provision of public facilities and their role in guiding growth toward the most suitable locations.

Furthermore, the City should decline to extend services where urban development would be in conflict with these general guidelines or the more specific policies delineated under each guideline.

In summary, the City should extend municipal facilities and services to facilitate urban growth which (1) promotes and maintains environmental quality; (2) provides fiscal efficiency and integrity; (3) conserves scarce resources; and (4) maintains or improves the level of utility service within Austin's existing incorporated area.

TABLE 4-9: CAPITAL IMPROVEMENTS PROGRAM POLICIES BASED ON CITIZENS' GOALS

In Chapter 2, Goals, Objectives and Policies, the provision of public facilities was viewed by citizens as an important part of urban growth management. The following capital improvements program policies are taken from the eight sections of Chapter 2.

- Municipal utilities, especially water, wastewater and streets, should be expanded into those areas with the greater environmental suitability for urbanization and withheld from those areas with the greatest environmental limitations.
- Capital improvements should provide incentives for a compact, contiguous and efficient urban form.
- Existing neighborhoods which are inadequately served by municipal utilities should receive the highest priority for capital improvements projects.
- The City of Austin should compile and evaluate the environmental impacts of major utility construction.

  The City should review and comment on all applications to the Texas Department of Water Resources for package waste treatment plant permits around Austin. The City should oppose direct discharge of treated effluent in environmentally sensitive areas.
- The location of power plants, electric substations, utility lines, water and wastewater treatment plants and other utilities should be determined with respect to surrounding land uses and the environmental suitability of the site.

  Independent utility districts within Austin's extraterritorial jurisdiction should be discouraged where the City is capable of providing services. The City shall consider the district's fiscal integrity a primary factor.
- The City should develop high intensity transit corridors integrated with utility improvements.

  Utility fees and rates should continue to be higher for consumers outside of Austin.
- Lift stations should not be used to transport sewage from watersheds which are not part of the City's gravity wastewater system unless deemed consistent with growth management objectives.
- The overflow of sewage from wastewater mains during periods of peak flow should be reduced by replacing or relieving overloaded lines and lift stations.

Appendix

Implementation Policies, Ordinances and Programs

A successful transition from the existing trends of urban growth to the alternative recommended in the preceding section will depend upon a practical, yet ambitious implementation process. Existing growth trends will be very difficult to alter because they have established considerable momentum and acceptance which are deeply rooted in individual and community values. Transition will be gradual. Implementation of the growth alternative in terms of urban form, environmental quality, resource conservation, public service improvement, and fiscal efficiency and integrity can be accomplished through the means described in the Appendix.

Authority for Implementation

The implementation of any comprehensive plan must be based on the authority granted to cities by the State of Texas. This authority must be incorporated in effective local ordinances and policies, continually monitored and evaluated for achievement.

The legal authority of the City of Austin to govern and regulate activities within its jurisdiction is based upon the broad powers granted to home rule cities by the Constitution of the State of Texas, Article 1175 of Vernon's Annotated Civil Texas Statutes (VACTS) and upon the police power granted to cities to regulate the platting and recording of subdivisions of land, Article 974a, and to regulate the use of land through zoning, Article 1011a.

Home Rule Cities

Article 1175 provides powers of self government to cities with a population greater than five thousand people as long as the authority the city wishes to invoke does not conflict with other statutes and provisions of the Constitution of the State of Texas. Article 1175 allows Austin to institute any law in the interest of the health, safety, morals and general welfare of the citizens of the city which is consistent with the laws of the state. This authority is further expressed in the Austin City Charter, adopted by vote of the citizens and changed only with their consent.

These powers are enforceable, provided the city enacts specific ordinances. In the absence of a specific ordinance, it is presumed that the city has chosen not to avail itself of these powers. In addition, not all the powers are enforceable beyond the city's corporate limits. These powers are conferred by other state statutes and they will be examined later in this Appendix.

The provisions of Article 1175 listed below are enforceable only within the corporate limits of the city. Austin currently utilizes most of these powers, with the exception of licensing private vehicles that use the city's street system, requiring utility companies to extend services, and municipally operating the school system. The City of Austin has the power:

(1) to establish the form of government;
(2) to fix the boundaries of the city;
(3) to establish, levy and collect taxes;
(4) to control the finances of the City and to issue bonds;
(5) to regulate public property and to establish franchises;
(6) to control the public streets and levy liens against property;
(7) to open new streets and cause property owners to contribute toward their improvement;
(8) to regulate obstructions or encroachments in streets and alleys, and to abandon same;
(9) to establish licensing provisions for the operation of all vehicles using the city streets;
(10) to regulate the fares charged for carrying people or freight;
(11) to regulate theaters, bowling alleys and other amusements;
(12) to license businesses;
(13) to regulate signs;
(14) to establish fire zones and regulate types of construction therein, and to condemn and remove hazardous buildings;
(15) to zone;
(16) to establish fire and police departments;
(17) to establish health departments;
(18) to establish a sanitary sewer system and compel its use by residents;
(19) to compel any public utility corporation to extend its system into any section of the city, not to exceed two miles in any one year;
(20) to establish public schools and levy taxes for their support; and
(21) to condemn any public utility and purchase same by use of bonds, notes or other evidence of indebtedness.

The following provisions of Article 1175 are enforceable both within the city and its extraterritorial jurisdiction. The City of Austin has the power:

(1) to own and hold property of any kind;
(2) to own, erect, maintain and operate water works facilities;
(3) to own, operate and construct public utilities systems, and to condemn property for such purposes;
(4) to manufacture its own electricity, gas or anything else needed by the public;
(5) to appropriate private property for public purposes;
(6) to define and regulate all nuisances within the city and to a distance of five thousand feet from the city limits;
(7) to require franchise holders to extend service to such territory as may be required by charter.

These powers provide a means to control nuisances, which include objectionable land uses, and to control the provision of service by franchise holders to any particular territory.

The City of Austin could expand its authority over growth and development more fully by utilizing the authority granted by Article 1175. Examples of codes and ordinances authorized by this article include health codes, building codes, industrial waste ordinances, housing codes and flood hazard regulations. In some cases, amendments to the City Charter would be necessary. In most cases, however, the authority could be attained through enactment of ordinances. Such ordinances could be effective tools for the integration of policy and plans by coordinating both public and private development decisions.

Subdivision Authority

The regulation of subdivisions is probably the single most important regulatory power available to the City of Austin for the management of growth. Implementation of the selected growth alternative will depend heavily on the City's ability to influence the location, timing and environmental impact of new subdivisions.

The power of cities to regulate the subdivision of land is granted in Article 974a, as amended. Article 974a requires that the platting and recording of subdivisions of land within the city's corporate limits or extraterritorial jurisdiction be approved based on the following criteria:

(1) conformance to the general plan;
(2) regard for access to and extension of sewer and water mains and other instruments of public utilities; and
(3) conformance to the city's general rules and regulations governing plats within its jurisdiction in order to promote health, safety, morals or general welfare and the safe, orderly development of the community.

Cities are expressly prohibited from providing municipal utility services to subdivisions which do not meet these requirements. Existing subdivision regulations should be amended to include performance principles and standards such as those found in Table A-1.

Zoning Authority

Article 1011a grants cities the power to establish zoning districts for the purpose of regulating the size and bulk, yards, density, location and use of structures and land. According to the article, the purposes of zoning are the promotion of health, safety, morals, general welfare, or the protection and preservation of places of historical and cultural importance. For these purposes, the statute authorizes the regulation of the construction, alteration, reconstruction, or razing of buildings.

Article 1011b states that municipalities, in order to carry out the purposes of zoning, may divide the city into districts of any size and number. Although regulations may vary from one district to another, "all such regulations shall be uniform for each class or kind of building throughout each district."

Article 1011c provides a list of purposes for zoning: to abate congestion and overcrowding, to secure safety and promote health and general welfare, and to facilitate the provision of public services, utilities and other public facilities. It states that zoning regulations "shall be made in compliance with a comprehensive plan."

Article 1011d authorizes the City Council to determine how the zoning ordinance shall be established, enforced and amended. No regulation or amendment to the regulations can become effective until a public hearing has been held which has been preceded by at least fifteen days of public notice.

Article 1011e provides that in the case of a zoning change, the land owner, or at least twenty percent of the land owners within two hundred feet of the proposed change, can submit a written protest. The proposed zoning change cannot become effective without at least three-fourths favorable vote by all the members of the City Council.

Article 1011f states that the City Council shall appoint a Zoning Commission or designate the Planning Commission to be the Zoning Commission. The City Council cannot hold public hearings or take action until the Commission has held public hearings and submitted its final report. The article provides for the written notification of all owners of property within two hundred feet of the property involved in the proposed change.

Article 1011g provides for the creation of a Board of Adjustment, the selection of its members by the City Council and the duties and authority of the Board.

Historic Districts

Historic Districts will be created for the purpose of promoting the general welfare, education and recreational pleasure of the public through the preservation of areas or structures of historic or architectural significance. The criteria for designation of a historic district will include, but not be limited to, the following: historic sites or areas which exemplify cultural, political, economic or social history; historic areas or structures identified with the lives of historic personages or events; and structures or areas which embody distinguishing architectural characteristics.

Regulations within such districts will be designed to protect against the destruction of or encroachment upon such areas or structures; to encourage uses which will lead to their continuance, conservation, and improvement in a manner appropriate to the preservation of their heritage; to prevent the creation of environmental influences adverse to such purposes; and to assure that new structures and uses within such districts will be in keeping with the character to be preserved and enhanced.

Watershed Protection

The Texas Water Code provides that any city of five thousand or more people may establish a water pollution control and abatement program. This program may include all areas in the city and such areas of the city's extraterritorial jurisdiction that the city deems necessary to carry out the program. The program should, according to the code, include:

(1) development and maintenance of an inventory of all significant waste discharges into or adjacent to the waterways within the city and, where the city so elects, within the extraterritorial jurisdiction of the city without regard to whether or not the discharges are authorized by the Texas Water Quality Board;

(2) regular monitoring of all significant waste discharges included in the inventory prepared pursuant to number one, above;

(3) collection of samples and periodic inspections and tests of monitored waste discharges to determine whether the discharges are in compliance with the code and applicable permits, orders or regulations of the Texas Water Quality Board, and whether they should be covered by a permit from the Board;

(4) development of a procedure, in cooperation with the Board, for obtaining compliance by the waste dischargers being monitored, including, where necessary, the use of legal enforcement proceedings; and

(5) development and execution of reasonable and realistic plans for controlling and abating pollution or potential pollution resulting from generalized discharges of waste which are not traceable to a specific source, such as storm sewer discharges and urban runoff from rainwater.

The Texas Water Code provides a broad authority for cities to adopt water pollution control plans and specific programs necessary to implement these plans. Plans and regulatory programs such as the *Lake Austin Growth Management Plan* seem consistent with this statute. Such regulations could include:

(1) a permit system to assure compliance with the plan;

(2) land use restrictions to protect the watershed; and

(3) environmental performance standards.

Flood Control Act

Article 8280-13, VACTS, empowers cities to establish flood control programs and cooperate with the US Department of Housing and Urban Development in the US National Flood Insurance Program. Since it duplicates state authority to delegate land use control inside a city's incorporated area, it reinforces a city's zoning and subdivision powers. The act authorizes the city to take all necessary, reasonable actions to comply with the requirements for the National Flood Insurance Program. Both the City of Austin's and Travis County's legislative bodies have adopted flood control programs.

Airport Zoning Regulations

Article 46e, VACTS, enables Austin and Travis County to enact an airport zoning ordinance to govern land use through a joint airport zoning board. The act requires that an Airport Zoning Commission be created, similar to the City Planning Commission, to hold hearings and provide recommendations. The act also provides for the establishment of an Airport Zoning Board of Adjustment which would function much the same as the Zoning Board of Adjustment. The essential difference is that in order to govern the unincorporated area surrounding Bergstrom Air Force Base these boards and commissions would have to operate jointly as both City and County boards. This statute allows the City and County to enact zoning, building and land use restrictions around Robert Mueller Municipal Airport, Bergstrom Air Force Base and Tim's Airpark.

Municipal Annexation Act

The Municipal Annexation Act of 1963 was enacted to bring order to the process of city incorporation and expansion in Texas. It provides a method for annexation and defines the responsibilities a city incurs when it chooses to annex territory. It also enables cities to limit the incorporation of new suburban communities and special utility districts. Provisions of the act include:

(1) definition of the extraterritorial jurisdiction (ETJ) of all cities and towns;

(2) rules for the apportionment of any territory where an overlap of ETJ occurs between cities;

(3) expansion of the ETJ as the city annexes land;

(4) extension of the city's subdivision ordinance requirements to the area covered by the ETJ;

(5) designation of land within the ETJ as industrial districts and contracts to guarantee immunity from annexation for a period of up to seven years;

(6) procedures for annexation, including hearings, notification and completion of proceedings; and

(7) requirements and procedures for annexation and disannexation.

Limitations to a city's authority to annex land prevent:

(1) annexation of land outside the ETJ or land that is not contiguous to the city;

(2) annexation beyond 10 percent of the incorporated area of the city each year, or a cumulative total of 30 percent of the incorporated area; and

(3) annexation within the ETJ of another city without the consent of that city.

Summary of Regulatory Authority for Growth Management

Based upon the analysis of existing statutory authority, the City of Austin has significant authority under Texas Home Rule powers, with the exception of land use controls in the ETJ, to manage growth both within the corporate limits and the ETJ. This authority is summarized in Table A-2.

Comprehensive Development Code

Implementation of the selected growth alternative and attainment of the Austin Tomorrow goals will depend upon a growth management strategy which is based upon the authority authorized by the State Legislature. The City cannot reach these goals of rational, planned growth and environmental quality by relying entirely upon the relatively narrow authority provided by the subdivision and zoning statutes. The City must look to a coordinated group of ordinances, each drawing its legal status

from specific state statutes in what can be termed a Comprehensive Development Code. In such a code, diverse subjects can be addressed without jeopardizing the legality of the entire code. Such a code should include:

(1) Subdivision Regulations, Article 974a;
(2) Zoning Regulations, Article 1011a;
(3) Watershed Protection, Texas Water Code;
(4) Flood Control, Article 8280-13, VACTS;
(5) Noise Control, Home Rule Powers; and
(6) Airport Zoning Regulations, Article 46e.

The Comprehensive Development Code should include performance principles and standards designed to protect the natural and urban resources identified in the *Comprehensive Plan* and guide Austin toward a more rational, efficient urban form. Development principles and standards for natural and urban resource areas are presented in Chapter 3.

Quantitative values for these performance standards should be specified as far as possible in the various ordinances comprising the development code. Variances from these quantitative standards should be permitted where it can be conclusively demonstrated that the performance goals can be met through means other than those specified.

TABLE A-1: JURISDICTION AUTHORITY

GROWTH MANAGEMENT ISSUE	INCORPORATED AREA	EXTRATERRITORIAL JURISDICTION
Protection of Open Space	Comprehensive Plan	Comprehensive Plan
Land Use Control	Water Code Airport Zoning Zoning Ordinance Flood Control Act	Water Code Airport Zoning
Environmental Quality	Health Code Subdivision Ordinance Water Code Comprehensive Plan	Health Code Subdivision Ordinance Water Code Comprehensive Plan
Septic Tank Use	Health Code Subdivision Ordinance	Health Code Subdivision Ordinance Water Code
Water Quality	Home Rule	Water Code
Building Standards	Building Ordinance	Water Code Airport Zoning
Traffic Control	Home Rule	Subdivision Ordinance
Noise Control	Home Rule	Annexation Act
Annexation	Annexation Act	Water Code Subdivision Ordinance Comprehensive Plan
Development in Floodprone Areas	Building Code Subdivision Ordinance Comprehensive Plan Flood Control Act	Water Code
Regulation of Grading and Clearing	Water Code	
New Incorporations or Utility Districts		Annexation Act
Timing of Major Public Improvements	Comprehensive Plan	Comprehensive Plan

TABLE A-2: NATURAL RESOURCES AND RELATED PERFORMANCE PRINCIPLES AND STANDARDS

NATURAL RESOURCE	PERFORMANCE PRINCIPLES	RELATED PERFORMANCE STANDARDS
Steep Slopes	Development activities on slopes greater than 15% should not increase erosion, flooding or water pollution potential nor should they require unsightly scarring of hillsides.	Cut and fill of land; grading and clearing vegetation; impervious coverage of land; major streets and roads; and septic tanks.
Clay Soils and Bedrock	Development on clay soils and bedrock should include measures to ensure that the physical properties of these materials do not result in foundation damage, erosion and slope collapse, drainage problems, corrosion or rupturing of buried pipes or the surfacing of septic tank system effluent.	Foundation construction; drainage; erosion and slippage; corrosion ; and septic tanks.
Floodplains	Any development or alteration proposed for a floodplain should not result in an increase in flood height, a reduction in stream storage capacity, greater flood potential downstream, increased risk of loss of life or increased potential for extensive property damage from flooding.	Construction of residential, commercial or industrial buildings; cut and fill of land; grading and clearing of vegetation; septic tanks; and stream channelization.
Prime Agricultural Lands	Development on prime agricultural land should be clustered to minimize the amount of land permanently removed from cultivation and should not result in drainage or erosion problems for adjacent cultivated land.	Density; utilities; drainage; and erosion and sedimentation.
Contribution Zones for Edwards Aquifer Recharge	Development in this zone should not increase the pollution of surface or ground waters above that expected in the natural state and impervious surfaces in the zone should be minimized to permit storm runoff infiltration to the aquifer.	Density; impervious coverage of land; open space; storm runoff retention; erosion and sedimentation; septic tanks; grading and clearing of land; land use; and storm runoff quality.
Lake Austin Watershed	Development in this watershed should not result in further deterioration of water quality in Lake Austin.	Cut and fill of land; grading and clearing of vegetation; erosion and sedimentation; storm runoff retention; impervious coverage of land; septic tanks; and land use.

Glossary

ad valorem	A method of taxation proportional to the value of property.
annexation	The incorporation of land into a municipality.
aquifer	A waterbearing rock, geologic formation or group of formations.
arterial	A street or road carrying a major flow of traffic.
at-grade crossing	An intersection without underpass or overpass.
bearing capacity	The ability of a material to support weight without deforming. Usually expressed in tons per square foot.
berm	A low earthen mound.
buffer zone	A land area interposed between incompatible land uses which acts to moderate adverse impacts.
building permit	Written permission from a municipality, required by City ordinance, to construct or alter a building.
categorical federal programs	Federal grant and loan programs restricted to specific purposes or categories such as water treatment facilities, transit facilities and operations, *etc.*
collector street	A street collecting traffic from other streets and serving as the most direct route to an arterial street.
commercial strip	A segment of a street or road which is lined with predominantly commercial land uses.
concourse	A large open space for the gathering or passage of crowds.
creek permit	A permit required by the City of Austin for development of property which is adjacent to or crossed by a creek. Also called a waterway development permit.
curb cut	A discontinuation of curbs to allow for driveways.
cut and fill	Removing soil and rock from the uphill side of a street right-of-way or building site and depositing the same material on the downhill slope for the purpose of creating a more level ground surface.
drainage plan	The Drainage Criteria Manual, Department of Engineering, City of Austin. In other usage, the design for carrying stormwater from a development site.
easement	A right conveyed by the owner of land to another party for specific, limited use of that land.
economic analysis	An investigation of the production, distribution and consumption of goods and services.
economies of scale	The fall in the per unit production cost of a good or service as a result of the increase in the total number of units produced. Usually associated with high fixed costs of production, such as electric power production and water treatment.
effluent	An outflow of a wastewater treatment plant or septic tank. More generally, any fluid discharge into creeks, streams, rivers or lakes.

electric substation	A subsidiary facility which is necessary to transform voltage from a transmission system to a distribution system of usable quantities of electricity.
enabling legislation	Federal or state laws delegating powers or rights to political subdivisions, such as cities.
erosion potential	The tendency of soil or rock fragments to be detached and moved by water, wind, ice or gravity.
exfiltration	Leakage from sewer pipes.
extraterritorial jurisdiction	That area within five miles of the city limits within which the municipality, by State statute, may regulate the subdivision of land.
feeder services	Minor transportation services which link trip origins and destinations with major transit facilities.
fee simple	An estate in land of which the possessor has unqualified ownership and power of disposition.
filter field	A subsurface distribution system within a bed of gravel for the absorption of septic tank effluent into the natural soil.
filtering process (housing)	The depreciation of the value of aging housing and the consequent occupation of that housing by lower income persons.
final plat	A map, drawing or chart on which is presented for legal approval and recording the final plan of a proposed subdivision.
fiscal analysis	An analysis of governmental revenues and expenditures, often with respect to a specific issue.
floodplain	The area adjoining the channel of a natural stream which has been or may be covered by flood water.
Freedom of Choice Plan	A policy of the Austin Public Housing Authority whereby applicants may reject the first two housing units offered, but must accept the third or go to the back of the waiting line.
funding bodies	Private or public entities or organizations which provide money for the operation of projects, programs or services.
grading	The moving of earth to change the level or degree of inclination of a slope, road, building site or other surface.
groundwater	Water beneath the earth's surface that may supply wells and springs. See aquifer.
halfway house	A house or meeting place used to provide a gradual transition between institutional and non-institutional residency.
height and bulk limitations	Zoning regulations which establish limits on the size of a building, its height and location on the lot.
high intensity travel corridors	Streets, roads, highways, or other travelways such as rail, which have high traffic volumes, especially of commercial and industrial traffic.

Housing and Community Development Act, 1974	A federal law which consolidated a variety of categorical federal programs providing aid to urban areas into Community Development Block Grants. The CDBG program emphasizes housing needs and local planning.
impervious coverage	Structures, roads, parking lots or other constructed features which do not permit the penetration of rainfall into the soil and underlying rock material.
infiltration	The passage or permeation of rainfall and runoff into the soil and underlying rock material.
infrastructure	The utilities and facilities which support urban development, such as water and wastewater lines and treatment plants, roads and highways, gas and electric distribution systems, *etc.*
interest rate reduction subsidies	Monetary assistance granted to individuals by a government to reduce the cost of mortgages.
intensity (land use)	The relative degree of traffic, noise, pollution, *etc.,* generated by a particular land use.
intensity (transportation)	The relative degree of noise, pollution, danger, *etc.,* generated by a particular mode of transportation.
landfill	A pit or trench used to dispose of solid waste. Landfill trenches are usually excavated in clay soil and bedrock, filled with solid waste, then covered and compacted with the excavated soil.
land trust	A legal title to land held by one party for the benefit of another.
lift station	A sewage facility used to pump wastewater uphill, allowing for the transfer of wastewater between natural drainage basins.
line-haul service	Transportation service along a fixed path or route, such as a bus route.
market value	The value, usually monetary, of a good or service as determined by supply and demand in an open or unrestricted market.
modal choice	The choice between different transportation modes or methods, *e.g.* automobile versus bus.
money market	The various markets where money is borrowed and lent, *e.g.* markets for mortgages, bonds or consumer loans.
mortgage indemnification	Mortgage insurance.
multi-modal	Having various means of transportation.
overzoning	Zoning more land area than can reasonably be expected to be developed for a particular use.
overlay designation	A set of zoning requirements that is described in the Zoning Ordinance text, and is mapped and imposed in addition to those of the underlying, existing classification or designation.
package treatment plant	A small scale water or wastewater treatment plant.

passive area	A recreation facility for relaxing, resting or sitting, such as a bench or gazebo.
peak flow	The maximum instantaneous flow from a given storm condition at a specific location.
peak surface discharge	The maximum rate of rainfall runoff from impervious surfaces during a particular storm.
pedestrian nodes	Focal points where walking is the dominant mode of transportation.
percolation	To drain or pass through a porous substance or filter.
performance indicators	Measures of attainment of specified goals or objectives.
planned unit development	An area of land under unified control which is planned and developed as a whole.
piggyback operation ramp	A ramp for loading truck trailers onto railroad flatcars.
population carrying capacity	The maximum population which can be sustained with the available or anticipated resources and public services, or in another sense, without significant environmental degradation. Usually applied to a limited geographical area, such as a watershed.
porous surfaces	Those surfaces which admit the passage of liquid, especially water, through pores or interstices.
pre-application plan	A plan for a subdivision submitted to City staff for review before formal submission for subdivision plat approval by the Planning Commission.
preliminary plan	A plan for a subdivision submitted to the Planning Commission for formal review of compliance with the Subdivision Ordinance.
primary treatment	A wastewater treatment process involving screening, skimming and settling, designed to remove between 30 and 35 percent of the organic pollutants and up to one-half of the suspended solids found in untreated wastewater.
public use easement	An easement given specifically for a public use or public purpose. See easement.
redevelopment pressure	The perceived availability of greater economic returns through the conversion of an existing land use to a new use, often commercial.
Rental Assistance Payments Program	A federal program to provide rent subsidies to low income households.
right-of-way	The entirety of a public street area within public ownership; this strip of land encompasses the public roadway and adjacent sidewalks.
ripability	The relative ease with which bedrock can be torn up using heavy equipment.
sanitary landfill	See landfill.
sanitary sewer	The pipe, conduit, or other physical facilities employed to carry off wastewater.
secondary treatment	A wastewater treatment process involving biological and mechanical processes designed to remove between 80 and 90 percent of the organic materials and over 80 percent of the suspended solids found in untreated wastewater.
septic tank suitability	The suitability or appropriateness of soil, hydrological and geological factors for the safe and sanitary operation of a septic tank system of wastewater, or sewage disposal.

service nodes	The focal points of commercial or governmental services.
setback	In the Zoning Ordinance, the minimum horizontal distance between the front wall of any projection of a building and the street line.
settlement basin	A depression, tank or container used to trap or retain solid materials suspended in or carried by waste or storm runoff water. In the case of storm runoff water, the terms sediment basin, or retention basin are often used.
sewage	Waste matter or wastewater.
sewerage	The system for the removal of surface water, waste matter, and wastewater.
shrink-swell capacity	The tendency or ability of predominantly clay soils to expand or swell when moist, and to contract or shrink when dry. This expansion and contraction can break or crack foundations, streets, water lines, *etc.*
sight distance	The distances over which drivers have an unobstructed view of traffic, signs, signals, *etc.*
slope stability	The ability of an inclined land surface to maintain its original configuration.
speculative market value	The value of a commodity or property as determined in the open market, primarily by conjecture, as to its future capacity to produce income. See market value.
steep slope	Land having a sharp or precipitous inclination. Slopes with inclinations greater than 15 percent are usually considered steep.
storm sewer	The pipe, conduit or other physical facility used to carry off rainfall.
street features	Traffic lights, signs, directional indicators, *etc.*
subdivision plat	A map, drawing or chart on which is presented a plan for the division of any lot, tract or parcel of land into two or more lots or sites for the purpose of sale or development. See final plat and preliminary plan.
surcharge	An additional sum added to the usual amount or cost.
surface water	Water in creeks, rivers, lakes, *etc.,* as distinguished from groundwater.
surveillance systems (traffic)	Various devices for recording and monitoring traffic flow.
tap fee	A charge for connection to a water or wastewater system.
tertiary treatment	Advanced wastewater treatment, including primary and secondary treatment plus additional removal of standard organic pollutants or removal of specific organic compounds or ions from the wastewater stream. See primary and secondary treatment.
time-distance relationships	The relationship of the distance between two objects and the time required to travel between them.
urban homesteading	Refers to a variety of urban housing programs designed to rehabilitate decaying housing in central cities. A usual feature of the programs is the sale of dilapidated or deteriorated houses to individuals at very low prices.

urban intensification	Transition of land uses from lower to higher densities, with attendant increases in land values taxes, traffic, noise and pollution. Usually measured in terms or residential units per acre, commercial square feet per acre, traffic volume, noise, *etc.*
urban sprawl	The growth of low density suburbs around and at increasing distances from the center of a city.
user charges	Fees for goods or services charged directly to those who benefit from or consume them.
use value	The value of land as determined by its current use rather than by a speculative future use.
waiver	The intentional relinquishment of a right, claim or privilege, especially the refraining from enforcing some aspect of zoning or subdivision regulations.
water district	Any of a variety of special districts authorized by the State of Texas for the construction and operation of water and wastewater works.
watershed	The land draining into a creek, stream, river or body of water.
windshield survey	An inspection or examination, usually of land use or housing condition, undertaken from an automobile.